



Cisco Unity Connection Provisioning Interface (CUPI) API

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CHAPTER 1

API Overview

Links to Other API pages: Cisco_Unity_Connection_APIS

- [API Overview](#) , on page 1

API Overview

Links to Other API pages: Cisco_Unity_Connection_APIS

Introduction

Cisco Unity Connection Provisioning Interface (CUPI) is a provisioning API for Cisco Unity Connection that has been designed to be stable and simple to use. It is based on leading industry standards for web-based API development, and provides access to the most commonly provisioned data on Connection systems (users, contacts, distribution lists, and call handlers).



Note With Cisco Unity Connection 9.1(1), the single sign-on feature is enabled for all the Connection Rest APIs. For more information, see the "Single Sign-On in Cisco Unity Connection" chapter in *Security Guide for Cisco Unity Connection 9.x* available at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/9x/security/guide/9xcucsec061.htm

Benefits

By using CUPI, you can securely do the following:

- Create, read, update, and delete users and user configurations
- Reset passwords
- Create, read, and update distribution lists
- Create, read, update, and delete call handlers
- Create, read, update, and delete contacts



Note All the above functions associated with CUPI API support both the IPv4 and IPv6 addresses. However, the IPv6 address works only when Connection platform is configured in Dual (IPv4/IPv6) mode.

For more information see the chapter "Adding or Changing the IPv6 Addresses of Cisco Unity Connection 8.5 and Later Servers" at the following link https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/9x/upgrade/guide/9xcucrugx/9xcucrug051.html

Technical Details

Previous provisioning APIs required knowledge of the underlying database, and were vulnerable to changes in the database schema. CUPI provides a layer over the database to make the interface more stable.

CUPI is standards based. CUPI was developed by using the latest advances in web-based interfaces. It is a REST interface that standardizes operations such as add, delete, and modify. The XML comes with standard XML schema definitions that are annotated with information about what is in them.

Other product groups in VTG are developing REST-based interfaces, and as the interfaces converge this positions CUPI well to fit in with them. REST interfaces also work well with Web 2.0 applications.

As a web-based interface, CUPI is independent of operating system and programming language and does not require any client libraries to use.



Note It is recommended to perform provisioning only on the Publisher server in Active-Active mode and on Subscriber (Acting Primary) in case of cluster failover. The password change and password setting modification for User PIN/Web application should be provisioned on Publisher server in Active-Active mode.

Getting Started

In order to begin developing with the Cisco Unity Connection CUPI API, you need to obtain the following:

Hardware

- Cisco Media Convergence Server (MCS) for Cisco Unity Connection version 8.0 and later
- For detailed hardware requirements, see the [Cisco Unity Connection 8.x Supported Platforms List](#)

Software

- Cisco Unity Connection Software Ordering
- Not for Resale Kits (Must be eligible to purchase)
- Communications System Release Kit

Discounts for some of the required hardware and software may be available for participants in the Cisco Technology Developer Program.

We recommend that all developers have an up-to-date Cisco Developer Services support agreement. This provides the developer with access to professional support and assistance for application development

Other CUPI Resources

Additional information about CUPI is also available on the Cisco Developer Network (link to CDN). Note, however, that the documentation here on the DocWiki is the most up-to-date documentation available for CUPI.

To participate in the CUPI forum, see the CUPI forum on CDN.

On the CUPI page on CDN, you will also find links to the CUPI WADL and CUPI XML schema.

Troubleshooting

See the following for information on troubleshooting all Connection APIs:

[Troubleshooting \(applies to all Connection APIs\)](#)



CHAPTER 2

Cisco Unity Connection Provisioning Interface (CUPI) API -- Getting the Object Schema Details

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Getting the Schema Details, on page 5](#)

Getting the Schema Details

All the schema details for all supported object types can be obtained by going to the REST schema page using the URL:

```
http://{server name}/vmrest/schema
```

All the objects supported will come up in a list, each as a link that will take you to a page detailing which items of information will be returned when fetching that object.



Note In the case of users the schema shows what will come back when fetching the full user data using a URL like this:

```
http://{server name}/vmrest/users/{object_id}
```

If, however, you are getting a list of users or searching for one or more users with a query parameter like this:

```
http://{server name}/vmrest/users?query=(alias%20is%20operator)
```

Then you will get a subset of user properties on each user returned in the list. This is an optimization since users have such a large amount of data associated with them that returning all of those properties for each user on a potentially large list is very inefficient. Make sure your application accounts for this.



CHAPTER 3

Cisco Unity Connection Provisioning Interface (CUPI) API -- About Versioning

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [About Versioning, on page 7](#)
- [Getting Unity Connection Version, on page 7](#)

About Versioning

Cisco Unity Connection REST interfaces essentially are not versioned. There are several mechanisms in place to ease forward and backward compatibility:

1. The version is available as a resource at `/vmrest/version`:

```
<VersionInformation>
  <name>vmrest</name>
  <version>8.0.0.229</version>
</VersionInformation>
```

2. Extra fields in a resource are ignored by the server.

This means that if we add a field to a resource in a future release, and the new resource is sent to an older server, the operation will complete (with the exception of updating the field that it does not have).

3. Clients ignore new fields.

The XML schema files that are provided for clients include a provision for arbitrary fields to be added at the end. This means that when a new field is added to a resource exposed by the server, it will not affect client code.

4. New resources are added at new URLs.

Adding a new resource means adding a new URL, not changing existing URLs. This means that existing client code can continue to run against the new version without change.

Getting Unity Connection Version

To get the active master version of Cisco Unity Connection, do the following GET request:

```
GET http://<connection-server>/vmrest/version/product/
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<VersionInformation>  
<name>Cisco Unity Connection Version</name>  
<version>11.5.1.17108-2</version>  
</VersionInformation>
```

```
Response Code: 200
```




CHAPTER 4

Cisco Unity Connection Provisioning Interface (CUPI) API -- Authentication and Authorization

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [About CUPI Authentication and Authorization, on page 9](#)

About CUPI Authentication and Authorization

CUPI uses the same authentication and authorization scheme that the administration console uses. This means that the objects an administrator has access to when authenticated are determined by the roles to which the administrator is assigned.

CUPI authenticates by using standard HTTPS and Basic authentication, so that credentials can be passed by using typical mechanisms to send username and password via HTTP headers.



CHAPTER 5

Cisco Unity Connection Provisioning Interface (CUPI) API -- Error Handling

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Possible Errors, on page 11](#)

Possible Errors

The HTTP status codes themselves provide information about many typical errors. See the following list for some of the status codes returned by CUPI:

Possible Errors	Explanation
200 OK	Normal response when a page has been successfully fetched.
201 Created	The resource has been created.
301 Moved Permanently	The page has moved permanently. It is usually a response from implementing a 301 redirect.
302 Moved Temporarily	The page has moved temporarily.
400 Bad Request	The request could not be understood by the server, due to incorrect syntax.
401 Unauthorized User	Authentication is required.
403 Forbidden	The server understood the request, but is refusing to fulfill it.
404 Page Not Found	The server has not found anything that matches the Request-URI.
405 Method Not Allowed	The method specified in the Request-Line is not allowed for the resource identified by the Request-URI.
406 Not Acceptable	The server cannot generate a response that the requester is willing to accept.
410 Gone	The requested resource is no longer available at the server, and no forwarding address is known. This condition is similar to 404, except that the 410 error condition is expected to be permanent.
415 Unsupported Media Type	The server is refusing the request, because the request is in a format not supported by the requested resource for the requested method.
500 Server Error	There is an internal web server error.

In addition to the error codes, in most cases CUPI will return an XML document that provides more information about the error:

```
<xs:complexType name="ErrorDetails">
  <xs:all>
    <xs:element name="errors" maxOccurs="unbounded">
      <xs:complexType>
        <xs:all>
          <xs:element name="code" type="ErrorCode"/>
          <xs:element name="message" type="xs:string"/>
        </xs:all>
      </xs:complexType>
    </xs:element>
  </xs:all>
</xs:complexType>
```



CHAPTER 6

Cisco Unity Connection Provisioning Interface (CUPI) API -- Examples of Basic Operations

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Reading a User's Information, on page 13](#)
- [Creating a User, on page 13](#)
- [Modifying a User, on page 13](#)
- [Deleting a User, on page 14](#)
- [Searching for a User, on page 14](#)
- [Reset the MWI for a User, on page 14](#)

Reading a User's Information

To read a user's information, do the following GET request:

```
GET http://<connection-server>/vmrest/users/{objectId}
```

Creating a User

To create a user account, do the following POST request:

```
POST http://<connection-server>/vmrest/users?templateAlias=voicemailusertemplate
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<User>
<Alias>jdoe</Alias>
<DtmfAccessId>7890</DtmfAccessId>
</User>
```

The following is the result of the above POST request:

```
201 Created
```

The HTTP response will include the full URI to the newly created user in the Location header.

Modifying a User

To modify a user account, do the following PUT request:

```
PUT http://<connection-server>/vmrest/users/{objectid}
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<User>
<DisplayName>johnd</DisplayName>
</User>
```

The following is the result of the above PUT request:

```
204 Accepted
```

Deleting a User

To delete a user account, do the following DELETE request:

```
DELETE http://<connection-server>/vmrest/users/{objectid}
```

The following is the result of the above DELETE request:

```
200 OK
```

Searching for a User

To search for a user account, do the following GET request:

```
GET http://<connection-server>/vmrest/users?query=(alias%20startswith%20ab)
```

Reset the MWI for a User

The reset the MWI for a user:

```
POST http://<connection-server>/vmrest/users/{objectid}?method=resetmwi
```



CHAPTER 7

Cisco Unity Connection Provisioning Interface (CUPI) API -- Getting the Object Count Without Getting the Objects

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Getting the Object Count Without Getting the Objects, on page 15](#)
- [Examples, on page 15](#)

Getting the Object Count Without Getting the Objects

For performance reasons, you can retrieve an object count without retrieving the objects. For example, you might have over 1000 users and you want to know the exact user count. To speed up the query, you can retrieve only the count of users, without retrieving the payload, by using and setting the query parameter "pageNumber" or "rowsPerPage" to 0, as follows:

Examples

The following example returns the number of users:

```
GET http://<connection-server>/vmrest/users?rowsPerPage=0
```

The following example returns the number of users whose alias starts with "John":

```
GET http://<connection-server>/vmrest/users?query=(alias%20startswith%20John) &pageNumber=0
```




CHAPTER 8

Cisco Unity Connection Provisioning Interface (CUPI) API -- Searching and Sorting

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Searching, on page 17](#)
- [Sorting, on page 17](#)
- [Constraints on the Allowed Values in Search Queries and Sorts, on page 18](#)

Searching

The general format of a search query is:

```
query=(column [is | startswith] value)
```

For example, to find all users that have an alias starting with the letter "a," the query would be:

```
query=(alias startswith a)
```

The full URL, including escaping spaces as %20, would be:

```
GET http://<connection-server>/vmrest/users?query=(alias%20startswith%20a)
```

(For more information about escaping spaces, see the [RFC for URIs](#).)

Sorting

Sorting is similar to searching. The general format of a sort is:

```
sort=(column [asc | desc])
```

For example, to sort users by alias, the sort would be:

```
sort=(alias asc)
```

The full URL would be:

```
GET http://<connection-server>/vmrest/users?sort=(alias%20asc)
```

Note that spaces must be escaped in the URL as %20 (standard URL escape code for space).

Constraints on the Allowed Values in Search Queries and Sorts

Note the following constraints on the allowed values in the queries and sorts, based on database performance requirements:

- Sorts can support only a single column.
- Sorts can specify only a column that is indexed.
- Queries can support only an indexed column or a boolean column.
- Queries can specify more than one column only if all columns belong to a single compound index. (Note: the ability to specify more than one column is not yet implemented; at this time, only single criteria queries are allowed.)
- When both a query and a sort are specified, the sort column must be one of the columns in the query.
- Queries can use only two conditions: "is" and "startswith".



CHAPTER 9

Cisco Unity Connection Provisioning Interface (CUPI) API -- Voice Names

Links to Other API pages: [Cisco_Unity_Connection_APIS](#)

- [About Voice Names, on page 19](#)
- [Listing and Viewing, on page 19](#)
- [Setting Voice Names, on page 20](#)

About Voice Names

Many objects available via the CUPI interface have a voice name field. There are two ways to access the voice name for these objects:

- For Connection versions 7.x and 8.0.x the voice names are accessed by using the VoiceFileURI. Modifying the voice name as a voice file requires a three step process as detailed below.
- For Connection versions 8.5 and later the voice name access has been simplified so that it can be accessed by using a VoiceNameURI. This new URI is a standard sub-resource of the primary resource URI (see example below). Modifying the voice name by using the new URI reduces the three step process to a single step. The old VoiceFileURI still works in the later versions of Connection, but use of the new URI is easier.

`http://<server>/users/<user object id>/voicename)`

Listing and Viewing

Voice Name GET for Connection 8.5 and Later

Use the standard VoiceNameURI directly to get the file:

```
GET http://<connection-server>/vmrest/<resource>/<resource id>/voicename
```

The response will return the audio/wav data for the voice name.

Voice Name GET for Connection 7.x and 8.0.x

First get the primary resource to find out the voice file URI, then use the VoiceFileURI to get the file:

```
GET http://<connection-server>/vmrest/voicefiles/<voice file name>
```

The response will return the audio/wav data for the voice name.

Setting Voice Names

Setting a Voice Name in Connection 8.5 and Later

PUT the audio data directly to the standard resource voice name URI:

```
PUT /vmrest/<object>/<object id>/voicename
```

```
content is audio/wav data
```

The response is a 204 indicating that the content has been accepted and copied into the temporary file.

Setting a Voice Name in Connection 7.x and 8.0.x

To create a voice name for a resource is a three step process.

1. A place-holder for the WAV file must be created with a POST. This is a temporary file place-holder that can be used for up to 30 minutes. If it is not used within 30 minutes (assigned to a resource), the file is assumed to be abandoned and is automatically cleaned.

```
POST /vmrest/voicefiles
```

The response code is 201 and the content is the name of the newly created temporary file.

2. Use the temporary file name to PUT the new audio data. The HTTP content type is "audio/wav" and the payload content is the audio data.

```
PUT /vmrest/voicefiles/<temporary file name>
```

The response is a 204 indicating that the content has been accepted and copied into the temporary file.

3. Set the voicename field of the target resource to the temporary file name. See the example for a user below:

```
PUT /vmrest/users/<user object id>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<User>
<VoiceName>temporary file name</VoiceName>
</User>
```



CHAPTER 10

Cisco Unity Connection Provisioning Interface (CUPI) API -- Subscriber Dependency

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Subscriber Dependency API, on page 21](#)

Subscriber Dependency API

Administrator can use this API to list the objects that reference a specified user. Using this API administrator can also replace the dependencies with another user.

Listing Dependencies of All Users

```
GET https://<connection-server>/vmrest/subscriberdependencies
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<SubscriberDependencies total="2">
  <SubscriberDependency>
    <DependencyType>TT2</DependencyType>
    <DependentEntityObjectId>43205549-0127-48c9-9261-f84102a5890f</DependentEntityObjectId>
    <DependentEntityObjectType>3</DependentEntityObjectType>
    <DependentEntityOwner>Donald_UserTemplate_1 </DependentEntityOwner>
    <DependencyDestinationType>2</DependencyDestinationType>
    <SubscriberObjectId>10b494ca-56ff-4430-a49f-747a33abbd09</SubscriberObjectId>
    <UserURI>/vmrest/users/10b494ca-56ff-4430-a49f-747a33abbd09</UserURI>
    <DependentEntityOwnerType>User Template </DependentEntityOwnerType>
  </SubscriberDependency>
  <SubscriberDependency>
    <DependencyType>Recipient</DependencyType>
    <DependentEntityObjectId>beb9623b-60e4-439d-8fe3-b4c7eec42dfc</DependentEntityObjectId>
    <DependentEntityObjectType>3</DependentEntityObjectType>
    <DependentEntityOwner>Operator </DependentEntityOwner>
    <DependencyDestinationType>5</DependencyDestinationType>
    <SubscriberObjectId>cfbb6680-f028-4282-8740-ba7531e574cf</SubscriberObjectId>
    <UserURI>/vmrest/users/cfbb6680-f028-4282-8740-ba7531e574cf</UserURI>
    <DependentEntityOwnerType>Call Handler </DependentEntityOwnerType>
  </SubscriberDependency>
</SubscriberDependencies>
```

Response Code: 200

JSON Example

```
GET https://<connection-server>/vmrest/subscriberdependencies
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2",
  "SubscriberDependency":
  [
    {
      "DependencyType": "TT2",
      "DependentEntityObjectId": "43205549-0127-48c9-9261-f84102a5890f",
      "DependentEntityObjectType": "3",
      "DependentEntityOwner": "Donald_UserTemplate_1",
      "DependencyDestinationType": "2",
      "SubscriberObjectId": "10b494ca-56ff-4430-a49f-747a33abbd09",
      "UserURI": "/vmrest/users/10b494ca-56ff-4430-a49f-747a33abbd09",
      "DependentEntityOwnerType": "User Template"
    },
    {
      "DependencyType": "Recipient",
      "DependentEntityObjectId": "beb9623b-60e4-439d-8fe3-b4c7eec42dfc",
      "DependentEntityObjectType": "3",
      "DependentEntityOwner": "Operator",
      "DependencyDestinationType": "5",
      "SubscriberObjectId": "cfbb6680-f028-4282-8740-ba7531e574cf",
      "UserURI": "/vmrest/users/cfbb6680-f028-4282-8740-ba7531e574cf",
      "DependentEntityOwnerType": "Call Handler"
    }
  ]
}
```

Response Code: 200

Viewing Dependency of a Specific User

```
GET https://<connection-server>/vmrest/subscriberdependencies/<subscriber-objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<SubscriberDependencies total="1">
  <SubscriberDependency>
    <DependencyType>Standard Greeting</DependencyType>
    <DependentEntityObjectId>7ea0ecb6-4125-4866-a0f6-5308a5a4b3d1</DependentEntityObjectId>
    <DependentEntityObjectType>66</DependentEntityObjectType>
    <DependentEntityOwner>Texoma_SystemCallhandlerTemplate_1</DependentEntityOwner>
    <DependencyDestinationType>0</DependencyDestinationType>
    <SubscriberObjectId>4bc6f97a-0c97-4ed9-a7e2-05e611bb02d3</SubscriberObjectId>
    <UserURI>/vmrest/users/4bc6f97a-0c97-4ed9-a7e2-05e611bb02d3</UserURI>
    <DependentEntityOwnerType>Call Handler Template</DependentEntityOwnerType>
  </SubscriberDependency>
</SubscriberDependencies>
```

Response code: 200

JSON Example

```
GET https://<connection-server>/vmrest/subscriberdependencies/<subscriber-objectid>
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1",
  "SubscriberDependency":
  {
    "DependencyType": "Standard Greeting",
    "DependentEntityObjectId": "7ea0ecb6-4125-4866-a0f6-5308a5a4b3d1",
    "DependentEntityType": "66",
    "DependentEntityOwner": "Texoma_SystemCallhandlerTemplate_1",
    "DependencyDestinationType": "0",
    "SubscriberObjectId": "4bc6f97a-0c97-4ed9-a7e2-05e611bb02d3",
    "UserURI": "/vmrest/users/4bc6f97a-0c97-4ed9-a7e2-05e611bb02d3",
    "DependentEntityOwnerType": "Call Handler Template"
  }
}
```

Response Code: 200

Finding Dependencies

Example 1:

Suppose following is the dependent object of a particular user and it is required to find the complete dependency, then below are the steps that should be followed. Dependent Object:

```
<SubscriberDependency>
  <DependencyType>Standard Greeting</DependencyType>
  <DependentEntityObjectId>7ea0ecb6-4125-4866-a0f6-5308a5a4b3d1</DependentEntityObjectId>
  <DependentEntityType>66</DependentEntityType>
  <DependentEntityOwner>Texoma_SystemCallhandlerTemplate_1 </DependentEntityOwner>
  <DependencyDestinationType>0</DependencyDestinationType>
  <SubscriberObjectId>4bc6f97a-0c97-4ed9-a7e2-05e611bb02d3</SubscriberObjectId>
  <UserURI>/vmrest/users/4bc6f97a-0c97-4ed9-a7e2-05e611bb02d3</UserURI>
  <DependentEntityOwnerType>Call Handler Template</DependentEntityOwnerType>
</SubscriberDependency>
```

Steps to be followed:

- Check `DependentEntityOwnerType` and `DependentEntityObjectId` from the response, which depicts the type of object referencing the user. In the example, the referencing object entity is call handler template, whose name is 'Texoma_SystemCallhandlerTemplate_1' and object id is '7ea0ecb6-4125-4866-a0f6-5308a5a4b3d1'.
- Check `DependencyType`, which specifies type of dependency. In this example, it is Standard Greeting. For more information, see the Possible Value of `DependencyType` section.
- Check `DependencyDestinationType`, where user is actually referred. In the example, it is 0 that is After Greeting Action. For more information, see the Possible Values of `DependencyDestinationType` section.
- Therefore, user is referenced in the After Greeting action of Standard Greeting of callhandler template(Texoma_SystemCallhandlerTemplate_1)

Example 2:

Dependent Object:

```
<SubscriberDependency>
  <DependencyType>PCTRCaller</DependencyType>
  <DependentEntityObjectId>476dd400-4130-4795-9e15-c8ce3dd57ff3</DependentEntityObjectId>
  <DependentEntityType>45</DependentEntityType>
  <DependentEntityOwner>Donald_Operator_1</DependentEntityOwner>
  <DependencyDestinationType>4</DependencyDestinationType>
```

```
<SubscriberObjectId>cfb66680-f028-4282-8740-ba7531e574cf</SubscriberObjectId>
<UserURI>/vmrest/users/cfb66680-f028-4282-8740-ba7531e574cf</UserURI>
<DependentEntityOwnerType>User</DependentEntityOwnerType>
</SubscriberDependency>
```

Steps to be followed:

- Check the `DependentEntityOwnerType` and `DependentEntityObjectId` from response, which depicts the type of object referencing the user. In the example, the referencing object entity is user whose name is 'Donald_Operator_1' and object id is '476dd400-4130-4795-9e15-c8ce3dd57ff3'. For more information, see the Possible Value of `DependencyType` section.
- Check `DependencyType`, which specifies type of dependency. In this example, the `PCTRCaller` is `DependencyType`.
- Check `DependencyDestinationType`, where user is actually referred. In the example, it is 4 that is referenced by personal rule caller. For more information, see the Possible Values of `DependencyDestinationType` section.
- In above example specified user is referenced in the personal call transfer rule of user (Donald_Operator_1).

Moving Dependencies of One User to Another

Example 1:

Suppose following is the dependent object of a particular user and it is required to move dependencies to another user, then below are the steps that should be followed. Dependent Object:

```
<SubscriberDependency>
  <DependencyType>Standard Greeting</DependencyType>
  <DependentEntityObjectId>7ea0ecb6-4125-4866-a0f6-5308a5a4b3d1</DependentEntityObjectId>
  <DependentEntityObjectType>66</DependentEntityObjectType>
  <DependentEntityOwner>Texoma_SystemCallhandlerTemplate_1 </DependentEntityOwner>
  <DependencyDestinationType>0</DependencyDestinationType>
  <SubscriberObjectId>4bc6f97a-0c97-4ed9-a7e2-05e611bb02d3</SubscriberObjectId>
  <UserURI>/vmrest/users/4bc6f97a-0c97-4ed9-a7e2-05e611bb02d3</UserURI>
  <DependentEntityOwnerType>Call Handler Template</DependentEntityOwnerType>
</SubscriberDependency>
```

Steps to be followed:

- Check the `DependentEntityOwnerType` and `DependentEntityObjectId` from response. In this example, `DependentEntityOwnerType` is `Call Handler Template`, and `DependentEntityObjectId` is `7ea0ecb6-4125-4866-a0f6-5308a5a4b3d1`.
- Perform GET Operation on Dependent Object with `DependentEntityObjectId` as Object ID of dependent object entity. In this example use URI:

```
https://<connection-server>/vmrest/callhandlertemplates/<DependentEntityObjectId>
```

- Check `DependencyType`, which specifies type of dependency. In this example it is `Greeting (Standard)`, therefore, use GET on

```
https://<connection-server>/vmrest/callhandlertemplates/<DependentEntityObjectId>/templategreetings/Standard
```

- Check `DependencyDestinationType`. In this example it is 0 that is `After Greeting` therefore, perform PUT operation to move the dependency to new user.

PUT

```
https://<connection-server>/vmrest/callhandlertemplates/<DependentEntityObjectId>/templategreetings/Standard
```



```

<TemplateGreeting>
  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>PHGreeting</AfterGreetingTargetConversation>

  <AfterGreetingTargetHandlerObjectId>9b121ddf-8ce4-4bbd-b179-ab75ab63eb15</AfterGreetingTargetHandlerObjectId>
</TemplateGreeting>

```

Where, AfterGreetingTargetHandlerObjectId is the call handler of new user. In above example After Greeting action of Standard Greeting of call handler template is now referencing callhandler of new user.

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
UserURI	Read Only	String	URI of referenced User
DependencyType	Read Only	String(24)	Type of dependency (e.g., After Greeting, After Message, Routing Rule, etc.). Possible values are specified in the table given under the Possible Value of DependencyType section.
DependentEntityObjectId	Read Only	String(32)	The unique identifier of the entity that is dependent on the user.
DependentEntityObjectType	Read Only	Integer	The type of object that is dependent on the user. Possible values are specified in the table given under the Possible Values of DependentEntityObjectType section.
DependentEntityOwner	Read Only	String(36)	The unique identifier of the entity that owns the object which is dependent on the user. For example, a user's call handler may be the dependent entity, but the call handler is owned by another user.
DependencyDestinationType	Read Only	Integer	Possible values are specified in the table given under the Possible Values of DependencyDestinationType section.
SubscriberObjectId	Read Only	String(36)	Unique Object Id of referenced User
DependentEntityOwnerType	Read Only	String(24)	The entity owner type of object (e.g., User, Call Handler Template)

Possible Value of Dependency Type

Name	Value	Description	DisplayName
NotificationRuleCaller	NotificationRuleCaller	Reference from notification rule caller	Notification
GreetingOffHours	GreetingOffHours	Reference from closed greeting	Closed Greeting
GreetingInternal	GreetingInternal	Reference from internal greeting	Internal Greeting
GreetingError	GreetingError	Reference from error greeting	Error Greeting
GreetingHoliday	GreetingHoliday	Reference from holiday greeting	Holiday Greeting

Possible Value of Dependency Type

Name	Value	Description	DisplayName
GreetingAlternate	GreetingAlternate	Reference from alternate greeting	Alternate Greeting
GreetingBusy	GreetingBusy	Reference from busy greeting	Busy Greeting
GreetingStandard	GreetingStandard	Reference from standard greeting	Standard Greeting
UserExit	UserExit	Reference from user's call handler's exit action	Exit Action
PCTRCaller	PCTRCaller	Reference from personal rule caller	PCTR Caller
SMPPProvider	SMPP	Reference from SMPP Provider SMPP Provider	SMPP Provider
TT_Pound	TT#	Reference from call handler's TT# menu entry	#
TT_Star	TT*	Reference from call handler's TT* menu entry	*
TT_0	TT0	Reference from call handler's TT0 menu entry	0
TT_1	TT1	Reference from call handler's TT1 menu entry	1
TT_2	TT2	Reference from call handler's TT2 menu entry	2
TT_3	TT3	Reference from call handler's TT3 menu entry	3
TT_4	TT4	Reference from call handler's TT4 menu entry	4
TT_5	TT5	Reference from call handler's TT5 menu entry	5
TT_6	TT6	Reference from call handler's TT6 menu entry	6
TT_7	TT7	Reference from call handler's TT7 menu entry	7
TT_8	TT8	Reference from call handler's TT8 menu entry	8
TT_9	TT9	Reference from call handler's TT9 menu entry	9
AfterGreeting	After Greeting	Reference from call handler's "AfterGreeting" action	After Greeting
AfterMessage	AfterMessage	Reference from call handler's "AfterMessage" action	AfterMessage
Exit	Exit	Reference from call handler's "Exit" action	Exit
NoInput	NoInput	Reference from call handler's "NoInput" action	NoInput
NoSelection	NoSelection	Reference from call handler's "NoSelection" action	AfterMessage
Zero	Zero	Reference from call handler's "Zero" action	Zero
RoutingRule	RoutingRule	Reference from a routing rule's "Action".	RoutingRule

Possible Values of DependentEntityType

Name	Value	Description
CallHandler	3	CallHandler
DirectoryHandler	6	Directory Handler used to search a subset of the directory. Formerly referred to as "NameLookupHandler."
GreetingRule	66	Defines the greeting to play and the action to take for a call handler
InterviewHandler	5	Special case handler that asks the caller up to 20 questions
PersonalRuleCaller	45	A caller that drives a personal rule.
MenuEntry	67	Touch-tone menu entry for a call handler
NotificationRule	72	Specifies when and which notification device is used for notification of a new message.
Subscriber	21	User that has a subscription to a voice mail service and as such also is assigned at least one mailbox.
UserTemplate	10	Template for creating a new user.
RoutingRule	103	System call routing rule.
GlobalUser	104	Global user account type.
SMPPProvider	53	A provider of Short Message Peer-To-Peer services
CallHandlerTemplate	135	Template for creating new call handlers
NotificationRuleCaller	152	User triggering a notification rule

Possible Values of DependencyDestinationType

Name	Value	Description
AfterGreeting	0	The user is an After Greeting destination
AfterMessage	1	The user is an After Message destination
CallerInputKey	2	The user is a destination of a caller input key
DirectoryHandlerCallerInputKey	3	The user is a destination of a directory handler
PCTR	4	The user is referenced by a personal rule caller

Possible Values of DependencyDestinationType



CHAPTER 11

Cisco Unity Connection Provisioning Interface (CUPI) API -- Alternate Extension

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Alternate Extensions API, on page 29](#)

Alternate Extensions API

Listing the Basic Settings of Alternate Extension

```
GET https://<connection-server>/vmrest/users/<user-objectid>/alternateextensions
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<AlternateExtensions total="1">
  <AlternateExtension>

    <URI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/alternateextensions/f0cfbf52-a6b2-466c-b7e6-eb05d6cce705</URI>

    <IdIndex>0</IdIndex>
    <DtmfAccessId>99934</DtmfAccessId>
    <LocationObjectId>42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationObjectId>

    <LocationURI>/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationURI>

    <ObjectId>f0cfbf52-a6b2-466c-b7e6-eb05d6cce705</ObjectId>
    <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionURI>

    <AlternateExtensionAdvancedURI>/vmrest/alternateextensionadvanceds/42266e69-5e5e-42fe-924e-e942c9e06b3</AlternateExtensionAdvancedURI>

  </AlternateExtension>
</AlternateExtensions>
```

Response Code: 200

JSON Example

```
GET
https://<connection-server>/vmrest/users/<user-objectid>/alternateextensions/<alternateextension_objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":
"/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/alternateextensions/f0cfbf52-a6b2-466c-b7e6-eb05d6cce705",

  "IdIndex": "0",
  "DtmfAccessId": "99934",
  "LocationObjectId": "42a9ab40-490d-4819-9bfb-8ddce4f430ff",
  "LocationURI": "/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff",

  "ObjectId": "f0cfbf52-a6b2-466c-b7e6-eb05d6cce705",
  "PartitionObjectId": "da2114bf-cde7-43d8-9709-cd3895a9d41b",
  "PartitionURI": "/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b",
  "AlternateExtensionAdvancedURI":
"/vmrest/alternateextensionadvanceds/42266e69-5e5e-42fe-924e-e94b2c9e06b3"
}
```

Listing the Advanced Settings of Alternate Extension

- Fetch the Alternate Extension URI from following URI:

```
https://<connection-server>/vmrest/users/<user-objectid>
```

- Now fetch the Alternate Extension Advanced URI from a URI:

```
https://<connection-server>/vmrest/users/<user-objectid>/alternateextensions/<alternateextionsion_objectid>
```

- Set following as a Request URI:

```
https://<connection-server>/vmrest/alternateextensionadvanceds/<alternateextensionadvanced_objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<AlternateExtensionAdvanced>
  <URI>/vmrest/alternateextensionadvanceds/42266e69-5e5e-42fe-924e-e94b2c9e06b3</URI>

  <DeviceDtmfAccessIdObjectId>7c26381e-ee0f-4abf-9083-94a5017abc76</DeviceDtmfAccessIdObjectId>

  <MessageSpeed>100</MessageSpeed>
  <MessageVolume>50</MessageVolume>
  <ObjectId>42266e69-5e5e-42fe-924e-e94b2c9e06b3</ObjectId>
  <PromptSpeed>100</PromptSpeed>
  <PromptVolume>50</PromptVolume>
  <SaveMessageOnHangup>true</SaveMessageOnHangup>
  <SendMessageOnHangup>1</SendMessageOnHangup>
  <SkipPasswordForKnownDevice>true</SkipPasswordForKnownDevice>
  <SubscriberObjectId>bf0e9ca3-db47-472d-aa0c-609a3265ada1</SubscriberObjectId>
  <UserURI>/vmrest/users/bf0e9ca3-db47-472d-aa0c-609a3265ada1</UserURI>
</AlternateExtensionAdvanced>

Response Code: 200
```

JSON Example

- Step 1: Fetch the Alternate Extension URI from following URI:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

- Step 2: Now fetch the Alternate Extension Advanced URI from a URI:

```
GET https://<connection-server>/vmrest/users/
<user-objectid>/alternateextensions/<alternateextension_objectid>
```

- Step 3: Set following as a Request URI:

```
GET https://<connection-server>/vmrest/alternateextensionadvanced/<objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/alternateextensionadvanced/42266e69-5e5e-42fe-924e-e94b2c9e06b3",
  "DeviceDtmfAccessIdObjectId": "7c26381e-ee0f-4abf-9083-94a5017abc76",
  "MessageSpeed": "100",
  "MessageVolume": "50",
  "ObjectId": "42266e69-5e5e-42fe-924e-e94b2c9e06b3",
  "PromptSpeed": "100",
  "PromptVolume": "50",
  "SaveMessageOnHangup": "true",
  "SendMessageOnHangup": "1",
  "SkipPasswordForKnownDevice": "true",
  "SubscriberObjectId": "bf0e9ca3-db47-472d-aa0c-609a3265ada1",
  "UserURI": "/vmrest/users/bf0e9ca3-db47-472d-aa0c-609a3265ada1"
}

Response Code: 200
```

Create a new Alternate Extension

The mandatory fields for creation of alternate extension are IdIndex, DtmfAccessId, and PartitionObjectId. The URI for getting partition object ID use:

```
GET https://<connection-server>/vmrest/partitions
```

The following URI is fetched from the response body of URI:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

To create a new alternate extension for a user

```
POST https://<connection-server>/vmrest/users/<user-objectid>/alternateextensions
<AlternateExtension> <IdIndex>2</IdIndex>
<DtmfAccessId>999341</DtmfAccessId>
<PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
</AlternateExtension>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/users/fa2114bf-cde7-43d8-9709-cd3895a9d41b/alternateextensions/ea2114bf-cde7-43d8-9709-cd3895a9d41b
```

JSON Example

```
POST https://<connection-server>/vmrest/users/<user-objectid>/alternateextensions
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "IdIndex": "2",
```

```

    "DtmfAccessId": "999341",
    "PartitionObjectId": "da2114bf-cde7-43d8-9709-cd3895a9d41b"
  }

```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```

Response code: 201
/vmrest/users/fa2114bf-cde7-43d8-9709-cd3895a9d41b/alternateextensions/ea2114bf-cde7-43d8-9709-cd3895a9d41b

```

Update Basic Settings of Alternate Extension

```

PUT https://<connection-server>/vmrest/users/<user-objectid>/alternateextensions/<objectid>

```

```

<AlternateExtension>
  <DtmfAccessId>999345c1</DtmfAccessId>
  <PartitionObjectId>elc25917-7dbe-4691-8226-246f84edc73b</PartitionObjectId>
</AlternateExtension>

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```

Response Code: 204

```

JSON Example

```

PUT
https://<connection-server>/vmrest/users/<user-objectid>/alternateextensions/<alternateextension_objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive

{
  "DtmfAccessId": "123345"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```

Response Code: 204

```

Delete Alternate Extension

```

DELETE
https://<connection-server>/vmrest/users/<user-objectid>/alternateextensions/<alternateextension_objectid>

```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```

Response Code: 204

```

JSON Example

```

DELETE
https://<connection-server>/vmrest/users/<user-objectid>/alternateextensions/<alternateextension_objectid>
Accept: application/json
Connection: keep-alive

```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```

Response code: 204

```


Explanation of Data Fields

Field Name	Data Type	Operation	Description
URI	String	Read Only	URI of Alternate Extension
IdIndex	Read/Write	Integer	An index into the alternate extensions for a subscriber. Possible value can be 0-20. Admin-defined alternate extensions utilize the range of 1-10. User-defined alternate extensions utilize the range of 11-20.
DtmfAccessId	String(319)	Read/Write	The dialable number.
PartitionURI	String	Read Only	URI of partition to which the DtmfAccessId is assigned.
PartitionObjectId	String(36)	Read/Write	The unique identifier of the Partition to which the DtmfAccessId is assigned.
LocationObjectId	String(36)	Read/Write	The unique identifier of the Location object to which this location (denormalized) belongs.
ObjectId	String(36)	Read Only	The unique identifier of the Extension
DisplayName	String(64)	Read/Write	The text name of this DtmfAccessId to be used when displaying entries.
AlternateExtensionAdvancedURI	String	Read Only	URI for getting and setting the advanced settings of Alternate Extension

Explanation of Data Fields: Advance Settings

Field Name	Data Type	Operation	Description
URI	String	Read Only	URI of Advance setting of Alternate Extension
AddressMode	Integer	Read/Write	The default method the subscriber will use to address messages to other subscribers. This can be addressing by ID, addressing by first name then last name, or by last name and then first name. Possible Values can be 0-2.
CommandDigitTimeout	Integer	Read/Write	The amount of time (in milliseconds) between digits on a multiple digit menu command entry (i.e. different than the inter digit timeout that is used for strings of digits such as extensions and transfer strings). Possible Values can be 250-5000.
ConfirmationConfidenceThreshold	Integer	Read/Write	Voice Recognition Confirmation Confidence Threshold Possible Values can be 0-100.

Field Name	Data Type	Operation	Description
ConfirmDeleteMessage	Boolean	Read/Write	<p>A flag indicating whether Cisco Unity Connection will request confirmation from a subscriber before proceeding with a deletion of a single new or saved message.</p> <p>Possible Values can be:</p> <ul style="list-style-type: none"> • false: Cisco Unity Connection will not request confirmation from a subscriber before proceeding with a deletion of a single new or saved message. • true: Cisco Unity Connection will request confirmation from a subscriber before proceeding with a deletion of a single new or saved message
ContinuousAddMode	Boolean	Read/Write	<p>A flag indicating whether when addressing, after entering one recipient name, whether the subscriber is asked to enter another name or assume the subscriber is finished adding names and is ready to move on to recording the message or applying message options.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • 0: Unity Connection prompts subscribers to press 1 to add more recipients. • 1: Unity Connection does not prompt subscribers to press 1 to add more recipients. Instead, subscribers continue entering recipient names or extensions (as applicable) until they indicate that they have completed addressing. <p>- Changing this setting affects the Send and Forward flows for all subscribers associated with the Unity Connection server, regardless of subscriber conversation style and whether Unity Connection is set up to prompt subscribers to record before or after addressing. - By enabling streamlined addressing, forwarding messages to single recipients requires that subscribers press an extra keystroke as when streamlined addressing is disabled.</p>
Device_DtmfAccessIdObjectId	String(36)	Read Only	The device to which this DeviceCustomConvSetting object belongs. The unique identifier of the DtmfAccessId object to which these setting apply.
FirstDigitTimeout	Integer	Read/Write	The amount of time to wait (in milliseconds) for first digit when collecting touchtone. Possible Values can be 500-10000.

Field Name	Data Type	Operation	Description
InterDigitDelay	Integer	Read/Write	The amount of time to wait (in milliseconds) for input between touch tones when collecting digits in touchtone conversation. Possible Values can be 1000-10000.
JumpToMessagesOnLogin	Boolean	Read/Write	<p>A flag indicating whether the subscriber conversation jumps directly to the first message in the message stack after subscriber sign-in.</p> <p>Subscribers will not hear message counts, their own name, top level menus, etc when this setting is active.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • false: Subscriber conversation does not jump directly to first message in the message stack after subscriber sign-in. • true: Subscriber conversation jumps directly to the first message in the message stack after subscriber sign-in.
MessageSpeed	Integer	Read/Write	<p>The audio speed Cisco Unity Connection uses to play back messages to the subscriber.</p> <p>Possible Values: A value between 0 and 200 is allowed.</p> <ul style="list-style-type: none"> • Normal speed, the speed at which messages are recorded is a value of 100. • Twice as fast as normal speed is a value of 200. • Half as fast as normal speed is a value of 50.
MessageVolume	Integer	Read/Write	<p>The audio volume expressed as a percentage that Cisco Unity Connection uses to play back message.</p> <p>Possible Values: A value between 0 and 100 is allowed.</p> <ul style="list-style-type: none"> • Normal volume, the volume used to record a message is a value of 50. • Twice as loud is a value of 100. • Half as loud as normal volume is a value of 25. <p>Note that the value is only used for message play back, not for other parts of the conversation.</p>

Field Name	Data Type	Operation	Description
NameConfirmation	Boolean	Read/Write	Indicates whether the voice name of the subscriber or distribution list added to an address list when a subscriber addresses a message to other subscribers is played. Possible Values: <ul style="list-style-type: none"> • true • false
ObjectId	String(36)	Read Only	A globally unique, system-generated identifier for an object.
PromptSpeed	Integer	Read/Write	The audio speed Cisco Unity Connection uses to play back prompts to the subscriber. Possible Values: A value between 0 and 200 is allowed. <ul style="list-style-type: none"> • Normal speed, the speed at which messages are recorded is a value of 100. • Twice as fast as normal speed is a value of 200. • Half as fast as normal speed is a value of 50.
PromptVolume	Integer	Read/Write	The volume level for playback of system prompts. Possible Values: A value between 0 and 100 is allowed. <ul style="list-style-type: none"> • Normal volume, the volume used to record a message is a value of 50. • Twice as loud is a value of 100. • Half as loud as normal volume is a value of 25. <p>Note that the value is only used for playback of system prompts, not for other parts of the conversation.</p>
RepeatMenu	Integer	Read/Write	The number of times to repeat a menu in touchtone. Possible Values: 0-250
SaveMessageOnHangup	Boolean	Read/Write	A flag indicating when hanging up while listening to a new message, whether the message is marked new again or is marked read. Possible values: <ul style="list-style-type: none"> • true • false

Field Name	Data Type	Operation	Description
SendMessageOnHangup	Integer	Read/Write	Indicates when hanging up while addressing a message that has a recording and at least one recipient, whether the message is discarded, saved or the message is sent. Possible Values: <ul style="list-style-type: none"> • 0: Message is not sent on hangup unless subscriber explicitly issues the command to send the message via DTMF or voice command. • 1: Message is sent on hangup if it has a recording and at least one valid recipient • 2: Message is saved as a draft message
SkipForwardTime	Integer	Read/Write	Indicates the amount of time (in milliseconds) to jump forward when skipping ahead in a voice or TTS message using either DTMF or voice commands while reviewing messages. Possible Values: 1000-60000
SkipPasswordForKnownDevice	Boolean	Read/Write	A flag indicating whether the subscriber will be asked for his/her PIN. Possible Values: <ul style="list-style-type: none"> • false: Subscriber will not be asked for their PIN when calling in from a known device. • true: Subscriber will be asked for their PIN when calling in from a known device.
SkipReverseTime	Integer	Read/Write	Indicates the amount of time (in milliseconds) to jump backward when skipping in reverse in a voice or TTS message using either DTMF or voice commands while reviewing messages. Possible Values: 1000-60000
SpeechIncompleteTimeout	Integer	Read/Write	Specifies the required length of silence (in milliseconds) from when the speech prior to the silence matches an active grammar, but where it is possible to speak further and still match the grammar. By contrast, the SpeechCompleteTimeout property is used when the speech prior to the silence matches an active grammar and no further words can be spoken. Possible Values: 300-0000
UserURI	String	Read Only	URI of the subscriber to which alternate extension belongs

Field Name	Data Type	Operation	Description
SpeechSensitivity	Integer	Read/Write	A variable level of sound sensitivity that enables the speech engine to filter out background noise and not mistake it for speech. A higher value means higher sensitivity. Possible Values: 0-100
SubscriberObjectId	String(36)	Read Only	Object id of Subscriber to which the Alternate Extension Belongs.
UseVui	Boolean	Read/Write	A flag indicating whether the speech recognition conversation is the default conversation for the subscriber. Possible Values: <ul style="list-style-type: none"> • false: Speech recognition conversation is not default conversation for the subscriber. • true: Speech recognition conversation is the default conversation for the subscriber. This is different from the voice-recognition class of service which indicates that the subscriber is allowed to use the voice-recognition conversation



CHAPTER 12

Cisco Unity Connection Provisioning Interface (CUPI) API -- Alternate Names API

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Alternate Names API, on page 39](#)

Alternate Names API

Listing the Alternate Names

GET
`https://<connection-server>/vmrest/alternatenames?query=(GlobalUserObjectId%20is%20<user-objectid>)`

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<AlternateNames total="3">
  <AlternateName>
    <URI>/vmrest/alternatenames/5fa9e143-d9d3-42ea-9370-e763d8ee319d</URI>
    <FirstName>sd</FirstName>
    <LastName>asd</LastName>
    <ObjectId>5fa9e143-d9d3-42ea-9370-e763d8ee319d</ObjectId>
    <GlobalUserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</GlobalUserObjectId>
    <GlobalUserURI>/vmrest/globalusers/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</GlobalUserURI>
  </AlternateName>
  <AlternateName>
    <URI>/vmrest/alternatenames/89b0a8b9-68d7-445c-acb9-aaf2a569d5ef</URI>
    <FirstName>sqdas</FirstName>
    <LastName>asqd</LastName>
    <ObjectId>89b0a8b9-68d7-445c-acb9-aaf2a569d5ef</ObjectId>
    <GlobalUserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</GlobalUserObjectId>
    <GlobalUserURI>/vmrest/globalusers/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</GlobalUserURI>
  </AlternateName>
  <AlternateName>
    <URI>/vmrest/alternatenames/dc03dec6-a9df-4d2b-8972-78c3bceec987</URI>
    <FirstName>sdwds</FirstName>
    <LastName>asd</LastName>
    <ObjectId>dc03dec6-a9df-4d2b-8972-78c3bceec987</ObjectId>
    <GlobalUserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</GlobalUserObjectId>
    <GlobalUserURI>/vmrest/globalusers/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</GlobalUserURI>
</AlternateNames>
```

```
</AlternateName>
</AlternateNames>
```

Response Code: 200

JSON Example

```
GET
https://<connection-server>/vmrest/alternatenames?query=(GlobalUserObjectId%20is%20<user-objectid>)
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Response Code: 200

Create a new Alternate Name

The mandatory fields for creation of an alternate name are: FirstName, LastName, and GlobalUserObjectId. The URI for getting partition object ID use:

```
GET https://<connection-server>/vmrest/partitions
```

The following URI is fetched from the response body of above URI:

```
https://<connection-server>/vmrest/users/<user-objectid>
```

The Request URI:

```
POST https://<connection-server>/vmrest/alternatenames
<AlternateName>
  <FirstName>sdwds</FirstName>
  <LastName>asd</LastName>
  <GlobalUserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</GlobalUserObjectId>
</AlternateName>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

Response Code: 201
/vmrest/alternatenames/f375d893-c8eb-437b-90bf-7de4b1d0c3e8

JSON Example

```
POST https://<connection-server>/vmrest/alternatenames
Accept: application/json
Content-type: application/json
Connection: keep-alive
Request body:
{
  "FirstName": "and",
  "LastName": "gupta",
  "GlobalUserObjectId": "9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

Response Code: 201
/vmrest/alternatenames/f375d893-c8eb-437b-90bf-7de4b1d0c3e8

Update Alternate Names

```
PUT https://<connection-server>/vmrest/alternatenames/<objectid>
<AlternateName>
  <FirstName>kapil</FirstName>
  <LastName>gupta</LastName>
</AlternateName>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

```
PUT https://<connection-server>/vmrest/alternatenames/<objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
{
  "FirstName": "John",
  "LastName": "gupta"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response code: 204

Delete Alternate Names

```
DELETE https://<connection-server>/vmrest/alternatenames/<objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

```
DELETE https://<connection-server>/vmrest/alternatenames/<objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

Response code: 204

Reference

- .



CHAPTER 13

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Caller Input

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Caller Inputs API, on page 43](#)

Caller Inputs API

To get the caller input URI, follow the steps given below:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

From above URI get the call handler URI:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
```

To edit caller inputs, you need to get the menu entries:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/menuentries
```

Listing Caller Inputs

```
GET  
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/menuentries/<key>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<MenuEntry>  
  <URI>/vmrest/handlers/callhandlers/287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842/menuentries/1/<URI>  
  
  <CallHandlerObjectId>287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842</CallHandlerObjectId>  
  
<CallhandlerURI>/vmrest/handlers/callhandlers/287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842/<CallhandlerURI>  
  
  <TouchtoneKey>1</TouchtoneKey>  
  <Locked>>false</Locked>  
  <Action>7</Action>  
  <TargetConversation>BroadcastMessageAdministrator</TargetConversation>  
  <ObjectId>d2a363af-d3f6-46cf-81c9-5ad48d2dccd7</ObjectId>  
  <DisplayName>abc</DisplayName>  
  <TransferType>0</TransferType>
```

```
<TransferRings>9</TransferRings>
</MenuEntry>
```

JSON Example

```
GET
https://<Connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/menuentries/4
Accept: application/json
Connection: keep-alive

{
  "URI": "/vmrest/handlers/callhandlers/43bb6590-e9e3-43ca-972e-e3e158a96126/menuentries/4"
  "CallHandlerObjectId": "43bb6590-e9e3-43ca-972e-e3e158a96126"
  "CallhandlerURI": "/vmrest/handlers/callhandlers/43bb6590-e9e3-43ca-972e-e3e158a96126"
  "TouchtoneKey": "4"
  "Locked": "false"
  "Action": "2"
  "TargetConversation": "AD"
  "TargetHandlerObjectId": "80b1b22b-2fd8-458e-abd1-294e83a9ec55"
  "ObjectId": "a164d69a-5d0a-4c07-b2e2-d972448950db"
}

Response code: 200
```

Updating Caller Input Parameters

The following is an example of the PUT request that updates caller input parameters:

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
<Callhandler>
  <OneKeyDelay>9999</OneKeyDelay>
  <EnablePrependDigits>true</EnablePrependDigits>
  <PrependDigits>4545</PrependDigits>
</Callhandler>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204



Note <Prepend Digits> parameter must be having digits only (extension parameter)

Updating Caller Input Keys

The following is an example of the PUT request that updates the call input keys:

```
PUT
https://<connection-server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/menuentries
```

The following is an example of the PUT request that edits the call input keys for (*):

```
PUT
https://<connection-server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/menuentries/*
Request Body:
<MenuEntry>
  <Locked>true</Locked>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204	
Values	Parameters
0	Ignore
1	Hang Up
4	Take Message
5	Skip Greeting
6	Restart Greeting
7	Transfer to alternate contact number
8	Route from next call routing rule

Example 1: Edit call actions

```
Request Body:
<MenuEntry>
  <Action>7</Action>
  <TransferType>1</TransferType>
  <TransferNumber>2344</TransferNumber>
  <TransferRings>4</TransferRings>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Example 2: Edit Call Handler The following is an example of the PUT request that shows the call handler object ID:

```
PUT https://<connection-server>/vmrest/handlers/callhandlers
Request Body:
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>PHGreeting</TargetConversation>
  <TargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</TargetHandlerObjectId>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Example 3: Interview handler

```
Request Body:
<MenuEntry>
  <Action>2</Action>
  <TargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</TargetHandlerObjectId>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 4: Directory handler

```
Request Body:
<MenuEntry>
  <Action>2</Action>
  <TargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</TargetHandlerObjectId>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 5: Conversation

```
Request Body: for broadcast message administrator
</MenuEntry>
  <Action>2</Action>
  <TargetConversation>BroadcastMessageAdministrator</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for broadcast message administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

```
Request Body: for caller system transfer
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>SystemTransfer</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for caller system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

```
Request Body: for greeting administrator
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>GreetingAdministrator</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for greeting administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

```
Request Body: for sign in
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>SubSignIn</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for sign in and the actual response will depend upon the information given by you:

```
Response Code: 204
```

```
Request Body: for user system transfer
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>SubSysTransfer</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for user system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 4: Users with Mailbox

```
Request Body:
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>PHTransfer</TargetConversation>
  <TargetHandlerObjectId>71cb381b-fd16-4ba8-8a1d-e71684e57b0e</TargetHandlerObjectId>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

For conversation, do the following:

```
Request URI:
PUT
https://<connection-server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/menuentries/4
Accept: application/json
Content-type: application/json
Connection: keep-alive
Request Body:
{
  "Action": "2",
  "TargetConversation": "SubSignIn"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Data Type	Operations	Comments
OneKeyDelay	Integer	Read/Write	<p>Indicate the amount of time that System waits for additional input after callers press a single key that is not locked. If there is no input within this time, system performs the action assigned to the single key.</p> <p>We recommend a value of 1,500 milliseconds (one and one-half seconds).</p> <p>Note</p> <ul style="list-style-type: none"> • This option is unavailable if Ignore Caller Input is enabled on the Greetings page. • OneKeyDelay can only accept integer with value 0 through 10000
ObjectId	String	Read Only	Unique Id for menu entry.
EnablePrependDigits	Boolean	Read/Write	<p>To simulate abbreviated extensions by using prepended digits for call handlers and user mailboxes. When such digits are defined, they are prepended to any extension that a caller dials while listening to the greeting for the call handler or user mailbox.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true • false <p>Default value: false.</p>
PrependDigits	Integer	Read/Write	Digits that are prepended to any extension that a caller dials while listening to the greeting of the user.
MenuEntriesURI	String	Read Only	<p>Parameters for caller input keys are present in menu entries URI.</p> <p>Note For # touchtone key, symbol %23 is used in the URI.</p>
TouchtoneKey	String	Read Only	Indicates the phone keypad key to which the settings apply.
Locked	Boolean	Read/Write	<p>A locked menu entry does not allow additional dialing after this choice is entered.</p> <p>Values can be: • false: Unlocked - Additional dialing after this choice is entered is allowed • true: Locked - Additional dialing is ignored</p> <p>Default value: false.</p>
Action	Integer	Read/Write	<p>Takes values from 0-8. See table for values.</p> <p>Default value: 0</p>
CallHandlerObjectId	String	Read Only	Menu entries can only belong to call handlers. No other object can own a menu entry.
TargetConversation	String	Read/Write	The name of the conversation to which the caller is routed.

Parameter	Data Type	Operations	Comments
TargetHandlerObjectid	String(36)	Read/Write	The unique identifier of the specific object to send along to the target conversation.
TransferNumber	Integer	Read/Write	Extension to which call is transferred.
DisplayName	String(24)	Read/Write	Descriptive name of the handler being used.
TransferType	Integer	Read/Write	<p>The type of call transfer Cisco Unity Connection will perform - supervised or unsupervised (also referred to as "Release to Switch" transfer).</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • 0: Release to switch • 1: Supervise transfer <p>Default Value: 0 TransferRings Integer Read/Write Applies only when the "TransferType" column is set to supervised (1). This value should never be less than 2 for a supervised transfer. Possible value: 2-20 Default value: 4</p>



CHAPTER 14

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Greetings

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Greetings API, on page 51](#)

Greetings API

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

From the above URI, get the call handler object ID:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
```

The following URI can be used to view the greetings:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings
```

The following URI can be used to view the alternate greeting:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Alternate
```

The following URI can be used to view the busy greeting:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Busy
```

The following URI can be used to view the error greeting:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Error
```

The following URI can be used to view the closed greeting:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Off%20Hours
```

The following URI can be used to view the standard greeting:

```
GET
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Standard
```

The following URI can be used to view the holiday greeting:

```
GET https://<connection-server>/vmrest/callhandlers/<CallhandlerObjectId>/greetings/Holiday
```

Updating Fields of Greeting

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Alternate
```

Request Body: Enable greeting

```
<Greeting>
  <EnableTransfer>true</EnableTransfer>
</Greeting>
```

The following is the response from the *PUT* request to enable greeting and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: enable with no end date

```
<Greeting>
  <EnableTransfer>true</EnableTransfer>
  <TimeExpires></TimeExpires>
</Greeting>
```

The following is the response from the *PUT* request to enable with no end date and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: enable until

```
<Greeting>
  <EnableTransfer>true</EnableTransfer>
  <TimeExpires>2014-12-31 05:30:00.000</TimeExpires>
</Greeting>
```

The following is the response from the *PUT* request to enable until and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: edit caller hears

```
<Greeting>
  <PlayWhat>2</PlayWhat>
  <PlayRecordMessagePrompt>true</PlayRecordMessagePrompt>
</Greeting>
```

The following is the response from the *PUT* request to edit caller hears and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: enable ignore caller inputs

```
<Greeting>
  <IgnoreDigits>true</IgnoreDigits>
</Greeting>
```

The following is the response from the *PUT* request to enable ignore caller inputs and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: enable allow transfers to numbers not associated with users or call handlers

```
<Greeting>
  <IgnoreDigits>false</IgnoreDigits>
  <EnableTransfer>true</EnableTransfer>
</Greeting>
```

The following is the response from the *PUT* request to enable allow transfers to numbers not associated with users or call handlers and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Alternate
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "EnableTransfer":"true","IgnoreDigits":"false"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Data Type	Operations	Comments
ObjectId	String(36)	Read Only	Unique identifier of the directory entry.
CallHandlerObjectId	String(36)	Read Only	The unique identifier of the call handler object to which this greeting rule belongs.

Parameter	Data Type	Operations	Comments
IgnoreDigits	Boolean	Read/Write	<p>A flag indicating whether Cisco Unity Connection takes action in response to touchtone keys pressed by callers during the greeting.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • false: Caller input enabled during greeting • true: Caller input ignored during greeting <p>Default Value: false</p>
PlayWhat	Integer(2)	Read/Write	<p>The source for the greeting when this greeting is active.</p> <p>Default Value: 0 Default Values can be:</p> <ul style="list-style-type: none"> • Call handler - 1 (recording) • Subscriber - 0 (system)
RepromptDelay	Integer(2)	Read/Write	<p>The amount of time (in seconds) that Cisco Unity Connection waits without receiving any input from a caller before Cisco Unity Connection prompts the caller again.</p> <p>Default Value:2 Values can be:</p> <ul style="list-style-type: none"> • 0: Do wait without receiving caller input and do not replay greeting. • 1 or greater: Wait this number of seconds without receiving any input from the caller before playing the greeting again.
Reprompts	Integer(2)	Read/Write	<p>The number of times to reprompt a caller. After the number of times indicated here, Cisco Unity Connection performs the after-greeting action.</p> <p>Default Value: 0 Values can be:</p> <ul style="list-style-type: none"> • 0: Do not reprompt - Cisco Unity Connection will play the greeting once and then the after-greeting action is taken. • 1 or greater: Number of times to reprompt.
TimeExpires	Data Time(8)	Read/Write	<p>The date and time when the greeting rule expires. The greeting rule is considered not expired (enabled), if the value is NULL or a future date. The greeting rule is considered expired (disabled), the value is in the past.</p>
GreetingType	String(12)	Read Only	<p>The type of greeting, e.g. "Standard," "Off Hours," "Busy," etc.</p>

Parameter	Data Type	Operations	Comments
AfterGreetingAction	Integer(2)	Read/Write	AfterMessageAction can only accept integer with value 1, 2, 4, 6, 8 Values can be: <ul style="list-style-type: none"> • 1: Hang up • 2. for other actions with object id (call handler, interview handler, directory handler) • 4. Take Message • 6. Restart greeting • 8: Route from next call routing rule.
AfterGreetingActionObjectId	String(36)	Read/Write	The unique identifier of the CallAction object that determines what action Cisco Unity Connection will take on the call after the greeting is played.
AfterGreetingTargetConversation	String(64)	Read/Write	The name of the conversation to which the caller is routed.
AfterGreetingTargetHandleObjectId	String(36)	Read/Write	The unique identifier of the specific object to send along to the target conversation.
PlayRecordMessagePrompt	Integer(2)	Read/Write	A flag indicating whether the "Record your message at the tone..." prompt prior to recording a message. Values can be: <ul style="list-style-type: none"> • 0: System will not play the "Record your message at the tone..." prompt prior to recording a message. • 1: System will play the "Record your message at the tone..." prompt prior to recording a message. Default Value: 1

Parameter	Data Type	Operations	Comments
EnableTransfer	Boolean	Read/Write	<p>A flag indicating when an extension is dialed at the greeting and the extension is not available whether to transfer to another extension.</p> <p>Default value: 0 Values can be:</p> <ul style="list-style-type: none"> • 0: User cannot be transferred to another extension. • 1: User can "be transferred to another extension." <p>Greeting Type</p> <ul style="list-style-type: none"> • 1.Alternate - can be used for a variety of special situations, such as vacations, leave of absence, or a holiday. An alternate greeting overrides all other greetings. • 2.Busy - plays when the extension is busy. A busy greeting overrides the standard, off hours, and internal greetings. • 3.Error - plays when a caller attempts to dial an extension that does not exist on the system during a greeting. • 4.Internal - plays to internal callers only. An internal greeting overrides the standard and off hours greetings. • 5.Off hours - plays during the closed (nonbusiness) hours defined for the active schedule. An off hours greeting overrides the standard greeting, and thus limits the standard greeting to the open hours defined for the active schedule. • 6.Standard - plays at all times unless overridden by another greeting. You cannot disable the standard greeting. • 7.Holiday - plays when holiday schedule is encountered unless overridden by an alternate greeting.



CHAPTER 15

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Mailbox API

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Mailbox API, on page 57](#)
- [Listing the Mailbox Details of a User, on page 57](#)
- [Updating Mailbox Quota, on page 58](#)
- [Explanation of Data Fields, on page 59](#)

Mailbox API

To get object ID for message aging policy, use URI

```
GET https://<connection server>/vmrest/messageagingpolicies
```

```
GET https://<connection server>/vmrest/users/<userobjectid>/mailboxattributes
```

Listing the Mailbox Details of a User

```
GET https://<connection-server>/vmrest/users/<userobjectid>/mailboxattributes
```

The following is the response from the *GET* request and the actual response will depend upon the information given by you:

```
<MailboxAttributes>
  <ByteSize>0</ByteSize>

<MessageAgingPolicyObjectId>efb2f81f-32c5-4ed6-ba6b-d85260012d5c</MessageAgingPolicyObjectId>

  <Mounted>true</Mounted>
  <NotificationType>0</NotificationType>
  <SendReadReceipts>>false</SendReadReceipts>
  <NumMessages>0</NumMessages>
  <Send>1024</Send>
  <Receive>1024</Receive>
  <Warn>1024</Warn>
</MailboxAttributes>
```

```
Response Code: 200
```

JSON Example

```
GET https://<connection-server>/vmrest/users/<userobjectid>/mailboxattributes
Accept: application/json
Connection: keep-alive
```

The following is the response from the *GET* request and the actual response will depend upon the information given by you:

```
{
  "ByteSize": "0",
  "MessageAgingPolicyObjectId": "efb2f81f-32c5-4ed6-ba6b-d85260012d5c",
  "Mounted": "true",
  "NotificationType": "0",
  "SendReadReceipts": "false",
  "NumMessages": "0",
  "ReceiveQuota": "1024",
  "SendQuota": "1024",
  "WarningQuota": "1024"
}
```

```
Response Code: 200
```

Updating Mailbox Quota

Request Body: for use system settings

```
<UserTemplate>
  <ReceiveQuota>-2</ReceiveQuota>
  <SendQuota>-2</SendQuota>
  <WarningQuota>-2</WarningQuota>
</UserTemplate>
```

The following is the response from the *PUT* request for use system settings and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for custom system maximum settings

```
<UserTemplate>
  <ReceiveQuota>-1</ReceiveQuota>
  <SendQuota>-1</SendQuota>
  <WarningQuota>-1</WarningQuota>
</UserTemplate>
```

The following is the response from the *PUT* request for custom system maximum settings and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for custom settings

```
<UserTemplate>
  <ReceiveQuota>1048576</ReceiveQuota>
  <SendQuota>1048576</SendQuota>
  <WarningQuota>1048576</WarningQuota>
</UserTemplate>
```

The following is the response from the *PUT* request for custom settings and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To change mailbox quota, do the following:

```
PUT https://<connection-server>/vmrest/users/<userobjectid>/mailboxattributes
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "ReceiveQuota": "104345",
  "SendQuota": "104345",
  "WarningQuota": "104345"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note Above all values are in bytes and in Cisco Unity Connection Administration, it takes values in MB.

Explanation of Data Fields

Field Name	Data Types	Operation	Description
Send	Integer	Read/Write	Send limit mailbox size (in bytes). (Max:2048 MB) Possible values: <ul style="list-style-type: none"> • 2: The default system quota is assigned. • 1: The quota is unlimited. 1- n : Limit in bytes which is integral multiple of 1024 bytes.

Field Name	Data Types	Operation	Description
Warning	Integer	Read/Write	Warning limit mailbox size (in bytes). Maximum size can be 2048 MB. Possible values: <ul style="list-style-type: none"> • 2: The default system quota is assigned. • 1: The quota is unlimited. 1- n : Limit in bytes which is integral multiple of 1024 bytes.
Receive	Integer	Read/Write	Receive limit mailbox size (in bytes). Maximum size can be 2048 MB. Possible values: <ul style="list-style-type: none"> • 2: The default system quota is assigned. • 1: The quota is unlimited. • 1- n : Limit in bytes. which is integral multiple of 1024 bytes
SendReadReceipts	Boolean	Read/Write	A flag indicating whether the mailbox created with this subscriber allows the system to send read receipts on its behalf. Possible values: <ul style="list-style-type: none"> • false: Disable • true: Enable Default value: false
ByteSize	Integer	Read Only	The total size, in bytes, of all voice messages for the current user.
Mounted	Boolean	Read Only	A flag indicating whether the mailbox store is mounted. Possible value: <ul style="list-style-type: none"> • false: unMounted • true: Mounted Default value: true
NotificationType	Integer	Read/Write	The notification type to use for this mailbox created Possible value: <ul style="list-style-type: none"> • false: Classical - marking a message unread, read and back to unread will turn the notification (mwi) on, off and back on. • true: Modern - once a message has been touched (read) then it will not trigger notifications each time the message is marked unread and read again. Default Value: false
NumMessages	Integer	Read Only	The total number of new messages, read messages, and messages that have been marked deleted

Field Name	Data Types	Operation	Description
MessageAgingPolicyObjId	String (36)	Read/Write	Object ID of a message aging policy



CHAPTER 16

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Message Actions API

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Message Actions API](#), on page 63

Message Actions API

Listing Message Actions

First hit the URI:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

Then, fetch the following URI from the response body:

```
https://<connection-server>/vmrest/users/<user-objectid>/messagehandlers/<object Id>
```

The following is the response from the *GET* request and the actual response will depend upon the information given by you:

```
<MessageHandler>
<URI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/messagehandlers/583722c8-e93b-42f0-8052-b75aa1ededb8</URI>

  <ObjectId>583722c8-e93b-42f0-8052-b75aa1ededb8</ObjectId>
  <SubscriberObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</SubscriberObjectId>
  <UserURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</UserURI>
  <RelayAddress>Texoma@cisco.com</RelayAddress>
  <VoicemailAction>2</VoicemailAction>
  <EmailAction>2</EmailAction>
  <FaxAction>2</FaxAction>
  <DeliveryReceiptAction>1</DeliveryReceiptAction>
</MessageHandler>
```

```
Response Code: 200
```

JSON Example

```
GET https://<connection-server>/vmrest/users/<objectid>/messagehandlers/<object Id>
Accept: application/json
Connection: keep-alive
```

The following is the response from the *GET* request and the actual response will depend upon the information given by you: Response Body:

```
{
  "URI":"/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/messagehandlers/583722c8-e93b-42f0-8052-b75aa1ededb8"
  "ObjectId":"583722c8-e93b-42f0-8052-b75aa1ededb8"
  "SubscriberObjectId":"9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
  "UserURI":"/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
  "RelayAddress":Texoma@cisco.com
  "VoicemailAction":"2"
  "EmailAction":"2"
  "FaxAction":"2"
  "DeliveryReceiptAction":"1"
}
```

```
Response Code: 200
```

Update Message Actions

First hit the URI:

```
https://<connection-server>/vmrest/users/<user-objectid>
```

Then fetch the following URI from the response body:

```
https://<connection-server>/vmrest/users/<user-objectid>/messagehandlers/<object Id>
```

```
<MessageHandler>
  <VoicemailAction>2</VoicemailAction>
  <EmailAction>2</EmailAction>
  <FaxAction>2</FaxAction>
  <DeliveryReceiptAction>1</DeliveryReceiptAction>
  <RelayAddress>cguii@10.com</RelayAddress>
</MessageHandler>
```

```
Response code: 204
```

JSON Example

```
PUT https://<connection-server>/vmrest/users/<objectid>/messagehandlers/<object Id>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "EmailAction":"2",
  "FaxAction":"2",
  "DeliveryReceiptAction":"1",
  "RelayAddress":"john@cisco.com"
}
```


Response code: 204

Explanation of Data Fields

Parameter	Data Type	Operations	Description
DeliveryReceiptAction	Integer	Read/Write	The action to take for delivery receipt messages. Possible values are given just below the table. Default value: 1
EmailAction	Integer	Read/Write	The action to take for email messages. Possible values are given just below the table. Default value: 1
FaxAction	Integer	Read/Write	The action to take for fax messages. Possible values are given just below the table. Default value: 1
ObjectId	String(36)	Read Only	The primary key for this table. A globally unique system-generated identifier for a MessageHandler object
RelayAddress	String(320)	Read/Write	The SMTP address to which messages should be relayed
SubscriberObjectId	String(36)	Read Only	The unique identifier of the Subscriber object to which this message handler belongs.
VoicemailAction	Integer	Read/Write	The action to take for voicemail messages. Possible values are given just below the table. Default value: 1

Email Action, Fax Action, Delivery Receipt Action, and Voicemail Action can take the following values:

- 0 - Reject the message
- 1 - Accept the message
- 2 - Relay the message
- 3 - Accept and relay the message



CHAPTER 17

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Message Settings API

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Message Settings API, on page 67](#)

Message Settings API

Administrator can use this API to create and update the message settings. All the parameters for message settings are present in call handler.

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

From the above URI get the call handler URI:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
```

Please Find below the combination of values to select language for a call handler: URI for timezone:

```
https://<connection-server>/vmrest/timezones.
```

URI for installed Languages:

```
https://<connection-server>/vmrest/installedlanguages.
```

URI to get all language codes supported:

```
https://<connection-server>/vmrest/languagemap.
```

	UseCallLanguage	UseDefaultLanguage	Language
Use System Default Language	false	true	NULL/LanguageCode
Inherit Language from Caller	true	true/false	NULL/LanguageCode
Particular Language	false	false	Language Code

Listing Message Settings

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<Callhandler>
  <URI>/vmrest/handlers/callhandlers/287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842</URI>
  <CreationTime>2013-03-05T11:24:33Z</CreationTime>
  <Language>1033</Language>
  <Undeletable>>false</Undeletable>
  <LocationObjectId>42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationObjectId>
<LocationURI>/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationURI>

  <EditMsg>>true</EditMsg>
  <IsPrimary>>true</IsPrimary>
  <OneKeyDelay>1500</OneKeyDelay>
  <ScheduleSetObjectId>b8a03d12-d425-4cdb-ba36-88e64bf16432</ScheduleSetObjectId>
  <ScheduleSetURI>/vmrest/schedulesets/b8a03d12-d425-4cdb-ba36-88e64bf16432</ScheduleSetURI>

  <SendUrgentMsg>1</SendUrgentMsg>
  <MaxMsgLen>300</MaxMsgLen>
  <IsTemplate>>false</IsTemplate>
  <ObjectId>287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842</ObjectId>
<RecipientSubscriberObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</RecipientSubscriberObjectId>

  <RecipientUserURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</RecipientUserURI>
  <DisplayName>chhaviiii</DisplayName>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>SubSysTransfer</AfterMessageTargetConversation>
  <TimeZone>190</TimeZone>
  <UseDefaultLanguage>>false</UseDefaultLanguage>
  <UseDefaultTimeZone>>true</UseDefaultTimeZone>
  <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150</PhoneSystemURI>

  <UseCallLanguage>>false</UseCallLanguage>
  <SendSecureMsg>>true</SendSecureMsg>
  <EnablePrependDigits>>false</EnablePrependDigits>
  <DispatchDelivery>>false</DispatchDelivery>
  <CallSearchSpaceObjectId>4398317e-3f78-425c-aad8-22d9f818b3dd</CallSearchSpaceObjectId>
<CallSearchSpaceURI>/vmrest/searchspaces/4398317e-3f78-425c-aad8-22d9f818b3dd</CallSearchSpaceURI>

  <InheritSearchSpaceFromCall>>true</InheritSearchSpaceFromCall>
  <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionURI>
  <PlayPostGreetingRecording>0</PlayPostGreetingRecording>
<PostGreetingRecordingObjectId>cc9de0b0-ddfd-479f-9cc1-b3ee14c1a6d0</PostGreetingRecordingObjectId>

  <SendPrivateMsg>1</SendPrivateMsg>
  <PlayAfterMessage>1</PlayAfterMessage>
<GreetingsURI>/vmrest/handlers/callhandlers/287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842/greetings</GreetingsURI>

<TransferOptionsURI>/vmrest/handlers/callhandlers/287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842/transferoptions</TransferOptionsURI>

<MenuEntriesURI>/vmrest/handlers/callhandlers/287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842/menuentries</MenuEntriesURI>

<CallHandlerOwnerURI>/vmrest/handlers/callhandlers/287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842/callhandlerowners
  </CallHandlerOwnerURI>
</Callhandler>

```

```
Response Code: 200
```

JSON Example

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallHandlerObjectId>
Accept: application/json
Connection: keep-alive
Response Code: 200
```

Updating Message Settings

The following is an example of the PUT request that updates message settings:

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<CallHandlerObjectId>
```

```
<Callhandler>
  <EditMsg>true</EditMsg>
  <MaxMsgLen>1000</MaxMsgLen>
  <AfterMessageAction>1</AfterMessageAction>
  <SendUrgentMsg>2</SendUrgentMsg>
  <UseCallLanguage>false</UseCallLanguage>
  <SendSecureMsg>false</SendSecureMsg>
  <SendPrivateMsg>1</SendPrivateMsg>
  <PlayAfterMessage>2</PlayAfterMessage>
</Callhandler>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<CallHandlerObjectId>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "AfterMessageAction": "2",
  "AfterMessageTargetConversation": "SystemTransfer"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response code: 204
```

Updating after Message Actions

Example 1: Call Handler

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallHandlerObjectId>
```

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>PHGreeting</AfterMessageTargetConversation>

<AfterMessageTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</AfterMessageTargetHandlerObjectId>

</Callhandler>
```

The following is an example of the GET request that shows the call handler object ID:

```
GET https://<connection-server>/vmrest/handlers/callhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: Interview Handler

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>

<AfterMessageTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</AfterMessageTargetHandlerObjectId>

<AfterMessageTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</AfterMessageTargetHandlerObjectId>

</Callhandler>
```

The following is an example of the GET request that shows the interview handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/interviewhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 3: Directory Handler

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>AD</AfterMessageTargetConversation>

<AfterMessageTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</AfterMessageTargetHandlerObjectId>

</Callhandler>
```

The following is an example of the GET request that shows the interview handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/directoryhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 4: Conversation

Request Body: for broadcast message administrator

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>

<AfterMessageTargetConversation>BroadcastMessageAdministrator</AfterMessageTargetConversation>
</Callhandler>
```

The following is the response from the *PUT* request for broadcast message administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for caller system transfer

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>SystemTransfer</AfterMessageTargetConversation>
</Callhandler>
```

The following is the response from the *PUT* request for caller system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for greeting administrator

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>GreetingAdministrator</AfterMessageTargetConversation>
</Callhandler>
```

The following is the response from the *PUT* request for greeting administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

For sign in

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>SubSignIn</AfterMessageTargetConversation>
</Callhandler>
```

The following is the response from the *PUT* request for sign in and the actual response will depend upon the information given by you:

```
Response Code: 204
```

For system transfer:

```
Request Body:
<CallhandlerPrimaryTemplate>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>SubSysTransfer</AfterMessageTargetConversation>
</CallhandlerPrimaryTemplate>
```

The following is the response from the *PUT* request for user system transfer and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
Accept: application/json
Content-type: application/json
Connection: keep-alive
Request Body:
{
  "AfterMessageAction": "2",
  "AfterMessageTargetConversation": "SystemTransfer"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

Parameter	Data Type	Operations	Comments
MaxMsgLen	Integer	Read/Write	The maximum recording length (in seconds) for messages left by unidentified callers. Default value : 300 Range: 1-3600
EditMsg	Boolean	Read/Write	Allows callers to be prompted to listen to, add to, rerecord, or delete their messages. Values can be: • false: Callers cannot edit messages • true: Callers can edit messages Default value: true
UseDefaultLanguage	Boolean	Read/Write	Values can be: • false: The language is the default language defined for the call handler template. • true: The language is derived from the location to which this call handler template belongs. Default value: true
UseCallLanguage	Boolean	Read/Write	This flag allows that language to be the language used by handlers in the system to play prompts for users. Values can be: • false: Do not use the language specified by the system call routing rule to play prompts for users • true: Use the language specified by the system call routing rule to play prompts for users Default value: false

Parameter	Data Type	Operations	Comments
SendUrgentMsg	Integer	Read/Write	<p>A flag indicating whether an unidentified caller can mark a message as "urgent." Values can be:</p> <ul style="list-style-type: none"> • 0: Never - messages left by unidentified calls are never marked urgent. • 1: Always - all messages left by unidentified callers are marked urgent. • 2: Ask - Cisco Unity Connection asks unidentified callers whether to mark their messages urgent. <p>Default Value: 0</p>
SendPrivateMsg	Integer	Read/Write	<p>Determines if an outside caller can mark their message as private.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Never - No messages are marked private. • 1: Always - All messages are marked private. • 2: Ask - Ask the outside caller if they wish to mark the message as private. <p>Default Value: 0</p>
SendSecureMsg	Boolean	Read/Write	<p>A flag indicating whether an unidentified caller can mark a message as "secure."</p> <p>Values can be:</p> <ul style="list-style-type: none"> • false: Never - messages left by unidentified calls are never marked secure. • true: Always - all messages left by unidentified callers are marked secure. <p>Default Value: false</p>
PlayAfterMessage	Integer	Read/Write	<p>Indicates whether the Sent Message Prompt Recording referenced by Post Greeting</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Do not play recording • 1: System default recording • 2: Play recording <p>Default value: 0</p>

Parameter	Data Type	Operations	Comments
AfterMessageAction	Integer	Read/Write	AfterMessageAction can only accept integer with the following values: <ul style="list-style-type: none"> • 0: Ignore • 1: Hang up • 2: Goto • 3: Error • 4: TakeMsg • 5: SkipGreeting • 6: RestartGreeting • 7: TransferAltContact • 8: Route from next call routing rule.
AfterMessageTargetHandleObjectID	String(36)	Read/Write	The unique identifier of the specific object to send along to the target conversation.
AfterMessageTargetConversation	String(64)	Read/Write	The name of the conversation to which the caller is routed.
Language	Integer	Read/Write	The Windows Locale ID (LCID) that identifies the language that Cisco Unity Connection plays for system prompts

•



CHAPTER 18

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Message Waiting Indicators

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Message Waiting Indicator \(MWI\) Settings API, on page 77](#)

Message Waiting Indicator (MWI) Settings API

Listing All MWIs

```
GET https://<connection-server>/vmrest/users/<user-objectid>/mwis
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<Mwis total="1">
  <Mwi>
    <URI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/mwis/2c07a9ca-c041-4dfa-b0d1-7f633883a1b7</URI>

    <SubscriberObjectId>4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1</SubscriberObjectId>
    <UserURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1</UserURI>
    <ObjectId>2c07a9ca-c041-4dfa-b0d1-7f633883a1b7</ObjectId>
    <DisplayName>MWI-1</DisplayName>
    <MwiExtension>99999</MwiExtension>
    <MwiOn>false</MwiOn>
    <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150</PhoneSystemURI>

    <IncludeTextMessages>false</IncludeTextMessages>
    <IncludeVoiceMessages>true</IncludeVoiceMessages>
    <IncludeFaxMessages>false</IncludeFaxMessages>
    <Active>true</Active>
    <UsePrimaryExtension>true</UsePrimaryExtension>
    <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
  </Mwi>
</Mwis>
```

```
Response Code: 200
```

Listing Details of a Specific MWI

```
GET https://<connection-server>/vmrest/users/<user-objectid>/mwis/<mwi-objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<Mwi>

<URI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/mwis/1a231793-7168-44aa-8657-aa40eda67481</URI>

  <SubscriberObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</SubscriberObjectId>
  <UserURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</UserURI>
  <ObjectId>1a231793-7168-44aa-8657-aa40eda67481</ObjectId>
  <DisplayName>MWI</DisplayName>
  <MwiExtension>99934</MwiExtension>
  <MwiOn>false</MwiOn>
  <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150</PhoneSystemURI>

  <IncludeTextMessages>false</IncludeTextMessages>
  <IncludeVoiceMessages>true</IncludeVoiceMessages>
  <IncludeFaxMessages>false</IncludeFaxMessages>
  <Active>true</Active>
  <UsePrimaryExtension>true</UsePrimaryExtension>
  <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
</Mwi>
```

Response Code: 200

JSON Example

```
GET https://<connection-server>/vmrest/users/<user-objectid>/mwis/<mwi-objectid>
Accept: application/json
Connection: keep-alive
{
  "URI":"/vmrest/users/53c84cf9-c8fe-4dd5-a295-b648b72b5a2c/mwis/810ce62e-eeec-4f47-85bd-68c69a7bca66"
  "SubscriberObjectId":"53c84cf9-c8fe-4dd5-a295-b648b72b5a2c"
  "UserURI":"/vmrest/users/53c84cf9-c8fe-4dd5-a295-b648b72b5a2c"
  "ObjectId":"810ce62e-eeec-4f47-85bd-68c69a7bca66"
  "DisplayName":"MWI-1"
  "MwiExtension":"99999"
  "MwiOn":"false"
  "MediaSwitchObjectId":"e912b134-1bd0-45f9-baae-9f1e096ae3b9"
  "PhoneSystemURI":"/vmrest/phonesystems/e912b134-1bd0-45f9-baae-9f1e096ae3b9"
  "IncludeTextMessages":"false"
  "IncludeVoiceMessages":"true"
  "IncludeFaxMessages":"false"
  "Active":"true"
  "UsePrimaryExtension":"true"
  "MediaSwitchDisplayName":"PhoneSystem"
}
```

Response Code: 200

Create a New MWI

The mandatory fields for creation of a MWI are DisplayName, MediaSwitchObjectId, and MWIExtension. URI for getting MediaswitchObjectId:

```
GET https://<connection-server>/vmrest/phonesystems
```

```
POST https://<connection-server>/vmrest/users/<user-objectid>/mwis
```

```
<Mwi>
  <DisplayName>MWI-1</DisplayName>
  <MwiExtension>9997</MwiExtension>
  <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>
</Mwi>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/users/f82b301d-1ec8-44c6-a3ee-0012269439bf/mwis/a9159ac7-3857-480c-917d-0c599a32fc03
```

JSON Example:

To create MWI

```
POST https://<connection-server>/vmrest/users/<user-objectid>/mwis
Accept: application/json
Content-type: application/json
Connection: keep-alive
Request Body:-
{
  "DisplayName": "MWI-1",
  "MwiExtension": "9997",
  "MediaSwitchObjectId": "ec1e2636-fc14-44fc-8cda-d6c1a3d61150"
}
```

```
Response Code: 201
/vmrest/users/f82b301d-1ec8-44c6-a3ee-0012269439bf/mwis/a9159ac7-3857-480c-917d-0c599a32fc03
```

Update a MWI

```
PUT https://<connection-server>/vmrest/users/<user-objectid>/mwis/<mwi-objectid>
```

```
<Mwi>
  <Active>true</Active>
  <DisplayName>MWI</DisplayName>
  <MwiExtension>9997</MwiExtension>
  <MwiOn>false</MwiOn>
  <UsePrimaryExtension>true</UsePrimaryExtension>
</Mwi>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example:**To Update MWI**

```
PUT https://<connection-server>/vmrest/users/<user-objectid>/mwis/<mwi-objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
Response Body:
{
  "DisplayName": "NEW_MWI",
  "UsePrimaryExtension": true
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Delete a MWI

```
DELETE https://<connection-server>/vmrest/users/<user-objectid>/mwis/<mwi-objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
DELETE https://<connection-server>/vmrest/users/<user-objectid>/mwis/<mwi-objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Field Name	Data Type	Operations	Description
Active	Boolean	Read/Write	<p>Flag indicate whether MWI is enabled or not.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true means that it is active and the MWI will be turned on/off by the notifier. • false <p>Default value: false (except the default MWI)</p>

Field Name	Data Type	Operations	Description
Display Name	String(64)	Read/Write	The unique text name of this notification MWI to be used when displaying entries in the administrative console, e.g. Cisco Unity Connection Administration. For example, "Office Phone" or " Lab Phone".
MwiExtension	String	Read/Write	The phone number (extension) of the MWI to activate. NULL means use the subscriber's extension.
MediaSwitchObjectld	String(36)	Read/Write	The unique identifier of the MediaSwitch object to use for activating/deactivating the MWI.
MwiOn	Boolean	Read/Write	A flag indicating whether the MWI is on or off. This is the state of the MWI from the perspective of Cisco Unity Connection. Possible values: <ul style="list-style-type: none"> • false: MWI is off • true: MWI is on Default value: false
UsePrimaryExtension	Boolean	Read/Write	A flag indicating that the primary extension of the subscriber should be used. <ul style="list-style-type: none"> • true: Use Inherit Extension • false: Do not use Inherit Extension Default value: false (but its true for default MWI)
IncludeTextMessages	Boolean	Read/Write	A flag indicating whether the MWI should be set for a text message. Possible values: <ul style="list-style-type: none"> • false: Do not set MWI for text message. • true: Set MWI for text message. Default value: false
IncludeVoiceMessages	Boolean	Read/Write	A flag indicating whether the MWI should be set for a voice message. Possible values: false: Do not set MWI for voice message. true: Set MWI for voice message. Default Value: true
IncludeFaxMessages	Boolean	Read/Write	A flag indicating whether the MWI should be set for a FAX message. Possible values: <ul style="list-style-type: none"> • false: Do not set MWI for fax message. • true: Set MWI for fax message. Default value: false
MediaSwitchDisplayName	String	Read/Write	Name of phone system associated with the user.

Explanation of Data Fields

Field Name	Data Type	Operations	Description
ObjectId	String(36)	Read Only	A globally unique, system-generated identifier for a MWI object.



CHAPTER 19

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Notification Devices API

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [User Notification Devices API, on page 83](#)

User Notification Devices API

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrest/users/<user-object>
```

From the above URI, get the notification devices object ID:

```
GET https://<connection-server>/vmrest/users/<user-objectid>/usernotificationdevices
```

Pager

```
PUT:https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/pagerdevices/<pagerobjectid>
```

```
<PagerDevice>
  <RetriesOnBusy>4</RetriesOnBusy>
  <RetriesOnRna>4</RetriesOnRna>
  <RetriesToWait>10</RetriesToWait>
  <BusyRetryInterval>5</BusyRetryInterval>
  <RnaRetryInterval>15</RnaRetryInterval>
</PagerDevice>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

Listing Pager Device

```
PUT
https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/pagerdevices/<pagerobjectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "FailDeviceObjectId": "c5ce04c1-e76e-4075-97f9-471ac49b7e85"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note To activate notification device <PhoneNumber> parameter is mandatory and <RepeatInterval > parameter is mandatory to enable repeat notify. The provided values can be changed and possible values are given in the Explanation of Fields: Pager and Phone table.

Listing Pager Device

JSON Example

To view pager devices, do the following:

```
GET
https://<connection-server>/vmrest/users/<users>/<user-objectid>/notificationdevices/pagerdevices/<pagerobjectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":"/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/notificationdevices/pagerdevices/6215dce7-cf4a-469a-8722-035b6228ba3d"

  "TransmitForcedAuthorizationCode":"false"
  "AfterDialDigits":""
  "BusyRetryInterval":"5"
  "DialDelay":"1"
  "PhoneNumber":"123"
  "RetriesOnBusy":"10"
  "RetriesOnRna":"10"
  "RingsToWait":"10"
  "RnaRetryInterval":"1"
  "SendCount":"false"
  "WaitConnect":"false"
  "MediaSwitchObjectId":"7b092808-d815-4c0b-a10d-d02d3f5090b8"
  "PhoneSystemURI":"/vmrest/phonesystems/7b092808-d815-4c0b-a10d-d02d3f5090b8"
  "ObjectId":"6215dce7-cf4a-469a-8722-035b6228ba3d"
  "Active":"false"
  "DeviceName":"Pager"
  "DisplayName":"Pager"
  "MaxBody":"512"
  "MaxSubject":"64"
  "SubscriberObjectId":"9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
  "UserURI":"/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
  "SendCallerId":"false"
  "Undeletable":"true"
  "SuccessRetryInterval":"1"
  "RetriesOnSuccess":"0"
  "EventList":"NewUrgentFaxUrgentDispatchMessage"
  "ScheduleSetObjectId":"1f360ab8-076e-4cb5-bfde-ef7d3805f037"InitialDelay":"12"
  "VoiceMessage":"false"
  "UrgentOnly":"false"
  "RepeatInterval":"1"
  "RepeatNotify":"true",
  "FailDeviceObjectId":"c5ce04c1-e76e-4075-97f9-471ac49b7e85"
}
```

Response Code: 200

Create Pager Device

The mandatory parameters are: PhoneNumber, DisplayName, and MediaSwitchObjectId.

```
POST:
https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/pagerdevices
```

```
<PagerDevice>
  <PhoneNumber>12334</PhoneNumber>
  <DisplayName>Newpager</DisplayName>
  <MediaSwitchObjectId>8adf6869-4afc-4455-9fd5-d05b68ca6630</MediaSwitchObjectId>
</PagerDevice>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

Response Code: 201

JSON Example

```
POST
https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/pagerdevices
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "DisplayName": "New Pager",
  "PhoneNumber": "1234",
  "MediaSwitchObjectId": "ae63574f-2aaf-4c28-8973-bfa8e3b1dd1c"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/users/<user-objectid>/notificationdevices/pagerdevices/84e72420-615e-4d94-b1df-f1317906cce3
```

The phone system ID is mandatory to create pager device. URI to get ID for phone system:

```
https://<connection-server>/vmrest/phonesystems
```

Phone Devices

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

From above URI get notification devices URI:

```
https://<connection-server>/vmrest/users/<user-objectid>/usernotificationdevices
```

Listing Phone Device

```
GET:https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/phonedevices/<phone_objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
Response code: 200
```

JSON Example

```
GET
https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/phonedevices/<phone_objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
Response Code: 200
```

Create Phone Device

The mandatory fields are DisplayName, PhoneNumber, and MediaSwitchObjectId.

```
POST
https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/phonedevice
```

```
<PhoneDevice>
  <DisplayName>Work Phone1</DisplayName>
  <PhoneNumber>123</PhoneNumber>
  <MediaSwitchObjectId>ae63574f-2aaf-4c28-8973-bfa8e3b1dd1c</MediaSwitchObjectId>
</PhoneDevice>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

JSON Example

```
POST
https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/phonedevice
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "DisplayName": "Work Phone1",
  "PhoneNumber": "123",
  "MediaSwitchObjectId": "ae63574f-2aaf-4c28-8973-bfa8e3b1dd1c"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

URI to get ID for phone system:

```
https://<connection-server>/vmrest/phonesystems
```

Update Phone Device

```
PUT:https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/phonedevice/<phone_objectid>
<PhoneDevice>
  <RetriesOnBusy>10</RetriesOnBusy>
  <RetriesOnRna>10</RetriesOnRna>
  <RingsToWait>10</RingsToWait>
  <RnaRetryInterval>1</RnaRetryInterval>
</PhoneDevice>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response code: 204
```

To activate notification device, the <PhoneNumber> parameter is mandatory. The <RepeatInterval> parameter is mandatory to enable repeat notify. The phone devices are of 3 types: Work phone, Home phone, and Mobile phone. You have to provide phone device object id to edit any of the 3 devices.

JSON Example

```
PUT
https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/phonedevice/<phone_objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "FailDeviceObjectId": "c5ce04c1-e76e-4075-97f9-471ac49b7e85"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response code: 204
```

Delete Phone Device

```
DELETE
https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/phonedevice/<phone_objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response code: 204
```

JSON Example

```
DELETE
https://<connection-server>/vmrest/users/<user-objectid>/notificationdevices/phonedevice/<phone_objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

SMTP Device

Listing SMTP Device

```
GET:https://<Connection-server>/vmrest/user/notificationdevices/smtpdevices
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:


```
Response code: 200
```

JSON Example

```
GET https://<connection-server>/vmrest/user/notificationdevices/smtpdevices
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":
  "/vmrest/user/notificationdevices/smtpdevices/eb4dbeae-ec87-417c-8cc0-d4ac3ab04942",
  "SendCount": "true",
  "SmtAddress": "John@cisco.com",
  "StaticText": [],
  "ObjectId": "eb4dbeae-ec87-417c-8cc0-d4ac3ab04942",
  "Active": "false",
  "DeviceName": "SMTP",
  "DisplayName": "SMTP",
  "MaxBody": "512",
  "MaxSubject": "64",
  "SubscriberObjectId": "104b8800-554e-47cd-9fe7-ee16c79ce4d2",
  "SendCallerId": "true",
  "SendPcaLink": "false",
  "Undeletable": "true",
  "HeaderText": "Texoma_Header",
  "FooterText": "Texoma_Footer"
}
```

```
Response Code: 200
```

Update SMTP Device

```
GET:https://<Connection-server>/vmrest/user/notificationdevices/smtpdevices/<smtpDeviceObjectId>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
Response code: 204
```

```
<SmtDevice>
  <SmtAddress>John@cisco.com</SmtAddress>
  <HeaderText>Texoma_Header</HeaderText>
  <FooterText>Texoma_Footer</FooterText>
</SmtDevice>
```

JSON Example

```
PUT
https://<connection-server>/vmrest/user/notificationdevices/smtpdevices/<smtpDeviceObjectId>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "SmtpAddress": "John@cisco.com",
  "HeaderText": "Texoma_Header",
  "FooterText": "Texoma_Footer"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response code: 204
```

About HTML Notification Devices (in Cisco Unity Connection 9.0(1) and Later)

Cisco Unity Connection Provisioning Interface (CUPI) API allows users to view list of Html Notification Devices, a specific notification device or modify an existing HTML Notification Device.

Listing HTML Notification Devices

The following is an example of the GET request that lists the HTML notification devices for the users:

```
GET /vmrest/users/notificationdevices/htmldevices
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<HtmlDevices total="3">
  <HtmlDevice>

  <URL>/vmrest/users/5786019c-f962-4b86-8103-a01755b9993c/notificationdevices/htmldevices/d7044a91-b3b5-4e5a-9d08-eca2235660fd</URL>

  <Active>>false</Active>
  <DeviceName>HTML</DeviceName>
  <DisableMobileNumberFromPCA>>false</DisableMobileNumberFromPCA>
  <DisplayName>HTML_Missed_Call</DisplayName>
  <NotificationTemplateID>f37de0e3-c070-4d7e-bb98-5b8b1911ed27</NotificationTemplateID>
  <ObjectId>d7044a91-b3b5-4e5a-9d08-eca2235660fd</ObjectId>
  <Undeletable>>true</Undeletable>
  <SubscriberObjectId>5786019c-f962-4b86-8103-a01755b9993c</SubscriberObjectId>
  <UserURI>/vmrest/users/5786019c-f962-4b86-8103-a01755b9993c</UserURI>
  <DisableTemplateSelectionFromPCA>>false</DisableTemplateSelectionFromPCA>
  <AllowVoiceMailAsAttachment>>false</AllowVoiceMailAsAttachment>
  <MessageCountInSummary>10</MessageCountInSummary>
  <EventList>NewMissedCall</EventList>
  <ScheduleSetObjectId>48993a7c-2732-4217-8abc-893604fa16b6</ScheduleSetObjectId>
  <SendScheduledNotificationAt/>
</HtmlDevice>
</HtmlDevices>
```

Listing an HTML Notification Device for Users

The following is an example of the GET request that lists a particular html notification device for the end users represented by <deviceid>:

```
GET /vmrest/user/notificationdevices/htmldevices/<deviceid>
```

The following is the response from the above *GET* request and the actual result will depend upon the information has been provided by you:

```
<HtmlDevice>
<URI>/vmrest/user/notificationdevices/htmldevices/8660c5af-b544-47cc-93eb-93f4923bc03b</URI>
  <Active>>false</Active>
  <CallbackNumber>1234</CallbackNumber>
  <DeviceName>HTML</DeviceName>
  <DisableMobileNumberFromPCA>>false</DisableMobileNumberFromPCA>
  <DisableTemplateSelectionFromPCA>>false</DisableTemplateSelectionFromPCA>
  <DisplayName>HTML</DisplayName>
  <NotificationTemplateID>75825d74-bf4f-4af3-bf84-6226389a8611
  </NotificationTemplateID>
  <ObjectId>8660c5af-b544-47cc-93eb-93f4923bc03b</ObjectId>
  <PhoneNumber />
  <SmtAddress />
  <Undeletable>>true</Undeletable>
  <SubscriberObjectId>a880bb22-0df1-45aa-893e-895ebf2d3652
  </SubscriberObjectId>
  <UserURI>/vmrest/users</UserURI>
  <EventList>NewVoiceMail</EventList>
  <ScheduleSetObjectId>1fb3df1c-6ff6-4876-996d-59052126f1fa
  </ScheduleSetObjectId>
  <InitialDelay>0</InitialDelay>
  <RepeatInterval>0</RepeatInterval>
  <RepeatNotify>>false</RepeatNotify>
</HtmlDevice>
```

Modifying an HTML Notification Device for Users

The following is an example of the PUT request that modifies the HTML notification device for the users as represented by <deviceid>:

```
PUT /vmrest/users/notificationdevices/htmldevices/<deviceid>
```

The input for the PUT request will be XML or JSON as per HtmlDevice schema. The output for this request returns the successful response code.

Modifying an HTML Notification Device to Apply HTML Notification Template

The following is an example of the PUT request that modifies the HTML notification device as represented by <deviceid>:

```
PUT /vmrest/users/notificationdevices/htmldevices/<deviceobjectid>
<HtmlDevice>
  <NotificationTemplateID>103c4514-db6e-489b-bc08-e9e131b60099</NotificationTemplateID>
</HtmlDevice>
```

Configuring an HTML-Based Notification Template with an HTML Notification Device

This PUT request allow users to apply an HTML-based notification template with an HTML notification device. The user can perform this action if the template selection rights are given by administrator. The following is an example of PUT request:

```
PUT /vmrest/users/notificationdevices/htmldevices/<deviceobjectid>
```

This API will modify a particular HTML notification device for the end users as represented by `<deviceobjectid>`.

Configuring Schedule Notification

Cisco Unity Connection allows you to receive schedule notification tag in 24 hours format (hh:mm) using `<SendScheduledNotificationAt>`. You can configure multiple notifications using comma in the separated values. The schedules mentioned in this tag would overwrite all the existing schedules. In order to delete all existing schedules, provide an empty `<SendScheduledNotificationAt>` tag.

Listing Schedule Notification

The following is an example of the GET request that lists the HTML notification devices for the users:

```
GET vmrest/users/<user-object-id>/notificationdevices/htmldevices/<device-object-id>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<HtmlDevice>
<URI>vmrest/users/a3ab2df0-f16c-405f-afdf-394495acf000/notificationdevices/htmldevices/856c8ce9-d7dd-4623-888b-8d14874061af</URI>
<Active>True</Active>
<DeviceName>HTML</DeviceName>
<DisplayName>HTMLDevice1</DisplayName>
<NotificationTemplateID>3be2bd9e-114b-4103-a724-4e6c908d7c86</NotificationTemplateID>
<ObjectId>856c8ce9-d7dd-4623-888b-8d14874061af</ObjectId>
<SubscriberObjectId>a3ab2df0-f16c-405f-afdf-394495acf000</SubscriberObjectId>
<SendScheduledNotificationAt>10:15,23:00 </SendScheduledNotificationAt>
<EventList>NewVoiceMail</EventList>
</HtmlDevice>
```

JSON Example

```
GET vmrest/users/<user-object-id>/notificationdevices/htmldevices/<device-object-id>?jsopn=1
```

```
{
  {
    "URI":"/vmrest/users/707c291f-95d8-4353-9d8c-2439722f4c25/notificationdevices/htmldevices/49d04c39-f899-445c-a939810d66b30e38",
    "Active":"false",
    "DeviceName":"HTML",
    "DisableMobileNumberFromPCA":"false",
    "DisplayName":"HTML",
    "ObjectId":"49d04c39-f899-445c-a939-810d66b30e38",
    "Undeletable":"true",
    "SubscriberObjectId":"707c291f-95d8-4353-9d8c-2439722f4c25",
    "UserURI":"/vmrest/users/707c291f-95d8-4353-9d8c-2439722f4c25",
    "DisableTemplateSelectionFromPCA":"false",
    "AllowVoiceMailAsAttachment":"false",
    "EventList":"NewVoiceMail",
    "ScheduleSetObjectId":"a6fec625-58e1-4a2c-8950-829ee307d81a",
    "SendScheduledNotificationAt":"12:50"
  }
}
```

```
Response Code: 200 OK
```

Modifying Schedule Notification

The following is an example of the PUT request that modifies the Schedule notification for the user as represented by <SendScheduledNotificationAt>:

```
PUT vmrest/users/<user-object-id>/notificationdevices/htmldevices/<device-object-id>
```

```
Response Code: 204 OK
<HtmlDevice>

<URL>vmrest/users/a3ab2df0-f16c-405f-afdf-394495acf000/notificationdevices/htmldevices/856c8ce9-d7dd-4623-888b-8d14874061af</URL>

  <Active>True</Active>
  <DeviceName>HTML</DeviceName>
  <DisplayName>HTMLDevice1</DisplayName>
  <NotificationTemplateID>3be2bd9e-114b-4103-a724-4e6c908d7c86</NotificationTemplateID>
  <ObjectID>856c8ce9-d7dd-4623-888b-8d14874061af</ObjectID>
  <SubscriberObjectID>a3ab2df0-f16c-405f-afdf-394495acf000</SubscriberObjectID>
  <SendScheduledNotificationAt>10:15,23:00 </SendScheduledNotificationAt>
  <EventList>NewVoiceMail</EventList>
</HtmlDevice>
```

JSON Example

```
PUT vmrest/users/<user-object-id>/notificationdevices/htmldevices/<device-object-id>?json=1
```

```
{
  "Active":"false",
  "DisplayName":"HTML",
  "NotificationTemplateID":"3be2bd9e-114b-4103-a724-4e6c908d7c86",
  "EventList":"NewMissedCall",
  "SendScheduledNotificationAt":"9:00"
}
```

```
Response Code: 204 OK
```

The following is an example of the PUT request that deletes all the existing schedules by representing the <SendScheduledNotificationAt> tag empty:

```
<HtmlDevice>
  <Active>True</Active>
  <DisplayName>HTMLDevice1</DisplayName>
  <NotificationTemplateID>3be2bd9e-114b-4103-a724-4e6c908d7c86</NotificationTemplateID>
  <ObjectID>856c8ce9-d7dd-4623-888b-8d14874061af</ObjectID>
  <EventList>None</EventList>
  <SendScheduledNotificationAt></SendScheduledNotificationAt>
</HtmlDevice>
```

```
Response Code : 204 Ok
```

JSON Example

```
{
  "Active":"false",
  "DisplayName":"HTML",
  "NotificationTemplateID":"3be2bd9e-114b-4103-a724-4e6c908d7c86",
  "EventList":"NewMissedCall",
  "SendScheduledNotificationAt":""
}
```

Response Code : 204 Ok

Explanation of Data Fields

Device Name	Data Type	Operations	Comments
Device Name	String(12)	Read Only	Device name of HTML notification device.
Display Name	String(64)	Read Only	The preferred text name of the notification device to be used when displaying entries in the administrative console, e.g. Cisco Unity Connection Administration. For example, "Home Phone," Pager 2," "Work Phone, " etc.
Active	Boolean	Read Only	Enable notification device. Values: <ul style="list-style-type: none"> • true:Enable the device • false:Do not enable the notification device
EventList	String	Read/Write	By default it is NewVoiceMail. Possible values: <ul style="list-style-type: none"> • All Voice messages: NewVoiceMail • All voice message urgent only: NewUrgentVoiceMail • Dispatch message: DispatchMessage • Dispatch message urgent only: UrgentDispatchMessage • Fax message: NewFax • Fax message urgent only: NewUrgentFax • Calendar Appointments: CalendarAppointment • Calendar Meetings: CalendarMeeting Default value: NewVoiceMail. Note To keep value of this field blank, enter "None" value for the field.
SmtptAddress	String(320)	Read Only	SMTP address to be notified.
ObjectId	String(36)	Read Only	Unique identifier of Notification Device

Device Name	Data Type	Operations	Comments
DisableMobileNumberFromPCA	Boolean	Read Only	Disable Outdial Number From Cisco PCA Values: <ul style="list-style-type: none"> • false:Enable Outdial Number From Cisco PCA (Default value) • True:Disable Outdial Number From Cisco PCA
CallbackNumber	Integer	Read Only	Outdial Number
SubscriberObjectID	String(36)	Read Only	The unique identifier of the Subscriber object to which this notification device belongs.
ScheduleSetObjectID	String(36)	Read Only	The unique identifier of the Schedule
DisableTemplateSelectionFromPCA	Boolean	Read Only	Disable HTML Template selection From Cisco PCA <ul style="list-style-type: none"> • true:Disable • false:enable Default value is false.
AllowVoiceMailAsAttachment	Boolean	Read Only	A flag indicating whether Cisco Unity Connection will allow notifier to send voice mail recording with the notification. false: Don't Allow notifier to send voice mail recording with the notification true: Allow notifier to send voice mail recording with the notification Default value is false.
NotificationTemplateID	String(36)	Read Only	The unique identifier of the Notification Template object which this notification device is using for HTML based notification This URI can be used to fetch NotificationTemplateID <pre>https://<Connectio-server>/vmrest/notificationtemplates</pre>
PhoneNumber	String	Read/Write	The phone number to dial, including the trunk access code (if any), of the device.
Undeletable	Boolean	Read Only	flag indicating whether HTML cannot be deleted or not. Possible values: <ul style="list-style-type: none"> • true: For default HTML Device • false:For other userdefined HTML Devices
SendScheduledNotificationAt	Integer	Read/Write	A tag that is use to receive schedule notifications in 24 hours format (hh:mm). You can configure multiple notifications using comma in the separated values.

Enum Type

Name	Value	Description
SystemGreeting	0	System greeting - Cisco Unity Connection plays a prerecorded greeting along with the recorded name of the subscriber (for example, "Sorry, <subscriber name> is not available"). If the subscriber does not have a recorded name, Cisco Unity Connection plays the subscriber extension instead. When a greeting is enabled but not recorded, Cisco Unity Connection plays a prerecorded system greeting.
RecordedGreeting	1	Recorded greeting - use a personal recording for the call handler (or subscriber). This can be recorded over the phone or from the Cisco Unity Connection Administration and CPCA administrative interfaces on the call handler/subscriber.
NoGreeting	2	No greeting is played.



CHAPTER 20

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Phone Menu API

Links to Other API pages:[Cisco_Unity_Connection_APIS](#)

- [Phone Menu API, on page 97](#)

Phone Menu API

Listing Phone Menu Fields

All the parameters of Phone Menu are present at the URI:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing Phone Menu Fields

```

<User>
  <URI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1</URI>
  <ObjectId>4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1</ObjectId>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <Alias>undeliverablemessagesmailbox</Alias>
  <DisplayName>Undeliverable Messages</DisplayName>
  <TimeZone>190</TimeZone>
  <CreationTime>2013-03-05T10:54:38Z</CreationTime>
  <IsTemplate>>false</IsTemplate>
  <CosObjectId>610c9c71-32be-4465-b61a-523f24a9d828</CosObjectId>
  <CosURI>/vmrest/coses/610c9c71-32be-4465-b61a-523f24a9d828</CosURI>
  <Language>1033</Language>
  <LocationObjectId>42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationObjectId>

<LocationURI>/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationURI>

  <AddressMode>0</AddressMode>
  <ClockMode>0</ClockMode>
  <ConversationTui>SubMenu</ConversationTui>
  <GreetByName>true</GreetByName>
  <ListInDirectory>>false</ListInDirectory>
  <IsVmEnrolled>true</IsVmEnrolled>
  <SayCopiedNames>true</SayCopiedNames>
  <SayDistributionList>true</SayDistributionList>
  <SayMsgNumber>true</SayMsgNumber>
  <SaySender>true</SaySender>
  <SayTimestampAfter>true</SayTimestampAfter>
  <SayTimestampBefore>>false</SayTimestampBefore>
  <SayTotalNew>>false</SayTotalNew>
  <SayTotalNewEmail>>false</SayTotalNewEmail>
  <SayTotalNewFax>>false</SayTotalNewFax>
  <SayTotalNewVoice>true</SayTotalNewVoice>
  <SayTotalReceipts>>false</SayTotalReceipts>
  <SayTotalSaved>true</SayTotalSaved>
  <Speed>100</Speed>
  <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150</PhoneSystemURI>

  <Undeletable>true</Undeletable>
  <UseBriefPrompts>>false</UseBriefPrompts>
  <Volume>50</Volume>
  <EnAltGreetDontRingPhone>>false</EnAltGreetDontRingPhone>
  <EnAltGreetPreventSkip>>false</EnAltGreetPreventSkip>
  <EnAltGreetPreventMsg>>false</EnAltGreetPreventMsg>
  <EncryptPrivateMessages>>false</EncryptPrivateMessages>
  <DeletedMessageSortOrder>2</DeletedMessageSortOrder>
  <SayAltGreetWarning>>false</SayAltGreetWarning>
  <SaySenderExtension>>false</SaySenderExtension>
  <SayAni>>false</SayAni>
  <CallAnswerTimeout>4</CallAnswerTimeout>
  <CallHandlerObjectId>13a3c5fc-f706-4bd0-aeeb-32dad2c4a29b</CallHandlerObjectId>

<CallhandlerURI>/vmrest/handlers/callhandlers/13a3c5fc-f706-4bd0-aeeb-32dad2c4a29b</CallhandlerURI>

  <MessageTypeMenu>>false</MessageTypeMenu>
  <NewMessageSortOrder>1</NewMessageSortOrder>
  <SavedMessageSortOrder>2</SavedMessageSortOrder>
  <MessageLocatorSortOrder>1</MessageLocatorSortOrder>
  <NewMessageStackOrder>1234567</NewMessageStackOrder>
  <SavedMessageStackOrder>1234567</SavedMessageStackOrder>
  <EnablePersonalRules>true</EnablePersonalRules>
  <RecordUnknownCallerName>true</RecordUnknownCallerName>
  <RingPrimaryPhoneFirst>>false</RingPrimaryPhoneFirst>
  <ExitAction>2</ExitAction>

```

```

<ExitTargetConversation>PHGreeting</ExitTargetConversation>
<PromptSpeed>100</PromptSpeed>
<ExitTargetHandlerObjectId>939d4d12-cec8-4fee-ae47-fbf0cf20c33e</ExitTargetHandlerObjectId>

<RepeatMenu>1</RepeatMenu>
<FirstDigitTimeout>5000</FirstDigitTimeout>
<InterdigitDelay>3000</InterdigitDelay>
<PromptVolume>50</PromptVolume>
<ExitCallActionObjectId>d6507973-3041-4798-ac83-c6c691cb9187</ExitCallActionObjectId>
<AddressAfterRecord>>false</AddressAfterRecord>
<DtmfAccessId>99999</DtmfAccessId>
<ConfirmDeleteMessage>>false</ConfirmDeleteMessage>
<ConfirmDeleteDeletedMessage>>false</ConfirmDeleteDeletedMessage>
<ConfirmDeleteMultipleMessages>>true</ConfirmDeleteMultipleMessages>
<IsClockMode24Hour>>false</IsClockMode24Hour>
<SynchScheduleObjectId>821f40e6-3a97-412c-ae7f-6c7ade9a754b</SynchScheduleObjectId>
<SynchScheduleURI>/vmrest/schedules/821f40e6-3a97-412c-ae7f-6c7ade9a754b</SynchScheduleURI>

<RouteNDRToSender>>true</RouteNDRToSender>
<IsSetForVmEnrollment>>true</IsSetForVmEnrollment>
<VoiceNameRequired>>false</VoiceNameRequired>
<SendBroadcastMsg>>false</SendBroadcastMsg>
<UpdateBroadcastMsg>>false</UpdateBroadcastMsg>
<ConversationVui>VuiStart</ConversationVui>
<ConversationName>SubMenu</ConversationName>
<SpeechCompleteTimeout>0</SpeechCompleteTimeout>
<SpeechIncompleteTimeout>750</SpeechIncompleteTimeout>
<UseVui>>false</UseVui>
<SkipPasswordForKnownDevice>>false</SkipPasswordForKnownDevice>
<JumpToMessagesOnLogin>>false</JumpToMessagesOnLogin>
<UseDefaultTimeZone>>true</UseDefaultTimeZone>
<EnableMessageLocator>>false</EnableMessageLocator>
<AssistantRowsPerPage>5</AssistantRowsPerPage>
<InboxMessagesPerPage>20</InboxMessagesPerPage>
<InboxAutoRefresh>15</InboxAutoRefresh>
<InboxAutoResolveMessageRecipients>>true</InboxAutoResolveMessageRecipients>
<PcaAddressBookRowsPerPage>5</PcaAddressBookRowsPerPage>
<ReadOnly>>false</ReadOnly>
<EnableTts>>true</EnableTts>
<SmtpAddress>undeliverablemessagesmailbox@ucbu-aricent-vm463.cisco.com</SmtpAddress>
<ConfirmationConfidenceThreshold>60</ConfirmationConfidenceThreshold>
<AnnounceUpcomingMeetings>60</AnnounceUpcomingMeetings>
<SpeechConfidenceThreshold>40</SpeechConfidenceThreshold>
<SpeechSpeedVsAccuracy>50</SpeechSpeedVsAccuracy>
<SpeechSensitivity>50</SpeechSensitivity>
<EnableVisualMessageLocator>>false</EnableVisualMessageLocator>
<ContinuousAddMode>>false</ContinuousAddMode>
<NameConfirmation>>false</NameConfirmation>
<CommandDigitTimeout>1500</CommandDigitTimeout>
<SaveMessageOnHangup>>false</SaveMessageOnHangup>
<SendMessageOnHangup>1</SendMessageOnHangup>
<SkipForwardTime>5000</SkipForwardTime>
<SkipReverseTime>5000</SkipReverseTime>
<UseShortPollForCache>>false</UseShortPollForCache>

<SearchByExtensionSearchSpaceObjectId>877942bf-6600-4b7a-809d-159199cfc2ec</SearchByExtensionSearchSpaceObjectId>

<SearchByExtensionSearchSpaceURL>/vmrest/searchspaces/877942bf-6600-4b7a-809d-159199cfc2ec</SearchByExtensionSearchSpaceURL>

<SearchByNameSearchSpaceObjectId>877942bf-6600-4b7a-809d-159199cfc2ec</SearchByNameSearchSpaceObjectId>

```

```

<SearchByNameSearchSpaceURI>/vmrest/searchspaces/877942bf-6600-4b7a-809d-159199cfc2ec</SearchByNameSearchSpaceURI>

  <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionURI>
  <UseDynamicNameSearchWeight>>false</UseDynamicNameSearchWeight>
  <LdapType>0</LdapType>
  <CreateSmtProxyFromCorp>>false</CreateSmtProxyFromCorp>
  <MwisURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/mwis</MwisURI>

<NotificationDevicesURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/notificationdevices</NotificationDevicesURI>

<MessageHandlersURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/messagehandlers</MessageHandlersURI>

  <ExternalServiceAccountsURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-
  d48e7e9b73c1/externalserviceaccounts</ExternalServiceAccountsURI>

<AlternateExtensionsURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/alternateextensions</AlternateExtensionsURI>

<PrivateListsURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/privatelists</PrivateListsURI>

<UserWebPasswordURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/credential/password</UserWebPasswordURI>

<UserVoicePinURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/credential/pin</UserVoicePinURI>

<SmtProxyAddressesURI>/vmrest/smtproxyaddresses?query=(ObjectGlobalUserId%20is%204d5df6e3-a036-4f16-8f1e-d48e7e9b73c1)

  </SmtProxyAddressesURI>

<AlternateNamesURI>/vmrest/alternatenames?query=(GlobalUserId%20is%204d5df6e3-a036-4f16-8f1e-d48e7e9b73c1)
  </AlternateNamesURI>
</User>

```

Response Code: 200

Updating Phone menu fields

To update the attributes of Phone Menu, the following steps can be followed:

```
PUT https://<connection-server>/vmrest/users/<user-objectid>
```

```

<User>
  <UseBriefPrompts>>true</UseBriefPrompts>
  <PromptVolume>100</PromptVolume>
  <PromptSpeed>100</PromptSpeed>
  <IsClockMode24Hour>>false</IsClockMode24Hour>
  <ConversationTui>SubMenu</ConversationTui>
  <MessageLocatorSortOrder>1</MessageLocatorSortOrder>
  <JumpToMessagesOnLogin>>false</JumpToMessagesOnLogin>
</User>

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Updating Conversation fields

Example 1: Edit call actions

```
<User>
  <ExitAction>1</ExitAction>
</User>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: Edit call handler

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>PHTransfer</ExitTargetConversation>
  <ExitTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</ExitTargetHandlerObjectId>
</User>
```

The following URI can be used to view call handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/callhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 3: Interview handler

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>PHInterview</ExitTargetConversation>
  <ExitTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</ExitTargetHandlerObjectId>
</User>
```

The following is an example of the GET request that shows the interview handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/interviewhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 4: Directory handler

The following is an example of the GET request that shows the directory handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/directoryhandlers
```

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>AD</ExitTargetConversation>
  <ExitTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</ExitTargetHandlerObjectId>
</User>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 5: Conversation

Request Body: for broadcast message administrator

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>BroadcastMessageAdministrator</ExitTargetConversation>
</UserTemplate>
```

The following is the response from the *PUT* request for broadcast message administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for caller system transfer

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>SystemTransfer</ExitTargetConversation>
</User>
```

The following is the response from the *PUT* request for caller system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for greeting administrator

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>GreetingAdministrator</ExitTargetConversation>
</User>
```

The following is the response from the *PUT* request for greeting administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for sign in

```
<UserTemplate>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>SubSignIn</ExitTargetConversation>
</UserTemplate>
```

The following is the response from the *PUT* request for sign in and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for user system transfer

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>SubSysTransfer</ExitTargetConversation>
</User>
```

The following is the response from the *PUT* request for user system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 6: Users with Mailbox

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>PHTransfer</ExitTargetConversation>
  <ExitTargetHandlerObjectId>71cb381b-fd16-4ba8-8a1d-e71684e57b0e</ExitTargetHandlerObjectId>
</User>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example To set exit action, do the following:

```
PUT https://<connection-server>/vmrest/users/<userobjectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "ExitAction": "2",
  "ExitTargetConversation": "SubSysTransfer"
}
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Field Name	Data Type	Operation	Description
UseBriefPrompts	Boolean	Read/Write	<p>A flag indicating whether the subscriber hears brief or full phone menus when accessing Cisco Unity Connection over the phone.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true: Brief • false: Full
PromptVolume	Integer	Read/Write	<p>The volume level for playback of system prompts. The range can vary from 0 to 100.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • 25: Low • 50: Medium • 100: High <p>Default Value: 50</p>
PromptSpeed	Integer	Read/Write	<p>The audio speed Cisco Unity Connection uses to play back prompts to the subscriber.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • 50: Slow • 100: Normal • 150: Fast • 200: Fastest <p>Default Value: 100</p>

Field Name	Data Type	Operation	Description
IsClockMode24Hour	Boolean	Read/Write	<p>The time format used for the message timestamps that the subscriber hears when they listen to their messages over the phone.</p> <p>Possible values: • true: 24-Hour Clock (00:00 - 23:59) • false: 12-Hour Clock (12:00 AM - 11:59 PM)</p> <p>EnableMessageLocator Boolean Read/Write A flag indicating whether the message locator feature is enabled for the subscriber. Possible Values: • false: Message locator feature is disabled for subscriber • true: Message locator feature is enabled for subscriber</p> <p>Default Value: false</p> <p>RepeatMenu Integer Read/Write The number of times to repeat a menu in touchtone conversation. The range can vary from 0 to 250. Default value: 1</p> <p>ConversationTui String Read/Write The name of the conversation the subscriber uses to set up, send, and retrieve messages. Possible values:</p> <ul style="list-style-type: none"> • SubMenu: Classic Conversation • SubMenu_Alternate_Custom: Custom keypad mapping1 • SubMenu_Alternate_Custom1: Custom keypad mapping1 • SubMenu_AlternateN: Alternate Keypad Mapping(N) • SubMenu_AlternateS: Alternate Keypad Mapping(S) • SubMenu_AlternateX: Alternate Keypad Mapping (X) • SubMenuOpt1: Optional conversation1 • SubMenu_AlternateI: Standard Conversation
MessageLocatorSortOrder	Integer	Read/Write	<p>The order in which system will sort messages when the "Message Locator" feature is enabled.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • 1: Last In, First Out • 2: First In, First Out <p>Default Value: 1</p>
FirstDigitTimeout	Integer	Read/Write	<p>The amount of time to wait (in milliseconds) for first digit when collecting touchtone. The range can vary from 500 to 10000.</p> <p>Default value: 5000</p>
InterdigitDelay	Integer	Read/Write	<p>The amount of time to wait (in milliseconds) for input between touch tones when collecting digits in touchtone conversation. The range can vary from 1000 to 10000.</p> <p>Default Value: 3000</p>
CommandDigitTimeout	Integer	Read/Write	<p>The amount of time (in milliseconds) between digits on a multiple digit menu command entry (i.e. different than the inter digit timeout that is used for strings of digits such as extensions and transfer strings). The range can vary from 250 to 5000.</p> <p>Default value: 1500</p>

Field Name	Data Type	Operation	Description
GreetByName	Boolean	Read/Write	A flag indicating whether the subscriber hears his/her name when they log into their mailbox over the phone. Possible Values: <ul style="list-style-type: none"> • false: Do not play the name. • true: Play the recorded voice name. Default Value: true
SayAltGreetWarning	Boolean	Read/Write	A flag indicating whether Cisco Unity Connection notifies the subscriber when they login via the phone (plays conversation) or CPCA (displays a warning banner) if their alternate greeting is turned on. <ul style="list-style-type: none"> • true- Notify the subscriber when they login if their alternate greeting is turned on • false: Do not notify the subscriber that their alternate greeting is turned on Default Value: false
JumpToMessagesOnLogin	Boolean	Read/Write	A flag indicating whether the subscriber conversation jumps directly to the first message in the message stack after subscriber sign-in. Possible values: <ul style="list-style-type: none"> • false: Subscriber conversation does not jump directly to first message in the message stack after subscriber sign-in. • true: Subscriber conversation jumps directly to the first message in the message stack after subscriber sign-in. Default Value: true
ExitCallActionObjectid	String(36)	Read Only	The unique identifier of the CallAction object that is taken when a caller exits the subscriber conversation by pressing the * key or timing out.
ExitAction	Integer	Read/Write	The type of call action to take, e.g., hang-up, goto another object, etc. Possible values: 0-8 Default Value: 0
ExitTargetConversation	String(64)	Read/Write	The name of the conversation to which the caller is routed.
ExitTargetHandleObjectid	String(36)	Read Only	The unique identifier of the specific object to send along to the target conversation.

•



CHAPTER 21

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Playback Message Settings

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Playback Message Settings API, on page 107](#)

Playback Message Settings API

The following URI can be used to view the playback message settings of the specific user:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

Edit Parameters

```
PUT https://<connection-server>/vmrest/users/<user-objectid>
```

```
<User>
  <Volume>50</Volume>
  <Speed>100</Speed>
  <SayTotalNew>true</SayTotalNew>
  <SayTotalNewVoice>true</SayTotalNewVoice>
  <SayTotalNewEmail>false</SayTotalNewEmail>
  <SayTotalNewFax>false</SayTotalNewFax>
  <SayTotalReceipts>false</SayTotalReceipts>
  <SayTotalSaved>true</SayTotalSaved>
  <SayTotalDraftMsg>false</SayTotalDraftMsg>
  <MessageTypeMenu>false</MessageTypeMenu>
  <NewMessageSortOrder>2</NewMessageSortOrder>
  <SaveMessageOnHangup>1</SaveMessageOnHangup>
  <DeletedMessageSortOrder>1</DeletedMessageSortOrder>
  <SaySender>true</SaySender>
  <SaySenderExtension>false</SaySenderExtension>
  <SayAni>true</SayAni>
  <SayMsgNumber>true</SayMsgNumber>
  <SayTimestampBefore>true</SayTimestampBefore>
  <AutoAdvanceMsgs>false</AutoAdvanceMsgs>
  <ConfirmDeleteMessage>true</ConfirmDeleteMessage>
</User>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note To sort the message type:

- for new message:

```
<NewMessageSortOrder>
2
</NewMessageSortOrder>
```

- for saved message:

```
<SaveMessageSortOrder>
1
</SaveMessageSortOrder>
```

- for deleted message:

```
<DeletedMessageSortOrder>
1
</DeletedMessageSortOrder>
```

All the possible values for above three parameters are given in the table.

JSON Example

```
PUT https://<connection-server>/vmrest/users/<user-objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
Request Body:
{
  "Volume": "50"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameters	Data Type	Operation	Description
Volume	Integer	Read/Write	<p>The audio volume expressed as a percentage that Cisco Unity Connection uses to play back message. The range can vary from 0 to 100.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • 25: Low • 50: Medium • 100: High <p>Default value: 50</p>
Speed	Integer	Read/Write	<p>The audio speed system uses to play back messages to the subscriber. The range can vary from 0 to 200.</p> <ul style="list-style-type: none"> • 50: Slow • 100: Normal • 150: Fast • 200: Fastest <p>Default value: 100</p>
SayTotalNew	Boolean	Read/Write	<p>A flag indicating whether system announces the total number of new messages in the subscriber mailbox.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not announce total number of new messages. • true: Announce the total number of new messages in the subscriber mailbox. <p>Default Value: false</p>
SayTotalNewEmail	Boolean	Read/Write	<p>A flag indicating whether system announces the total number of new e-mail messages in the subscriber mailbox</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not announce total number of new e-mail messages. • true: Announce the total number of new e-mail messages in the subscriber mailbox. <p>Default Value: false</p>
SayTotalNewFax	Boolean	Read/Write	<p>A flag indicating whether system announces the total number of new fax messages in the subscriber mailbox.</p> <ul style="list-style-type: none"> • false: Do not announce total number of new fax messages. • true: Announce the total number of new fax messages in the subscriber mailbox. <p>Default Value: false</p>

Parameters	Data Type	Operation	Description
SayTotalNewVoice	Boolean	ReadWrite	<p>A flag indicating whether system announces the total number of new voice messages in the subscriber mailbox.</p> <ul style="list-style-type: none"> • false: Do not announce total number of new voice messages. • true: Announce the total number of new voice messages in the subscriber mailbox. <p>Default Value: true</p>
SayTotalReceipts	Boolean	ReadWrite	<p>A flag indicating whether system announces the total number of new receipts in the subscriber mailbox.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not announce total number of new receipts. • true: Announce the total number of new receipts in the subscriber mailbox. <p>Default Value: false</p>
SayTotalSaved	Boolean	ReadWrite	<p>A flag indicating whether system announces the total number of saved messages in the subscriber mailbox.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not announce total number of saved messages. • true: Announce the total number of saved messages in the subscriber mailbox. <p>Default Value: false</p>
SayTotalDraftMsg	Boolean	ReadWrite	<p>A flag indicating whether Cisco Unity Connection announces the total number of draft messages in the subscriber mailbox.</p> <p>Possible values</p> <ul style="list-style-type: none"> • false: Do not announce total number of draft messages. • true: Announce the total number of draft messages in the subscriber mailbox. <p>Default Value: false</p>
MessageTypeMenu	Boolean	ReadWrite	<p>A flag indicating whether system plays the message type menu when the subscriber logs on to system over the phone.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not play message type menu • true: Play message type menu <p>Default Value: false</p>

Parameters	Data Type	Operation	Description
NewMessageStackOrder	String	Read/Write	The order in which system plays the following types new messages: Possible values: <ul style="list-style-type: none"> • Urgent voice messages • Non-urgent voice messages • Urgent fax messages • Non-urgent fax messages • Urgent e-mail messages • Non-urgent e-mail messages • Receipts and notices
SaveMessageOnHangup	Boolean	Read/Write	A flag indicating when hanging up while listening to a new message, whether the message is marked new again or is marked read. Possible Values: <ul style="list-style-type: none"> • false: Message is marked new again • true: Message is marked read Default Value: false
SavedMessageStackOrder	String(36)	Read/Write	The order in which system plays the following types of saved messages: <ul style="list-style-type: none"> • Urgent voice messages • Non-urgent voice messages • Urgent fax messages • Non-urgent fax messages • Urgent e-mail messages • Non-urgent e-mail messages • Receipts and notices
NewMessageSortOrder	Integer	Read/Write	The order in which Cisco Unity Connection will sort new messages. Possible values: <ul style="list-style-type: none"> • 1: Newest First • 2: Oldest First Default Value: 1
SavedMessageSortOrder	Integer	Read/Write	The order in which Cisco Unity Connection will sort saved messages.. Possible values: <ul style="list-style-type: none"> • 1: Newest First • 2: Oldest First Default Value: 2

Parameters	Data Type	Operation	Description
DeleteMessageSortOrder	Integer	ReadWrite	<p>The order in which Cisco Unity Connection presents deleted messages to the subscriber.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • 1: Newest First • 2: Oldest First <p>Default Value: 2</p>
SaySender	Boolean	ReadWrite	<p>A flag indicating whether system announces the sender of a message during message playback for the subscriber.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not announce the sender. • true: Announce the sender. <p>Default Value: true</p>
SaySenderExtension	Boolean	ReadWrite	<p>A flag indicating whether Cisco Unity Connection during message playback, plays the primary extension information of the subscriber who sent the message after playing the sender's voice name.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not play the extension information of the subscriber who sent the message. • true: After playing the sender's voice name, play the primary extension information of the subscriber who sent the message.
SayAni	Boolean	ReadWrite	<p>A flag indicating whether Cisco Unity Connection plays the Automatic Number Identification (ANI) information during message playback for voice messages from unidentified callers.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • true • false <p>Default value: false</p>
SayMsgNumber	Boolean	ReadWrite	<p>A flag indicating whether system announces the position of each message in the stack (i.e., 'Message 1', 'Message 2', etc.) during message playback for the subscriber.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not play the message number. • true: Play the message number. <p>Default value: true</p>

Parameters	Data Type	Operation	Description
SayTimestampBefore	Boolean	Read/Write	A flag indicating whether system announces the timestamp before it plays back each for the subscriber. <ul style="list-style-type: none"> • false: Do not announce the timestamp before each message is played. • true: Announce the timestamp before each message is played. Default value: false
SayMessageLength	Boolean	Read/Write	A flag indicating whether Cisco Unity Connection announces the length of each message during message playback. <p>possible values:</p> <ul style="list-style-type: none"> • true • false Default value: false
SkipForwardTime	Integer	Read/Write	Indicates the amount of time (in milliseconds) to jump forward when skipping ahead in a voice or TTS message using either DTMF or voice commands while reviewing messages. <p>Default Value: 5000 The range can vary from 1000 to 60000.</p>
SkipReverseTime	Integer	Read/Write	Indicates the amount of time (in milliseconds) to jump backward when skipping in reverse in a voice or TTS message using either DTMF or voice commands while reviewing messages. <p>Default Value: 5000 The range can vary from 1000 to 60000.</p>
EnableMessageBookmark	Boolean	Read/Write	A flag indicating whether Message Bookmark is enabled for the subscriber <p>Possible values:</p> <ul style="list-style-type: none"> • false: Message Bookmark feature is disabled for subscriber • true: Message Bookmark feature is enabled for subscriber Default value: false
SaveMessageOnHangup	Boolean	Read/Write	A flag indicating when hanging up while listening to a new message, whether the message is marked new again or is marked read. <ul style="list-style-type: none"> • false: Message is marked new again • true: Message is marked read Default Value: false
SaySenderAfter	Boolean	Read/Write	This flag works exactly the same as the SaySender flag on a user, except the conversation plays the sender in the message footer. <p>Possible Values:</p> <ul style="list-style-type: none"> • false: Do not announce the sender. • True: Announce the sender.

Parameters	Data Type	Operation	Description
SaySenderExtensionAfter	Boolean	ReadWrite	<p>This flag works exactly the same as the SaySenderExtension flag on a user, except the conversation plays the sender's extension in the message footer.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • false: Do not play the extension information of the subscriber who sent the message. • true- After playing the sender's voice name, play the primary extension information of the subscriber who sent the message.
SayMsgNumberAfter	Boolean	ReadWrite	<p>This flag works exactly the same as the SayMsgNumber flag on a user, except the conversation plays the message number in the message footer.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • false: Do not play the message number. • true: Play the message number.
SayAniAfter	Boolean	ReadWrite	<p>This flag works exactly the same as the SayAni flag on a user, except the conversation plays the ani in the message footer.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • true • false <p>Default value: false</p>
SayMessageLengthAfter	Boolean	ReadWrite	<p>This flag works exactly the same as the SayMessageLength flag on a user, except the conversation plays the message length in the message footer.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • true • false <p>Default value: false</p>
AutoAdvanceMsgs	Boolean	ReadWrite	<p>A flag indicating whether the conversation moves to the next message in the playback stack automatically during playback after playing the After Message Menu.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • false: Do not automatically skip to the next message after playing the After Message Menu once. • true: Automatically skip to the next message after playing the After Message Menu once. <p>Default Value: false</p>

Parameters	Data Type	Operation	Description
ConfirmDeleteMessage	Boolean	Read/Write	<p>A flag indicating whether system will request confirmation from a subscriber before proceeding with a deletion of a single new or saved message.</p> <ul style="list-style-type: none">• false: system will not request confirmation from a subscriber before proceeding with a deletion of a single new or saved message.• true: system will request confirmation from a subscriber before proceeding with a deletion of a single new or saved message. <p>Default Value: false</p>



CHAPTER 22

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Post Greeting Recording

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Post Greeting Recording Settings API, on page 117](#)

Post Greeting Recording Settings API

The following URI can be used to view the user object ID:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

From the above URI, get the call handler object ID.

Update Post Greeting Recording Settings

```
Request Body:  
<CallhandlerPrimaryTemplate>  
  <PlayPostGreetingRecording>1</PlayPostGreetingRecording>  
</CallhandlerPrimaryTemplate>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update post greeting recording settings, do the following:

```
Request URI:  
PUT https://<connection-server>/vmrest/callhandlerprimarytemplates/<ObjectId>  
Accept: application/json  
Content-type: application/json  
Connection: keep-alive  
Request Body:  
{  
  "PlayPostGreetingRecording": "1"  
}
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

Parameters	Data Type	Operations	Values
PlayPostGreetingRecording	Integer	Read/Write	<ul style="list-style-type: none"> • 0: Do Not Play Recording • 1: Play Recording to All Callers • 2: Play Recording Only to Unidentified Callers
PostGreetingRecordingObjectId	String(64)	Read/Write	Object Id of post greeting. URI to fetch it: <pre>https://<connection-server>/vmrest/postgreetingrecordings</pre>



CHAPTER 23

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Private List API

Links to Other API pages: [Cisco_Unity_Connection_APIs](#)

- [Private List API](#) , on page 119

Private List API

Listing All the Private Lists

```
GET https://<connection-server>/vmrest/users/<user-objectid>/privatelists
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<PrivateLists total="1">
  <PrivateList>
    <URI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/privatelists/8465e5d7-f0d2-4d32-81b1-634a2315db9c</URI>
    <ObjectId>8465e5d7-f0d2-4d32-81b1-634a2315db9c</ObjectId>
    <DisplayName>Test1</DisplayName>
    <UserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</UserObjectId>
    <UserURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</UserURI>
    <DtmfName>83781</DtmfName>
    <Alias>Texoma_8465e5d7-f0d2-4d32-81b1-634a2315db9c</Alias>
    <NumericId>1</NumericId>
    <IsAddressable>true</IsAddressable>
  </PrivateList>
</PrivateLists>
<AlternateNamesURI>/vmrest/alternatenames?query=(PersonalGroupObjectId%20is%208465e5d7-f0d2-4d32-81b1-634a2315db9c)
</AlternateNamesURI>
</PrivateList>
</PrivateLists>
```

```
Response Code: 200
```

Listing a Particular Private List

```
GET https://<connection-server>/vmrest/users/<user-objectid>/privatelists/<objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<PrivateList>

<URI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/privatelists/8465e5d7-f0d2-4d32-81b1-634a2315db9c</URI>

  <ObjectId>8465e5d7-f0d2-4d32-81b1-634a2315db9c</ObjectId>
  <DisplayName>Test1</DisplayName>
  <UserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</UserObjectId>
  <UserURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</UserURI>
  <DtmfName>83781</DtmfName>
  <Alias>Texoma_8465e5d7-f0d2-4d32-81b1-634a2315db9c</Alias>
  <NumericId>1</NumericId>
  <IsAddressable>true</IsAddressable>

<PrivateListMembersURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/privatelists/8465e5d7-f0d2-4d32-81b1-634a2315db9c/privatelistmembers</PrivateListMembersURI>

<AlternateNamesURI>/vmrest/alternatenames?query=(PersonalGroupObjectId%20is%208465e5d7-f0d2-4d32-81b1-634a2315db9c)

  </AlternateNamesURI>
</PrivateList>
```

Response Code: 200

JSON Example

```
GET https://<connection-server>/vmrest/users/<user-objectid>/privatelists/<objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":
  "/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/privatelists/8465e5d7-f0d2-4d32-81b1-634a2315db9c"

  "ObjectId": "8465e5d7-f0d2-4d32-81b1-634a2315db9c"
  "DisplayName": "Test1"
  "UserObjectId": "9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
  "UserURI": "/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
  "DtmfName": "83781"
  "Alias": "Texoma_8465e5d7-f0d2-4d32-81b1-634a2315db9c"
  "NumericId": "1"
  "IsAddressable": "true"
  "PrivateListMembersURI":
  "/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/privatelists/8465e5d7-f0d2-4d32-81b1-634a2315db9c/privatelistmembers"
  "AlternateNamesURI":
  "/vmrest/alternatenames?query=(PersonalGroupObjectId%20is%208465e5d7-f0d2-4d32-81b1-634a2315db9c)"
}
```

Response Code: 200

Create a Private list

The mandatory field for creation is DisplayName.

```
POST https://<connection-server>/vmrest/users/<user-objectid>/privatelists
```

```
<PrivateList>
  <DisplayName>Test1</DisplayName>
</PrivateList>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/privatelists/2375d893-c8eb-437b-90bf-7de4b1d0c3e5
```

JSON Example

```
POST https://<connection-server>/vmrest/users/<user-objectid>/privatelists/<objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "DisplayName": "Test1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/privatelists/2375d893-c8eb-437b-90bf-7de4b1d0c3e5
```

Update Private List

```
PUT https://<connection-server>/vmrest/users/<user-objectid>/privatelists/<objectid>
```

```
<PrivateList>
  <DisplayName>Test11</DisplayName>
</PrivateList>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
PUT https://<connection-server>/vmrest/users/<user-objectid>/privatelists/<objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "DisplayName": "Test11"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Delete Private List

```
DELETE https://<connection-server>/vmrest/users/<user-objectid>/privatelists/<objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
DELETE https://<connection-server>/vmrest/users/<user-objectid>/privatelists/<objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Field Name	Data Type	Operation	Description
DisplayName	String	Read/Write	The preferred text name of the list to be used when displaying entries such as in the administrative console, e.g. Cisco Unity Connection Administration.
UserObjectId	String(36)	Read Only	The unique identifier of the User object to which this list belongs.
DtmfName	String	Read Only	The digits corresponding to the numeric keypad mapping on a standard touchtone phone representing the group name. These digits would need to be dialed to address a message to this list via the phone.
Alias	String	Read Only	The unique text name for either a list
NumericId	String	Read Only	If being used as a personal voicemail list (i.e., "private" voicemail list), the numeric identifier for the personal group,(Value 0-4)

Field Name	Data Type	Operation	Description
IsAddressable	Boolean	Read Only	A flag indicating whether the entity to which the alias belongs is addressable. Possible Values: <ul style="list-style-type: none">• false: The entity is not addressable• true: The entity is addressable. Default value: true
ObjectId	String(36)	Read Only	Unique identifier of private List



CHAPTER 24

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Send Message Settings

Links to Other API pages: [Cisco_Unity_Connection_APIS](#)

- [Send Message Settings API, on page 125](#)

Send Message Settings API

Listing the Send Message Settings

The following URI can be used to get the Send Message Settings API of user:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<User>
  <AddressMode>0</AddressMode>
  <SendBroadcastMsg>true</SendBroadcastMsg>
  <UpdateBroadcastMsg>true</UpdateBroadcastMsg>
  <NameConfirmation>false</NameConfirmation>
  <ContinuousAddMode>false</ContinuousAddMode>
  <SendMessageOnHangup>2</SendMessageOnHangup>
</User>
```

```
Response Code: 200
```

JSON Example

```
GET https://<connection-server>/vmrest/users/<user-objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "AddressMode": "0"
  "SendBroadcastMsg": "true"
  "UpdateBroadcastMsg": "true"
  "NameConfirmation": "false"
  "ContinuousAddMode": "false"
  "SendMessageOnHangup": "2"
}
```

Response Code: 200

Update Send Message Settings

```
PUT https://<connection-server>/vmrest/users/<user-objectid>
```

```
<User>
  <AddressMode>0</AddressMode>
  <SendBroadcastMsg>true</SendBroadcastMsg>
  <UpdateBroadcastMsg>true</UpdateBroadcastMsg>
  <NameConfirmation>>false</NameConfirmation>
  <ContinuousAddMode>>false</ContinuousAddMode>
  <SendMessageOnHangup>2</SendMessageOnHangup>
</User>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

```
PUT https://<connection-server>/vmrest/users/<user-objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "AddressMode": "2",
  "UpdateBroadcastMsg": "true"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

Parameter	Data Type	Values
SendBroadcastMsg	Boolean	User Can Send Broadcast Messages to Users on This Server Values: <ul style="list-style-type: none"> • 0: Cannot send broadcast messages. • 1: Can send broadcast messages. Default value: False
UpdateBroadcastMsg	Boolean	User Can Update Broadcast Messages Stored on This Server
AddressMode	Integer	Address mode options. <ul style="list-style-type: none"> • 0: Spelling the Last Name Then First Name • 1: Entering the extension • 2: Spelling the First Name Then Last Name
NameConfirmation	Boolean	Confirm Recipient by Name
ContinuousAddMode	Boolean	Continue Adding Names after Each Recipient. Default value: False
UseDynamicNameSearchWeight	Boolean	Automatically Add Recipients to Addressing Priority List
EnableSaveDraft	Boolean	Allow Users to Save Draft Messages
RetainUrgentMessageFlag	Boolean	Retain Urgency Flag When Forwarding or Replying to Messages
SendMessageOnHangup	Integer	Allow addressing a message or discard Message or save Message as draft on hanging. <ul style="list-style-type: none"> • 0: Discard Message • 1: Send Message • 2: Save Message as Draft

•



CHAPTER 25

Cisco Unity Connection Provisioning Interface (CUPI) API -- User SMTP Proxy Address

- [SMTP Proxy Address API](#), on page 129

SMTP Proxy Address API

Listing the SMTP proxy Address

```
GET
https://<connection-server>/vmrest/smtpproxyaddresses?query=(GlobalUserObjectId%20is%20<user-objectid>)
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<SmtProxyAddresses total="2">
  <SmtProxyAddress>
    <URI>/vmrest/smtpproxyaddresses/3d71d2ed-5baf-48c4-bf25-875bca56e30e</URI>
    <ObjectId>3d71d2ed-5baf-48c4-bf25-875bca56e30e</ObjectId>
    <SmtAddress>chhavi@we.com</SmtAddress>
    <ObjectGlobalUserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</ObjectGlobalUserObjectId>
  </SmtProxyAddress>
  <ObjectGlobalUserURI>/vmrest/globalusers/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</ObjectGlobalUserURI>
  </SmtProxyAddress>
  <SmtProxyAddress>
    <URI>/vmrest/smtpproxyaddresses/062fc8cc-a0aa-4ad7-b74c-9589dd95cb1c</URI>
    <ObjectId>062fc8cc-a0aa-4ad7-b74c-9589dd95cb1c</ObjectId>
    <SmtAddress>chhavi@5.co</SmtAddress>
    <ObjectGlobalUserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</ObjectGlobalUserObjectId>
  </SmtProxyAddress>
  <ObjectGlobalUserURI>/vmrest/globalusers/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</ObjectGlobalUserURI>
  </SmtProxyAddress>
</SmtProxyAddresses>
```

Response Code: 200

JSON Example

```
GET
https://<connection-server>/vmrest/smtpproxyaddresses?query=(GlobalUserObjectId%20is%20<user-objectid>)
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2",
  "SmtproxyAddress":
  [
    {
      "URI": "/vmrest/smtpproxyaddresses/3d71d2ed-5baf-48c4-bf25-875bca56e30e",
      "ObjectId": "3d71d2ed-5baf-48c4-bf25-875bca56e30e",
      "SmtAddress": "john@we.com",
      "ObjectGlobalUserObjectId": "9375d893-c8eb-437b-90bf-7de4b1d0c3e8",
      "ObjectGlobalUserURI": "/vmrest/globalusers/9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
    },
    {
      "URI": "/vmrest/smtpproxyaddresses/062fc8cc-a0aa-4ad7-b74c-9589dd95cb1c",
      "ObjectId": "062fc8cc-a0aa-4ad7-b74c-9589dd95cb1c",
      "SmtAddress": "mary@5.co",
      "ObjectGlobalUserObjectId": "9375d893-c8eb-437b-90bf-7de4b1d0c3e8",
      "ObjectGlobalUserURI": "/vmrest/globalusers/9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
    }
  ]
}
```

Response Code: 200

Create an SMTP Proxy Address

The mandatory fields for creation are SmtAddress and ObjectGlobalUserObjectId

```
POST https://<connection-server>/vmrest/smtpproxyaddresses
```

```
<SmtproxyAddress>
  <SmtAddress>Texoma@cisco.com</SmtAddress>
  <ObjectGlobalUserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</ObjectGlobalUserObjectId>
</SmtproxyAddress>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/smtpproxyaddresses/8375d893-c8eb-437b-90bf-7de4b1d0c3e8
```

JSON Example

```
POST https://<connection-server>/vmrest/smtpproxyaddresses
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "SmtproxyAddress": "Texoma@cisco.com",
  "ObjectGlobalUserObjectId": "9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/smtproxyaddresses/8375d893-c8eb-437b-90bf-7de4b1d0c3e8
```

Update SMTP proxy Address

```
PUT https://<connection-server>/vmrest/smtproxyaddresses/<objectid>
```

```
<SmtproxyAddress>
  <SmtAddress>Texoma@cisco.com</SmtAddress>
</SmtproxyAddress>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
PUT https://<connection-server>/vmrest/smtproxyaddresses/<object_id>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "SmtAddress": "Texoma@cisco.com"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Delete SMTP Proxy Address

```
DELETE https://<connection-server>/vmrest/smtproxyaddresses/<objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
DELETE https://<connection-server>vmrest/smtpproxyaddresses/<objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Field Name	Data Type	Operation	Description
ObjectId	String(36)	Read Only	The primary key for this table.
SmtpAddress	String(320)	Read/Write	The full SMTP proxy address for this object.
ObjGlobalUserObjId	String(36)	Read/Write	The unique identifier of the Global User to which this SMTP address belongs.



CHAPTER 26

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Transfer Rules

- [Transfer Rule API, on page 133](#)

Transfer Rule API

First get the call handler URI of a particular user: GET

```
https://<Connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
```

From call handler URI get for transfer options: GET

```
https://<Connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/transferoptions
```

For alternate transfer rule: GET

```
https://<Connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/transferoptions/Alternate
```

For closed transfer rule: GET

```
https://<Connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/transferoptions/Off%20Hours
```

For Standard transfer rule: GET

```
https://<Connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/transferoptions/Standard
```

Listing All Transfer Rules

```
GET  
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/transferoptions
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing All Transfer Rules

```

<TransferOptions total="2">
  <TransferOption>

<URI>/vmrest/callhandlerprimarytemplates/939d4d12-cec8-4fee-ae47-fbf0cf20c33e/transferoptions/Off%20Hours</URI>

  <CallHandlerObjectId>939d4d12-cec8-4fee-ae47-fbf0cf20c33e</CallHandlerObjectId>

<CallhandlerURI>/vmrest/handlers/callhandlers/939d4d12-cec8-4fee-ae47-fbf0cf20c33e</CallhandlerURI>

  <TransferOptionType>Off Hours</TransferOptionType>
  <Action>0</Action>
  <RnaAction>1</RnaAction>
  <TransferAnnounce>>false</TransferAnnounce>
  <TransferConfirm>>false</TransferConfirm>
  <TransferDtDetect>>false</TransferDtDetect>
  <TransferHoldingMode>0</TransferHoldingMode>
  <TransferIntroduce>>false</TransferIntroduce>
  <TransferRings>4</TransferRings>
  <TransferScreening>>false</TransferScreening>
  <TransferType>0</TransferType>
  <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>

<PhoneSystemURI>/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150</PhoneSystemURI>

  <UsePrimaryExtension>>true</UsePrimaryExtension>
  <PlayTransferPrompt>>true</PlayTransferPrompt>
  <PersonalCallTransfer>>false</PersonalCallTransfer>
  <Enabled>>true</Enabled>
</TransferOption>
<TransferOption>

<URI>/vmrest/handlers/callhandlers/939d4d12-cec8-4fee-ae47-fbf0cf20c33e/transferoptions/Standard</URI>

  <CallHandlerObjectId>939d4d12-cec8-4fee-ae47-fbf0cf20c33e</CallHandlerObjectId>

<CallhandlerURI>/vmrest/handlers/callhandlers/939d4d12-cec8-4fee-ae47-fbf0cf20c33e</CallhandlerURI>

  <TransferOptionType>Standard</TransferOptionType>
  <Action>0</Action>
  <RnaAction>1</RnaAction>
  <TransferAnnounce>>false</TransferAnnounce>
  <TransferConfirm>>false</TransferConfirm>
  <TransferDtDetect>>false</TransferDtDetect>
  <TransferHoldingMode>0</TransferHoldingMode>
  <TransferIntroduce>>false</TransferIntroduce>
  <TransferRings>4</TransferRings>
  <TransferScreening>>false</TransferScreening>
  <TransferType>0</TransferType>
  <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>

<PhoneSystemURI>/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150</PhoneSystemURI>

  <UsePrimaryExtension>>true</UsePrimaryExtension>
  <PlayTransferPrompt>>true</PlayTransferPrompt>
  <PersonalCallTransfer>>false</PersonalCallTransfer>
  <Enabled>>true</Enabled>
</TransferOption>
</TransferOptions>

```

Response Code: 200

Viewing the Alternate Transfer Rule

The following is an example of the GET request that lists the details of alternate transfer rule:

```
GET
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/transferoptions/Alternate
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<TransferOption>
<URI>/vmrest/callhandlerprimarytemplates/45e0a6f4-43c4-472a-8ffb-f6124aa549d0/transferoptions/Alternate</URI>
  <CallHandlerObjectId>45e0a6f4-43c4-472a-8ffb-f6124aa549d0</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/45e0a6f4-43c4-472a-8ffb-f6124aa549d0</CallhandlerURI>
  <TransferOptionType>Alternate</TransferOptionType>
  <Action>1</Action>
  <RnaAction>1</RnaAction>
  <TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
  <TransferAnnounce>false</TransferAnnounce>
  <TransferConfirm>false</TransferConfirm>
  <TransferDtDetect>false</TransferDtDetect>
  <TransferHoldingMode>0</TransferHoldingMode>
  <TransferIntroduce>false</TransferIntroduce>
  <TransferRings>4</TransferRings>
  <TransferScreening>false</TransferScreening>
  <TransferType>0</TransferType>
  <MediaSwitchObjectId>221ee752-5147-4326-9990-d4a138674f9e</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/221ee752-5147-4326-9990-d4a138674f9e</PhoneSystemURI>
  <UsePrimaryExtension>true</UsePrimaryExtension>
  <PlayTransferPrompt>true</PlayTransferPrompt>
  <PersonalCallTransfer>false</PersonalCallTransfer>
  <Enabled>false</Enabled>
</TransferOption>
```

```
Response Code: 200
```

JSON Example

To view the alternate transfer rule, do the following:

```
GET
https://<connection-server>/vmrest/handlers/<callhandlerObjectId>/transferoptions/Alternate
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":"/vmrest/handlers/callhandlers/43bb6590-e9e3-43ca-972e-e3e158a96126/transferoptions/Alternate"
  "CallHandlerObjectId":"43bb6590-e9e3-43ca-972e-e3e158a96126"
  "CallHandlerURI":"/vmrest/handlers/callhandlers/43bb6590-e9e3-43ca-972e-e3e158a96126"
  "TransferOptionType":"Alternate"
  "Action":"0"
  "RnaAction":"1"
  "TimeExpires":"1972-01-01 00:00:00.0"
  "TransferAnnounce":"false"
  "TransferConfirm":"false"
  "TransferDtDetect":"false"
  "TransferHoldingMode":"0"
  "TransferIntroduce":"false"
  "TransferRings":"4"
  "TransferScreening":"false"
  "TransferType":"0"
  "MediaSwitchObjectId":"e912b134-1bd0-45f9-baae-9f1e096ae3b9"
  "PhoneSystemURI":"/vmrest/phonesystems/e912b134-1bd0-45f9-baae-9f1e096ae3b9"
  "UsePrimaryExtension":"true"
  "PlayTransferPrompt":"true"
  "PersonalCallTransfer":"false"
  "Enabled":"false"
}
```

Response Code: 200

Updating Transfer Option

The following is an example of the PUT request that updates the transfer option:

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallHandlerObjectId>/transferoptions/Alternate
```

```
<TransferOption>
  <Action>0</Action>
  <TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
  <TransferAnnounce>>false</TransferAnnounce>
  <TransferConfirm>>false</TransferConfirm>
  <TransferHoldingMode>0</TransferHoldingMode>
  <TransferIntroduce>>false</TransferIntroduce>
  <TransferRings>4</TransferRings>
  <TransferScreening>>false</TransferScreening>
  <TransferType>0</TransferType>
</TransferOption>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

To update the transfer rule, do the following:


```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/transferoptions/Alternate
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "Action": "1",
  "TransferAnnounce": "false",
  "TransferConfirm": "false",
  "TransferHoldingMode": "0",
  "TransferIntroduce": "false",
  "TransferRings": "4",
  "TransferScreening": "false",
  "TransferType": "0"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Data Type	Operations	Comments
TransferOptionType	String(64)	Read Only	The type of transfer option, e.g. "Standard," "Off Hours," or "Alternate."
Enabled	Boolean	ReadWrite	To enable transfer rules. Possible values: <ul style="list-style-type: none"> • true • false Default value: false
TimeExpires	DateTime	ReadWrite	The date and time when this transfer option expires. If the transfer rule is enabled, the value is NULL or a date in the future. If the transfer rule is disabled, the value is a past date.
Actions	Integer	ReadWrite	A flag indicating whether Cisco Unity Connection transfers the call to the call handler greeting or attempts to transfer the call to an extension. Values can be: <ul style="list-style-type: none"> • 0: Greeting • 1: Extension

Parameter	Data Type	Operations	Comments
TransferType	Integer	ReadWrite	The type of call transfer Cisco Unity Connection will perform - supervised or unsupervised (also referred to as "Release to Switch" transfer). Values: <ul style="list-style-type: none"> • 0: Release to Switch • 1: Supervise Transfer
TransferRings	Integer	ReadWrite	The number of times the extension rings before Cisco Unity Connection considers it a "ring no answer" and plays the subscriber or handler greeting. Applies only when the "TransferType" column is set to supervised (1). This value should never be less than 2 for a supervised transfer. Possible Values: 2-20 Default value: 4
PlayTransferPrompt	Boolean	ReadWrite	Enables "Wait While I Transfer Your Call" Prompt. Values: <ul style="list-style-type: none"> • false: System will not play the "Wait while I transfer your call" prompt prior to transfer. • true: System will play the "Wait while I transfer your call" prompt prior to transfer. Default value: true
TransferHoldingMode	Integer	ReadWrite	The action Cisco Unity Connection will take when the extension is busy. Applies only when the "TransferType" column is set to supervised (1). Values: <ul style="list-style-type: none"> • 0: Send callers to voicemail. • 1: Put callers on hold without asking. • 2: Ask callers to hold.
TransferAnnounce	Boolean	ReadWrite	A flag indicating whether Cisco Unity Connection plays "transferring call" when the subscriber answers the phone. Requires a "TransferType" of supervised (1). Values: <ul style="list-style-type: none"> • false: Do not say "Transferring call" when the subscriber answers the phone • true: Say "Transferring call" when the subscriber answers the phone Default value: false

Parameter	Data Type	Operations	Comments
TransferIntroduce	Boolean	ReadWrite	<p>A flag indicating whether Cisco Unity Connection will say "call for <recorded name of the call handler>" when the subscriber answers the phone.</p> <p>Requires a "TransferType" of supervised (1). This functionality is normally used when a single extension number is being shared by multiple subscribers or a scenario where the subscriber who is the message recipient takes calls for more than one dialed extension. The introduction alerts the subscriber who answers that the call is for the call handler. Default value: false</p>
TransferConfirm	Boolean	ReadWrite	<p>A flag indicating whether Cisco Unity Connection prompts the subscriber to accept or refuse a call ("Press 1 to take the call or 2 and I'll take a message"). If the call is accepted, it is transferred to the subscriber phone. If the call is refused, Cisco Unity Connection plays the applicable subscriber greeting.</p> <p>Requires a "TransferType" of supervised (1). Typically this is used in conjunction with the call screening option ("TransferScreening" column) enabled. This combination enables the subscriber to hear the name of the caller and then decide if they want to take the call or not. Values:</p> <ul style="list-style-type: none"> • false: Transfer confirm disabled • true: Transfer confirm enabled <p>Default value: false</p>
TransferScreening	Boolean	ReadWrite	<p>Requires a "TransferType" of supervised (1).</p> <p>Normally this column is used along with "TransferConfirm" to allow the subscriber to screen calls. Values:</p> <ul style="list-style-type: none"> • false: Call screening disabled • true: Ask and record caller name <p>Default value: false</p>



CHAPTER 27

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Management API

- [User API](#) , on page 141
- [Admin User API](#) , on page 165

User API

Administrator can use this API to create/update/delete/fetch the user with mailbox. Various attributes of user, for example notification device, greetings, contact, private list, phone menu, call transfer, screening, or personal data, can also be updated using this API .

Listing the Users

The request can be used to fetch the list of all users.

```
GET https://<connection-server>/vmrest/users
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<Users total="2">
  <User>
    <URI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1</URI>
    <ObjectId>4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1</ObjectId>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
    <Alias>undeliverablemessagesmailbox</Alias>
    <DisplayName>Undeliverable Messages</DisplayName>
    <TimeZone>0</TimeZone>
    <CreationTime>2013-03-05T10:54:38Z</CreationTime>
    <CosObjectId>610c9c71-32be-4465-b61a-523f24a9d828</CosObjectId>
    <CosURI>/vmrest/coses/610c9c71-32be-4465-b61a-523f24a9d828</CosURI>
    <Language>0</Language>
    <LocationObjectId>42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationURI>

  <ListInDirectory>>false</ListInDirectory>
  <IsVmEnrolled>>true</IsVmEnrolled>
  <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150</PhoneSystemURI>

  <CallHandlerObjectId>13a3c5fc-f706-4bd0-aeeb-32dad2c4a29b</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/13a3c5fc-f706-4bd0-aeeb-32dad2c4a29b</CallhandlerURI>

  <DtmfAccessId>99999</DtmfAccessId>
  <VoiceNameRequired>>false</VoiceNameRequired>
  <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionURI>
  <Inactive>>false</Inactive>
  <MwisURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/mwis</MwisURI>

<NotificationDevicesURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/notificationdevices</NotificationDevicesURI>

<MessageHandlersURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/messagehandlers</MessageHandlersURI>

<ExternalServiceAccountsURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/externalserviceaccounts</ExternalServiceAccountsURI>

<AlternateExtensionsURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/alternateextensions</AlternateExtensionsURI>

<PrivateListsURI>/vmrest/users/4d5df6e3-a036-4f16-8f1e-d48e7e9b73c1/privatelists</PrivateListsURI>

<SmtproxyAddressesURI>/vmrest/smtproxyaddresses?query=(ObjectGlobalUserObjectId%20is%204d5df6e3-a036-4f16-8f1e-d48e7e9b73c1)</SmtproxyAddressesURI>

<AlternateNamesURI>/vmrest/alternatenames?query=(GlobalUserObjectId%20is%204d5df6e3-a036-4f16-8f1e-d48e7e9b73c1)

</AlternateNamesURI>
  </User>
  <User>
    <URI>/vmrest/users/671fd8d1-7240-4e60-9194-0ec9c4a626ce</URI>
    <ObjectId>671fd8d1-7240-4e60-9194-0ec9c4a626ce</ObjectId>
    <Alias>operator</Alias>
    <DisplayName>Operator</DisplayName>
    <TimeZone>0</TimeZone>
    <CreationTime>2013-03-05 10:54:39.02</CreationTime>
    <CosObjectId>610c9c71-32be-4465-b61a-523f24a9d828</CosObjectId>
    <CosURI>/vmrest/coses/610c9c71-32be-4465-b61a-523f24a9d828</CosURI>
    <Language>0</Language>

```

```

    <LocationObjectId>42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationObjectId>
<LocationURI>/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationURI>

    <ListInDirectory>>false</ListInDirectory>
    <IsVmEnrolled>>true</IsVmEnrolled>
    <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150</PhoneSystemURI>

    <CallHandlerObjectId>4546d6df-5120-4fb3-9719-8d521b8a5796</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/4546d6df-5120-4fb3-9719-8d521b8a5796</CallhandlerURI>

    <DtmfAccessId>99990</DtmfAccessId>
    <VoiceNameRequired>>false</VoiceNameRequired>
    <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionURI>
    <Inactive>>false</Inactive>
    <MwisURI>/vmrest/users/671fd8d1-7240-4e60-9194-0ec9c4a626ce/mwis</MwisURI>
<NotificationDevicesURI>/vmrest/users/671fd8d1-7240-4e60-9194-0ec9c4a626ce/notificationdevices</NotificationDevicesURI>

<MessageHandlersURI>/vmrest/users/671fd8d1-7240-4e60-9194-0ec9c4a626ce/messagehandlers</MessageHandlersURI>

<ExternalServiceAccountsURI>/vmrest/users/671fd8d1-7240-4e60-9194-0ec9c4a626ce/externalserviceaccounts</ExternalServiceAccountsURI>

<AlternateExtensionsURI>/vmrest/users/671fd8d1-7240-4e60-9194-0ec9c4a626ce/alternateextensions</AlternateExtensionsURI>

<PrivateListsURI>/vmrest/users/671fd8d1-7240-4e60-9194-0ec9c4a626ce/privatelists</PrivateListsURI>

<SipProxyAddressesURI>/vmrest/sipproxyaddresses?query=(GlobalUserObjectId%20is%20671fd8d1-7240-4e60-9194-0ec9c4a626ce)</SipProxyAddressesURI>

<AlternateNamesURI>/vmrest/alternatenames?query=(GlobalUserObjectId%20is%20671fd8d1-7240-4e60-9194-0ec9c4a626ce)
</AlternateNamesURI>
</User>
<User>
    <URI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9</URI>
    <ObjectId>8321097e-cca4-483f-b24c-0f2175e6e4c9</ObjectId>
    <FirstName>John</FirstName>
    <LastName>10000</LastName>
    <Alias>John10000</Alias>
    <City/>
    <Department/>
    <EmployeeId/>
    <DisplayName>John 10000</DisplayName>
    <EmailAddress>john@cisco.com</EmailAddress>
    <TimeZone>190</TimeZone>
    <CreationTime>2015-06-01T05:03:15Z</CreationTime>
    <CosObjectId>0a987b74-acf0-4310-ab81-4ebe0190cca4</CosObjectId>
    <CosURI>/vmrest/coses/0a987b74-acf0-4310-ab81-4ebe0190cca4</CosURI>
    <Language>1033</Language>
    <LocationObjectId>17f9c794-d4e4-453b-a9df-771c48c0590e</LocationObjectId>
<LocationURI>/vmrest/locations/connectionlocations/17f9c794-d4e4-453b-a9df-771c48c0590e</LocationURI>

    <ListInDirectory>>true</ListInDirectory>
    <IsVmEnrolled>>false</IsVmEnrolled>
    <MediaSwitchObjectId>6f37f783-437a-4c9b-aefe-74201f33deab</MediaSwitchObjectId>

```

```

<PhoneSystemURI>/vmrest/phonesystems/6f37f783-437a-4c9b-aefe-74201f33deab</PhoneSystemURI>

<CallHandlerObjectId>be938317-6c75-4d67-9c9e-642ba90d85d1</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/be938317-6c75-4d67-9c9e-642ba90d85d1</CallhandlerURI>

<DtmfAccessId>10000</DtmfAccessId>
<VoiceNameRequired>>false</VoiceNameRequired>
<PartitionObjectId>30c21994-bd80-4992-97ce-601ca93bf3da</PartitionObjectId>
<PartitionURI>/vmrest/partitions/30c21994-bd80-4992-97ce-601ca93bf3da</PartitionURI>
<Inactive>>false</Inactive>
<MwisURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/mwis</MwisURI>

<NotificationDevicesURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/notificationdevices</NotificationDevicesURI>

<MessageHandlersURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/messagehandlers</MessageHandlersURI>

<ExternalServiceAccountsURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/externalserviceaccounts</ExternalServiceAccountsURI>

<AlternateExtensionsURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/alternateextensions</AlternateExtensionsURI>

<PrivateListsURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/privatelists</PrivateListsURI>

<VideoServiceAccountsURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/videoserviceaccounts</VideoServiceAccountsURI>

<UserWebPasswordURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/credential/password</UserWebPasswordURI>

<UserMailboxURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/mailboxattributes</UserMailboxURI>

  <MailboxStoreName>Unity Messaging Database -1</MailboxStoreName>

<UserVoicePinURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/credential/pin</UserVoicePinURI>

  <UserRoleURI>/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/userroles</UserRoleURI>

<SntpProxyAddressesURI>/vmrest/sntpproxyaddresses?query=(GlobalUserObjectId%20is%208321097e-cca4-483f-b24c-0f2175e6e4c9)
  </SntpProxyAddressesURI>

<AlternateNamesURI>/vmrest/alternatenames?query=(GlobalUserObjectId%20is%208321097e-cca4-483f-b24c-0f2175e6e4c9)</AlternateNamesURI>
</User>
</Users>

```

Response Code: 200

JSON Example

To view the list of users, do the following:

```

GET https://<connection-server>/vmrest/users
Accept: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:


```

{
  "Users": {
    "-total": "1",
    "User": {
      "URI": "/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9",
      "ObjectId": "8321097e-cca4-483f-b24c-0f2175e6e4c9",
      "FirstName": "John",
      "LastName": "10000",
      "Alias": "John10000",
      "DisplayName": "John 10000",
      "EmailAddress": "john@cisco.com",
      "TimeZone": "190",
      "CreationTime": "2015-06-01T05:03:15Z",
      "CosObjectId": "0a987b74-acf0-4310-ab81-4ebe0190cca4",
      "CosURI": "/vmrest/coses/0a987b74-acf0-4310-ab81-4ebe0190cca4",
      "Language": "1033",
      "LocationObjectId": "17f9c794-d4e4-453b-a9df-771c48c0590e",
      "LocationURI":
"/vmrest/locations/connectionlocations/17f9c794-d4e4-453b-a9df-771c48c0590e",
      "ListInDirectory": "true",
      "IsVmEnrolled": "false",
      "MediaSwitchObjectId": "6f37f783-437a-4c9b-aefe-74201f33deab",
      "PhoneSystemURI": "/vmrest/phonesystems/6f37f783-437a-4c9b-aefe-74201f33deab",
      "CallHandlerObjectId": "be938317-6c75-4d67-9c9e-642ba90d85d1",
      "CallhandlerURI": "/vmrest/handlers/callhandlers/be938317-6c75-4d67-9c9e-642ba90d85d1",

      "DtmfAccessId": "10000",
      "VoiceNameRequired": "false",
      "PartitionObjectId": "30c21994-bd80-4992-97ce-601ca93bf3da",
      "PartitionURI": "/vmrest/partitions/30c21994-bd80-4992-97ce-601ca93bf3da",
      "Inactive": "false",
      "MwisURI": "/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/mwis",
      "NotificationDevicesURI":
"/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/notificationdevices",
      "MessageHandlersURI":
"/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/messagehandlers",
      "ExternalServiceAccountsURI":
"/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/externalserviceaccounts",
      "AlternateExtensionsURI":
"/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/alternateextensions",
      "PrivateListsURI": "/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/privatelists",

      "VideoServiceAccountsURI":
"/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/videoserviceaccounts",
      "UserWebPasswordURI":
"/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/credential/password",
      "UserMailboxURI":
"/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/mailboxattributes",
      "MailboxStoreName": "Unity Messaging Database -1",
      "UserVoicePinURI": "/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/credential/pin",

      "UserRoleURI": "/vmrest/users/8321097e-cca4-483f-b24c-0f2175e6e4c9/userroles",
      "SmtpproxyAddressesURI":
"/vmrest/smtpproxyaddresses?query=(ObjectGlobalUserObjectId%20is%208321097e-cca4-483f-b24c-0f2175e6e4c9)",
      "AlternateNamesURI":
"/vmrest/alternatenames?query=(GlobalUserObjectId%20is%208321097e-cca4-483f-b24c-0f2175e6e4c9)"
    }
  }
}

```

Response Code: 200

Listing Users based on Email Address

In Cisco Unity Connection 11.5(1) and later, the system administrator can use email address to list the users using following URI:

```
GET https://<connection-server>/vmrest/users?query=(emailaddress is
<emailaddress@domain.com>)

GET https://<connection-server>/vmrest/users?query=(emailaddress startswith
<emailaddress@domain.com>)

GET https://<connection-server>/vmrest/users?query=(emailaddress isnull)

GET https://<connection-server>/vmrest/users?query=(emailaddress isnotnull)
```

The following is an example of the GET request that lists the details of specific user based on the email address (emailaddress is <emailaddress@domain.com>):

```

<User>
  <URI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1</URI>
  <ObjectId>fc78a2c6-3065-46a5-b5cb-0bba363280d1</ObjectId>
  <FirstName>abc</FirstName>
  <LastName></LastName>
  <Alias>abc</Alias>
  <City>
  </City>
  <Department>
  </Department>
  <EmployeeId>
  </EmployeeId>
  <DisplayName>abc</DisplayName>
  <EmailAddress>abc@cisco.com</EmailAddress>
  <TimeZone>190</TimeZone>
  <CreationTime>2016-05-11T09:51:04Z</CreationTime>
  <CosObjectId>4e1c04f4-eb53-4f19-aaa2-0982121fa8fd</CosObjectId>
  <CosURI>/vmrest/coses/4e1c04f4-eb53-4f19-aaa2-0982121fa8fd</CosURI>
  <Language>1033</Language>
  <LocationObjectId>44471f12-f7cb-4d99-80fe-672bf039faef</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/44471f12-f7cb-4d99-80fe-672bf039faef</LocationURI>

  <ListInDirectory>>true</ListInDirectory>
  <IsVmEnrolled>>false</IsVmEnrolled>
  <MediaSwitchObjectId>cf3e31a0-979f-4011-b239-0881cd9c4292</MediaSwitchObjectId>

  <PhoneSystemURI>/vmrest/phonesystems/cf3e31a0-979f-4011-b239-0881cd9c4292</PhoneSystemURI>

  <CallHandlerObjectId>5e6a0ef4-4ffb-4654-a1ba-1a595ae76f7a</CallHandlerObjectId>

  <CallhandlerURI>/vmrest/handlers/callhandlers/5e6a0ef4-4ffb-4654-a1ba-1a595ae76f7a</CallhandlerURI>

  <DtmfAccessId>9899</DtmfAccessId>
  <VoiceNameRequired>>false</VoiceNameRequired>
  <PartitionObjectId>7c789d46-449b-4ae4-b3f4-176e3b46bd18</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/7c789d46-449b-4ae4-b3f4-176e3b46bd18</PartitionURI>
  <Inactive>>false</Inactive>
  <MwisURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/mwis</MwisURI>

  <NotificationDevicesURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/notificationdevices</NotificationDevicesURI>

  <MessageHandlersURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/messagehandlers</MessageHandlersURI>

  <ExternalServiceAccountsURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/externalserviceaccounts</ExternalServiceAccountsURI>

  <AlternateExtensionsURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/alternateextensions</AlternateExtensionsURI>

  <PrivateListsURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/privatelists</PrivateListsURI>

  <VideoServiceAccountsURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/videoserviceaccounts</VideoServiceAccountsURI>

  <UserWebPasswordURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/credential/password</UserWebPasswordURI>

  <UserMailboxURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/mailboxattributes</UserMailboxURI>

  <MailboxStoreName>Unity Messaging Database -1</MailboxStoreName>

```

Listing Users based on Email Address

```

<UserVoicePinURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/credential/pin</UserVoicePinURI>
  <UserRoleURI>/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/userroles</UserRoleURI>
<SntpProxyAddressesURI>/vmrest/sntpproxyaddresses?query=(ObjectGlobalUserObjectId%20is%20fc78a2c6-3065-46a5-b5cb-0bba363280d1)</SntpProxyAddressesURI>
<AlternateNamesURI>/vmrest/alternatenames?query=(GlobalUserObjectId%20is%20fc78a2c6-3065-46a5-b5cb-0bba363280d1)</AlternateNamesURI>
</User>

```

Response Code: 200

JSON Example

To view the details of particular user based on email address (emailaddress is <emailaddress@domain.com>), do the following:

```

GET https://<connection-server>/vmrest/users?query=(emailaddress is abc@cisco.com)
Accept: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
  "Users": {
    "-total": "1",
    "User": {
      "URI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1"
      "ObjectId": "fc78a2c6-3065-46a5-b5cb-0bba363280d1"
      "FirstName": "abc"
      "Alias": "abc"
      "DisplayName": "abc"
      "EmailAddress": "abc@cisco.com"
      "TimeZone": "190"
      "CreationTime": "2016-05-11T09:51:04Z"
      "CosObjectId": "4e1c04f4-eb53-4f19-aaa2-0982121fa8fd"
      "CosURI": "/vmrest/coses/4e1c04f4-eb53-4f19-aaa2-0982121fa8fd"
      "Language": "1033"
      "LocationObjectId": "44471f12-f7cb-4d99-80fe-672bf039faef"

"LocationURI": "/vmrest/locations/connectionlocations/44471f12-f7cb-4d99-80fe-672bf039faef"

      "ListInDirectory": "true"
      "IsVmEnrolled": "false"
      "MediaSwitchObjectId": "cf3e31a0-979f-4011-b239-0881cd9c4292"
      "PhoneSystemURI": "/vmrest/phonesystems/cf3e31a0-979f-4011-b239-0881cd9c4292"
      "CallHandlerObjectId": "5e6a0ef4-4ffb-4654-alba-1a595ae76f7a"/CallHandlerObjectId"
      "CallhandlerURI": "/vmrest/handlers/callhandlers/5e6a0ef4-4ffb-4654-alba-1a595ae76f7a"

      "DtmfAccessId": "9899"
      "VoiceNameRequired": "false"
      "PartitionObjectId": "7c789d46-449b-4ae4-b3f4-176e3b46bd18"
      "PartitionURI": "/vmrest/partitions/7c789d46-449b-4ae4-b3f4-176e3b46bd18"
      "Inactive": "false"
      "MwisURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/mwis"

"NotificationDevicesURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/notificationdevices"

"MessageHandlersURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/messagehandlers"

"ExternalServiceAccountsURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/externalserviceaccounts"

"AlternateExtensionsURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/alternateextensions"

      "PrivateListsURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/privatelists"

"VideoServiceAccountsURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/videoserviceaccounts"

"UserWebPasswordURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/credential/password"

"UserMailboxURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/mailboxattributes"
      "MailboxStoreName": "Unity Messaging Database -1"
      "UserVoicePinURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/credential/pin"

      "UserRoleURI": "/vmrest/users/fc78a2c6-3065-46a5-b5cb-0bba363280d1/userroles"

"SnmpProxyAddressesURI": "/vmrest/snmpproxyaddresses?query=(ObjectGlobalUserObjectId%20is%20fc78a2c6-3065-46a5-b5cb-0bba363280d1)"

"AlternateNamesURI": "/vmrest/alternatenames?query=(GlobalUserObjectId%20is%20fc78a2c6-3065-46a5-b5cb-0bba363280d1)"

    }
  }
}

```

```
}  
}
```

Listing Specific Tenant Related Users by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectID to list the specific tenant related user using the following URI:

```
GET https://<connection-server>/vmrest/users?query=(TenantObjectID is <Tenant-ObjectID>)
```

To get the TenantObjectID, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Viewing the Details of a Specific User

The following is an example of the GET request that lists the details of specific user represented by the provided value of object ID:

```
GET https://<connection-server>/vmrest/users/<user-objectId>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<User>
  <URI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</URI>
  <ObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</ObjectId>
  <UseDefaultLanguage>>true</UseDefaultLanguage>
  <FirstName>jsdghj</FirstName>
  <Initials>efjoe</Initials>
  <LastName>djghfjk</LastName>
  <Alias>Texoma</Alias>
  <City/>
  <State/>
  <Country>US</Country>
  <PostalCode/>
  <Department/>
  <Manager/>
  <Title>eoufowe</Title>
  <Building/>
  <EmployeeId>2343</EmployeeId>
  <Address/>
  <DisplayName>user_Opera_1</DisplayName>
  <BillingId/>
  <TimeZone>190</TimeZone>
  <CreationTime>2013-03-05T11:24:33Z</CreationTime>
  <IsTemplate>>false</IsTemplate>
  <DtmfNameFirstLast>5734453544355</DtmfNameFirstLast>
  <DtmfNameLastFirst>3544355573445</DtmfNameLastFirst>
  <CosObjectId>8ab2b94d-1531-4589-865f-27bd3eea8adc</CosObjectId>
  <CosURI>/vmrest/coses/8ab2b94d-1531-4589-865f-27bd3eea8adc</CosURI>
  <Language>1033</Language>
  <LocationObjectId>42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationObjectId>
</LocationURI>/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationURI>

  <AddressMode>0</AddressMode>
  <ClockMode>0</ClockMode>
  <ConversationTui>SubMenu</ConversationTui>
  <GreetByName>>true</GreetByName>
  <ListInDirectory>>true</ListInDirectory>
  <IsVmEnrolled>>true</IsVmEnrolled>
  <SayCopiedNames>>true</SayCopiedNames>
  <SayDistributionList>>true</SayDistributionList>
  <SayMsgNumber>>true</SayMsgNumber>
  <SaySender>>true</SaySender>
  <SayTimestampAfter>>true</SayTimestampAfter>
  <SayTimestampBefore>>false</SayTimestampBefore>
  <SayTotalNew>>false</SayTotalNew>
  <SayTotalNewEmail>>false</SayTotalNewEmail>
  <SayTotalNewFax>>false</SayTotalNewFax>
  <SayTotalNewVoice>>true</SayTotalNewVoice>
  <SayTotalReceipts>>false</SayTotalReceipts>
  <SayTotalSaved>>true</SayTotalSaved>
  <Speed>100</Speed>
  <MediaSwitchObjectId>ec1e2636-fc14-44fc-8cda-d6c1a3d61150</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150</PhoneSystemURI>

  <Undeletable>>false</Undeletable>
  <UseBriefPrompts>>false</UseBriefPrompts>
  <Volume>50</Volume>
  <EnAltGreetDontRingPhone>>false</EnAltGreetDontRingPhone>
  <EnAltGreetPreventSkip>>false</EnAltGreetPreventSkip>
  <EnAltGreetPreventMsg>>false</EnAltGreetPreventMsg>
  <EncryptPrivateMessages>>false</EncryptPrivateMessages>
  <DeletedMessageSortOrder>2</DeletedMessageSortOrder>
  <SayAltGreetWarning>>false</SayAltGreetWarning>
  <SaySenderExtension>>false</SaySenderExtension>

```

Viewing the Details of a Specific User

```

<SayAni>>false</SayAni>
<XferString/>
<CallAnswerTimeout>4</CallAnswerTimeout>
<CallHandlerObjectId>287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/287cdcc0-9f77-48e0-a7b1-0f9b1a5ac842</CallhandlerURI>

<MessageTypeMenu>>false</MessageTypeMenu>
<NewMessageSortOrder>1</NewMessageSortOrder>
<SavedMessageSortOrder>2</SavedMessageSortOrder>
<MessageLocatorSortOrder>1</MessageLocatorSortOrder>
<NewMessageStackOrder>1234567</NewMessageStackOrder>
<SavedMessageStackOrder>1234567</SavedMessageStackOrder>
<EnablePersonalRules>>true</EnablePersonalRules>
<RecordUnknownCallerName>>true</RecordUnknownCallerName>
<RingPrimaryPhoneFirst>>false</RingPrimaryPhoneFirst>
<ExitAction>2</ExitAction>
<ExitTargetConversation>PHGreeting</ExitTargetConversation>
<PromptSpeed>100</PromptSpeed>
<ExitTargetHandlerObjectId>55af319d-7a26-40ad-9b20-153ee1f39e99</ExitTargetHandlerObjectId>

<RepeatMenu>1</RepeatMenu>
<FirstDigitTimeout>5000</FirstDigitTimeout>
<InterdigitDelay>3000</InterdigitDelay>
<PromptVolume>50</PromptVolume>
<ExitCallActionObjectId>2b3566bd-0339-43a4-85a1-09ab3177f0e9</ExitCallActionObjectId>
<AddressAfterRecord>>false</AddressAfterRecord>
<DtmfAccessId>99934</DtmfAccessId>
<ConfirmDeleteMessage>>false</ConfirmDeleteMessage>
<ConfirmDeleteDeletedMessage>>false</ConfirmDeleteDeletedMessage>
<ConfirmDeleteMultipleMessages>>true</ConfirmDeleteMultipleMessages>
<IsClockMode24Hour>>false</IsClockMode24Hour>
<SynchScheduleObjectId>58dce2eb-9d6d-4621-b81d-a56c80b83897</SynchScheduleObjectId>
<SynchScheduleURI>/vmrest/schedules/58dce2eb-9d6d-4621-b81d-a56c80b83897</SynchScheduleURI>

<RouteNDRToSender>>true</RouteNDRToSender>
<IsSetForVmEnrollment>>true</IsSetForVmEnrollment>
<VoiceNameRequired>>false</VoiceNameRequired>
<SendBroadcastMsg>>false</SendBroadcastMsg>
<UpdateBroadcastMsg>>false</UpdateBroadcastMsg>
<ConversationVui>VuiStart</ConversationVui>
<ConversationName>SubMenu</ConversationName>
<SpeechCompleteTimeout>0</SpeechCompleteTimeout>
<SpeechIncompleteTimeout>750</SpeechIncompleteTimeout>
<UseVui>>false</UseVui>
<SkipPasswordForKnownDevice>>true</SkipPasswordForKnownDevice>
<JumpToMessagesOnLogin>>true</JumpToMessagesOnLogin>
<UseDefaultTimeZone>>true</UseDefaultTimeZone>
<EnableMessageLocator>>false</EnableMessageLocator>
<DtmfNameFirst>573445</DtmfNameFirst>
<DtmfNameLast>3544355</DtmfNameLast>
<AssistantRowsPerPage>5</AssistantRowsPerPage>
<InboxMessagesPerPage>20</InboxMessagesPerPage>
<InboxAutoRefresh>15</InboxAutoRefresh>
<InboxAutoResolveMessageRecipients>>true</InboxAutoResolveMessageRecipients>
<PcaAddressBookRowsPerPage>5</PcaAddressBookRowsPerPage>
<ReadOnly>>false</ReadOnly>
<EnableTts>>true</EnableTts>
<SmtpAddress>user_operator_1@ucbu-aricent-vm463.cisco.com</SmtpAddress>
<ConfirmationConfidenceThreshold>60</ConfirmationConfidenceThreshold>
<AnnounceUpcomingMeetings>60</AnnounceUpcomingMeetings>
<SpeechConfidenceThreshold>40</SpeechConfidenceThreshold>
<SpeechSpeedVsAccuracy>50</SpeechSpeedVsAccuracy>
<SpeechSensitivity>50</SpeechSensitivity>

```



```

<EnableVisualMessageLocator>>false</EnableVisualMessageLocator>
<ContinuousAddMode>>false</ContinuousAddMode>
<NameConfirmation>>false</NameConfirmation>
<CommandDigitTimeout>1500</CommandDigitTimeout>
<SaveMessageOnHangup>>false</SaveMessageOnHangup>
<SendMessageOnHangup>1</SendMessageOnHangup>
<SkipForwardTime>5000</SkipForwardTime>
<SkipReverseTime>5000</SkipReverseTime>
<UseShortPollForCache>>true</UseShortPollForCache>

<SearchByExtensionSearchSpaceObjectId>5d004dee-14ef-4fc4-83b8-850274628286</SearchByExtensionSearchSpaceObjectId>

<SearchByExtensionSearchSpaceURI>/vmrest/searchspaces/5d004dee-14ef-4fc4-83b8-850274628286</SearchByExtensionSearchSpaceURI>

<SearchByNameSearchSpaceObjectId>5d004dee-14ef-4fc4-83b8-850274628286</SearchByNameSearchSpaceObjectId>

<SearchByNameSearchSpaceURI>/vmrest/searchspaces/5d004dee-14ef-4fc4-83b8-850274628286</SearchByNameSearchSpaceURI>

  <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionURI>
  <Inactive>>false</Inactive>
  <UseDynamicNameSearchWeight>>false</UseDynamicNameSearchWeight>
  <LdapType>1</LdapType>
  <FaxServerObjectId>1564dbbc-002f-47b9-a0f3-38f2cd6e2d87</FaxServerObjectId>
  <FaxServerURI>/vmrest/faxservers/1564dbbc-002f-47b9-a0f3-38f2cd6e2d87</FaxServerURI>
  <MwisURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/mwis</MwisURI>

<NotificationDevicesURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/notificationdevices</NotificationDevicesURI>

<MessageHandlersURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/messagehandlers</MessageHandlersURI>

  <ExternalServiceAccountsURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/externalserviceaccounts</ExternalServiceAccountsURI>

<AlternateExtensionsURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/alternateextensions</AlternateExtensionsURI>

<PrivateListsURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/privatelists</PrivateListsURI>

<UserWebPasswordURI>/vmrest/users/7e048531-acdf-460b-884e-415be712d0bc/credential/password</UserWebPasswordURI>

<UserVoicePinURI>/vmrest/users/7e048531-acdf-460b-884e-415be712d0bc/credential/pin</UserVoicePinURI>

  <UserRoleURI>/vmrest/users/7e048531-acdf-460b-884e-415be712d0bc/userroles</UserRoleURI>

<SipProxyAddressesURI>/vmrest/sipproxyaddresses?query=(ObjectGlobalUserObjectId%20is%209375d893-c8eb-437b-90bf-7de4b1d0c3e8)</SipProxyAddressesURI>

<AlternateNamesURI>/vmrest/alternatenames?query=(GlobalUserObjectId%20is%209375d893-c8eb-437b-90bf-7de4b1d0c3e8)
  </AlternateNamesURI>
</User>

```

Response Code: 200

JSON Example

To view the details of particular user, do the following:

```
GET https://<connection-server>/vmrest/users?query=(emailaddress is abc@cisco.com)
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":"/vmrest/users/6c91a90f-0771-492b-a7a5-083ea246a7e1"
  "ObjectId":"6c91a90f-0771-492b-a7a5-083ea246a7e1"
  "UseDefaultLanguage":"true"
  "Alias":"Texoma"
  "DisplayName":"Texoma"
  "TimeZone":"190"
  "CreationTime":"2013-03-14T10:54:47Z"
  "IsTemplate":"false"
  "CosObjectId":"844e18ef-884c-4f43-b9ce-1dc0d53196c2"
  "CosURI":"/vmrest/coses/844e18ef-884c-4f43-b9ce-1dc0d53196c2"
  "Language":"1033"
  "LocationObjectId":"42a9ab40-490d-4819-9bfb-8ddce4f430ff"
  "LocationURI":"/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff"

  "AddressMode":"0"
  "ClockMode":"0"
  "ConversationTui":"SubMenu"
  "GreetByName":"true"
  "ListInDirectory":"true"
  "IsVmEnrolled":"true"
  "SayCopiedNames":"true"
  "SayDistributionList":"true"
  "SayMsgNumber":"true"
  "SaySender":"true"
  "SayTimestampAfter":"true"
  "SayTimestampBefore":"false"
  "SayTotalNew":"true"
  "SayTotalNewEmail":"true"
  "SayTotalNewFax":"false"
  "SayTotalNewVoice":"true"
  "SayTotalReceipts":"false"
  "SayTotalSaved":"true"
  "Speed":"100"
  "MediaSwitchObjectId":"ec1e2636-fc14-44fc-8cda-d6c1a3d61150"
  "PhoneSystemURI":"/vmrest/phonesystems/ec1e2636-fc14-44fc-8cda-d6c1a3d61150"
  "Undeletable":"false"
  "UseBriefPrompts":"false"
  "Volume":"50"
  "EnAltGreetDontRingPhone":"false"
  "EnAltGreetPreventSkip":"false"
  "EnAltGreetPreventMsg":"false"
  "EncryptPrivateMessages":"false"
  "DeletedMessageSortOrder":"2"
  "SayAltGreetWarning":"false"
  "SaySenderExtension":"false"
  "SayAni":"false"
  "CallAnswerTimeout":"4"
  "CallHandlerObjectId":"fc2f99c4-31ac-465b-b143-5d21c760439c"
  "CallHandlerURI":"/vmrest/handlers/callhandlers/fc2f99c4-31ac-465b-b143-5d21c760439c"
  "MessageTypeMenu":"false"
  "NewMessageSortOrder":"1"
  "SavedMessageSortOrder":"2"
  "MessageLocatorSortOrder":"1"
  "NewMessageStackOrder":"1234567"
  "SavedMessageStackOrder":"1234567"
  "EnablePersonalRules":"true"
  "RecordUnknownCallerName":"true"
  "RingPrimaryPhoneFirst":"false"
  "ExitAction":"2"
  "ExitTargetConversation":"PHGreeting"
  "PromptSpeed":"100"
  "ExitTargetHandlerObjectId":"939d4d12-cec8-4fee-ae47-fbf0cf20c33e"
  "RepeatMenu":"1"
}
```

Viewing the Details of a Specific User

```

"FirstDigitTimeout": "5000"
"InterdigitDelay": "3000"
"PromptVolume": "50"
"ExitCallActionObjectId": "a5ab392f-dce6-4de2-af7f-92f9ebd14300"
"AddressAfterRecord": "false"
"DtmfAccessId": "12345"
"ConfirmDeleteMessage": "false"
"ConfirmDeleteDeletedMessage": "false"
"ConfirmDeleteMultipleMessages": "true"
"IsClockMode24Hour": "false"
"SynchScheduleObjectId": "214cc45c-db48-44c6-a239-aa4c5e65e32a"
"SynchScheduleURI": "/vmrest/schedules/214cc45c-db48-44c6-a239-aa4c5e65e32a"
"RouteNDRToSender": "true"
"IsSetForVmEnrollment": "true"
"VoiceNameRequired": "false"
"SendBroadcastMsg": "false"
"UpdateBroadcastMsg": "false"
"ConversationVui": "VuiStart"
"ConversationName": "SubMenu"
"SpeechCompleteTimeout": "0"
"SpeechIncompleteTimeout": "750"
"UseVui": "false"
"SkipPasswordForKnownDevice": "false"
"JumpToMessagesOnLogin": "false"
"UseDefaultTimeZone": "true"
"EnableMessageLocator": "false"
"AssistantRowsPerPage": "5"
"InboxMessagesPerPage": "20"
"InboxAutoRefresh": "15"
"InboxAutoResolveMessageRecipients": "true"
"PcaAddressBookRowsPerPage": "5"
"ReadOnly": "false"
"EnableTts": "true"
"SmtptAddress": "vishull@ucbu-aricent-vm463.cisco.com"
"ConfirmationConfidenceThreshold": "60"
"AnnounceUpcomingMeetings": "60"
"SpeechConfidenceThreshold": "40"
"SpeechSpeedVsAccuracy": "50"
"SpeechSensitivity": "50"
"EnableVisualMessageLocator": "false"
"ContinuousAddMode": "false"
"NameConfirmation": "false"
"CommandDigitTimeout": "1500"
"SaveMessageOnHangup": "false"
"SendMessageOnHangup": "1"
"SkipForwardTime": "5000"
"SkipReverseTime": "5000"
"UseShortPollForCache": "false"
"SearchByExtensionSearchSpaceObjectId": "877942bf-6600-4b7a-809d-159199cfc2ec"
"SearchByExtensionSearchSpaceURI": "/vmrest/searchspaces/877942bf-6600-4b7a-809d-159199cfc2ec"

"SearchByNameSearchSpaceObjectId": "877942bf-6600-4b7a-809d-159199cfc2ec"
"SearchByNameSearchSpaceURI": "/vmrest/searchspaces/877942bf-6600-4b7a-809d-159199cfc2ec"

"PartitionObjectId": "da2114bf-cde7-43d8-9709-cd3895a9d41b"
"PartitionURI": "/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b"
"Inactive": "false",
"UseDynamicNameSearchWeight": "false"
"LdapType": "0"
"MwisURI": "/vmrest/users/6c91a90f-0771-492b-a7a5-083ea246a7e1/mwis"

"NotificationDevicesURI": "/vmrest/users/6c91a90f-0771-492b-a7a5-083ea246a7e1/notificationdevices"

```

```

"MessageHandlersURI":"/vmrest/users/6c91a90f-0771-492b-a7a5-083ea246a7e1/messagehandlers"
"ExternalServiceAccountsURI":"/vmrest/users/6c91a90f-0771-492b-a7a5-083ea246a7e1/externalserviceaccounts"
"AlternateExtensionsURI":"/vmrest/users/6c91a90f-0771-492b-a7a5-083ea246a7e1/alternateextensions"
  "PrivateListsURI":"/vmrest/users/6c91a90f-0771-492b-a7a5-083ea246a7e1/privatelists"
"SmtpProxyAddressesURI":"/vmrest/smtpproxyaddresses?query=(ObjectGlobalUserId%20is%206c91a90f-0771-492b-a7a5-083ea246a7e1)"
"AlternateNamesURI":"/vmrest/alternatenames?query=(GlobalUserId%20is%206c91a90f-0771-492b-a7a5-083ea246a7e1)"
}

```

Response Code: 200

Creating a User

This request can be used to create a new user. The mandatory fields for creation of a user are alias and DtmfAccessId. The URI for getting user template alias is:

```
https://<connection-server>/vmrest/usertemplates.
```

The URI for getting MailboxStoreObjectId is:

```
https://<connection-server>/vmrest/mailboxstores.
```

The ObjectId field in the response body of above URI is used as MailboxStoreObjectId. Users can be created in two ways:

1. This creates the user using default mailbox store:

```
POST https://<connection-server>/vmrest/users?templateAlias=<usertemplatealias>
```

2. This creates the user using specified mailbox store object ID:

```
POST
https://<connection-server>/vmrest/users?templateAlias=<usertemplateAlias>&MailboxStoreObjectId=<mailboxStore-ObjectId>
```

```

<User>
  <Alias>texoma</Alias>
  <DtmfAccessId >123422</DtmfAccessId >
</User>

```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/users/f82b301d-1ec8-44c6-a3ee-0012269439bf
```

JSON Example

To create user, do the following:

```

POST https://<Connection-server>/vmrest/users?templateAlias=voicemailusertemplate
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Alias": "voicemailusertemplate1",
  "DisplayName": "Voice Mail User Template 1"
}

```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```

Response Code: 201
/vmrest/users/f82b301d-1ec8-44c6-a3ee-0012269439bf

```

Updating a User

The following is an example of the PUT request that update details of a user:

```

PUT https://<connection-server>/vmrest/users/<user-objectid>

```

```

<User>
  <Alias>Texoma</Alias>
  <UseShortPollForCache> true</UseShortPollForCache>
  <ListInDirectory>true </ListInDirectory>
  <SkipPasswordForKnownDevice>true </SkipPasswordForKnownDevice>
  <IsVmEnrolled> true</IsVmEnrolled>
  <RouteNDRToSender >true</RouteNDRToSender >
  <MediaSwitchObjectId>ecl1e2636-fc14-44fc-8cda-d6c1a3d61150 </MediaSwitchObjectId>
  <DtmfAccessId>99934</DtmfAccessId>
  <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
  <Inactive>>false</Inactive>
  <CosObjectId>8ab2b94d-1531-4589-865f-27bd3eea8adc</CosObjectId>

<SearchByExtensionSearchSpaceObjectId>877942bf-6600-4b7a-809d-159199cfc2ec</SearchByExtensionSearchSpaceObjectId>
</User>

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```

Response Code: 204

```

JSON Example

To update details of a user:

```

PUT https://<connection-server>/vmrest/users/<user-objectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "DtmfAccessId": "123"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Update Language and TimeZone:

	UseCallLanguage	UseDefaultLanguage	Language
Use System Default Language	false	true	NULL/LanguageCode
Inherit Language from Caller	true	true/false	NULL/LanguageCode
Particular Language	false	false	Language Code

- URI for timezone:

```
https://<Connection-server>/vmrest/timezones
```

- URI for installed Languages:

```
https://<Connection-server>/vmrest/installedlanguages
```

- URI to get Language code:

```
https://<Connection-server>/vmrest/languagemap
```

```
<User>
  <UseDefaultTimeZone>false</UseDefaultTimeZone>
  <TimeZone>175</TimeZone>
  <UseDefaultLanguage>false</UseDefaultLanguage>
  <Language>1034</Language>
</User>
```

```
Response Code: 204
```

JSON Example

To delete a user, do the following:

```
DELETE https://<connection-server>/vmrest/users/<user-objectid>
Accept: application/json
Content-type: application/json
Connection: keep_alive
```

```
Response Code: 204
```

Delete a User

The following is an example of the DELETE request that can be used to delete a user:

```
DELETE https://<connection-server>/vmrest/users/<user-objectid>
```

```
Response Code: 204
```

JSON Example

To delete a user, do the following:

```
DELETE https://<connection-server>/vmrest/users/<user-objectid>
Accept: application/json
Content-type: application/json
Connection: keep_alive
```

```
Response Code: 204
```

Explanation of Data Fields:

Field Name	Operation	Data Type	Description
Inactive	Read/Write	Boolean	<p>A flag displays the status of a user.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true: if user is inactive. • false: if user is active. <p>Default Value: false</p> <p>Note You can only change the status from true to false.</p>
Alias	Read/Write	String(64)	<p>A unique text name of a user. Users enter the alias to sign in to the Cisco Personal Communications Assistant (Cisco PCA).</p> <p>The administrators enter the alias to sign in to Cisco Unity Connection Administration.</p>
DisplayName	Read/Write	String(64)	Descriptive name of the user.
FirstName	Read/Write	String(64)	The first name (i.e., given name) of the user.
LastName	Read/Write	String(64)	The last name (i.e., surname or family name) of the user, by which a user is commonly known.
SmtAddress	Read/Write	String(320)	The full SMTP address for the user
TimeZone	Read/Write	Integer(4)	<p>The time zone to which this user account is associated.</p> <p>URI for timezone is: https://<Connection-server>/vmrest/timezones.</p>
UseDefaultTimeZone	Read/Write	Boolean	<p>Indicates if the default timezone is being used. Possible values:</p> <ul style="list-style-type: none"> • true: if default time zone is to be used • false: to use specific time zone, if false is selected timezone should be also specified.

Field Name	Operation	Data Type	Description
Language	Read/Write	Integer	The preferred language of this user. For a user with a voice mailbox, it is the language in which the subscriber hears instructions played to them. If the subscriber has TTS enabled by their class of service, it is the language used for TTS.
UseDefaultLanguage	Read/Write	Boolean	Set to true, if the call handler is using default language from the location it belongs to. If false, you need to specify the language, so set the particular language
LdapType	Read/Write	Integer	The LDAP configuration information for the user. Possible Value: <ul style="list-style-type: none"> • 0-Do not Integrate with LDAP directory. • 1-Integrate with LDAP directory • 2-Authenticate • 4-Inactive Default Value: 0
LocationObjectId	Read Only	String(36)	The unique identifier of the LocationVMS object to which the user belongs to.
IsTemplate	Read Only	Boolean	A flag indicating whether this instance of a user object is a "template" for creating new users. Possible values: <ul style="list-style-type: none"> • true: if user template • false: if user Default Value: false
Initials	Read/Write	String(64)	The initial letters of some or all of the names of the user.
Title	Read/Write	String(64)	The position or function of a user within an organization, such as 'Vice President'.
EmployeeId	Read/Write	String(64)	The numeric or alphanumeric identifier assigned to a person, typically based on order of hire or association with an organization.
Address	Read/Write	String(128)	The physical address such as a house number and street name where the user is located, or with which a user is associated.
Building	Read/Write	String(64)	The name of the building where the user is based.
City	Read/Write	String(64)	The name of a locality, such as a city, county or other geographic region where the user is located, or with which a user is associated.
State	Read/Write	String(64)	The full name of the state or province where this user is located, or with which a user is associated.

Explanation of Data Fields:

Field Name	Operation	Data Type	Description
PostalCode	Read/Write	String(40)	For users in the United States, the zip code where the user is located. For users in Canada, Mexico, and other countries, the postal code where the user is located.
Country	Read/Write	String(2)	The two-letter ISO 3166-1 country code where the user is located, or with which a user is associated. URI to fetch available country code: https://<Connection-server>/vmrest/languagemap. From the response fetch last 2 letter of the Language tag parameter.
Department	Read/Write	String(64)	The name or number for the department or subdivision of an organization to which a person belongs to.
Manager	Read/Write	String(64)	The name of the person who is the manager or supervisor of the user. Any character except non-printing ASCII characters can be used here.
BillingId	Read/Write	String(32)	Accounting information or project code associated with the user. Any ASCII or Unicode character can be used here.
EmailAddress	Read/Write	String(320)	The corporate email address of the user.
DtmfAccessId	Read/Write	String(40)	The DTMF access id (i.e., extension) of the subscriber.
XferString	Read/Write	String(40)	The cross-server transfer extension. If NULL, the user's primary extension is used.
FaxServerObjectId	Read/Write	String(36)	The unique identifier of the FaxServer object for the subscriber.
PartitionObjectId	Read/Write	String(36)	The unique identifier of the partition associated with the user
MediaSwitchObjectId	Read/Write	String(36)	The unique identifier of the MediaSwitch object associated with the user
SearchByExtensionSearchSpaceObjectId	Read/Write	String(36)	The unique identifier of the SearchSpace which is used to limit the visibility to dialable/addressable objects when searching by extension (dial string).
SearchByNameSearchSpaceObjectId	Read/Write	String(36)	The unique identifier of the SearchSpace which is used to limit the visibility to dialable/addressable objects when searching by name (character string).
CosObjectId	Read/Write	String(36)	The unique identifier of the class of service object to which this user account is associated.
CallHandlerObjectId	Read/Write	String(36)	The unique identifier of the primary CallHandler object for the subscriber.

Field Name	Operation	Data Type	Description
ScheduleSetObjectId	Read/Write	String(36)	<p>The unique identifier of the schedule set Cisco Unity Connection will use for making standard versus off hours decisions within this call handler.</p> <p>Note To update the ScheduleSetObjectId ,first go to the user URI, then go to the callhandler URI, and then update the scheduleset.</p>
TenantObjectId	Read Only	String(36)	The unique identifier of the tenant to which the user belongs. This field is reflected in the response only if the user belongs to a particular tenant.
IsVmEnrolled	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection plays the enrollment conversation (record a voice name, indicate if they are listed in the directory, etc.) for the subscriber when they login.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: The enrollment conversation is not played for the subscriber when they login. • true: The enrollment conversation is played for the subscriber when they login. <p>Default value: true</p>
SkipPasswordForKnownDevice	Read/Write	Boolean	<p>A flag indicating whether the subscriber will be asked for his/her PIN when attempting to sign-in from a known device.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not Skip PIN When Calling From a Known Extension • true: Skip PIN When Calling From a Known Extension <p>Default value: false</p>
ListInDirectory	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection should list the subscriber in the phone directory for outside callers.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not list in Directory • true: List in directory <p>Default value: false</p>

Explanation of Data Fields:

Field Name	Operation	Data Type	Description
UseShortPollForCache	Read/Write	Boolean	<p>A flag indicating whether the user's polling cycle for retrieving the calendar information will be the shorter "power user" polling cycle.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: The subscriber's polling cycle is determined by the system default polling cycle. (System configuration setting "Normal Calendar Caching Poll Interval"). • true: The shorter "power user" polling cycle is used. (System configuration setting "Short Calendar Caching Poll Interval"). <p>Default value : false</p>
RouteNDRToSender	Read/Write	Boolean	<p>Flag indicating whether to Send Non-Delivery Receipts on Failed Message Delivery.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true: Send Non-Delivery Receipts on Failed Message Delivery. • false: Do not Send Non-Delivery Receipts on Failed Message Delivery. <p>Default value: true</p>
Undeletable	Read Only	Boolean	<p>Flag indicating whether a user cannot be deleted or not.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true: For default users • false: For other created users
VoiceName	Read/Write	String(40)	The name of the WAV file containing the recorded audio (voice name, greeting, etc.) for the parent object.
DialablePhoneNumber	Read/Write	String(255)	The phone number of the fax machine that the user sends faxes to for printing.
PhoneNumber	Read Only	String(255)	The corporate Phone number.
CreateSmtpProxyFromCorp	Read/Write	Boolean	<p>Flag indicating whether an SMTP proxy address matching the corporate e-mail address (column EmailAddress) should be created for the user.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: Do not create matching SMTP proxy address. • true: Create matching SMTP proxy address. <p>Default value: false MailboxStoreName Read Only String Mailbox store name used by the user</p>

Admin User API

Cisco Unity Connection 12.5 SU3 and later, supports Admin User API. Administrator can use this API to create/update/delete/fetch the users who does not have mailbox using Admin User API. Various attributes of user without mailbox, for example first name, last name, display name, alias, time zone, language, password, roles, password settings, can also be updated using this API .

Listing Admin Users without Mailbox

The request can be used to fetch the list of all users without mailbox.

```
GET https://<connection-server>/vmrest/adminusers
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing Admin Users without Mailbox

```

<Users total="4">
  <User>
    <URI>/vmrest/adminusers/c8a3a38b-df1a-4612-9679-d1fddc790e95</URI>
    <ObjectId>c8a3a38b-df1a-4612-9679-d1fddc790e95</ObjectId>
    <UseDefaultLanguage>true</UseDefaultLanguage>
    <Alias>admin</Alias>
    <DisplayName>admin</DisplayName>
    <TimeZone>190</TimeZone>
    <CreationTime>2020-07-28T10:13:15Z</CreationTime>
    <IsTemplate>>false</IsTemplate>
    <Language>1033</Language>
    <LocationObjectId>58b236f7-3c20-4e61-89a0-809740c05de5</LocationObjectId>
    <Undeletable>>true</Undeletable>
    <UseDefaultTimeZone>true</UseDefaultTimeZone>
    <ReadOnly>true</ReadOnly>
    <SmtpAddress>admin@ucbu-aricent-vm405.cisco.com</SmtpAddress>
    <LdapType>0</LdapType>

  <UserWebPasswordURI>/vmrest/users/c8a3a38b-df1a-4612-9679-d1fddc790e95/credential/password</UserWebPasswordURI>

  <UserRoleURI>/vmrest/users/c8a3a38b-df1a-4612-9679-d1fddc790e95/userroles</UserRoleURI>

  </User>
  <User>
    <URI>/vmrest/adminusers/0b008d28-a8ce-4d14-aa6f-3b584d3d43d2</URI>
    <ObjectId>0b008d28-a8ce-4d14-aa6f-3b584d3d43d2</ObjectId>
    <UseDefaultLanguage>true</UseDefaultLanguage>
    <FirstName>Cisco Unity Connection</FirstName>
    <LastName>Messaging System</LastName>
    <Alias>UnityConnection</Alias>
    <DisplayName>Cisco Unity Connection Messaging System</DisplayName>
    <TimeZone>190</TimeZone>
    <CreationTime>2020-07-28T10:13:15Z</CreationTime>
    <IsTemplate>>false</IsTemplate>
    <Language>1033</Language>
    <LocationObjectId>58b236f7-3c20-4e61-89a0-809740c05de5</LocationObjectId>
    <Undeletable>true</Undeletable>
    <UseDefaultTimeZone>true</UseDefaultTimeZone>
    <ReadOnly>true</ReadOnly>
    <SmtpAddress>unityconnection@ucbu-aricent-vm405.cisco.com</SmtpAddress>
    <LdapType>0</LdapType>

  <UserWebPasswordURI>/vmrest/users/0b008d28-a8ce-4d14-aa6f-3b584d3d43d2/credential/password</UserWebPasswordURI>

  <UserRoleURI>/vmrest/users/0b008d28-a8ce-4d14-aa6f-3b584d3d43d2/userroles</UserRoleURI>

  </User>
  <User>
    <URI>/vmrest/adminusers/6fd02048-a02c-4bb8-a440-c6c063cb3dcd</URI>
    <ObjectId>6fd02048-a02c-4bb8-a440-c6c063cb3dcd</ObjectId>
    <UseDefaultLanguage>true</UseDefaultLanguage>
    <FirstName>Replication</FirstName>
    <LastName>Agent</LastName>
    <Alias>Replication</Alias>
    <DisplayName>Replication Agent (ucbu-aricent-vm405)</DisplayName>
    <TimeZone>190</TimeZone>
    <CreationTime>2020-07-28T10:13:18Z</CreationTime>
    <IsTemplate>>false</IsTemplate>
    <Language>1033</Language>
    <LocationObjectId>58b236f7-3c20-4e61-89a0-809740c05de5</LocationObjectId>
    <Undeletable>true</Undeletable>
    <UseDefaultTimeZone>true</UseDefaultTimeZone>
    <ReadOnly>true</ReadOnly>
    <SmtpAddress>replication@ucbu-aricent-vm405.cisco.com</SmtpAddress>

```

```

    <LdapType>0</LdapType>
<UserWebPasswordURI>/vmrest/users/6fd02048-a02c-4bb8-a440-c6c063cb3dcd/credential/password</UserWebPasswordURI>
    <UserRoleURI>/vmrest/users/6fd02048-a02c-4bb8-a440-c6c063cb3dcd/userroles</UserRoleURI>
</User>
<User>
  <URI>/vmrest/adminusers/0347d21e-c238-4079-8d77-662499c058ba</URI>
  <ObjectId>0347d21e-c238-4079-8d77-662499c058ba</ObjectId>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <FirstName>George</FirstName>
  <Initials>GD</Initials>
  <LastName>Davis</LastName>
  <Alias>Davis</Alias>
  <State>Mumbai</State>
  <Title>Trainee</Title>
  <Address>HNo4 Street Ville Parle</Address>
  <DisplayName>George</DisplayName>
  <TimeZone>190</TimeZone>
  <CreationTime>2020-07-29T09:03:42Z</CreationTime>
  <IsTemplate>false</IsTemplate>
  <Language>1033</Language>
  <LocationObjectId>58b236f7-3c20-4e61-89a0-809740c05de5</LocationObjectId>
  <Undeletable>false</Undeletable>
  <UseDefaultTimeZone>true</UseDefaultTimeZone>
  <ReadOnly>false</ReadOnly>
  <SmtpAddress>davis@ucbu-aricent-vm405.cisco.com</SmtpAddress>
  <LdapType>3</LdapType>
<UserWebPasswordURI>/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba/credential/password</UserWebPasswordURI>
    <UserRoleURI>/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba/userroles</UserRoleURI>
</User>
</Users>

```

Response Code: 200

JSON Example

To view the list of admin users, do the following:

```

GET https://<connection-server>/vmrest/adminusers
Accept: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing Admin Users without Mailbox

```

{
  "@total": "4",
  "User": [
    {
      "URI": "/vmrest/adminusers/c8a3a38b-dfla-4612-9679-d1fddc790e95",
      "ObjectId": "c8a3a38b-dfla-4612-9679-d1fddc790e95",
      "UseDefaultLanguage": "true",
      "Alias": "admin",
      "DisplayName": "admin",
      "TimeZone": "190",
      "CreationTime": "2020-07-28T10:13:15Z",
      "IsTemplate": "false",
      "Language": "1033",
      "LocationObjectId": "58b236f7-3c20-4e61-89a0-809740c05de5",
      "Undeletable": "true",
      "UseDefaultTimeZone": "true",
      "ReadOnly": "true",
      "SmtpAddress": "admin@ucbu-aricent-vm405.cisco.com",
      "LdapType": "0",
      "UserWebPasswordURI":
"/vmrest/users/c8a3a38b-dfla-4612-9679-d1fddc790e95/credential/password",
      "UserRoleURI": "/vmrest/users/c8a3a38b-dfla-4612-9679-d1fddc790e95/userroles"
    },
    {
      "URI": "/vmrest/adminusers/0b008d28-a8ce-4d14-aa6f-3b584d3d43d2",
      "ObjectId": "0b008d28-a8ce-4d14-aa6f-3b584d3d43d2",
      "UseDefaultLanguage": "true",
      "FirstName": "Cisco Unity Connection",
      "LastName": "Messaging System",
      "Alias": "UnityConnection",
      "DisplayName": "Cisco Unity Connection Messaging System",
      "TimeZone": "190",
      "CreationTime": "2020-07-28T10:13:15Z",
      "IsTemplate": "false",
      "Language": "1033",
      "LocationObjectId": "58b236f7-3c20-4e61-89a0-809740c05de5",
      "Undeletable": "true",
      "UseDefaultTimeZone": "true",
      "ReadOnly": "true",
      "SmtpAddress": "unityconnection@ucbu-aricent-vm405.cisco.com",
      "LdapType": "0",
      "UserWebPasswordURI":
"/vmrest/users/0b008d28-a8ce-4d14-aa6f-3b584d3d43d2/credential/password",
      "UserRoleURI": "/vmrest/users/0b008d28-a8ce-4d14-aa6f-3b584d3d43d2/userroles"
    },
    {
      "URI": "/vmrest/adminusers/6fd02048-a02c-4bb8-a440-c6c063cb3dcd",
      "ObjectId": "6fd02048-a02c-4bb8-a440-c6c063cb3dcd",
      "UseDefaultLanguage": "true",
      "FirstName": "Replication",
      "LastName": "Agent",
      "Alias": "Replication",
      "DisplayName": "Replication Agent (ucbu-aricent-vm405)",
      "TimeZone": "190",
      "CreationTime": "2020-07-28T10:13:18Z",
      "IsTemplate": "false",
      "Language": "1033",
      "LocationObjectId": "58b236f7-3c20-4e61-89a0-809740c05de5",
      "Undeletable": "true",
      "UseDefaultTimeZone": "true",
      "ReadOnly": "true",
      "SmtpAddress": "replication@ucbu-aricent-vm405.cisco.com",
      "LdapType": "0",
      "UserWebPasswordURI":

```



```

"/vmrest/users/6fd02048-a02c-4bb8-a440-c6c063cb3dcd/credential/password",
  "UserRoleURI": "/vmrest/users/6fd02048-a02c-4bb8-a440-c6c063cb3dcd/userroles"
},
{
  "URI": "/vmrest/adminusers/0347d21e-c238-4079-8d77-662499c058ba",
  "ObjectId": "0347d21e-c238-4079-8d77-662499c058ba",
  "UseDefaultLanguage": "true",
  "FirstName": "George",
  "Initials": "GD",
  "LastName": "Davis",
  "Alias": "Davis",
  "State": "Mumbai",
  "Title": "Trainee",
  "Address": "HNo4 Street Ville Parle",
  "DisplayName": "George",
  "TimeZone": "190",
  "CreationTime": "2020-07-29T09:03:42Z",
  "IsTemplate": "false",
  "Language": "1033",
  "LocationObjectId": "58b236f7-3c20-4e61-89a0-809740c05de5",
  "Undeletable": "false",
  "UseDefaultTimeZone": "true",
  "ReadOnly": "false",
  "SmtpAddress": "davis@ucbu-aricent-vm405.cisco.com",
  "LdapType": "3",
  "UserWebPasswordURI":
"/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba/credential/password",
  "UserRoleURI": "/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba/userroles"
}
]
}

```

Response Code: 200

Viewing Details of Admin User without Mailbox

The following is an example of the GET request that lists the details of specific user without mailbox represented by the provided value of object ID:

```
GET https://<connection-server>/vmrest/adminusers/<user-objectId>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<User>
  <URI>/vmrest/adminusers/0347d21e-c238-4079-8d77-662499c058ba</URI>
  <ObjectId>0347d21e-c238-4079-8d77-662499c058ba</ObjectId>
  <UseDefaultLanguage>>true</UseDefaultLanguage>
  <FirstName>George</FirstName>
  <Initials>GD</Initials>
  <LastName>Davis</LastName>
  <Alias>Davis</Alias>
  <State>Mumbai</State>
  <Title>Trainee</Title>
  <Address>HNo4 Street Ville Parle</Address>
  <DisplayName>George</DisplayName>
  <TimeZone>190</TimeZone>
  <CreationTime>2020-07-29T09:03:42Z</CreationTime>
  <IsTemplate>>false</IsTemplate>
  <Language>1033</Language>
  <LocationObjectId>58b236f7-3c20-4e61-89a0-809740c05de5</LocationObjectId>
  <Undeletable>>false</Undeletable>
  <UseDefaultTimeZone>>true</UseDefaultTimeZone>
  <ReadOnly>>false</ReadOnly>
  <SmtpAddress>davis@ucbu-aricent-vm405.cisco.com</SmtpAddress>
  <LdapType>3</LdapType>

<UserWebPasswordURI>/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba/credential/password</UserWebPasswordURI>

  <UserRoleURI>/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba/userroles</UserRoleURI>
</User>

```

Response Code: 200

JSON Example

To view the details of particular user, do the following:

```

GET https://<connection-server>/vmrest/adminusers/{user-objectId}
Accept: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/adminusers/0347d21e-c238-4079-8d77-662499c058ba",
  "ObjectId": "0347d21e-c238-4079-8d77-662499c058ba",
  "UseDefaultLanguage": "true",
  "FirstName": "George",
  "Initials": "GD",
  "LastName": "Davis",
  "Alias": "Davis",
  "State": "Mumbai",
  "Title": "Trainee",
  "Address": "HNo4 Street Ville Parle",
  "DisplayName": "George",
  "TimeZone": "190",
  "CreationTime": "2020-07-29T09:03:42Z",
  "IsTemplate": "false",
  "Language": "1033",
  "LocationObjectId": "58b236f7-3c20-4e61-89a0-809740c05de5",
  "Undeletable": "false",
  "UseDefaultTimeZone": "true",
  "ReadOnly": "false",
  "SntpAddress": "davis@ucbu-aricent-vm405.cisco.com",
  "LdapType": "3",
  "UserWebPasswordURI":
"/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba/credential/password",
  "UserRoleURI": "/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba/userroles"
}
```

Response Code: 200

Creating Admin User without Mailbox

This request can be used to create a new user who does not have a mailbox. The mandatory fields for creation of a user are alias and templateAlias.

1. This creates the admin user using default administrator template:

```
POST https://<connection-server>/vmrest/adminusers?templateAlias=<administrator template>
```

```
<user>
<Alias>Davis</Alias>
<DisplayName>George</DisplayName>
<FirstName>George</FirstName>
<LastName>Davis</LastName>
<TimeZone>190</TimeZone>
<UseDefaultTimeZone>true</UseDefaultTimeZone>
<IsTemplate>false</IsTemplate>
<Language>1033</Language>
<UseDefaultLanguage>true</UseDefaultLanguage>
<LdapType>3</LdapType>
<Initials>GD</Initials>
<Title>Trainee</Title>
<Address>HNo4 Street Ville Parle</Address>
<State>Mumbai</State>
<Undeletable>false</Undeletable>
</user>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba
```

JSON Example

To create user, do the following:

```
POST https://<Connection-server>/vmrest/adminusers?templateAlias=administratortemplate
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "UseDefaultLanguage" : "true"
  "Alias": "Davis",
  "DisplayName": "George"
  "FirstName" : "George"
  "LastName" : "Davis"
  "TimeZone": "190"
  "UseDefaultTimeZone" : "true"
  "IsTemplate" : "false"
  "Language" : "1033"
  "LdapType" : "3"
  "Initials" : "GD"
  "Title" : "Trainee"
  "Address" : "HNo4 Street Ville Parle"
  "State" : "Mumbai"
  "Undeletable" : "false"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/users/0347d21e-c238-4079-8d77-662499c058ba
```

Updating Admin User without Mailbox

The following is an example of the PUT request that update details of a user without mailbox:

```
PUT https://<connection-server>/vmrest/adminusers/<user-objectid>
```

```
<user>
<Alias>Texoma</Alias>
<DisplayName>richardtexoma</DisplayName>
<IsTemplate>>false</IsTemplate>
<Language>1020</Language>
<LocationObjectId>35ac99ba-e098-4195-9ffb-cecb5a7cab65</LocationObjectId>
<Undeletable>>true</Undeletable>
<UseDefaultTimeZone>>true</UseDefaultTimeZone>
<ReadOnly>>true</ReadOnly>
<TimeZone>140</TimeZone>
</user>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update details of a user:

```

PUT https://<connection-server>/vmrest/adminusers/<user-objectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "TimeZone": "170"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```

Response Code: 204

```

Deleting Admin User without Mailbox

The following is an example of the DELETE request that can be used to delete a user who does not have a mailbox:

```

DELETE https://<connection-server>/vmrest/adminusers/<user-objectid>

```

```

Response Code: 204

```

JSON Example

To delete a user, do the following:

```

DELETE https://<connection-server>/vmrest/adminusers/<user-objectid>
Accept: application/json
Content-type: application/json
Connection: keep_alive

```

```

Response Code: 204

```

Explanation of Data Fields

Field Name	Operation	Data Type	Description
Alias	Read/Write	String(64)	A unique text name of a user.
Inactive	Read/Write	Boolean	<p>A flag displays the status of a user.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true: if user is inactive. • false: if user is active. <p>Default Value: false</p> <p>Note You can only change the status from true to false.</p>

Field Name	Operation	Data Type	Description
DisplayName	Read/Write	String(64)	Descriptive name of the user.
FirstName	Read/Write	String(64)	The first name (i.e., given name) of the user.
LastName	Read/Write	String(64)	The last name (i.e., surname or family name) of the user, by which a user is commonly known.
SmtAddress	Read/Write	String(320)	The full SMTP address for the user
TimeZone	Read/Write	Integer(4)	The time zone to which this user account is associated. URI for timezone is: https://<Connection-server>/vmrest/timezones.
UseDefaultTimeZone	Read/Write	Boolean	Indicates if the default timezone is being used. Possible values: <ul style="list-style-type: none"> • true: if default time zone is to be used • false: to use specific time zone, if false is selected timezone should be also specified.
Language	Read/Write	Integer	The preferred language of user.
UseDefaultLanguage	Read/Write	Boolean	Set to true, if the call handler is using default language from the location it belongs to. If false, you need to specify the language, so set the particular language
LdapType	Read/Write	Integer	The LDAP configuration information for the user. Possible Values: <ul style="list-style-type: none"> • 0-Not integrated with LDAP directory. • 3-Integrated with LDAP directory Default Value: 0
LocationObjectId	Read Only	String(36)	The unique identifier of the LocationVMS object to which the user belongs to.
IsTemplate	Read Only	Boolean	A flag indicating whether this instance of a user object is a "template" for creating new users. Possible values: <ul style="list-style-type: none"> • true: if user template • false: if user Default Value: false
Initials	Read/Write	String(64)	The initial letters of some or all of the names of the user.
Title	Read/Write	String(64)	The position or function of a user within an organization, such as 'Vice President'.
Address	Read/Write	String(128)	The physical address such as a house number and street name where the user is located, or with which a user is associated.

Field Name	Operation	Data Type	Description
Building	Read/Write	String(64)	The name of the building where the user is based.
City	Read/Write	String(64)	The name of a locality, such as a city, county or other geographic region where the user is located, or with which a user is associated.
State	Read/Write	String(64)	The full name of the state or province where this user is located, or with which a user is associated.
PostalCode	Read/Write	String(40)	For users in the United States, the zip code where the user is located. For users in Canada, Mexico, and other countries, the postal code where the user is located.
Country	Read/Write	String(2)	The two-letter ISO 3166-1 country code where the user is located, or with which a user is associated. URI to fetch available country code: <a href="https://<Connection-server>/vmrest/languagemap">https://<Connection-server>/vmrest/languagemap . From the response fetch last 2 letter of the Language tag parameter.
Department	Read/Write	String(64)	The name or number for the department or subdivision of an organization to which a person belongs to.
Manager	Read/Write	String(64)	The name of the person who is the manager or supervisor of the user. Any character except non-printing ASCII characters can be used here.
BillingId	Read/Write	String(32)	Accounting information or project code associated with the user. Any ASCII or Unicode character can be used here.
EmailAddress	Read/Write	String(320)	The corporate email address of the user.
Undeletable	Read Only	Boolean	Flag indicating whether a user cannot be deleted or not. Possible values: <ul style="list-style-type: none"> • true: For default users • false: For other created users



CHAPTER 28

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Password PIN Settings

- [User Password and PIN Settings API, on page 177](#)

User Password and PIN Settings API

Listing User PIN Settings

```
GET https://<Connection-server>/vmrest/users/<user-objectid>/credential/pin
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<Credential>
  <URI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/credential/pin</URI>
  <UserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</UserObjectId>
  <CredentialType>4</CredentialType>
  <Credentials/>
  <IsPrimary>>false</IsPrimary>
  <CantChange>>false</CantChange>
  <DoesntExpire>>true</DoesntExpire>
  <TimeChanged>2013-03-05 11:24:33.344</TimeChanged>
  <HackCount>5</HackCount>
  <Locked>>true</Locked>
  <TimeLastHack>2013-03-11 10:23:30.581</TimeLastHack>
  <TimeLockout>2013-03-05 11:24:33.344</TimeLockout>
  <Alias>Texoma</Alias>
  <CredMustChange>>true</CredMustChange>
  <CredentialPolicyObjectId>a97ff291-8e60-475a-b7ee-e956ae83a730</CredentialPolicyObjectId>

  <Hacked>>false</Hacked>
  <ObjectId>3f6f1cb0-3b00-45b5-91fd-d8553737eec7</ObjectId>
  <EncryptionType>3</EncryptionType>
</Credential>
```

```
Response Code: 200
```

Listing User Password Settings

```
GET https://<Connection-server>/vmrest/users/<user-objectid>/credential/password
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<Credential>
  <URI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/credential/password</URI>
  <UserObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</UserObjectId>
  <CredentialType>3</CredentialType>
  <Credentials/>
  <IsPrimary>>false</IsPrimary>
  <CantChange>>false</CantChange>
  <DoesntExpire>>true</DoesntExpire>
  <TimeChanged>2013-03-05 11:24:33.344</TimeChanged>
  <HackCount>5</HackCount>
  <Locked>>true</Locked>
  <TimeLastHack>2013-03-11 10:23:30.581</TimeLastHack>
  <TimeLockout>2013-03-05 11:24:33.344</TimeLockout>
  <Alias>Texoma</Alias>
  <CredMustChange>>true</CredMustChange>
  <CredentialPolicyObjectId>a97ff291-8e60-475a-b7ee-e956ae83a730</CredentialPolicyObjectId>

  <Hacked>>false</Hacked>
  <ObjectId>3f6f1cb0-3b00-45b5-91fd-d8553737eec7</ObjectId>
  <EncryptionType>3</EncryptionType>
</Credential>
```

```
Response Code: 200
```

JSON Example

```
GET https://<Connection-server>/vmrest/users/<user-objectid>/credential/password
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8/credential/password"
  "UserObjectId": "9375d893-c8eb-437b-90bf-7de4b1d0c3e8"
  "CredentialType": "3"
  "Credentials"
  "IsPrimary": "false"
  "CantChange": "false"
  "DoesntExpire": "true"
  "TimeChanged": "2013-03-05 11:24:33.344"
  "HackCount": "5"
  "Locked": "true"
  "TimeLastHack": "2013-03-11 10:23:30.581"
  "TimeLockout": "2013-03-05 11:24:33.344"
  "Alias": "Texoma"
  "CredMustChange": "true"
  "CredentialPolicyObjectId": "a97ff291-8e60-475a-b7ee-e956ae83a730"
  "Hacked": "false"
  "ObjectId": "3f6f1cb0-3b00-45b5-91fd-d8553737eec7"
  "EncryptionType": "3"
}
```

Response Code: 200

Update Password/PIN Settings

For PIN:

```
PUT https://<Connection-server>/vmrest/users/<user-objectid>/credential/pin
```

For Password:

```
PUT https://<Connection-server>/vmrest/users/<user-objectid>/credential/password
```

```
<Credential>
  <Locked>false</Locked>
  <DoesntExpire>true</DoesntExpire>
  <CredMustChange>true</CredMustChange>
  <CredentialPolicyObjectId>43e16996-57c6-46c4-86c0-f37d2edf0385</CredentialPolicyObjectId>
</Credential>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Unlock Password/PIN Settings

A user's PIN is the password that a user must enter over the phone to sign into their mailbox to listen or send new messages by phone. To change a user's PIN you need the object ID of the user. A user's password is the web application password that is required to interact with web applications, such as the Cisco PCA or the Inbox applications.

For Password:

```
PUT https://<Connection-server>/vmrest/users/<user-objectid>/credential/password
```

For PIN:

```
PUT https://<Connection-server>/vmrest/users/<user-objectid>/credential/pin
```

```
<Credential>
  <HackCount>0</HackCount>
  <TimeHacked></TimeHacked>
</Credential>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example:

To Unlock Password:

```
PUT https://<Connection-server>/vmrest/users/<user-objectid>/credential/password
Accept: application/json
Content-type: application/json
Connection: keep-alive
Response Body:
{
  "HackCount": "0",
  "TimeHacked": ""
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

To Unlock Password

```
PUT https://<Connection-server>/vmrest/users/<user-objectid>/credential/password
Accept: application/json
Content-type: application/json
Connection: keep-alive
Response Body:
{
  "HackCount": "0",
  "TimeHacked": ""
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Change Password/PIN

For Password: PUT

```
https://<Connection-server>/vmrest/users/<user-objectid>/credential/password
```

For PIN:

```
PUT https://<Connection-server>/vmrest/users/<user-objectid>/credential/pin
```

```
<Credential>
  <Credentials>ciscfo1234</Credentials>
</Credential>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example:

To Update PIN

```
PUT https://<Connection-server>/vmrest/users/<user-objectid>/credential/pin
Accept: application/json
Content-type: application/json
Connection: keep-alive
Response Body:
{
  "Credentials":"cisco1234"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Field Name	Data Type	Operation	Description
Locked	Boolean	Read/Write	A flag indicating whether access to the user account associated with this set of credentials is locked. Possible values: <ul style="list-style-type: none"> • true • false Default value: false
CantChange	Boolean	Read/Write	A flag indicating whether the user can set this credential. Possible values: <ul style="list-style-type: none"> • false: User can change credential • true: User cannot change credential Default Value: false

Field Name	Data Type	Operation	Description
CredMustChange	Boolean	Read/Write	A flag indicating whether the user must change their credentials (PIN or password) at the next login. Possible values: <ul style="list-style-type: none"> • true • false Default Value :true
DoesntExpire	Boolean	Read/Write	A flag indicating whether this user credential will expire, and therefore the user must change the credential periodically. However, if the credential does not expire (value = "true"), the user still may change the credential (if allowed by CantChange). Possible values: <ul style="list-style-type: none"> • true • false Default value: false
CredentialPolicyObjectId	String(36)	Read/Write	The unique identifier of the CredentialPolicy object that is associated with this credential. Value for this parameter can be fetched from the objectId parameter. Response of the following URI: GET: <a href="https://<connection-server>/vmrest/credentialpolicies">https://<connection-server>/vmrest/credentialpolicies .
TimeChanged	datetime(8)	Read/Write	The unique identifier of the CredentialPolicy object that is associated with this credential. Value for this parameter can be fetched from the objectId parameter. Response of the following URI: GET: <a href="https://<connection-server>/vmrest/credentialpolicies">https://<connection-server>/vmrest/credentialpolicies .
HackCount	Integer(4)	Read/Write	The number of logon attempted that failed due to invalid credentials. The Unity system or external authentication provider determined that the credentials supplied as part of a user logon attempt were invalid. Default value: 0
TimeLastHack	datetime(8)	Read/Write	The date and time of the last logon attempt with an invalid user credential.
TimeLockout	datetime(8)	Read/Write	The date and time that the credential was locked by an administrator.
TimeHacked	datetime(8)	Read/Write	The date and time that the credential was locked due to too many hacks. The date and time is recorded in this column whenever a user credential is locked due to too many hacks based on the credential policy.
ObjectId	String (36)	Read Only	Unique identifier for the password/pin
Credentials	String(256)	Read/Write	The PIN or password, for a user. The credentials are stored in an encrypted format.
Alias	String(64)	Read/Write	A unique text name of the user.

Field Name	Data Type	Operation	Description
Hacked	Boolean	Read/Write	<p>A flag indicating whether access to the user account associated with this set of credentials is locked due too many hack attempts.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • true • false <p>Default Value: false</p>
EncryptionType	Integer	Read/Write	<p>Type of encryption that was used to generate the credentials.</p> <p>Possible values:(0-5)</p> <ul style="list-style-type: none"> • UNKNOWN: 0 • HASH_MD5: 1 • HASH_SHA1: 2 • HASH_IMS: 3 • REVERSIBLE: 4 • NONE: 5 <p>Default Value: 0</p>
CredentialType	CredentialType	Read/Write	<p>The type of credential such as password, PIN, Windows or Domino credential.</p> <ul style="list-style-type: none"> • 4- for PIN • 3- for Password



CHAPTER 29

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Roles

- [User Roles API, on page 185](#)

User Roles API

Listing User Roles

```
GET https://<connection-server>/vmrest/users/<user-objectid>/userroles
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<UserRole>
<URI>/vmrest/users/d8054a3a-6c09-4a25-9880-6589d2f1dc85/userroles/973e143e-af15-4ef4-a7c1-5fafd9cc53d4</URI>

  <ObjectId>973e143e-af15-4ef4-a7c1-5fafd9cc53d4</ObjectId>
  <UserObjectId>d8054a3a-6c09-4a25-9880-6589d2f1dc85</UserObjectId>
  <UserURI>/vmrest/users/d8054a3a-6c09-4a25-9880-6589d2f1dc85</UserURI>
  <RoleObjectId>ba166947-41e8-4ec9-ad14-03658d91240e</RoleObjectId>
  <RoleURI>/vmrest/roles/ba166947-41e8-4ec9-ad14-03658d91240e</RoleURI>
  <RoleName>Audit Administrator</RoleName>
  <Alias>ABCD_user template</Alias>
</UserRole>
```

```
Response Code: 200
```

JSON Example

```

GET https://<connection-server>/vmrest/users/<usereobjectid>/userroles
Accept: application/json
Connection: keep-alive
The following is the response from the above *GET* request and the actual response will
depend upon the information given by you:
{
  "@total": "1"
  "UserRole":
  {
    "URI": "/vmrest/users/a9272189-720b-44b3-86e0-df7ef519599c/userroles/167b7661-ee8b-4c83-8867-decb88ec0c1c"

    "ObjectId": "167b7661-ee8b-4c83-8867-decb88ec0c1c"
    "UserObjectId": "a9272189-720b-44b3-86e0-df7ef519599c"
    "UserURI": "/vmrest/users/a9272189-720b-44b3-86e0-df7ef519599c"
    "RoleObjectId": "04d0f1ef-a8c6-454a-8cf0-0e8db7bb2b15"
    "RoleURI": "/vmrest/roles/04d0f1ef-a8c6-454a-8cf0-0e8db7bb2b15"
    "RoleName": "Help Desk Administrator"
    "Alias": "tenant005_usertemplate_1"
  }
}

```

Response Code: 200

Adding Roles

```
POST https://<connection-server>/vmrest/users/<user-objectid>/userroles
```



Note To get the roles object ID, use this URI:

```
https://<connection-server>/vmrest/roles
```

```

<UserRole>
  <RoleObjectId>4f077e4e-61c7-4ce8-a58a-2c4bc6089319</RoleObjectId>
</UserRole>

```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```

Response Code: 201
/vmrest/users/39871e30-849a-4dcf-b868-2faf360d503a/userroles/f4d0f1ef-a8c6-454a-8cf0-0e8db7bb2b15

```

JSON Example

```

POST https://<connection-server>/vmrest/users/<user-objectid>/userroles
Accept: application/json
Content-type: application/json
Connection: keep-alive
Request Body:
{
  "RoleObjectId": "04d0f1ef-a8c6-454a-8cf0-0e8db7bb2b15"
}

```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/users/39871e30-849a-4dcf-b868-2faf360d503a/userroles/f4d0f1ef-a8c6-454a-8cf0-0e8db7bb2b15
```

Delete Role of User

```
DELETE https://<connection-server>/vmrest/users/<user-objectid>/userroles/<userrolesId>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
DELETE https://<connection-server>/vmrest/users/<user-objectid>/userroles/<userroleid>
Accept: application/json
Connection: keep-alive
The following is the response from the above *DELETE* request and the actual response will
depend upon the information given by you:
```

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
ObjectId	String(36)	Read Only	A globally unique, system-generated identifier for a particular role of user
UserId	String	Read Only	URI of the User object (subject) to which this role is assigned.
UserObjectId	String(36)	Read Only	The unique identifier of the User object (subject) to which this role is assigned.
RoleObjectId	String(36)	Read/Write	The unique identifier of the Role object that specifies the privileges to be granted to the subject, for the target. For example, the role could be a "Technician."
RoleName	String(64)	Read Only	The name of the role.
RoleURI	String	Read Only	URI of the particular role
Alias	String(64)	Read Only	The alias of the user



CHAPTER 30

Cisco Unity Connection Provisioning Interface (CUPI) API for User Account Settings

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Alternate Names, on page 189](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Changing Passwords and Password Settings, on page 192](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Changing Primary and Alternate Extensions, on page 193](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Class of Service \(COS\), on page 195](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Enabling Single Inbox Example, on page 198](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Notification Devices, on page 199](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Private List Members , on page 212](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Private Lists, on page 215](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- SMTP Proxy Addresses , on page 217](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- User Import, on page 219](#)

Cisco Unity Connection Provisioning Interface (CUPI) API -- Alternate Names

About Alternate Names

This page contains information on how to use the API to create, list, update, and delete Alternate Names. Alternate Names are shared by users, contacts, distribution lists, private lists, and VPIM locations. Each of these objects can have Alternate Names associated with them.

Listing and Viewing

The following is an example of a GET that lists all Alternate Names:

```
GET http://<connection-server>/vmrest/alternatenames
```

The following is the response from the above GET request:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<AlternateNames total="5">
  <AlternateName>
    <URI>/vmrest/alternatenames/a2ec7ba8-db89-4135-8cde-2fce23e59616</URI>
    <FirstName>Ooser</FirstName>
    <LastName>Aye</LastName>
    <ObjectId>a2ec7ba8-db89-4135-8cde-2fce23e59616</ObjectId>
    <GlobalUserObjectId>bde24d71-95fa-4ba8-bf1b-0e19a4e9a68b</GlobalUserObjectId>
    <GlobalUserURI>/vmrest/globalusers/bde24d71-95fa-4ba8-bf1b-0e19a4e9a68b</GlobalUserURI>
  </AlternateName>
  <AlternateName>
    <URI>/vmrest/alternatenames/c10257ad-886a-451d-9d96-09499dbf5cf1</URI>
    <FirstName>allvoicemaleusers</FirstName>
    <ObjectId>c10257ad-886a-451d-9d96-09499dbf5cf1</ObjectId>
    <DistributionListObjectId>a9a648f7-bf32-4851-a0c5-62c0165116ae</DistributionListObjectId>
  </AlternateName>
  <DistributionListURI>/vmrest/distributionlists/a9a648f7-bf32-4851-a0c5-62c0165116ae</DistributionListURI>
  </AlternateName>
  <AlternateName>
    <URI>/vmrest/alternatenames/2b5b5a9a-1721-4ca6-a1e6-92d375f6c761</URI>
    <FirstName>khan</FirstName>
    <LastName>ah</LastName>
    <ContactObjectId>95beb3f7-b142-4ca5-861f-e36d65aef463</ContactObjectId>
    <ContactURI>/vmrest/contacts/95beb3f7-b142-4ca5-861f-e36d65aef463</ContactURI>
    <ObjectId>2b5b5a9a-1721-4ca6-a1e6-92d375f6c761</ObjectId>
  </AlternateName>
  <AlternateName>
    <URI>/vmrest/alternatenames/d6d06ae0-6c63-4944-9426-ce4027aa67fd</URI>
    <FirstName>privut lyst</FirstName>
    <ObjectId>d6d06ae0-6c63-4944-9426-ce4027aa67fd</ObjectId>
    <PersonalGroupObjectId>10966c03-e64b-4c3d-9809-990b62865c6a</PersonalGroupObjectId>
  </AlternateName>
  <AlternateName>
    <URI>/vmrest/alternatenames/44e03050-5e7e-4792-be69-96e1e7511224</URI>
    <FirstName>vpim lokaychion aye</FirstName>
    <ObjectId>44e03050-5e7e-4792-be69-96e1e7511224</ObjectId>
    <LocationObjectId>6aacd387-72e9-4971-82e5-b04a7a9790ad</LocationObjectId>
  </AlternateName>
  <LocationURI>/vmrest/locations/connectionlocations/6aacd387-72e9-4971-82e5-b04a7a9790ad</LocationURI>
  </AlternateName>
</AlternateNames>

```

In this example, the first Alternate Name in the list belongs to a user as denoted by the `GlobalUserObjectId` field. The second Alternate Name belongs to a Distribution List, and so on.

For Distribution Lists, Private Lists, and VPIM Locations, only the `FirstName` field is used to provide the Alternate Name. These objects only have a single Display Name, they do not have separate first and last names.

To retrieve a sorted list of all Alternate Names, add the following query parameter:

```
sort=(column [asc | desc])
```

For example, to retrieve a list of all Alternate Names sorted by Object Id in ascending order:

```
GET http://<connection-server>/vmrest/alternatenames?sort=(objectid%20asc)
```

To retrieve a specific Alternate Name by its object ID:

```
GET http://<connection-server>/vmrest/alternatenames/<objectid>
```

Searching

To retrieve a list of Alternate Names that meet a specified search criteria, add the following query parameter to a GET:

```
query=(column [is | startswith] value)
```

For example, to find all Alternate Names with a GlobalUserObjectId that equals "bde24d71-95fa-4ba8-bf1b-0e19a4e9a68b" (this is a search to find all Alternate Names for a specific User):

```
GET
http://<connection-server>/vmrest/alternatenames?query=(globaluserobjectid%20is%20bde24d71-95fa-4ba8-bf1b-0e19a4e9a68b)
```

To find Alternate Names for various objects, use the following object id columns:

- For Users, use GlobalUserObjectId.
- For Contacts, use ContactObjectId.
- For Distribution Lists, use DistributionListObjectId.
- For Private Lists, use PersonalGroupObjectId.
- For VPIM Locations, use LocationObjectId.

Creating

The required fields for creating an Alternate Name are a parent object id, a First Name, and for some objects a Last Name. To determine what parent object id column to use to create the new Alternate Name, use the list found in the Searching section above. For example, if you are creating an Alternate Name for a User, then a GlobalUserObjectId needs to be provided.

The following is an example of a POST that creates an Alternate Name for a User with a First Name of "Mike" and a Last Name of "Wholebert" whose Global User Object Id is "bde24d71-95fa-4ba8-bf1b-0e19a4e9a68b":

```
POST http://<connection-server>/vmrest/alternatenames

<?xml version="1.0" encoding="UTF-8"?>
  <AlternateName>
    <FirstName>Mike</FirstName>
    <LastName>Wholebert</LastName>
    <GlobalUserObjectId>bde24d71-95fa-4ba8-bf1b-0e19a4e9a68b</GlobalUserObjectId>
  </AlternateName>
```

When creating Distribution Lists, Private Lists, or VPIM Locations, only the FirstName field is used to provide the Alternate Name

Updating

The following is an example of a PUT request that modifies the First Name and Last Name of an existing Alternate Name:

```
PUT http://<connection-server>/vmrest/alternatenames/<objectid>

<?xml version="1.0" encoding="UTF-8"?>
  <AlternateName>
    <FirstName>Mick</FirstName>
    <LastName>Holebert</LastName>
  </AlternateName>
```

Deleting

The following is an example of a DELETE request that deletes an Alternate Name:

```
DELETE http://<connection-server>/vmrest/alternatenames/<objectid>
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Changing Passwords and Password Settings

Changing a User's PIN

A user's PIN is the password that a user must enter over the phone to sign in to their mailbox, so that they can listen to or send new messages by phone. To change a user's PIN you need the object ID of the user. The following example changes the user's PIN to 635241.

```
PUT vmrest/users/<objectid>/credential/pin

<?xml version="1.0" encoding="UTF-8"?>
<Credential>
  <Credentials>635241</Credentials>
</Credential>
```

Changing a User's Password

A user's password is the web application password required to interact with web applications, such as the PCA or the Inbox applications. The following example changes the user's password to My1stPassword.

```
PUT vmrest/users/<objectid>/credential/password

<?xml version="1.0" encoding="UTF-8"?>
<Credential>
  <Credentials>My1stPassword</Credentials>
</Credential>
```

Setting the *User Cannot Change Password* Flag

To configure a PIN or password so that the user cannot change it, use the CantChange element.

Here is an example of changing a user's PIN such that the user cannot change it.


```
PUT vmrest/users/<objectid>/credential/pin

<?xml version="1.0" encoding="UTF-8"?>
<Credential>
  <CantChange>true</CantChange>
</Credential>
```

Here is an example of changing a user's password such that the user cannot change it.

```
PUT vmrest/users/<objectid>/credential/password

<?xml version="1.0" encoding="UTF-8"?>
<Credential>
  <CantChange>true</CantChange>
</Credential>
```

Note that the only difference in these examples is the URI; they both use the same Credentials object.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Changing Primary and Alternate Extensions

About Changing Primary and Alternate Extensions

A common scenario is having a primary extension that needs to be changed, but the old primary extension needs to be kept around as an alternate extension for that same user. This document describes the steps to make such a change. It shows how to either create a new alternate extension for a user, or update an existing alternate extension.

Viewing the Primary Extension

The user's primary extension is the DTMFAccessID field on the user object. The following is an example of a GET that lists the user object:

```
GET /vmrest/users/<userobjectid>
```

The user's primary extension will also show up in their list of alternate extensions with an IdIndex of 0.

Updating the Primary Extension

The following is an example of a PUT that modifies the DTMFAccessID of a user to 2001:

```
PUT /vmrest/users/<userobjectid>

<?xml version="1.0" encoding="UTF-8"?>
<User>
  <DtmfAccessId>2001</DtmfAccessId>
</User>
```

The user's primary extension can also be updated through the user's alternate extensions URI by executing a PUT that modifies the alternate extension with an IdIndex of 0.

Creating a New Alternate Extension

The following is an example of a POST that creates an alternate extension of 2000 for a user. The IdIndex field is explained in further detail below.

```
POST /vmrest/users/<userobjectid>/alternateextensions

<?xml version="1.0" encoding="UTF-8"?>
<AlternateExtension>
  <IdIndex>1</IdIndex>
  <DtmfAccessId>2000</DtmfAccessId>
</AlternateExtension>
```

Updating an Existing Alternate Extension

The following is an example of a PUT that modifies the DTMFAccessID of an alternate extension on a user to 2000. The IdIndex field is explained in further detail below.

```
PUT /vmrest/users/<userobjectid>/alternateextensions/<alternateextensionobjectid>

<?xml version="1.0" encoding="UTF-8"?>
<AlternateExtension>
  <DtmfAccessId>2000</DtmfAccessId>
</AlternateExtension>
```

Explaining the IdIndex Field

The IdIndex field indicates what type of phone this extension represents. It does not affect the behavior of the alternate extension, it simply is a way to categorize and order the alternate extensions.

Cisco Unity Connection allows a user to have 9 administrator-defined alternate extensions and 10 user-defined alternate extensions (if allowed by COS). Only one alternate extension is associated with each IdIndex, and every extension must have an IdIndex.

Non-alternate extensions (primary, distribution list, location, etc.) have an IdIndex containing a value of 0. Administrator-defined alternate extensions use the range of 1-9. User-defined alternate extensions use the range of 11-20. User-defined alternate extensions cannot be created by administrators, only by users (if allowed by their COS).

In Cisco Unity Connection Administration, administrator-defined alternate extensions have their IdIndex translated into a **Phone Type**, which is simply a text tag to help you categorize your alternate extensions. The table below shows the translations.

- 1 = Work Phone
- 2 = Work Phone 2
- 3 = Home Phone
- 4 = Home Phone 2
- 5 = Mobile Phone
- 6 = Mobile Phone 2
- 7 = Work Fax

8 = Work Fax 2

9 = Home Fax

Cisco Unity Connection Provisioning Interface (CUPI) API -- Class of Service (COS)

About Classes of Service (COSes)

This page contains information on how to use the API to create, list, update, and delete classes of service.

Listing and Viewing

The following is an example of a GET request that lists all Classes of Service:

```
GET http://<connection-server>/vmrest/coses
```

The following is the response from the above GET request:

```
<?xml version="1.0" encoding="UTF-8"?>
<Coses total="2">
  <Cos>
    <URI>/vmrest/coses/e0da866c-07d4-41ae-8ca9-e334e4732ea7</URI>
    <ObjectId>e0da866c-07d4-41ae-8ca9-e334e4732ea7</ObjectId>
    <DisplayName>Voice Mail User COS</DisplayName>
  </Cos>
  <Cos>
    <URI>/vmrest/coses/38a57ca9-406d-4dec-9fc0-d7fc54ef5dff</URI>
    <ObjectId>38a57ca9-406d-4dec-9fc0-d7fc54ef5dff</ObjectId>
    <DisplayName>System</DisplayName>
  </Cos>
</Coses>
```

To retrieve a sorted list of all Classes of Service, add the following query parameter: `sort=(column [asc|desc])`

For example, to retrieve a list of all Classes of Service sorted by their display names in ascending order:

```
GET http://<connection-server>/vmrest/coses?sort=(displayname%20asc)
```

To retrieve a specific Class of Service by its object ID:

```
GET http://<connection-server>/vmrest/coses/<objectid>
```

The following is the response from the above GET request (requesting a single Class of Service by object ID) done on the factory default Voice Mail User Cos:

```

<?xml version="1.0" encoding="UTF-8"?>
<Cos>
  <URI>/vmrest/coses/a9a3a677-31f1-4edb-acd0-6a2135e15995</URI>
  <ObjectId>a9a3a677-31f1-4edb-acd0-6a2135e15995</ObjectId>
  <AccessFaxMail>>false</AccessFaxMail>
  <AccessTts>>false</AccessTts>
  <CallHoldAvailable>>false</CallHoldAvailable>
  <CallScreenAvailable>>false</CallScreenAvailable>
  <CanRecordName>>true</CanRecordName>
  <FaxRestrictionObjectId>d762807b-fbab-4b46-b21b-bf9e37648d0a</FaxRestrictionObjectId>
  <ListInDirectoryStatus>>true</ListInDirectoryStatus>
  <LocationObjectId>7fe7907a-2222-482e-83cb-d8d4ad32adc1</LocationObjectId>

  <LocationURI>/vmrest/locations/connectionlocations/7fe7907a-2222-482e-83cb-d8d4ad32adc1</LocationURI>

  <MaxGreetingLength>90</MaxGreetingLength>
  <MaxMsgLength>300</MaxMsgLength>
  <MaxNameLength>30</MaxNameLength>
  <MaxPrivateDlists>25</MaxPrivateDlists>
  <MovetoDeleteFolder>>true</MovetoDeleteFolder>

  <OutcallRestrictionObjectId>1c7c3ebf-391e-44f6-8ee2-3717049c614d</OutcallRestrictionObjectId>

  <PersonalAdministrator>>true</PersonalAdministrator>
  <DisplayName>Voice Mail User COS</DisplayName>
  <XferRestrictionObjectId>54caa5d6-0ec6-49c9-a80f-52ae743c256f</XferRestrictionObjectId>
  <Undeletable>>true</Undeletable>
  <WarnIntervalMsgEnd>0</WarnIntervalMsgEnd>
  <CanSendToPublicDl>>true</CanSendToPublicDl>
  <EnableEnhancedSecurity>>false</EnableEnhancedSecurity>
  <AccessVmi>>false</AccessVmi>
  <AccessLiveReply>>false</AccessLiveReply>
  <UaAlternateExtensionAccess>0</UaAlternateExtensionAccess>
  <AccessCallRoutingRules>>false</AccessCallRoutingRules>
  <WarnMinMsgLength>0</WarnMinMsgLength>
  <SendBroadcastMessage>>false</SendBroadcastMessage>
  <UpdateBroadcastMessage>>false</UpdateBroadcastMessage>
  <AccessVui>>false</AccessVui>
  <ImapCanFetchMessageBody>>true</ImapCanFetchMessageBody>
  <ImapCanFetchPrivateMessageBody>>false</ImapCanFetchPrivateMessageBody>
  <MaxMembersPVL>99</MaxMembersPVL>
  <AccessIMAP>>false</AccessIMAP>
  <ReadOnly>>false</ReadOnly>
  <AccessAdvancedUserFeatures>>false</AccessAdvancedUserFeatures>
  <AccessUnifiedClient>>false</AccessUnifiedClient>
  <RequireSecureMessages>4</RequireSecureMessages>
  <AccessOutsideLiveReply>>false</AccessOutsideLiveReply>
  <AccessSTT>>false</AccessSTT>
  <EnableSTTSecureMessage>0</EnableSTTSecureMessage>
</Cos>

```

RequireSecureMessages is a custom type that controls how secure messages are generated by users. It can be set to mark all messages as secure (1), never mark messages as secure (2), ask the user if they want to mark a message as secure (3), or only mark private messages as secure (4).

One can also use CUPI For End Users to retrieve one's own Class of Service with the following request:

```
GET /vmrest/user/cos
```

Searching

To retrieve a list of Classes of Service that meet a specified search criteria, add the following query parameter: query=(column [is|startswith] value)

For example, to find all Classes of Service with a display name that starts with "System":

```
GET http://<connection-server>/vmrest/cores?query=(displayname%20startswith%20System)
```

Creating

The only required field for creating a COS is DisplayName. All other fields are optional.

The following is an example of a POST request that creates a COS with the display name "My New COS":

```
POST http://<connection-server>/vmrest/cores

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Cos>
  <DisplayName>My New COS</DisplayName>
</Cos>
```

The following is the response from the above POST request:

```
201
Created
/vmrest/cores/8ae8b4a2-a25b-4f16-95d9-77abcb91b764
```

Updating

The following is an example of a PUT request that modifies the display name of an existing COS:

```
PUT http://<connection-server>/vmrest/cores/<objectid>

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Cos>
  <DisplayName>My New CoS</DisplayName>
</Cos>
```

The following is the response from the above PUT request:

```
204
No Content
null
```

Deleting

The following is an example of a DELETE request that deletes a Class of Service:

```
DELETE http://vmrest/cores/<objectid>
```

The following is the response from the above DELETE request:

```
204
No Content
null
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Enabling Single Inbox Example

Enabling Single Inbox for a User

This document explains how to use the API to enable the Single Inbox feature for a user. The API being used in all these examples is CUPI.



Note The Single Inbox feature is available only in Cisco Unity Connection 8.5 and later.

Update Class of Service

To allow a user to use the Single Inbox feature, the Class of Service must allow it. The **AccessIMAP** field controls access to the Single Inbox feature. This field must be set to "true."

Here is an example of modifying an existing Class of Service to allow access to the Single Inbox feature:

```
PUT /vmrest/coses/<cosobjectid>

<?xml version="1.0" encoding="UTF-8"?>
<Cos>
  <AccessIMAP>true</AccessIMAP>
</Cos>
```

Create or Update Unified Messaging Service

Unified Messaging Services cannot currently be created or updated through the API. Any configuration changes will need to be done through another interface such as Cisco Unity Connection Administration.

Create or Update Unified Messaging Accounts

To enable the Single Inbox feature for a user, the user must have a correctly configured Unified Messaging Account in which the **EnableMailboxSynCapability** field is set to "true." Note that prior to Connection 8.5, Unified Messaging Accounts were referred to as External Service Accounts, and this is how the API refers to them.

Here is an example of modifying an existing Unified Messaging Account to enable the Single Inbox feature:

```
PUT /vmrest/users/<userobjectid>/externalserviceaccounts/<externalserviceaccountobjectid>
<?xml version="1.0" encoding="UTF-8"?>
<ExternalServiceAccount>
  <EnableMailboxSynchCapability>true</EnableMailboxSynchCapability>
</ExternalServiceAccount>
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Notification Devices

About Notification Devices

This page contains information on how to use the API to create, list, update, and delete Notification Devices.

Cisco Unity Connection supports four different types of Notification Devices:

- Phone Devices
- Pager Devices
- SMS Devices
- SMTP Devices

The generic Notification Device resource contains the data fields that are common to most or all of the specialized Device resources, which in turn may contain additional data fields that are specific to certain Device resources. A listing of all data fields, including a description of what they mean and which specialized Device types support them, can be found later in this document.

An API user can retrieve a complete list of all Notification Devices or a specific Notification Device, but this is a read-only resource. In order to create, update, or delete a Notification Device, an API user must use the appropriate specialized Device resource. In other words, an API user can retrieve all of a user's Notification Devices, but if they then want to update a particular Phone Device, they must do the update operation on the Phone Device resource, not the Notification Device resource. This will be explained in more detail below.

The Notification Device resource and the four specialized Device resources contain data fields from the Device objects in the database, plus some data fields from the Notification Rule object. From an API user's perspective, this detail may not usually be important, but it is worth mentioning that the Device resources collapse two database objects into a single resource. This can be safely done because there is always a one-to-one mapping in the database of Notification Devices and Notification Rules.

The factory default User Template for Voicemail Users contains five Notification Devices: three Phone Devices (Home, Work, and Mobile), one Pager Device, and one SMTP Device. Any of these default Notification Devices can be modified, and new Devices of any of four specialized types can be created or deleted. Note that Notification Devices for User Templates are not currently exposed via the API, only Notification Devices for Users are exposed.

Listing and Viewing

An API user can list all generic Notification Device resources or all Device resources of a specified type (Phone, Pager, SMS, or SMTP).

Listing and Viewing Notification Devices

The following is an example of a GET that lists all Notification Devices of all types for the specified User:


```

GET https://<connection-server>/vmrest/users/<UserObjectId>/notificationdevices
{noformat}
The following is the response from the above *GET* request. Notice that this list contains
a mix of different types of specialized Devices, since the request was for a list of all
Notification Devices. The Type field indicates the specialized Device type for each
Notification Device (1 = Phone, 2 = Pager, 4 = SMTP, 5 = SMS).
{noformat}
200
OK

<?xml version="1.0" encoding="UTF-8"?>
<NotificationDevices total="5">
  <NotificationDevice>

<URI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa/notificationdevices/2b13dda8-6249-45b2-9a87-aba1b27a1f95</URI>

  <SubscriberObjectId>70c5d764-b2f3-498a-b16e-1a4d2a369dfa</SubscriberObjectId>
  <UserURI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa</UserURI>
  <ObjectId>2b13dda8-6249-45b2-9a87-aba1b27a1f95</ObjectId>
  <DisplayName>Pager</DisplayName>
  <Active>>false</Active>
  <BusyRetryInterval>5</BusyRetryInterval>
  <Type>2</Type>
  <DialDelay>1</DialDelay>
  <MaxBody>512</MaxBody>
  <MaxSubject>64</MaxSubject>
  <RetriesOnBusy>4</RetriesOnBusy>
  <RetriesOnRna>4</RetriesOnRna>
  <RingsToWait>4</RingsToWait>
  <RnaRetryInterval>15</RnaRetryInterval>
  <SendCount>>true</SendCount>
  <WaitConnect>>true</WaitConnect>
  <MediaSwitchObjectId>6ecaa89b-2d29-4a21-8013-75c154ee58f5</MediaSwitchObjectId>

<PhoneSystemURI>/vmrest/phonesystems/6ecaa89b-2d29-4a21-8013-75c154ee58f5</PhoneSystemURI>

  <TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
  <DeviceName>Pager</DeviceName>
  <PromptForId>>false</PromptForId>
  <SendCallerId>>true</SendCallerId>
  <SendPcaLink>>false</SendPcaLink>
  <Undeletable>>true</Undeletable>
  <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
  <DetectTransferLoop>>false</DetectTransferLoop>
  <SuccessRetryInterval>1</SuccessRetryInterval>
  <RetriesOnSuccess>0</RetriesOnSuccess>
  <EventList>NewVoiceMail</EventList>
  <ScheduleSetObjectId>d7ea64ca-e3fc-4d0a-8bd5-ef2337a31b97</ScheduleSetObjectId>
  <InitialDelay>0</InitialDelay>
  <RepeatInterval>0</RepeatInterval>
  <RepeatNotify>>false</RepeatNotify>
  </NotificationDevice>
</NotificationDevice>

<URI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa/notificationdevices/0f4ce029-1939-4ae0-9dee-9d84c77fadae</URI>

  <SubscriberObjectId>70c5d764-b2f3-498a-b16e-1a4d2a369dfa</SubscriberObjectId>
  <UserURI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa</UserURI>
  <ObjectId>0f4ce029-1939-4ae0-9dee-9d84c77fadae</ObjectId>
  <DisplayName>Home Phone</DisplayName>
  <Active>>false</Active>
  <BusyRetryInterval>5</BusyRetryInterval>
  <Conversation>SubNotify</Conversation>
  <Type>1</Type>

```

```

<DialDelay>1</DialDelay>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<RetriesOnBusy>4</RetriesOnBusy>
<RetriesOnRna>4</RetriesOnRna>
<RingsToWait>4</RingsToWait>
<RnaRetryInterval>15</RnaRetryInterval>
<SendCount>>false</SendCount>
<WaitConnect>>true</WaitConnect>
<MediaSwitchObjectId>6ecaa89b-2d29-4a21-8013-75c154ee58f5</MediaSwitchObjectId>

<PhoneSystemURI>/vmrest/phonesystems/6ecaa89b-2d29-4a21-8013-75c154ee58f5</PhoneSystemURI>

<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
<DeviceName>Home Phone</DeviceName>
<PromptForId>>false</PromptForId>
<SendCallerId>>false</SendCallerId>
<SendPcaLink>>false</SendPcaLink>
<Undeletable>>true</Undeletable>
<MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
<DetectTransferLoop>>false</DetectTransferLoop>
<SuccessRetryInterval>0</SuccessRetryInterval>
<RetriesOnSuccess>0</RetriesOnSuccess>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>d7ea64ca-e3fc-4d0a-8bd5-ef2337a31b97</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</NotificationDevice>
<NotificationDevice>

<URI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa/notificationdevices/878de0bf-9169-4ef7-afe4-ec82998c2322</URI>

<SubscriberObjectId>70c5d764-b2f3-498a-b16e-1a4d2a369dfa</SubscriberObjectId>
<UserURI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa</UserURI>
<ObjectId>878de0bf-9169-4ef7-afe4-ec82998c2322</ObjectId>
<DisplayName>Mobile Phone</DisplayName>
<Active>>false</Active>
<BusyRetryInterval>5</BusyRetryInterval>
<Conversation>SubNotify</Conversation>
<Type>1</Type>
<DialDelay>1</DialDelay>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<RetriesOnBusy>4</RetriesOnBusy>
<RetriesOnRna>4</RetriesOnRna>
<RingsToWait>4</RingsToWait>
<RnaRetryInterval>15</RnaRetryInterval>
<SendCount>>false</SendCount>
<WaitConnect>>true</WaitConnect>
<MediaSwitchObjectId>6ecaa89b-2d29-4a21-8013-75c154ee58f5</MediaSwitchObjectId>

<PhoneSystemURI>/vmrest/phonesystems/6ecaa89b-2d29-4a21-8013-75c154ee58f5</PhoneSystemURI>

<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
<DeviceName>Mobile Phone</DeviceName>
<PromptForId>>false</PromptForId>
<SendCallerId>>false</SendCallerId>
<SendPcaLink>>false</SendPcaLink>
<Undeletable>>true</Undeletable>
<MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
<DetectTransferLoop>>false</DetectTransferLoop>
<SuccessRetryInterval>0</SuccessRetryInterval>
<RetriesOnSuccess>0</RetriesOnSuccess>

```

```

    <EventList>NewVoiceMail</EventList>
    <ScheduleSetObjectId>d7ea64ca-e3fc-4d0a-8bd5-ef2337a31b97</ScheduleSetObjectId>
    <InitialDelay>0</InitialDelay>
    <RepeatInterval>0</RepeatInterval>
    <RepeatNotify>>false</RepeatNotify>
  </NotificationDevice>
</NotificationDevice>

<URI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa/notificationdevices/3a314c33-a69f-4179-a260-0c84a4520b3b</URI>

    <SubscriberObjectId>70c5d764-b2f3-498a-b16e-1a4d2a369dfa</SubscriberObjectId>
    <UserURI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa</UserURI>
    <ObjectId>3a314c33-a69f-4179-a260-0c84a4520b3b</ObjectId>
    <DisplayName>Work Phone</DisplayName>
    <Active>>true</Active>
    <AfterDialDigits>1701</AfterDialDigits>
    <BusyRetryInterval>5</BusyRetryInterval>
    <Conversation>SubNotify</Conversation>
    <Type>1</Type>
    <DialDelay>1</DialDelay>
    <MaxBody>512</MaxBody>
    <MaxSubject>64</MaxSubject>
    <PhoneNumber>3475</PhoneNumber>
    <RetriesOnBusy>4</RetriesOnBusy>
    <RetriesOnRna>4</RetriesOnRna>
    <RingsToWait>4</RingsToWait>
    <RnaRetryInterval>15</RnaRetryInterval>
    <SendCount>>false</SendCount>
    <WaitConnect>>false</WaitConnect>
    <MediaSwitchObjectId>6ecaa89b-2d29-4a21-8013-75c154ee58f5</MediaSwitchObjectId>

  <PhoneSystemURI>/vmrest/phonesystems/6ecaa89b-2d29-4a21-8013-75c154ee58f5</PhoneSystemURI>

    <TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
    <DeviceName>Work Phone</DeviceName>
    <PromptForId>>true</PromptForId>
    <SendCallerId>>false</SendCallerId>
    <SendPcaLink>>false</SendPcaLink>
    <Undeletable>>true</Undeletable>
    <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
    <DetectTransferLoop>>false</DetectTransferLoop>
    <SuccessRetryInterval>0</SuccessRetryInterval>
    <RetriesOnSuccess>0</RetriesOnSuccess>
    <EventList>AllMessage</EventList>
    <ScheduleSetObjectId>d7ea64ca-e3fc-4d0a-8bd5-ef2337a31b97</ScheduleSetObjectId>
    <InitialDelay>5</InitialDelay>
    <RepeatInterval>15</RepeatInterval>
    <RepeatNotify>>true</RepeatNotify>
    <FailDeviceObjectId>0f4ce029-1939-4ae0-9dee-9d84c77fadae</FailDeviceObjectId>
  </NotificationDevice>
</NotificationDevice>

<URI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa/notificationdevices/3e7f802b-d707-489f-b241-399ab67a0dc3</URI>

    <SubscriberObjectId>70c5d764-b2f3-498a-b16e-1a4d2a369dfa</SubscriberObjectId>
    <UserURI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa</UserURI>
    <ObjectId>3e7f802b-d707-489f-b241-399ab67a0dc3</ObjectId>
    <DisplayName>SMTP</DisplayName>
    <Active>>false</Active>
    <BusyRetryInterval>0</BusyRetryInterval>
    <Type>4</Type>
    <DialDelay>0</DialDelay>
    <MaxBody>512</MaxBody>
    <MaxSubject>64</MaxSubject>

```

```

<RetriesOnBusy>0</RetriesOnBusy>
<RetriesOnRna>0</RetriesOnRna>
<RingsToWait>0</RingsToWait>
<RnaRetryInterval>0</RnaRetryInterval>
<SendCount>true</SendCount>
<WaitConnect>false</WaitConnect>
<TransmitForcedAuthorizationCode>false</TransmitForcedAuthorizationCode>
<DeviceName>SMTP</DeviceName>
<PromptForId>false</PromptForId>
<SendCallerId>true</SendCallerId>
<SendPcaLink>false</SendPcaLink>
<Undeletable>true</Undeletable>
<DetectTransferLoop>false</DetectTransferLoop>
<SuccessRetryInterval>0</SuccessRetryInterval>
<RetriesOnSuccess>0</RetriesOnSuccess>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>d7ea64ca-e3fc-4d0a-8bd5-ef2337a31b97</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>false</RepeatNotify>
</NotificationDevice>
</NotificationDevices>

```

Listing and Viewing Specialized Devices

The following is an example of a GET that lists all Phone Devices for the specified User. Listing all specialized devices of other types is very similar; simply do a GET to the pagerdevices, smsdevices, or smtpdevices resource, rather than to the phonedevices resource.

```
GET https://<connection-server>/vmrest/users/<UserObjectId>/notificationdevices/phonedevices
```

The following is the response from the above GET request. Note that each returned resource is a Phone Device rather than a Notification Device since the request was for Phone Devices only.

```

200
OK

<?xml version="1.0" encoding="UTF-8"?>
<PhoneDevices total="3">
  <PhoneDevice>

<URL>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa/notificationdevices/phonedevices/3a314c33-a69f-4179-a260-0c84a4520b3b</URL>

    <TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
    <AfterDialDigits>1701</AfterDialDigits>
    <BusyRetryInterval>5</BusyRetryInterval>
    <Conversation>SubNotify</Conversation>
    <DialDelay>1</DialDelay>
    <PhoneNumber>3475</PhoneNumber>
    <RetriesOnBusy>4</RetriesOnBusy>
    <RetriesOnRna>4</RetriesOnRna>
    <RingsToWait>4</RingsToWait>
    <RnaRetryInterval>15</RnaRetryInterval>
    <WaitConnect>>false</WaitConnect>
    <MediaSwitchObjectId>6ecaa89b-2d29-4a21-8013-75c154ee58f5</MediaSwitchObjectId>

<PhoneSystemURI>/vmrest/phonesystems/6ecaa89b-2d29-4a21-8013-75c154ee58f5</PhoneSystemURI>

    <ObjectId>3a314c33-a69f-4179-a260-0c84a4520b3b</ObjectId>
    <Active>>true</Active>
    <DeviceName>Work Phone</DeviceName>
    <DisplayName>Work Phone</DisplayName>
    <MaxBody>512</MaxBody>
    <MaxSubject>64</MaxSubject>
    <SubscriberObjectId>70c5d764-b2f3-498a-b16e-1a4d2a369dfa</SubscriberObjectId>
    <UserURI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa</UserURI>
    <PromptForId>>true</PromptForId>
    <Undeletable>>true</Undeletable>
    <DetectTransferLoop>>false</DetectTransferLoop>
    <EventList>AllMessage</EventList>
    <ScheduleSetObjectId>d7ea64ca-e3fc-4d0a-8bd5-ef2337a31b97</ScheduleSetObjectId>
    <InitialDelay>5</InitialDelay>
    <RepeatInterval>15</RepeatInterval>
    <RepeatNotify>>true</RepeatNotify>
    <FailDeviceObjectId>0f4ce029-1939-4ae0-9dee-9d84c77fadae</FailDeviceObjectId>
  </PhoneDevice>
</PhoneDevice>

<URL>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa/notificationdevices/phonedevices/0f4ce029-1939-4ae0-9dee-9d84c77fadae</URL>

    <TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
    <BusyRetryInterval>5</BusyRetryInterval>
    <Conversation>SubNotify</Conversation>
    <DialDelay>1</DialDelay>
    <RetriesOnBusy>4</RetriesOnBusy>
    <RetriesOnRna>4</RetriesOnRna>
    <RingsToWait>4</RingsToWait>
    <RnaRetryInterval>15</RnaRetryInterval>
    <WaitConnect>>true</WaitConnect>
    <MediaSwitchObjectId>6ecaa89b-2d29-4a21-8013-75c154ee58f5</MediaSwitchObjectId>

<PhoneSystemURI>/vmrest/phonesystems/6ecaa89b-2d29-4a21-8013-75c154ee58f5</PhoneSystemURI>

    <ObjectId>0f4ce029-1939-4ae0-9dee-9d84c77fadae</ObjectId>
    <Active>>false</Active>
    <DeviceName>Home Phone</DeviceName>
    <DisplayName>Home Phone</DisplayName>
    <MaxBody>512</MaxBody>

```

Listing of HTML Notification Device for a User (in Cisco Unity Connection 9.0(1) and Later)

```

<MaxSubject>64</MaxSubject>
<SubscriberObjectId>70c5d764-b2f3-498a-b16e-1a4d2a369dfa</SubscriberObjectId>
<UserURI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa</UserURI>
<PromptForId>>false</PromptForId>
<Undeletable>>true</Undeletable>
<DetectTransferLoop>>false</DetectTransferLoop>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>d7ea64ca-e3fc-4d0a-8bd5-ef2337a31b97</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</PhoneDevice>
<PhoneDevice>

<URL>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa/notificationdevices/phonedevice/878de0bf-9169-4ef7-afe4-ec82998c2322</URL>

<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
<BusyRetryInterval>5</BusyRetryInterval>
<Conversation>SubNotify</Conversation>
<DialDelay>1</DialDelay>
<RetriesOnBusy>4</RetriesOnBusy>
<RetriesOnRna>4</RetriesOnRna>
<RingsToWait>4</RingsToWait>
<RnaRetryInterval>15</RnaRetryInterval>
<WaitConnect>>true</WaitConnect>
<MediaSwitchObjectId>6ecaa89b-2d29-4a21-8013-75c154ee58f5</MediaSwitchObjectId>

<PhoneSystemURI>/vmrest/phonesystems/6ecaa89b-2d29-4a21-8013-75c154ee58f5</PhoneSystemURI>

<ObjectId>878de0bf-9169-4ef7-afe4-ec82998c2322</ObjectId>
<Active>>false</Active>
<DeviceName>Mobile Phone</DeviceName>
<DisplayName>Mobile Phone</DisplayName>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<SubscriberObjectId>70c5d764-b2f3-498a-b16e-1a4d2a369dfa</SubscriberObjectId>
<UserURI>/vmrest/users/70c5d764-b2f3-498a-b16e-1a4d2a369dfa</UserURI>
<PromptForId>>false</PromptForId>
<Undeletable>>true</Undeletable>
<DetectTransferLoop>>false</DetectTransferLoop>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>d7ea64ca-e3fc-4d0a-8bd5-ef2337a31b97</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</PhoneDevice>
/PhoneDevices>

```

Listing of HTML Notification Device for a User (in Cisco Unity Connection 9.0(1) and Later)

The following is an example of the GET request that lists the HTML notification devices for a user:

```
GET /vmrest/users/<userobjectid>/notificationdevices/htmldevices
```

The following is the response from the above *GET* request:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
  <HtmlDevices total="2">
    <HtmlDevice>

<URL>/vmrest/users/24cb82fc-5153-4c3f-abc7-ef442b27b4e9/notificationdevices/htmldevices/eb8af2c7-1466-4d36-9f8a-957c001ad4c5</URL>

    <Active>>false</Active>
    <CallbackNumber></CallbackNumber>
    <DeviceName>HTML</DeviceName>
    <DisableMobileNumberFromPCA>>false</DisableMobileNumberFromPCA>
    <DisplayName>HTML</DisplayName>
    <NotificationTemplateID>a00ea2a4-623e-414e-bf9c-a15c77075766</NotificationTemplateID>
    <ObjectId>eb8af2c7-1466-4d36-9f8a-957c001ad4c5</ObjectId>
    <PhoneNumber></PhoneNumber>
    <SmtpAddress></SmtpAddress>
    <Undeletable>>true</Undeletable>
    <SubscriberObjectId>24cb82fc-5153-4c3f-abc7-ef442b27b4e9</SubscriberObjectId>
    <UserURI>/vmrest/users/24cb82fc-5153-4c3f-abc7-ef442b27b4e9</UserURI>
    <EventList>NewVoiceMail</EventList>
    <ScheduleSetObjectId>e6706d47-257f-4e24-bf9f-a182bb3b2633</ScheduleSetObjectId>
    <InitialDelay>0</InitialDelay>
    <RepeatInterval>0</RepeatInterval>
    <RepeatNotify>>false</RepeatNotify>
  </HtmlDevice>
</HtmlDevice>

<URL>/vmrest/users/24cb82fc-5153-4c3f-abc7-ef442b27b4e9/notificationdevices/htmldevices/64d260ca-7f09-46df-be87-88cd3ba9c5e3</URL>

    <Active>>false</Active>
    <DeviceName>SMTP</DeviceName>
    <DisableMobileNumberFromPCA>>true</DisableMobileNumberFromPCA>
    <DisplayName>HTML_3</DisplayName>
    <NotificationTemplateID>103c4514-db6e-489b-bc08-e9e131b60099</NotificationTemplateID>
    <ObjectId>64d260ca-7f09-46df-be87-88cd3ba9c5e3</ObjectId>
    <Undeletable>>true</Undeletable>
    <SubscriberObjectId>24cb82fc-5153-4c3f-abc7-ef442b27b4e9</SubscriberObjectId>
    <UserURI>/vmrest/users/24cb82fc-5153-4c3f-abc7-ef442b27b4e9</UserURI>
    <EventList>NewVoiceMail</EventList>
    <ScheduleSetObjectId>e6706d47-257f-4e24-bf9f-a182bb3b2633</ScheduleSetObjectId>
    <InitialDelay>0</InitialDelay>
    <RepeatInterval>0</RepeatInterval>
    <RepeatNotify>>false</RepeatNotify>
  </HtmlDevice>
</HtmlDevices>

```

Listing Properties of an HTML Notification Device (in Cisco Unity Connection 9.0(1) and Later)

The following is an example of the GET request that displays the properties for a particular HTML notification device:

```
GET /vmrest/users/<userobjectid>/notificationdevices/htmldevices/<deviceid>
```

The following is the response from the above *GET* request:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
  <HtmlDevice>

<URL>/vmrest/users/24cb82fc-5153-4c3f-abc7-ef442b27b4e9/notificationdevices/htmldevices/64d260ca-7f09-46df-be87-88cd3ba9c5e3</URL>

  <Active>>false</Active>
  <DeviceName>SMTP</DeviceName>
  <DisableMobileNumberFromPCA>>true</DisableMobileNumberFromPCA>
  <DisplayName>HTML_3</DisplayName>
  <NotificationTemplateID>103c4514-db6e-489b-bc08-e9e131b60099</NotificationTemplateID>
  <ObjectId>64d260ca-7f09-46df-be87-88cd3ba9c5e3</ObjectId>
  <Undeletable>>true</Undeletable>
  <SubscriberObjectId>24cb82fc-5153-4c3f-abc7-ef442b27b4e9</SubscriberObjectId>
  <UserURI>/vmrest/users/24cb82fc-5153-4c3f-abc7-ef442b27b4e9</UserURI>
  <EventList>NewVoiceMail</EventList>
  <ScheduleSetObjectId>e6706d47-257f-4e24-bf9f-a182bb3b2633</ScheduleSetObjectId>
  <InitialDelay>0</InitialDelay>
  <RepeatInterval>0</RepeatInterval>
  <RepeatNotify>>false</RepeatNotify>
</HtmlDevice>
```

Searching

To retrieve a list of Notification Devices that meet a specified search criteria, add the following query parameter to a GET: query=(column [is | startswith] value)

For example, to find all Notification Devices with a DisplayName that starts with "Phone":

```
GET
https://<connection-server>/vmrest/users/<UserObjectId/notificationdevices?query=(DisplayName%20startswith%20Home)
```

Search criteria can also be used when doing a GET to the specialized Device resources.

Creating

A generic Notification Device resource is read-only, so new ones cannot be created. However, the four specialized Device resources are not read-only, so new ones can be created. Each of the four specialized Device resources has different required parameters during creation.

Updating

A generic Notification Device resource is read-only, so Notification Devices cannot be updated. However, the five specialized Device resources are not read-only, so an API user can update the appropriate specialized Device resource.

Updating an Existing Phone Device

The following is an example of a PUT request that modifies the FailDeviceObjectId of an existing Phone Device. The FailDeviceObjectId indicates which Notification Device to try if notification fails to the current device, which allows you to setup a chain of Notification Devices.


```

PUT
https://<connection-server>/vmrest/users/<UserObjectId>/notificationdevices/phonedevices/2e377eba-a924-434b-b967-bac3815551d3

<PhoneDevice>
  <FailDeviceObjectId>ac200457-284c-4951-b04a-4d76bd03235e</FailDeviceObjectId>
</PhoneDevice>

```

The following is the response from the above PUT request:

```

204
No Content

```

Updating other types of specialized Device resources is very similar; simply do a PUT to the appropriate pagerdevice, smsdevice, or smtpdevice resource instead of a phonedevice resource.

Updating an HTML Notification Device to Apply the HTML Notification Template (in Cisco Unity Connection 9.0(1) and Later)

The following is an example of the PUT request that modifies the HTML notification device as represented by <deviceid>:

```

PUT /vmrest/users/<userobjectid>/notificationdevices/htmldevices/<deviceid>

<HtmlDevice>
  <NotificationTemplateID>103c4514-db6e-489b-bc08-e9e131b60099</NotificationTemplateID>
</HtmlDevice>

```

The input for the PUT request will be XML or JSON as per HtmlDevice schema. The output for this request returns the successful response code.

Deleting

A generic Notification Device resource is read-only, so Notification Devices cannot be deleted. However, the four specialized Device resources are not read-only, so an API user can delete the appropriate specialized Device resource, assuming its not one of the factory default Device resources (which are flagged as Undeletable).

Explanation of Data Fields

The following chart lists all of the data fields available on Notification Devices, Phone Devices, Pager Devices, SMS Devices, and SMTP Devices. In the Device Types column, "Base" means the generic Notification Device resource. Note that on a GET to the generic Notification Device resource, you may receive data fields that are meaningless for a particular type of device, so these fields can be safely ignored.

Field Name	Device Type	Writable?	Explanation/Comments
ObjectId	All	Read Only	ObjectId of the Device
Type	Base	Read Only	Auto-set during Create. 1=Phone, 2=Pager, 4=SMTP, 5=SMS
Active	All	Read/Write	Factory default=false. For newly-created, default=true

Field Name	Device Type	Writable?	Explanation/Comments
AfterDialDigits	Base, Phone, Pager	Read/Write	Extra-digits to dial after the Phone Number. Default=null
BusyRetryInterval	Base, Phone, Pager	Read/Write	Time in minutes to wait between retries if Busy. Default=5
Conversation	Base, Phone	Read Only	Auto-set during Create.
DetectTransferLoop	Base, Phone	Read/Write	Flags if Transfer Loop Detection is Enabled. Default=false
DeviceName	All	Read/Write	Friendly name for the Device type (not shown in CUCA or CPCA). Default="Other"
DialDelay	Base, Phone, Pager	Read/Write	Time in seconds to wait after Connect before dialing AfterDialDigits (ignored if no AfterDialDigits). Default=1
DisplayName	All	Read/Write	Friendly name for the Device like "Mobile Phone"
EventList	All	Read/Write	Comma-delimited list of Events that trigger Notification (see below). Default=NewVoiceMail
FailDeviceObjectid	All	Read/Write	ObjectId of next Notification Device to use if this one fails (to chain Notifications). Default=null
InitialDelay	All	Read/Write	Time in minutes to wait after a Message is received before Notification is triggered. Default=0
MaxBody	All	Read/Write	Maximum number of characters in the Body of a Notification message. Default=512
MaxSubject	All	Read/Write	Maximum number of characters in the Subject of a Notification message. Default=64
MediaSwitchObjectId	Base, Phone, Pager	Read/Write	ObjectId of the Phone System to use for the Dial-out.
PhoneNumber	Base, Phone, Pager	Read/Write	Phone Number to dial to reach the Device.
PromptForId	Base, Phone	Read/Write	Flags if the User must enter their ID to get the Notification message. Default=false
RecipientAddress	SMS	Read/Write	Address of Message recipient
RepeatInterval	All	Read/Write	Time in minutes to wait before re-notifying of messages. Default=0
RepeatNotify	All	Read/Write	Flags if Notification process should begin for each newly arrived message. Default=false
RetriesOnBusy	Base, Phone, Pager	Read/Write	Number of retry attempts if Busy. Default=4
RetriesOnRna	Base, Phone, Pager	Read/Write	Number of retry attempts if RNA. Default=4
RetriesOnSuccess	Base, Phone	Read/Write	Number of retry attempts if successful. Default=0
RingsToWait	Base, Phone, Pager	Read/Write	Number of rings to wait for Connect before RNA. Default=4

Field Name	Device Type	Writable?	Explanation/Comments
RnaRetryInterval	Base, Phone, Pager	Read/Write	Time in minutes to wait between retries if RNA. Default=5
ScheduleSetObjectId	All	Read/Write	ObjectId of the ScheduleSet during which Notification may trigger. Default=AllHours
SendCallerId	Base, Pager, SMS, SMTP	Read/Write	Flag to include CallerId in the Notification message. Default=true
SendCount	Base, Pager, SMS, SMTP	Read/Write	Flag to include the message counts in the Notification message. Default=true
SenderAddress	SMS	Read/Write	Address of Message sender. Default=null
SendPcaLink	Base, SMTP	Read/Write	Flag to include a link to CPCA in the Notification message. Default=false
SmppProviderObjectId	Base, SMS	Read/Write	ObjectId of the SMPP Provider
SmtppAddress	Base, SMTP	Read/Write	SMTP address to send the Notification message to
StaticText	Base, SMS, SMTP	Read/Write	Static text to include in the Notification Message. Default=null
SubscriberObjectId	All	Read Only	ObjectId of the User
SuccessRetryInterval	Base, Pager	Read/Write	Time in minutes to wait between retries if successful. Default=0
TransmitAuthorizationCode	Base, Phone, Pager	Read/Write	Flags if an authorization code should be sent to CUCM after the PhoneNumber is dialed. Default=false
Undeletable	All	Read Only	Factory default=true. For newly-created, default=false
WaitConnect	Base, Phone, Pager	Read/Write	Flags if need to wait for Connect before dialing AfterDialDigits. Default=true

The EventList field is a comma-delimited list of Message types which could trigger Notification. It can contain any of the following values. Note that Calendar Appointments and Meetings are not included in the AllMessage or AllUrgentMessage categories, which just include voicemail, fax, and dispatch messages.

Event Name	Description
None	No messages of any type or urgency
AllMessage	All messages of all types and urgencies
AllUrgentMessage	All urgent messages of all types
CalendarAppointment	Calendar appointments
CalendarMeeting	Calendar meetings
DispatchMessage	All dispatch messages
UrgentDispatchMessage	All urgent dispatch messages

Event Name	Description
NewFax	All fax messages
NewUrgentFax	All urgent fax messages
NewVoiceMail	All voicemail messages
NewUrgentVoiceMail	All urgent voicemail messages

Cisco Unity Connection Provisioning Interface (CUPI) API -- Private List Members

Viewing

Every private list has members. To see the members of a private list, do the following GET:

```
GET /vmrest/users/<userobjectid>/privatelists/<privatelistobjectid>/privatelistmembers
```

Here is an example of the response you might receive to such a request:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<PrivateListMembers total="4">
  <PrivateListMember>
    <URI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928/privatelists/
df523f3a-4e40-4d6d-9f80-72a5bc93331c/privatelistmembers/
4d390786-56a8-45e3-85a1-1c0933375b99</URI>

<PersonalVoiceMailListObjectId>df523f3a-4e40-4d6d-9f80-72a5bc93331c</PersonalVoiceMailListObjectId>

    <PrivateListURI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928/
privatelists/df523f3a-4e40-4d6d-9f80-72a5bc93331c</PrivateListURI>
    <MemberSubscriberObjectId>444ded7b-e2b9-48c1-9aca-bcfda4372928</
MemberSubscriberObjectId>
    <MemberUserURI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928</
MemberUserURI>
    <ObjectId>4d390786-56a8-45e3-85a1-1c0933375b99</ObjectId>
    <Alias>UserA</Alias>
    <DisplayName>User A</DisplayName>
    <Extension>1017</Extension>
  </PrivateListMember>
  <PrivateListMember>
    <URI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928/privatelists/
df523f3a-4e40-4d6d-9f80-72a5bc93331c/privatelistmembers/
4e16bf12-6383-46d9-ae32-9ca9a857ca4f</URI>

<PersonalVoiceMailListObjectId>df523f3a-4e40-4d6d-9f80-72a5bc93331c</PersonalVoiceMailListObjectId>

    <PrivateListURI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928/
privatelists/df523f3a-4e40-4d6d-9f80-72a5bc93331c</PrivateListURI>

<MemberDistributionListObjectId>4523ba2f-015c-414e-ad96-92aba431ed39</MemberDistributionListObjectId>

    <MemberDistributionListURI>/vmrest/distributionlists/
4523ba2f-015c-414e-ad96-92aba431ed39</MemberDistributionListURI>
    <ObjectId>4e16bf12-6383-46d9-ae32-9ca9a857ca4f</ObjectId>
    <Alias>ListA</Alias>
    <DisplayName>List A</DisplayName>
  </PrivateListMember>
  <PrivateListMember>
    <URI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928/privatelists/
df523f3a-4e40-4d6d-9f80-72a5bc93331c/privatelistmembers/
c61a60f6-0aa5-4c85-94ba-94fd6c167bd4</URI>

<PersonalVoiceMailListObjectId>df523f3a-4e40-4d6d-9f80-72a5bc93331c</PersonalVoiceMailListObjectId>

    <PrivateListURI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928/
privatelists/df523f3a-4e40-4d6d-9f80-72a5bc93331c</PrivateListURI>

<MemberPersonalVoiceMailListObjectId>48eb2b0f-15a8-4bdf-a3a0-098debed181d</MemberPersonalVoiceMailListObjectId>

    <MemberPrivateListURI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928/
privatelists/48eb2b0f-15a8-4bdf-a3a0-098debed181d</MemberPrivateListURI>
    <ObjectId>c61a60f6-0aa5-4c85-94ba-94fd6c167bd4</ObjectId>
    <Alias>UserA_48eb2b0f-15a8-4bdf-a3a0-098debed181d</Alias>
    <DisplayName>2</DisplayName>
  </PrivateListMember>
  <PrivateListMember>
    <URI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928/privatelists/
df523f3a-4e40-4d6d-9f80-72a5bc93331c/privatelistmembers/
41295a7c-c9c0-45d3-8060-5a5038f0a49e</URI>

<PersonalVoiceMailListObjectId>df523f3a-4e40-4d6d-9f80-72a5bc93331c</PersonalVoiceMailListObjectId>

```

```

    <PrivateListURI>/vmrest/users/444ded7b-e2b9-48c1-9aca-bcfda4372928/
privatelists/df523f3a-4e40-4d6d-9f80-72a5bc93331c</PrivateListURI>
    <ObjectId>41295a7c-c9c0-45d3-8060-5a5038f0a49e</ObjectId>
    <MemberContactObjectId>27e58431-981f-4fbd-b667-69b1aaac89fd</
MemberContactObjectId>
    <MemberContactURI>/vmrest/contacts/27e58431-981f-4fbd-b667-69b1aaac89fd</
MemberContactURI>
    <Alias>ConA</Alias>
    <DisplayName>Con A</DisplayName>
    <Extension>1290390</Extension>
  </PrivateListMember>
</PrivateListMembers>

```

Every member of a private list can be one of four objects: a user, a distribution list, another private list, or a remote contact (a contact that can receive a message). Depending on which object the member is, different fields are used to track the member information, which consists solely of an object id and a URI to that object.

The Alias, Display Name, and Extension of the member in question are also included. These fields are not actual values on the private list member data object; instead, the values are looked up by the API when it performs the GET.

Creating

The following POST adds a member to a private list. In this example, a user is being added to the private list by simply providing the object id of the user.

```

POST /vmrest/users/<userobjectid>/privatelists/<privatelistobjectid>/
privatelistmembers
<?xml version="1.0" encoding="UTF-8"?>
<PrivateListMember>
  <MemberSubscriberObjectId>9bc04f85-9ac4-42f8-9314-547408a6126c</
MemberSubscriberObjectId>
</PrivateListMember>

```

Use `MemberDistributionListObjectId` to add distribution lists to a private list. Use `MemberPersonalVoiceMailListObjectId` to add other private lists, and use `MemberContactObjectId` to add contacts.

Deleting

The following DELETE removes a member from a private list:

```

DELETE /vmrest/users/<userobjectid>/privatelists/<privatelistobjectid>/
privatelistmembers/<privatelistmemberobjectid>

```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Private Lists

Viewing

Every user with a mailbox can have private lists. To see the private lists belonging to a user, do the following GET request:

```
GET /vmrest/users/<user object id>/privatelists/
```

Here is an example of the response you might receive to such a request:

```
<?xml version="1.0" encoding="UTF-8"?>
<PrivateLists total="1">
  <PrivateList>
    <URI>/vmrest/users/f90d26fc-0e4a-405a-8c42-189a93129bdc/
privatelists/1f443e29-1d6b-4ef8-89a6-2767549e3577</URI>
    <ObjectId>1f443e29-1d6b-4ef8-89a6-2767549e3577</ObjectId>
    <DisplayName>1</DisplayName>
    <UserObjectId>f90d26fc-0e4a-405a-8c42-189a93129bdc</UserObjectId>
    <UserURI>/vmrest/users/f90d26fc-0e4a-405a-8c42-189a93129bdc</UserURI>
    <DtmfName>1</DtmfName>
    <Alias>UserA_1f443e29-1d6b-4ef8-89a6-2767549e3577</Alias>
    <VoiceName>6ce746b7-d775-4bc4-9d19-8b6a55b9461d.wav</VoiceName>
    <VoiceFileURI>/vmrest/voicefiles/
6ce746b7-d775-4bc4-9d19-8b6a55b9461d.wav</VoiceFileURI>
    <NumericId>1</NumericId>
    <IsAddressable>true</IsAddressable>
  </PrivateList>
</PrivateLists>
```

Many of these fields are consistent with what you see on other objects. Specific fields that are unique to private lists and require explanation are described below.

Private lists belong to specific users. The **UserObjectId** and **UserURI** field show that relationship.

DtmfName is a field with a value that is automatically generated every time the display name changes on the private list. DtmfName holds the digits that would need to be dialed to address a message by name to this group by phone.

Alias is a unique text name for the private list. The alias is automatically generated, and to ensure it is unique, it is constructed by concatenating the user alias, an underscore and the private list's object id. The user's alias is truncated to 28 characters to avoid overflow.

NumericId is the number of the private list. Private lists are numbered 1 through 99, and when addressing a message by extension over the phone, the number can be used to choose the group.

IsAddressable is an odd flag. It flags whether or not the private list is addressable. By default, all private lists are addressable.

Creating

The following POST creates a private list. In this example, it would be private list 2.

```
POST /vmrest/users/<user object id>/privatelists

<?xml version="1.0" encoding="UTF-8"?>
<PrivateList>
  <DisplayName>2</DisplayName>
  <VoiceName>6ce746b7-d775-4bc4-9d19-8b6a55b9461d.wav</VoiceName>
  <NumericId>2</NumericId>
</PrivateList>
```

These are the only three parameters that can be explicitly set on a new private list. The other parameters are not allowed on a POST, either defaulting to a certain value or being auto-generated as discussed above. The ObjectId can be explicitly set if desired, but that is optional.

Updating

Only the following fields can be updated in a PUT request:

- DisplayName
- VoiceName
- NumericId

The following example shows a PUT request that modifies some fields, changing a private list to private list 6.

```
PUT /vmrest/users/<user object id>/privatelists/<private list object id>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<PrivateList>
  <DisplayName>6</DisplayName>
  <NumericId>6</NumericId>
</PrivateList>
```

Deleting

A private list can be deleted by a DELETE request:

```
DELETE /vmrest/users/<user object id>/privatelists/<private list object id>
```

Voice Names

Creating a voice name for a private list (or for any object exposed in CUPI) is a multi-step process.

Step 1: Create a place-holder for the WAV file by doing a POST:

```
POST /vmrest/voicefiles
```

The name of the WAV file will be included in the response.

```
201
Created
6f9c6d05-42e5-48e3-8d07-204250af320d.wav
```

Step 2: Take the name returned in Step 1, and do a PUT where the HTTP content type is "audio/wav" and the payload content is the audio data:


```
PUT /vmrest/voicefiles/6f9c6d05-42e5-48e3-8d07-204250af320d.wav
```

Step 3: Take the name of the WAV file and do a PUT request on the private list whose voice name you want to set:

```
PUT /vmrest/users/<user object id>/privatelists/<private list object id>

<?xml version="1.0" encoding="UTF-8"?>
<PrivateList>
  <VoiceName>6ce746b7-d775-4bc4-9d19-8b6a55b9461d.wav</VoiceName>
</PrivateList>
```

The voice name can always be retrieved through the voice name URI, it will return the audio of the greeting as an "audio/wav" media type:

```
GET /vmrest/voicefiles/6f9c6d05-42e5-48e3-8d07-204250af320d.wav
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- SMTP Proxy Addresses

About SMTP Proxy Addresses

This page contains information on how to use the API to list SMTP Proxy Addresses.

Listing and Viewing

The following is an example of a GET that lists all <element name>:

```
GET http://<connection-server>/vmrest/smtpproxyaddresses
```

The following is the response from the above GET request:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<SmtproxyAddresses total="2">
  <SmtproxyAddress>
    <URI>/vmrest/smtproxyaddresses/9fd21b87-1509-42f1-88ce-3f36122c68ee</URI>
    <ObjectId>9fd21b87-1509-42f1-88ce-3f36122c68ee</ObjectId>
    <SmtAddress>somedude@somewhere.com</SmtAddress>
    <ObjectGlobalUserObjectId>0804bda6-953c-4271-b44a-0830c1429af2</ObjectGlobalUserObjectId>

  <ObjectGlobalUserURI>/vmrest/globalusers/0804bda6-953c-4271-b44a-0830c1429af2</ObjectGlobalUserURI>

  </SmtproxyAddress>
  <SmtproxyAddress>
    <URI>/vmrest/smtproxyaddresses/fc107ad8-b9e5-409e-b0bc-62e295c7532e</URI>
    <ObjectId>fc107ad8-b9e5-409e-b0bc-62e295c7532e</ObjectId>
    <SmtAddress>someotherdude@somewhereelse.com</SmtAddress>
    <ObjectGlobalUserObjectId>0804bda6-953c-4271-b44a-0830c1429af2</ObjectGlobalUserObjectId>

  <ObjectGlobalUserURI>/vmrest/globalusers/0804bda6-953c-4271-b44a-0830c1429af2</ObjectGlobalUserURI>

  </SmtproxyAddress>
</SmtproxyAddresses>

```

To retrieve a sorted list of all SMTP Proxy Addresses, add the following query parameter: `sort=(column [asc | desc])`

For example, to retrieve a list of all SMTP Proxy Addresses sorted by SMTP Address in ascending order:

```
GET http://<connection-server>/vmrest/smtproxyaddresses?sort=(smtpaddress%20asc)
```

To retrieve a specific SMTP Proxy Address by its object ID:

```
GET http://<connection-server>/vmrest/smtproxyaddresses/<objectid>
```

An SMTP Proxy Address can belong to one of four different objects: a global user, a contact, a distribution list, or a private list. In the above example, both SMTP Proxy Addresses belong to a user because `ObjectGlobalUserObjectId` property is set. The SMTP Proxy Address belongs to a contact if the `ObjectContactObjectId` property is set, a distribution list if the `ObjectDistributionListObjectId` property is set, or a private list if the `ObjectPersonalGroupObjectId` is set.

Searching

To retrieve a list of SMTP Proxy Addresses that meet a specified search criteria, add the following query parameter to a GET: `query=(column [is | startswith] value)`

For example, to find all SMTP Proxy Addresses with an SMTP Address that starts with "a":

```
GET http://<connection-server>/vmrest/smtproxyaddresses?query=(smtpaddress%20startswith%20a)
```

The following properties can be used for searching and sorting SMTP Proxy Addresses:

- SmtAddress
- ObjectId
- ObjectContactObjectId

- ObjectDistributionListObjectId
- ObjectGlobalUserObjectId
- ObjectPersonalGroupObjectId

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Import

LDAP Import

A GET of an LDAP user will have a phone number. When a user is imported, an LDAP import must specify a dtmfAccessId in the payload (this is often based on the phone number).

In this document, <type> in a URI refers to ldap value.

Initial Configuration

Before any LDAP users can be imported, the LDAP synchronization has to be set as described in the [LDAP Directory Integration with Cisco Unity Connection 10.x](https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/10x/design/guide/10xcucdgx.html) chapter of *Design Guide for Cisco Unity Connection Release 10.x* available at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/10x/design/guide/10xcucdgx.html.

GET a List of Users That Can Be Imported

```
GET http://<server>/vmrest/import/users/<type>
```

Only users that are eligible for import are returned; users that are already imported are not in this list.

Offset and Limit Parameters Can Be Part of the Ldap Query

```
http://<server>/vmrest/import/users/<type>?offset=x&limit=y
```

Note the following:

- Either parameter can be specified individually
- If the offset exceeds the number of entries, the response is an empty list
- If no limit is specified and more than 2000 results are returned, the response is an error

Filter and Sort

To put constraints on search results, LDAP requests support the CUPI standard filter and sort parameters.

Example

```
GET /vmrest/import/users/ldap?limit=5 HTTP/1.1
Accept: application/json
User-Agent: Java/1.6.0_20
Host: cuc-install-69.cisco.com
Connection: keep-alive
Authorization: Basic Y2NtYWRTaW5pc3RyYXRvcjplY3NidWxhYg==
```

The GET above would produce the following response:

```
HTTP/1.1 200 OK
Pragma: No-cache
Cache-Control: no-cache
Expires: Wed, 31 Dec 1969 16:00:00 PST
Set-Cookie: JSESSIONIDSSO=11D3599617B30496BAD4BF2BB4C23B32; Path=/
Set-Cookie: JSESSIONID=2D9E4ACB334EF6DED8734E51EDDDB7F9; Path=/vmrest
Content-Type: application/json
Transfer-Encoding: chunked
Date: Wed, 28 Apr 2010 19:39:03 GMT
Server:
```

```
\\{"alias":"sdavis","firstName":"sonya","lastName":"davis","dtmfAccessId":"12123","pkid":"c2e2bf1c-f249-40e5-b7b8-31a5b0333647"\\}
```

Import a User

```
POST http://<server>/vmrest/import/users/<type>?templateAlias=<voice mail user template>
with an ImportUser object as payload
```

An important point here is that because these users are imported, almost all values come from the internal database. One exception for an LDAP import is the dtmfAccessId. The dtmfAccessId data is not available in the internal database, so an LDAP import must specify both a pkid and a dtmfAccessId.

For example:

```
POST /vmrest/import/users/ldap?templateAlias=voicemailusertemplate HTTP/1.1
Content-Type: application/json
User-Agent: Java/1.6.0_20
Host: cuc-install-69.cisco.com
Accept: text/html, image/gif, image/jpeg, \*; q=.2, \*/\*; q=.2
Connection: keep-alive
Authorization: Basic Y2NtYWRTaW5pc3RyYXRvcjplY3NidWxhYg==
Content-Length: 126

\\{"alias":"sdavis","firstName":"sonya","lastName":"davis","dtmfAccessId":"12123","pkid":"c2e2bf1c-f249-40e5-b7b8-31a5b0333647"\\}
```

The POST above would produce the following response:

```
HTTP/1.1 201 Created
```



CHAPTER 31

License Users Entitlement

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- License User Entitlement, on page 221](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Bulk User License, on page 223](#)

Cisco Unity Connection Provisioning Interface (CUPI) API -- License User Entitlement

License User Entitlement APIs

Administrator can use this API to fetch users belonging to a tenant and their license information which includes messaging and Speech view.

Listing the Users with Their Licensing Details Who Belongs to a Particular Tenant

Obtain the Object ID of the tenant that you want to list the user licenses for:

```
GET https://<connection-server>/vmrest/tenants
```

Perform a GET operation on the tenant Object ID using the following URI to list all the user licenses:

```
GET https://<connection-server>/vmrest/tenants/c9d9c29d-4a81-47b5-9296-34b193cff5bb/userlicenses
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<UserLicenses total="1">
  <UserLicense>
    <Alias>raman@Texoma.com</Alias>
    <DtmfAccessId>1234</DtmfAccessId>
    <Messaging>Basic</Messaging>
    <SpeechView>Speech View Standard</SpeechView>
  </UserLicense></UserLicenses
```

```
Response Code: 200
```

JSON Example

To list all the user licenses, use the following:

```
Request URI:
GET
https://<connection-server>/vmrest/tenants/c9d9c29d-4a81-47b5-9296-34b193cff5bb/userlicenses
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1",
  "UserLicense":
  [
    {
      "Alias": "raman",
      "DtmfAccessId": "1234",
      "PartitionObjectId": "6a4ac446-8b88-4456-aad7-099f249958fa",
      "Messaging": "Basic",
      "SpeechView": "Speech View Standard"
    }
  ]
}
```

```
Response Code: 200
```

List Users by Performing an Query

Users can be queried based on all the fields of the License User Entitlement API, namely, Alias, DtmfAccessId, Messaging, SpeechView.

Obtain the Object ID of the tenant that you want to list the user licenses for:

```
GET https://<connection-server>/vmrest/tenants
```

Perform a GET operation on the tenant Object ID using the following URI to list the user licenses:

```
GET https://<connection-server>/vmrest/tenants/c9d9c29d-4a81-47b5-9296-34b193cff5bb/userlicenses?query=(DtmfAccessId%20is%201234)
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<UserLicenses total="1">
  <UserLicense>
    <Alias>raman@Texoma.com</Alias>
    <DtmfAccessId>1234</DtmfAccessId>
    <Messaging>Basic</Messaging>
    <SpeechView>Speech View Standard</SpeechView>
  </UserLicense>
</UserLicenses>
```

```
Response Code: 200
```

JSON Example

To list the user licenses, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/tenants/c9d9c29d-4a81-47b5-9296-
34b193cff5bb/userlicenses?query=(DtmfAccessId%20is%201234)
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1",
  "UserLicense": [{
    "Alias": "raman",
    "DtmfAccessId": "1234",
    "PartitionObjectId": "6a4ac446-8b88-4456-aad7-099f249958fa",
    "Messaging": "Basic",
    "SpeechView": "Speech View Standard"
  } ]
}
```

Response Code: 200

Explanation of Data Fields

Parameters	Operations	Data Type	Comments
Alias	Read Only	String(64)	The Alias of the user belonging to a Tenant.
dtmfAccessId	Read Only	String(40)	The DTMF access id (i.e., extension) of the subscriber.
Messaging	Read Only	String	Licensing Tag either Basic, Enhanced, Enhanced+
SpeechView	Read Only	String	It is a licensing Tag that specifies the transcription service. Speech View Standard or Speech View Pro. This field is not displayed when users do not use the transcription service.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Bulk User License

Bulk User License APIs

The administrator uses this API to fetch all the users along with the license detail of each user. This API works in both Multi Tenancy Mode and Non Multi Tenancy Mode of Cisco Unity Connection.

If the number of users is more than 20000, the Bulk User License API performs pagination and fetches the smaller number of users.



Note In Cisco Unity Connection 10.0(1) and later, TenantId in API response is available in Tenant Partitioning.

Listing the Users with Their License Details

Perform a GET operation to list the users along with their license details:

```
Get https://<connection-server>/vmrest/userlicenses
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<UserLicenses total="2">
  <UserLicense>
    <Alias>user1@Tenant1.com</Alias>
    <Messaging>Basic</Messaging>
    <SpeechView>Speech View Pro</SpeechView>
    <TenantId>Tenant1</TenantId>
  </UserLicense>
  <UserLicense>
    <Alias>user2@Tenant1.com</Alias>
    <Messaging>Basic</Messaging>
    <SpeechView>Speech View Pro</SpeechView>
    <TenantId>Tenant1</TenantId>
  </UserLicense>
</UserLicenses>
```

```
Response Code: 200
```

JSON Example

To list all the users along with their license details, use the following:

```
Request URI:
GET https://<connection-server>/vmrest/userlicenses
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2",
  "UserLicense":
  [
    {
      "Alias": "user1@Tenant1.com",
      "Messaging": "Basic",
      "TenantId": "Tenant1"
    },
    {
      "Alias": "user2@Tenant1.com",
      "Messaging": "Basic",
      "TenantId": "Tenant1"
    }
  ]
}
```



```
Response Code: 200
```

Listing Users with License Details Using Pagination

To list the users along with their license details using pagination, pass the value in the properties "rowsPerPage" and "pageNumber". By default the value of "rowsPerPage" is 2001.

Perform a GET operation to list the users along with their license details using pagination:

```
Get https://<connection-server>/vmrest/userlicenses?rowsPerPage=1&pageNumber=1
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<UserLicenses total="1">
  <UserLicense>
    <Alias>user1@Tenant1.com</Alias>
    <Messaging>Basic</Messaging>
    <SpeechView>Speech View Standard</SpeechView>
    <TenantId>Tenant1</TenantId>
  </UserLicense>
</UserLicenses>
```

```
Response Code: 200
```

JSON Example

To list all the users along with their license details using pagination, use the following:

```
Request URI:
GET https://<connection-server>/vmrest/userlicenses?rowsPerPage=1&pageNumber=1
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1",
  "UserLicense":
  {
    "Alias": "user1@Tenant1.com",
    "Messaging": "Basic",
    "SpeechView": "Speech View Standard",
    "TenantId": "Tenant1"
  }
}
```

```
Response Code: 200
```

List the Number of Users Using Licenses

To List the number of users using licenses, pass the value 0 in the property "rowsPerPage" or "pageNumber".

Perform a GET operation to list the number of users using licenses:

```
Get https://<connection-server>/vmrest/userlicenses?pageNumber=0
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<UserLicenses total="2"/>
```

```
Response Code: 200
```

JSON Response

To list all the number of users using licenses, use the following:

```
Request URI:
GET https://<connection-server>/vmrest/userlicenses?pageNumber=0
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{"@total": "2"}
```

```
Response Code: 200
```

Listing Users Using Same Type of Licenses

To list the users that are using same type of licenses, pass the "query" parameter.

Perform a GET operation to list the number of users using licenses:

```
Get https://<connection-server>/vmrest/userlicenses?query=(Messaging is Basic)
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<UserLicenses total="2">
  <UserLicense>
    <Alias>user1@Tenant1.com</Alias>
    <Messaging>Basic</Messaging>
    <SpeechView>Speech View Standard</SpeechView>
    <TenantId>Tenant1</TenantId>
  </UserLicense>
  <UserLicense>
    <Alias>user2@Tenant1.com</Alias>
    <Messaging>Basic</Messaging>
    <SpeechView>Speech View Standard</SpeechView>
    <TenantId>Tenant1</TenantId>
  </UserLicense>
</UserLicenses>
<pre>
<pre>
Response Code: 200
```

JSON Example

To list the number of users using same type of licenses, use the following:

```
Request URI:
GET https://<connection-server>/vmrest/userlicenses?query=(Messaging is Basic)
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2",
  "UserLicense":
  [
    {
      "Alias": "user1@Tenant1.com",
      "Messaging": "Basic",
      "SpeechView": "Speech View Standard",
      "TenantId": "Tenant1"
    },
    {
      "Alias": "user2@Tenant1.com",
      "Messaging": "Basic",
      "SpeechView": "Speech View Standard",
      "TenantId": "Tenant1"
    }
  ]
}
```

```
Response Code: 200
```

Listing License Details of a Particular User

To list the license of a particular user, pass the "query" parameter.

Perform a GET operation to list the number of users using licenses:

```
Get https://<connection-server>/vmrest/userlicenses?query=(Alias is user1)
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<UserLicenses total="1">
  <UserLicense>
    <Alias>user1</Alias>
    <Messaging>Basic</Messaging>
    <SpeechView>Speech View Standard</SpeechView>
    <TenantId>Tenant1</TenantId>
  </UserLicense>
</UserLicenses>
```

```
Response Code: 200
```

JSON Response

To list the license of a particular user, use the following:

```
Request URI:
GET https://ucbu-aricent-vm259.cisco.com/vmrest/userlicenses?query=(Alias is user1)
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1",
  "UserLicense":
  {
    "Alias": "user1",
    "Messaging": "Basic",
    "SpeechView": "Speech View Standard",
    "TenantId": "Tenant1"
  }
}
```

Response Code: 200

Explanation of Data Fields

Parameters	Operations	Data Type	Comments
Alias	Read Only	String(64)	The Alias of the user.
Messaging	Read Only	String	Licensing Tag either Basic, Enhanced, Enhanced+
SpeechView	Read Only	String	It is a licensing Tag that specifies the transcription service Speech View Standard or Speech View Pro This field is not displayed when users do not use the transcription service.
TenantId	Read Only	String	This field contains the Name of the tenant to which the user belongs. This field will be populated only if the connection is working in the Multi Tenancy Mode and user belongs to a Tenant.



CHAPTER 32

Cisco Unity Connection Provisioning Interface (CUPI) API -- Class of Service (COS) APIs

- [Classes of Service, on page 229](#)

Classes of Service

A class of service (COS) defines limits and permissions for accounts with voice mailboxes. For example, a COS.

- Controls user access to licensed features such as the Cisco Unity Connection Web Inbox (Connection 8.5 and later) or Messaging Inbox (Connection 8.0). (When a COS includes access to a feature that requires individual licenses, you can assign groups of users to the COS only if enough licenses are available.)
- Controls user access to non-licensed features such as personal call transfer rules.
- Controls how users interact with Connection. For example, a COS dictates the maximum length of user messages and greetings, and whether users can choose to be listed in the corporate directory.
- Controls call transfer options.
- Specifies the number of private distribution lists allowed to users, and the number of members allowed on each list.
- Specifies the restriction tables used to control the phone numbers that users can use for transfers and when placing calls.

A COS is not specified for the individual accounts or templates that are associated with users without voice mailboxes (typically, these are administrator accounts). Permissions associated with administrator accounts are instead controlled by roles in Connection Administration.

Default Classes of Service in Cisco Unity Connection

Voicemail User COS	Contains settings that are applicable to end users. By default, this COS is associated with the default Voicemail User template
System	A COS that special default user accounts are members of. This COS is read-only and cannot be modified or deleted

Administrator can use this API to create/update/delete/fetch the Class of Service. Various attributes of Class of Service can also be updated using this API.

Listing the Class of Services

The following is an example of the GET request that lists all the class of services:

```
GET https://<connection-server>/vmrest/coses
```

The following is an example of the response from the above *GET* request:

```
<Coses total="3">
  <Cos>
    <URI>/vmrest/coses/6e2c52a8-6bb6-40b0-b31e-27627293520c</URI>
    <ObjectId>6e2c52a8-6bb6-40b0-b31e-27627293520c</ObjectId>
    <DisplayName>Voice Mail User COS</DisplayName>
  </Cos>
  <Cos>
    <URI>/vmrest/coses/4af565ec-47d5-43be-9c3b-49d5ea995f63</URI>
    <ObjectId>4af565ec-47d5-43be-9c3b-49d5ea995f63</ObjectId>
    <DisplayName>System</DisplayName>
  </Cos>
  <Cos>
    <URI>/vmrest/coses/870f9a46-cc28-4d55-8fbd-e89cd02b9ff8</URI>
    <ObjectId>870f9a46-cc28-4d55-8fbd-e89cd02b9ff8</ObjectId>
    <DisplayName>Taxoma_COS_1</DisplayName>
  </Cos>
</Coses>
```

```
Response Code: 200
```

JSON Example

To list all class of services, do the following: <pre> Request URI: GET https://<connection-server>/vmrest/coses Accept: application/json Connection: keep-alive </pre> The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "3",
  "Coses": [
    {
      "URI": "/vmrest/coses/6e2c52a8-6bb6-40b0-b31e-27627293520c",
      "ObjectId": "6e2c52a8-6bb6-40b0-b31e-27627293520c",
      "DisplayName": "Voice Mail User COS"
    },
    {
      "URI": "/vmrest/coses/4af565ec-47d5-43be-9c3b-49d5ea995f63",
      "ObjectId": "4af565ec-47d5-43be-9c3b-49d5ea995f63",
      "DisplayName": "System"
    },
    {
      "URI": "/vmrest/coses/870f9a46-cc28-4d55-8fbd-e89cd02b9ff8",
      "ObjectId": "870f9a46-cc28-4d55-8fbd-e89cd02b9ff8",
      "DisplayName": "Taxoma_COS_1"
    }
  ]
}
```

```
Response Code: 200
```

Viewing the Specific Class of Services

The following is an example of the GET request that lists the details of specific class of services represented by the provided value of class of services object ID:

```
GET https://<connection-server>/vmrest/coses/<cosobjectid>
```

The following is the response from the above *GET* request:

```
<Cos>
  <URI>/vmrest/coses/77862e8e-42f3-4dac-811d-0be5291a9504</URI>
  <ObjectId>77862e8e-42f3-4dac-811d-0be5291a9504</ObjectId>
  <AccessFaxMail>>false</AccessFaxMail>
  <AccessTts>>false</AccessTts>
  <CallHoldAvailable>>false</CallHoldAvailable>
  <CallScreenAvailable>>false</CallScreenAvailable>
  <CanRecordName>>true</CanRecordName>
  <FaxRestrictionObjectId>8045d752-6723-4062-9fc3-22090b85b5d7</FaxRestrictionObjectId>
  <ListInDirectoryStatus>>true</ListInDirectoryStatus>
  <LocationObjectId>359e627b-c481-4428-8674-bc28f40e8d43</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/359e627b-c481-4428-8674-bc28f40e8d43</LocationURI>

  <MaxGreetingLength>90</MaxGreetingLength>
  <MaxMsgLength>300</MaxMsgLength>
  <MaxNameLength>30</MaxNameLength>
  <MaxPrivateDlists>25</MaxPrivateDlists>
  <MovetoDeleteFolder>>true</MovetoDeleteFolder>

  <OutcallRestrictionObjectId>9c07accb-2187-4ca4-baf4-6ae0613f605a</OutcallRestrictionObjectId>

  <PersonalAdministrator>>true</PersonalAdministrator>
  <DisplayName>HELLO_COS_1</DisplayName>
  <XferRestrictionObjectId>9c040521-fb05-4ba7-ba8f-d4f06f140b4c</XferRestrictionObjectId>

  <Undeletable>>false</Undeletable>
  <WarnIntervalMsgEnd>0</WarnIntervalMsgEnd>
  <CanSendToPublicDl>>true</CanSendToPublicDl>
  <EnableEnhancedSecurity>>false</EnableEnhancedSecurity>
  <AccessVmi>>false</AccessVmi>
  <AccessLiveReply>>false</AccessLiveReply>
  <UaAlternateExtensionAccess>0</UaAlternateExtensionAccess>
  <AccessCallRoutingRules>>false</AccessCallRoutingRules>
  <WarnMinMsgLength>0</WarnMinMsgLength>
  <SendBroadcastMessage>>false</SendBroadcastMessage>
  <UpdateBroadcastMessage>>false</UpdateBroadcastMessage>
  <AccessVui>>false</AccessVui>
  <ImapCanFetchMessageBody>>true</ImapCanFetchMessageBody>
  <ImapCanFetchPrivateMessageBody>>false</ImapCanFetchPrivateMessageBody>
  <MaxMembersPVL>99</MaxMembersPVL>
  <AccessIMAP>>false</AccessIMAP>
  <ReadOnly>>false</ReadOnly>
  <AccessAdvancedUserFeatures>>false</AccessAdvancedUserFeatures>
  <AccessAdvancedUser>>false</AccessAdvancedUser>
  <AccessUnifiedClient>>false</AccessUnifiedClient>
  <RequireSecureMessages>4</RequireSecureMessages>
  <AccessOutsideLiveReply>>false</AccessOutsideLiveReply>
  <AccessSTT>>false</AccessSTT>
  <EnableSTTSecureMessage>0</EnableSTTSecureMessage>
  <MessagePlaybackRestriction>0</MessagePlaybackRestriction>
  <SttType>1</SttType>
</Cos>
```

```
Response Code: 200
```

JSON Example

To view individual class of services, do the following

```
Request URI:
GET https://<connection-server>/vmrest/coses/<cosobjectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/coses/77862e8e-42f3-4dac-811d-0be5291a9504",
  "ObjectId": "77862e8e-42f3-4dac-811d-0be5291a9504",
  "AccessFaxMail": "false",
  "AccessTts": "false",
  "CallHoldAvailable": "false",
  "CallScreenAvailable": "false",
  "CanRecordName": "true",
  "FaxRestrictionObjectId": "8045d752-6723-4062-9fc3-22090b85b5d7",
  "ListInDirectoryStatus": "true",
  "LocationObjectId": "359e627b-c481-4428-8674-bc28f40e8d43",
  "LocationURI":
"/vmrest/locations/connectionlocations/359e627b-c481-4428-8674-bc28f40e8d43",
  "MaxGreetingLength": "90",
  "MaxMsgLength": "300",
  "MaxNameLength": "30",
  "MaxPrivateDlists": "25",
  "MovetoDeleteFolder": "true",
  "OutcallRestrictionObjectId": "9c07accb-2187-4ca4-baf4-6ae0613f605a",
  "PersonalAdministrator": "true",
  "DisplayName": "HELLO_COS_1",
  "XferRestrictionObjectId": "9c040521-fb05-4ba7-ba8f-d4f06f140b4c",
  "Undeletable": "false",
  "WarnIntervalMsgEnd": "0",
  "CanSendToPublicDl": "true",
  "EnableEnhancedSecurity": "false",
  "AccessVmi": "false",
  "AccessLiveReply": "false",
  "UaAlternateExtensionAccess": "0",
  "AccessCallRoutingRules": "false",
  "WarnMinMsgLength": "0",
  "SendBroadcastMessage": "false",
  "UpdateBroadcastMessage": "false",
  "AccessVui": "false",
  "ImapCanFetchMessageBody": "true",
  "ImapCanFetchPrivateMessageBody": "false",
  "MaxMembersPVL": "99",
  "AccessIMAP": "false",
  "ReadOnly": "false",
  "AccessAdvancedUserFeatures": "false",
  "AccessAdvancedUser": "false",
  "AccessUnifiedClient": "false",
  "RequireSecureMessages": "4",
  "AccessOutsideLiveReply": "false",
  "AccessSTT": "false",
  "EnableSTTSecureMessage": "0",
  "MessagePlaybackRestriction": "0",
  "SttType": "1"
}
```



```
Response Code: 200
```

Creating a Class of Services

You can create a new class of services in a generic way or by giving restriction tables as input.

Example 1: In a generic way

```
POST https://<connection-server>/vmrest/coses
Request Body:
<Cos>
<DisplayName>Texoma_cos_1</DisplayName>
</Cos>
```

The following is an example of the *POST* request that creates a new class of service in a generic way:

```
Response Code: 201
```

JSON Example

To create new COS, do the following:

```
Request URI:
POST https://<connection-server>/vmrest/coses
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "DisplayName": "Texoma_cos_1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Example 2: Giving restriction tables as input

The following is an example of the *POST* request that creates a new class of services by giving restriction tables as input:

```
POST https://<connection-server>/vmrest/coses
Request Body:
<cos>
  <DisplayName>Texoma_cos</DisplayName>
  <FaxRestrictionObjectId>3da15ac5-e56f-4fac-b631-9f08826e1472</FaxRestrictionObjectId>
<OutcallRestrictionObjectId>3da15ac5-e56f-4fac-b631-9f08826e1472</OutcallRestrictionObjectId>
  <XferRestrictionObjectId>3da15ac5-e56f-4fac-b631-9f08826e1472</XferRestrictionObjectId>
</cos>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

JSON Example:

```
Request URI:
POST https://<connection-server>/vmrest/coses
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "FaxRestrictionObjectId":"3da15ac5-e56f-4fac-b631-9f08826e1472",
  "OutcallRestrictionObjectId":"3da15ac5-e56f-4fac-b631-9f08826e1472",
  "XferRestrictionObjectId":"3da15ac5-e56f-4fac-b631-9f08826e1472"
}
The following is the response from the above *POST* request and the actual response will
depend upon the information given by you:
<pre>
Response Code: 201
```

Updating the Class of Services

Example 1: The following is an example of the PUT request that allows you to update the display name of the class of services:

```
PUT https://<connection-server>/vmrest/coses/<cosobjectid>
Request Body:
<Cos>
  <DisplayName>Texoma_123</DisplayName>
</Cos>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update display name of COS, do the following:

```
Request URI:
PUT https://<connection-server>/vmrest/coses/<cosobjectid>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "DisplayName": "Texoma_123"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: The following is an example of the PUT request that allows you to update the other fields of the class of services:

```
PUT https://<connection-server>/vmrest/coses/<cosobjectid>
Request Body:
<Cos>
  <MaxGreetingLength>45</MaxGreetingLength>
  <MaxMsgLength>500</MaxMsgLength>
  <MaxNameLength>50</MaxNameLength>
  <MaxPrivateDlists>30</MaxPrivateDlists>
</Cos>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
Request URI:
PUT https://<connection-server>/vmrest/coses/<cosobjectid>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "MaxGreetingLength": "45",
  "MaxMsgLength": "500",
  "MaxNameLength": "50",
  "MaxPrivateDlists": "30"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Deleting the Class of Services

The following is an example of the DELETE request that deletes a specific class of services where you need to mention the class of service object ID:

```
DELETE https://<connection-server>/vmrest/coses/<cosobjectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To delete class of services, do the following:

```
Request URI:
DELETE https://<connection-server>/vmrest/coses/<cosobjectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

The following chart lists all of the data fields:

Parameters	Operations	Data Type	Comments
URI	Read Only	String	Specifies URI for class of service
ObjectId	Read Only	String(36)	Specifies object id of class of service
accessfaxmail	Read/Write	Boolean	<p>A flag indicating whether a subscriber assigned this COS is allowed to manage their fax messages over the phone or from the Cisco Unity Connection Inbox.</p> <p>Future feature, 3rd-party fax is not supported in Cisco Unity Connection. Possible values are:</p> <ul style="list-style-type: none"> • false: Do not allow access to fax mail • true: Allow access to fax mail <p>To allow subscribers to have their e-mail messages delivered to a fax machine, both this column and "AccessTts" must be set to "true". Default Value: false.</p>
accesssts	Read/Write	Boolean	<p>A flag indicating whether a subscriber assigned this COS can have to their e-mail messages read to them by an e-mail reader over the phone.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot have e-mail messages read over the phone • true: Can have e-mail messages read over the phone <p>To allow subscribers to have their e-mail messages delivered to a fax machine, both this column and "AccessFaxMail" must be set to "true". Default Value: false.</p>

Parameters	Operations	Data Type	Comments
callholdavailable	Read/Write	Boolean	<p>A flag indicating whether the subscriber has the ability to change their own call holding options by using the Cisco Unity Connection Assistant. Call holding settings apply when calls are transferred from the automated attendant or a directory handler to subscriber phones. They do not apply when an outsider caller or another subscriber dials a subscriber extension directly.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot change call holding settings via Cisco Unity Assistant • true: Can change call holding settings via Cisco Unity Assistant <p>Default Value: false.</p>
callscreenavailable	Read/Write	Boolean	<p>A flag indicating whether the subscriber has the ability to change their own call screening options by using the Cisco Unity Assistant. Call screening settings apply when calls are transferred from the automated attendant or a directory handler to subscriber phones. They do not apply when an outsider caller or another subscriber dials a subscriber extension directly.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot change call screening settings via Cisco Unity Assistant • true: Can change call screening settings via Cisco Unity Assistant <p>Default Value: false.</p>
canrecordname	Read/Write	Boolean	<p>Used to prevent subscribers from recording their own names (for example, if an organization has all names and greetings recorded in one voice).</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot record their name • true: Can record their name <p>Default Value: true.</p>
faxrestrictionobjectid	Read/Write(36)	String	<p>The unique identifier for the RestrictionTable objects that Cisco Unity Connection uses to limit phone numbers that the subscriber can enter in fax dialing settings.</p>

Parameters	Operations	Data Type	Comments
listindirectorystatus	Read/Write	Boolean	<p>A flag indicating whether subscribers can choose to be listed or not in the phone directory. The phone directory (directory assistance) is the audio listing that subscribers and unidentified callers use to reach subscribers and to leave messages.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot choose whether or not to be listed in phone directory • true: Can choose whether or not to be listed in phone directory <p>Default value is: true.</p>
locationobjectid	Read Only	String	The unique identifier of the LocationVMS to which this COS belongs.
locationURI	Read Only	String	URI of the LocationVMS.
maxgreetinglength	Read/Write	Integer	<p>The maximum recording length (in seconds) allowed to the subscriber for recording their greeting.</p> <p>The range can vary from 1 to 1200. Default Value: 90.</p>
maxmsglength	Read/Write	Integer	<p>The maximum recording length (in seconds) allowed to the subscriber for recording messages and conversations.</p> <p>The range can vary from 1 to 3600. Default Value: 300</p>
maxnamelength	Read/Write	Integer	<p>The maximum recording length (in seconds) allowed to the subscriber for recording their voice name.</p> <p>The range can vary from 1 to 100. Default Value: 30</p>
maxprivatedlists	Read/Write	Integer	<p>The maximum number of personal voice mail lists the subscriber is allowed to create.</p> <p>The range can vary from 1 to 99.</p> <p>Default Value: 25</p>

Parameters	Operations	Data Type	Comments
movetodeletefolder	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection moves deleted messages for the subscriber to a Deleted Items folder or physically deletes the message.</p> <p>true='deletion' moves messages to the DeletedItems folder, where it ages until it evaporates. false='deletion' physically deletes the message. When this column is set to "1," a subscriber can:</p> <ul style="list-style-type: none"> • Use the phone and the Cisco Unity Connection Inbox (as applicable) to permanently delete messages stored in their Deleted Items folder. • Use the phone and the Cisco Unity Connection Inbox to listen to, reply to, or forward messages in their Deleted Items folder, or to restore them to the Inbox. <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Deleted messages are not moved to a Deleted Items folder, rather they are permanently deleted. • true: Deleted messages are moved to a Deleted Items folder. <p>Default Value: true.</p>
outcallrestrictionobjectid	Read/Write(36)	String	<p>The unique identifier of the Restriction Table object that Cisco Unity Connection uses to limit phone numbers that the subscriber can enter in message delivery settings. The restriction table also restricts the subscriber extensions that Cisco Unity Connection dials when the phone is selected as the recording and playback device for the Media Master.</p>
personaladministrator	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection allows a subscriber to use the Cisco Unity Assistant to personalize their Cisco Unity Connection setting -- including their recorded greetings and message delivery options -- or to set up message notification devices and create private lists.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot use Cisco Unity Assistant • true: Can use Cisco Unity Assistant <p>Default Value: true.</p>
displayname	Read/Write(64)	String	<p>The unique text name of this COS, e.g. "Default COS," "Basic Voice Mail." Used when displaying entries in the administrative console, e.g. Cisco Unity Connection Administration. DisplayName is a required when creating a new COS. DisplayName Length allowed is 64.</p>

Parameters	Operations	Data Type	Comments
xferrestrictionobjectid	Read/Write(36)	String	The unique identifier of the RestrictionTable objects that Cisco Unity Connection uses to limit phone numbers that the subscriber can enter in call transfer settings.
undeletable	Read/Write	Boolean	A flag indicating whether this COS can be deleted via an administrative application such as Cisco Unity Connection Administration. It is used to prevent deletion of factory defaults. Possible values are: <ul style="list-style-type: none"> • false: COS can be deleted • true: COS cannot be deleted Default Value: false.
warnintervalmsgend	Read/Write	Integer	This column works together with "WarnMinMsgLength" enabling the record termination warning feature. If the feature is enabled by the settings of these two columns, callers will hear a warning tone sound before the maximum message length is reached. Call termination warning only works with the Unified Communications Manager integration. Possible values are: <ul style="list-style-type: none"> • 0: Record termination warning disabled • 1-30000: The number of milliseconds from the end of the maximum recording time when the record termination warning tone is played. Default Value: 0.
cansendtopublicdl	Read/Write	Boolean	A flag indicating whether the subscriber can send messages to system (formerly called "public") distribution lists. Possible values are: <ul style="list-style-type: none"> • false: Cannot send messages to system distribution lists • true: Can send messages to system distribution lists Default Value: true.
enableenhancedsecurity	Read/Write	Boolean	A flag indicating whether the subscriber uses regular or enhanced phone security. Enhanced phone security adds RSA two-factor authentication to regular security. Possible values are: <ul style="list-style-type: none"> • false: Regular security • true: Enhanced phone security (RSA two-factor security) Default Value: false.

Parameters	Operations	Data Type	Comments
accessvmi	Read/Write	Boolean	<p>A flag indicating whether a subscriber assigned this COS can use the Cisco Unity Connection Inbox to listen to, compose, reply to, forward, and delete voice messages. If the subscriber has "AccessFaxMail" set, they can also use it to manage their faxes. This is a licensed feature.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot use Cisco Unity Connection Inbox • true: Can use Cisco Unity Connection Inbox <p>Default Value: false.</p>
accesslivereply	Read/Write	Boolean	<p>A flag indicating whether a subscriber assigned this COS can after listening to a message from another subscriber press 4-4, and Cisco Unity Connection will call the subscriber who left the message. Generally referred to as "Live Reply."</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot "live reply" to another subscriber • true: Can "live reply" to another subscriber after listening to message from another subscriber <p>Default Value: false.</p>
uaalternateextensionaccess	Read/Write	Integer	<p>The abilities a subscriber has to manage administrator-defined alternate extensions assigned to the subscriber. Determines whether subscribers can view the administrator-defined alternate extensions, and whether subscribers can manage (add, modify, and delete) their own set of alternate extensions in the Cisco Unity Assistant. If enabled, subscribers can define up to 5 alternate extensions in addition to the 9 alternate extensions that an administrator can define for them.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • 3: CRUD access - subscriber can view administrator-defined alternate extensions and manage (create, modify, and delete) their own subscriber-defined alternate extensions • 2: CUD access - subscriber can manage (create, modify, and delete) their own subscriber-defined alternate extensions. • 1: Read access - subscriber can view administrator-defined alternate extensions. • 0: No access - subscriber cannot view or manage alternate extensions. <p>Default Value: 0.</p>

Parameters	Operations	Data Type	Comments
accesscallroutingrules	Read/Write	Boolean	<p>A flag indicating whether a subscriber assigned this COS can access personal call routing rules.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot access to Personal Call Routing rules • true: Can access to Personal Call Routing rules <p>Default Value: false.</p>
warnminmsglength	Read/Write	Integer	<p>The minimum length (in milliseconds) that the maximum recording time has to be before the record termination warning feature is active. When the record termination feature is active, Cisco Unity Connection plays a warning tone indicating to the caller that they are almost out of recording time.</p> <p>The range of this field can vary from 0 to 99999. Default Value: 0.</p>
sendbroadcastmessage	Read/Write	Boolean	<p>A flag indicating whether the subscriber has the ability to send broadcast messages to all subscribers on the VMS.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot send broadcast messages. • true: Can send broadcast messages. <p>Default Value: false.</p>
updatebroadcastmessage	Read/Write	Boolean	<p>A flag indicating whether the subscriber has the ability to update broadcast messages that are active or will be active in the future.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot update broadcast messages. • true: Can update broadcast messages. <p>Default Value: false.</p>
accessvui	Read/Write	Boolean	<p>A flag indicating whether a subscriber assigned this COS can use the voice driven inbox conversation.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot use the voice driven inbox conversation • true: Can use the voice driven inbox conversation <p>Default Value: false.</p>

Parameters	Operations	Data Type	Comments
imapcanfetchmessagebody	Read/Write	Boolean	<p>A flag indicating whether the subscriber can fetch the body of a non-private message using IMAP.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot fetch message body of non-private messages. • true: Using IMAP, subscriber can fetch message body of non-private messages. <p>Default Value: true.</p>
imapcanfetchprivatemessagebody	Read/Write	Boolean	<p>A flag indicating whether the subscriber can fetch the body of a private message using IMAP.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot fetch message body of private messages. • true: Using IMAP, subscriber can fetch message body of private messages. <p>Default Value: false.</p>
maxmemberspvl	Read/Write	Integer	The maximum number of members allowed in a personal voice mail list. Range 1-999. default value is 99
accessimap	Read/Write	Boolean	<p>A flag indicating whether a subscriber assigned this COS can access VM via an IMAP client.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot access voice mail via IMAP • true: Can access voice mail via IMAP <p>Default Value: false.</p>
accessunifiedclient	Read/Write	Boolean	<p>A flag indicating whether a subscriber can use the unified client.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot access voice mail using unified client • true: Can access voice mail using unified client <p>Default Value: true.</p>
readonly	Read/Write	Boolean	<p>A flag indicating that this COS is read only. It cannot be modified from the Connection Administration.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Can modify this COS. • true: Cannot modify this COS. <p>Default Value: false.</p>

Parameters	Operations	Data Type	Comments
accessadvanceduserfeatures	Read/Write	Boolean	<p>A flag indicating whether or not the subscriber has access to advanced user features. Currently, there are two advanced user features: TTS and VUI.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: The Subscriber cannot access advanced user features. • true: The Subscriber can access advanced user features. <p>Default Value: false.</p>
requiresecuremessages	Read/Write	Integer	<p>Specifies when to mark message secure.</p> <p>Possible values are: 1: Always mark secure 2: Never mark secure 3: Ask 4: Set private messages secure Default Value: 4.</p>
accessoutsidelivereply	Read/Write	Boolean	<p>A flag indicating whether a subscriber, assigned this COS, can after listening to a message from outside caller issue a command to call the outside caller. When a VUI or TUI command is issued, Cisco Unity Connection will call the outside caller who left the message. Generally referred to as "Return Call to Outside Caller."</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: User cannot "Use Live Reply to Unidentified Callers" • true: User can "Use Live Reply to Unidentified Callers"after listening to message." <p>Default Value: false.</p>
accessstt	Read/Write	Boolean	<p>An integer value indicating whether a subscriber assigned this COS can have to their voice messages transcribed to text.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Do not use transcription service (speech view). • true: Use speech view transcription service. <p>Default Value: false.</p>
autoalternateextension	Read/Write	Boolean	<p>A flag indicating whether a subscriber assigned this COS can have automatic alternate extension.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • false: Cannot have automatic alternate extension. • true: Can have automatic alternate extension. <p>Default Value: false.</p>

Parameters	Operations	Data Type	Comments
enablesttsecuremessage	Read/Write	Integer	Controls transcriptions and notification of secure messages for Speech To Text transcription feature. Possible values are: <ul style="list-style-type: none"> • 0: Do not transcribe secure messages • 1: Allow transcriptions of secure messages • 2: Allow transcriptions and notifications of secure messages Default Value: 0.
messageplaybackrestriction	Read/Write	Integer	Playback restrictions for GUI clients. Allows restricting playback to phone only or computer only. Possible values are: <ul style="list-style-type: none"> • 0: No restrictions on message playback • 1: Allow playback on computer speakers only • 2: Allow playback on phone only Default Value: 0.
stttype	Read/Write	Integer	An integer value indicating whether a subscriber assigned standard or PRO COS for STT. Possible values are: <ul style="list-style-type: none"> • 1: Use speech view standard transcription service. • 2: Use speech view pro transcription service. Default Value: 1.
enablevideomessaging	Read/Write	Boolean	Allows video messaging for the users in this class of service. Possible Values: <ul style="list-style-type: none"> • true : allow Video messaging • false: Do not allow video messaging Default value: false.
accessadvanceduser	Read/Write	Boolean	Duplicate of AdvnacedUserFeatures for licensing code purposes. Possible Values: <ul style="list-style-type: none"> • false: The Subscriber cannot access advanced user features. • true: The Subscriber can access advanced user features. Default: false



CHAPTER 33

Cisco Unity Connection Provisioning Interface (CUPI) API for User Template

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Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Caller Inputs

User Template Caller Inputs

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
```

From the above URI, get the call handler primary template object ID:

```
GET https://<connection-server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>
```

Updating Caller Input Parameters

The following is an example of the PUT request that updates caller input parameters:

```
PUT
https://<connection-server>/vmrest/handlers/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/menuentries
```

All the parameters for caller inputs are present in callhandlerprimarytemplate.

```
Request Body:
<CallhandlerPrimaryTemplate>
  <OneKeyDelay>9999</OneKeyDelay>
  <EnablePrependDigits>true</EnablePrependDigits>
  <PrependDigits>4545</PrependDigits>
</CallhandlerPrimaryTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note <PrependDigit> parameter must be having digits only (extension parameter)

Updating Caller Input Keys

The following is an example of the PUT request that updates the call input keys:

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/menuentries
```

The following is an example of the PUT request that edits the call input keys:

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/menuentries/*
```

where "*" is the touchtone key ID.

```
<MenuEntry>
  <Locked>true</Locked>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 1: Edit call actions

Values	Parameters
0	Ignore
1	Hang Up
4	Take Message

Values	Parameters
5	Skip Greeting
6	Restart Greeting
7	Transfer to alternate contact number
8	Route from next call routing rule

```
<MenuEntry>
  <Action>7</Action>
  <TransferType>1</TransferType>
  <TransferNumber>2344</TransferNumber>
  <TransferRings>4</TransferRings>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Example 2: Edit Call Handler

```
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>PHGreeting</TargetConversation>
  <TargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</TargetHandlerObjectId>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

To get the call handler object ID:

GET https://<connection-server>/vmrest/handlers/callhandlers

Example 3: Interview handler

```
<MenuEntry>
  <Action>2</Action>
  <TargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</TargetHandlerObjectId>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

To get the Interview Handler object ID:

https://<connection-server>/vmrest/handlers/interviewhandlers

Example 4: Directory handler

```
<MenuEntry>
  <Action>2</Action>
  <TargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</TargetHandlerObjectId>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

To get the Directory Handler object ID:

```
https://<connection-server>/vmrest/handlers/directoryhandlers
```

Example 5: Conversation

Request Body: for broadcast message administrator

```
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>BroadcastMessageAdministrator</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for broadcast message administrator and the actual response will depend upon the information given by you:

Response Code: 204

Request Body: for caller system transfer

```
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>SystemTransfer</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for caller system transfer and the actual response will depend upon the information given by you:

Response Code: 204

Request Body: for greeting administrator

```
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>GreetingAdministrator</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for greeting administrator and the actual response will depend upon the information given by you:

Response Code: 204

Request Body: for sign in

```
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>SubSignIn</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for sign in and the actual response will depend upon the information given by you:

Response Code: 204

Request Body: for user system transfer

```
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>SubSysTransfer</TargetConversation>
</MenuEntry>
```

The following is the response from the *PUT* request for user system transfer and the actual response will depend upon the information given by you:

Response Code: 204

Example 4: Users with Mailbox

```
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>PHTransfer</TargetConversation>
```

```
<TargetHandlerObjectId>71cb381b-fd16-4ba8-8a1d-e71684e57b0e</TargetHandlerObjectId>
</MenuEntry>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

For conversation, do the following:

```
PUT
https://<connection-server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/menuentries/4
Accept: application/json
Content-type: application/json
Connection: keep-alive

{
  "Action": "2",
  "TargetConversation": "SubSignIn"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

Parameter	Data Type	Operations	Comments
OneKeyDelay	Integer	Read/Write	Indicate the amount of time that System waits for additional input after callers press a single key that is not locked. If there is no input within this time, system performs the action assigned to the single key. We recommend a value of 1,500 milliseconds (one and one-half seconds). Note <ul style="list-style-type: none"> This option is unavailable if Ignore Caller Input is enabled on the Greetings page. OneKeyDelay can only accept integer with value 0 through 10000
EnablePrependDigits	Boolean	Read/Write	To simulate abbreviated extensions by using prepended digits for call handlers and user mailboxes. When such digits are defined, they are prepended to any extension that a caller dials while listening to the greeting for the call handler or user mailbox. Default value: false.
PrependDigits	Integer	Read/Write	Digits that are prepended to any extension that a caller dials while listening to the greeting of the user.
MenuEntriesURI	String(36)	Read Only	Parameters for caller input keys are present in menu entries URI.
TouchtoneKey	String(1)	Read Only	Indicates the phone keypad key to which the settings apply.

Parameter	Data Type	Operations	Comments
Locked	Boolean	Read/Write	A locked menu entry does not allow additional dialing after this choice is entered. Values can be: <ul style="list-style-type: none"> • False: Unlocked - Additional dialing after this choice is entered is allowed • True: Locked - Additional dialing is ignored Default value: false.
Action	Integer	Read/Write	Takes values from 0-8. See table for values.
CallHandlerObjectId	String(36)	Read Only	Menu entries can only belong to call handlers. No other object can own a menu entry.
TargetConversation	String(36)	Read/Write	The name of the conversation to which the caller is routed.
TargetHandlerObjectId	String(36)	Read/Write	The unique identifier of the specific object to send along to the target conversation.
TransferNumber	Integer	Read/Write	Extension to which call is transferred.
TransferType	Integer	Read/Write	Values can be: <ul style="list-style-type: none"> • 0: Release to switch • 1: Supervise transfer
TransferRings	Integer	Read/Write	Applies only when the "TransferType" column is set to supervised (1). This value should never be less than 2 for a supervised transfer.

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Greetings API

User Template Greetings APIs

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
```

From the above URI, get the call handler primary template object ID:

```
GET https://<connection-server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>
```

The following URI can be used to view the greetings:

```
GET https://<connection-server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/usertemplategreetings
```

The following URI can be used to view the alternate greeting:

```
GET https://<connection-
server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId
>/usertemplategreetings/Alternate
```

The following URI can be used to view the busy greeting:

```
GET https://<connection-
server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId
>/usertemplategreetings/Busy
```

The following URI can be used to view the error greeting:

```
GET https://<connection-
server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId
>/usertemplategreetings/Error
```

The following URI can be used to view the closed greeting:

```
GET https://<connection-
server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId
>/usertemplategreetings/Off%20Hours
```

The following URI can be used to view the standard greeting:

```
GET https://<connection-
server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId
>/usertemplategreetings/Standard
```

The following URI can be used to view the holiday greeting:

```
GET https://<connection-
server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId
>/usertemplategreetings/Holiday
```

Updating Fields of Greeting

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Alternate
```

Request Body: Enable greeting

```
<Greeting>
  <EnableTransfer>true</EnableTransfer>
</Greeting>
```

The following is the response from the *PUT* request to enable greeting and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: enable with no end date

```
<Greeting>
  <EnableTransfer>true</EnableTransfer>
  <TimeExpires></TimeExpires>
</Greeting>
```

The following is the response from the *PUT* request to enable with no end date and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: enable until

```
<Greeting>
  <EnableTransfer>true</EnableTransfer>
  <TimeExpires>2014-12-31 05:30:00.000</TimeExpires>
</Greeting>
```

The following is the response from the *PUT* request to enable until and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: edit caller hears

```
<Greeting>
  <PlayWhat>2</PlayWhat>
  <PlayRecordMessagePrompt>true</PlayRecordMessagePrompt>
</Greeting>
```

The following is the response from the *PUT* request to edit caller hears and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: enable ignore caller inputs

```
<Greeting>
  <IgnoreDigits>true</IgnoreDigits>
</Greeting>
```

The following is the response from the *PUT* request to enable ignore caller inputs and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: enable allow transfers to numbers not associated with users or call handlers

```
<Greeting>
  <IgnoreDigits>>false</IgnoreDigits>
  <EnableTransfer>true</EnableTransfer>
</Greeting>
```

The following is the response from the *PUT* request to enable allow transfers to numbers not associated with users or call handlers and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Alternate
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "EnableTransfer":"true","IgnoreDigits":"false"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Changing after Greeting Actions

By default all the handlers must have tenant specific handlers

Example 1: Change Call Actions

```
Request Body:
<UserTemplateGreeting>
  <AfterGreetingAction>8</AfterGreetingAction>
</UserTemplateGreeting>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To change call actions, do the following:

```
PUT
https://<connection-server>/vmrest/callhandlerprimarytemplates/60cd837d-f1cf-43c2-b199-85b457858a16/usertemplategreetings/Alternate
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
Request Body:
{
  "AfterGreetingAction": "8"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note Values used for changing call actions are - 1,4,6,8

Example 2: Change Call Handler

```
Request Body:
<UserTemplateGreeting>
  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>PHTransfer</AfterGreetingTargetConversation>

<AfterGreetingTargetHandlerObjectId>ee065a6a-3f95-4b4d-bbbd-98cb2d4c0aa9</AfterGreetingTargetHandlerObjectId>
</UserTemplateGreeting>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note For attempt transfer use PHTransfer and for go directly to greetings use PHGreeting and AfterGreetingTargetHandlerObjectId can be viewed from URI:

```
GET https://<connection-server>/vmrest/handlers/callhandlers
```

Example 3: Change Interview handler

```
Request Body:
<UserTemplateGreeting>
  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>PHInterview</AfterGreetingTargetConversation>

<AfterGreetingTargetHandlerObjectId>2f6a0058-7535-48ac-abcd-c4b41d13f47e</AfterGreetingTargetHandlerObjectId>
</UserTemplateGreeting>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note AfterGreetingTargetHandlerObjectId can be viewed from URI:

```
GET https://<connection-server>/vmrest/handlers/interviewhandler
```

Example 4: Change Directory handler

```
Request Body:
<UserTemplateGreeting>
  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>AD</AfterGreetingTargetConversation>

<AfterGreetingTargetHandlerObjectId>1f1941a5-3bb7-47ee-96f9-78691cd8ad43</AfterGreetingTargetHandlerObjectId>
</UserTemplateGreeting>
```


The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note AfterGreetingTargetHandlerObjectId can be viewed from URI:

```
GET https://<connection-server>/vmrest/handlers/directoryhandler
```

Example 5: Change Conversation

```
Request Body: for broadcast message administrator
<UserTemplateGreeting>
  <AfterGreetingAction>2</AfterGreetingAction>

<AfterGreetingTargetConversation>BroadcastMessageAdministrator</AfterGreetingTargetConversation>
</UserTemplateGreeting>
```

The following is the response from the *PUT* request for broadcast message administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

```
Request Body: for caller system transfer
<UserTemplateGreeting>

  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>SystemTransfer</AfterGreetingTargetConversation>

</UserTemplateGreeting>
```

The following is the response from the *PUT* request for caller system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

```
Request Body: for greeting administrator
<UserTemplateGreeting>

  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>GreetingsAdministrator</AfterGreetingTargetConversation>

</UserTemplateGreeting>
```

The following is the response from the *PUT* request for greeting administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

```
Request Body: for sign in
<UserTemplateGreeting>

  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>SubSignIn</AfterGreetingTargetConversation>

</UserTemplateGreeting>
```

The following is the response from the *PUT* request for sign in and the actual response will depend upon the information given by you:

```
Response Code: 204
Request Body: for user system transfer
<UserTemplateGreeting>
  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>SubSysTransfer</AfterGreetingTargetConversation>
</UserTemplateGreeting>
```

The following is the response from the *PUT* request for user system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 6: Change user with Mailbox

```
<UserTemplateGreeting>
  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>PHTransfer</AfterGreetingTargetConversation>

<AfterGreetingTargetHandlerObjectId>92a9008d-9e18-4cd1-8e3c-10df32295cd8</AfterGreetingTargetHandlerObjectId>
</UserTemplateGreeting>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Changing Caller Option

```
<UserTemplateGreeting>
  <EnAltGreetDontRingPhone>true</EnAltGreetDontRingPhone>
  <EnAltGreetPreventSkip>true</EnAltGreetPreventSkip>
  <EnAltGreetPreventMsg>true</EnAltGreetPreventMsg>
</UserTemplateGreeting>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Creating Greeting

The following URI can be used to add greetings:

```
POST https://<connection-server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/usertemplategreetings/Alternate/greetingstreamfiles
```

The following is the response from the *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Save Video Greetings

Unity Connection allows you to save video greetings using both GET and PUT requests.

Example of GET Request

```
GET
http://<connection-server>/vmrest/callhandlerprimarytemplates/<callhandlerobjectid>/usertemplates/Greetings/<GreetingType>/GreetingStreamFiles/<Language>/video
```

The following is the response of the above GET command and the output may vary depending on your inputs.

```
Response: 200
<CallControl>
  <resourceId>aad91d6d-aeca-4a72-8069-b656efb3041f.wav</resourceId>
  <sessionId>570146ed1504cb1</sessionId>
</CallControl>
```

JSON Example

```
Request
GET
vmrest/handlers/callhandlers/30600b21-1a4c-47a3-a078-8078984e5376/greetings/Standard/greetingstreamfiles/1033/video
Accept: application/json
User-Agent: Java/1.6.0_17
Host: <connection-server>
Connection: keep-alive
authorization: Basic Y2NtYWRtaW5pc3RyYXRvcjplY3NidWxhYg=
```

```
Response
HTTP/1.1 200
Content-Type: application/json
Date: Fri, 15 Jan 2010 15:14:11 GMT
Server:
{ "resourceId" : " aad91d6d-aeca-4a72-8069-b656efb3041f.wav", "sessionId" : "570146ed1504cb1" }
```

Example of PUT Request

```
PUT
http://<connection-server>/vmrest/callhandlerprimarytemplates/<callhandlerobjectid>/usertemplates/Greetings/<GreetingType>/GreetingStreamFiles/<Language>/video
```

```
<CallControl>
  <resourceId>aad91d6d-aeca-4a72-8069-b656efb3041f.wav</resourceId>
  <sessionId>570146ed1504cb1</sessionId>
</CallControl>
```

Response: 204 OK

JSON Example

```
Request
PUT
vmrest/handlers/callhandlers/30600b21-1a4c-47a3-a078-8078984e5376/greetings/Standard/greetingstreamfiles/1033/video
Content-Type: application/json
Accept: application/json
Host: <connection-server>
Connection: keep-alive
authorization: Basic Y2NtYWRtaW5pc3RyYXRvcjplY3NidWxhYg==

{ "resourceId" : " aad91d6d-aeca-4a72-8069-b656efb3041f.wav", "sessionId" : "570146ed1504cb1" }
```

```
Response :
HTTP/1.1 204
Content-Type: application/json
Date: Fri, 15 Jan 2010 15:14:11 GMT
Server:
```

Explanation of Data Fields

Parameter	Data Type	Operations	Comments
CallHandlerObjectId	String(36)	Read Only	The unique identifier of the call handler object to which this greeting rule belongs.
IgnoreDigits	Boolean	Read/Write	A flag indicating whether Cisco Unity Connection takes action in response to touchtone keys pressed by callers during the greeting. Values can be: <ul style="list-style-type: none"> • False: Caller input enabled during greeting • True: Caller input ignored during greeting Default Value: False
PlayWhat	Integer(2)	Read/Write	The source for the greeting when this greeting is active. Default Value: 0 Default Values can be: <ul style="list-style-type: none"> • Call handler - 1 (recording) • Subscriber - 0 (system)

Parameter	Data Type	Operations	Comments
RepromptDelay	Integer(2)	Read/Write	<p>The amount of time (in seconds) that Cisco Unity Connection waits without receiving any input from a caller before Cisco Unity Connection prompts the caller again.</p> <p>Default Value:2 Values can be:</p> <ul style="list-style-type: none"> • 0: Do not wait without receiving caller input and do not replay greeting. • 1 or greater: Wait this number of seconds without receiving any input from the caller before playing the greeting again.
Reprompts	Integer(2)	Read/Write	<p>The number of times to reprompt a caller. After the number of times indicated here, Cisco Unity Connection performs the after-greeting action.</p> <p>Default Value: 0 Values can be:</p> <ul style="list-style-type: none"> • 0: Do not reprompt - Cisco Unity Connection will play the greeting once and then the after-greeting action is taken. • 1 or greater: Number of times to reprompt.
TimeExpires	DateTime(8)	Read/Write	<p>The date and time when the greeting rule expires. The greeting rule is considered not expired (enabled), if the value is NULL or a future date. The greeting rule is considered expired (disabled), the value is in the past.</p>
GreetingType	String(12)	Read Only	<p>The type of greeting, e.g. "Standard," "Off Hours," "Busy," etc.</p>
AfterGreetingAction	Integer(2)	Read/Write	<p>AfterMessageAction can only accept integer with value 1, 2, 4, 6, 8</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 1: Hang up • 2. for other actions with object id (call handler, interview handler, directory handler) • 4. Take Message • 6. Restart greeting • 8: Route from next call routing rule.
AfterGreetingActionObjectId	String(36)	Read/Write	<p>The unique identifier of the CallAction object that determines what action Cisco Unity Connection will take on the call after the greeting is played.</p>

Parameter	Data Type	Operations	Comments
PlayRecordMessagePromp	Integer(2)	Read/Write	<p>A flag indicating whether the "Record your message at the tone..." prompt prior to recording a message.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: System will not play the "Record your message at the tone..." prompt prior to recording a message. • 1: System will play the "Record your message at the tone..." prompt prior to recording a message. <p>Default Value: 1</p>
EnableTransfer	Boolean	Read/Write	<p>A flag indicating when an extension is dialed at the greeting and the extension is not available whether to transfer to another extension.</p> <p>Default value: 0 Values can be:</p> <ul style="list-style-type: none"> • 0: User cannot be transferred to another extension. • 1: User can "be transferred to another extension."
EnablePersonalVideoRecording	Boolean	Read/Write	<p>A flag indicating whether the personal video recording of the user will be used.</p> <p>Values:</p> <ul style="list-style-type: none"> • true : Personal Video Recording is enabled. • false : Personal Video Recording is not enabled. <p>Default value : false</p>
PlayRecordVideoMessagePrompt	Boolean	Read/Write	<p>A flag indicating whether Cisco Unity Connection will prompt callers to wait for a tone before recording their video message.</p> <p>Values:</p> <ul style="list-style-type: none"> • true : Callers will be prompted with a tone before recording their video message. • false : Callers will not be prompted with a tone before recording their video message. <p>Default value : false</p> <p>This flag is editable only when the flag EnablePersonalVideoRecording is set to True.</p>
EnAltGreetDontRingPhone	Boolean	Read/Write	Transfer Callers to Greeting without Ringing User's Phone
EnAltGreetPreventSkip	Boolean	Read/Write	Prevent Callers from Skipping the User's Greeting
EnAltGreetPreventMsg	Boolean	Read/Write	Prevent Callers from Leaving Messages

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Mailbox

Updating Mailbox Quota

Request Body: for use system settings

```
<UserTemplate>
  <ReceiveQuota>-2</ReceiveQuota>
  <SendQuota>-2</SendQuota>
  <WarningQuota>-2</WarningQuota>
</UserTemplate>
```

The following is the response from the *PUT* request for use system settings and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for custom system maximum settings

```
<UserTemplate>
  <ReceiveQuota>-1</ReceiveQuota>
  <SendQuota>-1</SendQuota>
  <WarningQuota>-1</WarningQuota>
</UserTemplate>
```

The following is the response from the *PUT* request for custom system maximum settings and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for custom settings

```
<UserTemplate>
  <ReceiveQuota>1048576</ReceiveQuota>
  <SendQuota>1048576</SendQuota>
  <WarningQuota>1048576</WarningQuota>
</UserTemplate>
```

The following is the response from the *PUT* request for custom settings and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To change mailbox quota, do the following:

```
PUT https://<connection-server>/vmrest/users/<userobjectid>/mailboxattributes
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "ReceiveQuota": "104345",
  "SendQuota": "104345",
  "WarningQuota": "104345"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note Above all values are in bytes and in Cisco Unity Connection Administration, it takes values in MB.

Updating Mailbox Store

Get the mailbox store object ID from the following URI:

```
GET https://<connection-server>/vmrest/voicemailboxstores
Request Body:
<UserTemplate>
  <MailboxStoreObjectId>9dfffae1-eae2-4eab-abe9-7b0773881d54</MailboxStoreObjectId>
</UserTemplates>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note Input should be in bytes, that is multiple of 1024.

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Message Settings

User Template Message Settings

Administrator can use this API to create/update/delete/fetch the message settings. All the parameters of message settings are present in call handler primary template.

```
GET https://<connection server>/vmrestvmrest/usertemplates/<usertemplateobjectid>
```

From the above URI get the call handler primary template URI:

```
GET https://<connection-
server>/vmrestvmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>
```


Updating Message Settings

The following is an example of the PUT request that updates message settings:

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
```

```
<Callhandler>
  <EditMsg>true</EditMsg>
  <MaxMsgLen>1000</MaxMsgLen>
  <AfterMessageAction>1</AfterMessageAction>
  <SendUrgentMsg>2</SendUrgentMsg>
  <UseCallLanguage>false</UseCallLanguage>
  <SendSecureMsg>false</SendSecureMsg>
  <SendPrivateMsg>1</SendPrivateMsg>
  <PlayAfterMessage>2</PlayAfterMessage>
</Callhandler>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "AfterMessageAction": "2",
  "AfterMessageTargetConversation": "SystemTransfer"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response code: 204
```

Updating after Message Actions

Example 1: Call Handler

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
```

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>PHGreeting</AfterMessageTargetConversation>
  <AfterMessageTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</AfterMessageTargetHandlerObjectId>
</Callhandler>
```

The following is an example of the GET request that shows the call handler object ID:

```
GET https://<connection-server>/vmrest/handlers/callhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: Interview Handler

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>

  <AfterMessageTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</AfterMessageTargetHandlerObjectId>

  <AfterMessageTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</AfterMessageTargetHandlerObjectId>
</Callhandler>
```

The following is an example of the GET request that shows the interview handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/interviewhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 3: Directory Handler

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>AD</AfterMessageTargetConversation>

  <AfterMessageTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</AfterMessageTargetHandlerObjectId>

</Callhandler>
```

The following is an example of the GET request that shows the interview handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/directoryhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 4: Conversation

Request Body: for broadcast message administrator

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>

  <AfterMessageTargetConversation>BroadcastMessageAdministrator</AfterMessageTargetConversation>
</Callhandler>
```

The following is the response from the *PUT* request for broadcast message administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for caller system transfer

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>SystemTransfer</AfterMessageTargetConversation>
</Callhandler>
```

The following is the response from the *PUT* request for caller system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for greeting administrator

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>GreetingAdministrator</AfterMessageTargetConversation>
</Callhandler>
```

The following is the response from the *PUT* request for greeting administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

For sign in

```
<Callhandler>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>SubSignIn</AfterMessageTargetConversation>
</Callhandler>
```

The following is the response from the *PUT* request for sign in and the actual response will depend upon the information given by you:

```
Response Code: 204
```

For system transfer:

```
Request Body:
<CallhandlerPrimaryTemplate>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>SubSysTransfer</AfterMessageTargetConversation>
</CallhandlerPrimaryTemplate>
```

The following is the response from the *PUT* request for user system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

```

PUT https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
Accept: application/json
Content-type: application/json
Connection: keep-alive
Request Body:
{
  "AfterMessageAction": "2",
  "AfterMessageTargetConversation": "SystemTransfer"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Ojects	Data Type	Comments
MaxMsgLen	Integer	Read/Write	The maximum recording length (in seconds) for messages left by unidentified callers. Default value : 300 Range: 1-3600
EditMsg	Boolean	Read/Write	Allows callers to be prompted to listen to, add to, rerecord, or delete their messages. Values can be: <ul style="list-style-type: none"> • False: Callers cannot edit messages • True: Callers can edit messages Default value: True

Parameter	Objects	Data Type	Comments
UseDefaultLanguage	Boolean	Read/Write	<p>Values can be:</p> <ul style="list-style-type: none"> • False: The language is the default language defined for the call handler template. • True: The language is derived from the location to which this call handler template belongs. <p>Default value: False</p>
UseCallLanguage	Boolean	Read/Write	<p>This flag allows that language to be the language used by handlers in the system to play prompts for users.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not use the language specified by the system call routing rule to play prompts for users • True: Use the language specified by the system call routing rule to play prompts for users • Default value: False

Parameter	Ojects	Data Type	Comments
SendUrgentMsg	Integer	Read/Write	<p>A flag indicating whether an unidentified caller can mark a message as "urgent."</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Never - messages left by unidentified calls are never marked urgent. • 1: Always - all messages left by unidentified callers are marked urgent. • 2: Ask - Cisco Unity Connection asks unidentified callers whether to mark their messages urgent.
SendPrivateMsg	Integer	Read/Write	<p>Determines if an outside caller can mark their message as private.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Never - No messages are marked private. • 1: Always - All messages are marked private. • 2: Ask - Ask the outside caller if they wish to mark the message as private.

Parameter	Ojects	Data Type	Comments
SendSecureMsg	Boolean	Read/Write	<p>A flag indicating whether an unidentified caller can mark a message as "secure."</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Never - messages left by unidentified calls are never marked secure. • 1: Always - all messages left by unidentified callers are marked secure.
PlayAfterMessage	Integer	Read/Write	<p>Indicates whether the Sent Message Prompt Recording referenced by Post Greeting</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Do not play recording • 1: System default recording • 2: Play recording
AfterMessageAction	Integer	Read/Write	<p>AfterMessageAction can only accept integer with value 1 or 8 or 2</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 1: Hang up • 8: Route from next call routing rule.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Message Action Template

Message Action Template

To edit a message action template, you must get the URI for message action from:

```
GET https://<connection server>/vmrestvmrest/usertemplates/<usertemplateobjectid>
```

Message action URI:

```
GET https://<connection server>/vmrestvmrest/usertemplates/<usertemplateobjectid>/useremplatemessageactions/<useremplatemessageactionsobjectid>
```

Updating Message Action

```
Request URI
PUT https://<connection server>/vmrest/usertemplates/<usertemplateobjectid>/useremplatemessageactions/<objectid>
Request Body:
<UserTemplateMessageAction>
  <VoicemailAction>3</VoicemailAction>
  <RelayAddress>%texoma%@tenant.com</RelayAddress>
</UserTemplateMessageAction>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update message actions, do the following:

```
Request URI:
PUT
https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/useremplatemessageactions/<objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
Request Body:
{
  "VoicemailAction": "3"
  "RelayAddress": "texoma@tenant.com"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```




Note For relay message and accept and relay message option relay address is mandatory and relay address must be correct for e.g.: tenant@cisco.com In the same way all other actions can be edited like: Voicemail Action, Email Action, Fax Action and Delivery Receipt Action

Explanation of Data Fields

Parameter	Data Types	Operation	Comments
VoicemailAction	Integer	Read/Write	<p>The action to take for voicemail messages.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Reject the Message • 1: Accept the Message • 2: Relay the Message • 3: Accept and Relay the Message <p>For 2 and 3, values have to provide RelayAddress.</p>
EmailAction	Integer	Read/Write	<p>The action to take for email messages.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Reject the Message • 1: Accept the Message • 2: Relay the Message • 3: Accept and Relay the Message <p>For 2 and 3, values have to provide RelayAddress.</p>
FaxAction	Integer	Read/Write	<p>The action to take for fax messages.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Reject the Message • 1: Accept the Message • 2: Relay the Message • 3: Accept and Relay the Message <p>For 2 and 3, values have to provide RelayAddress.</p>

Parameter	Data Types	Operation	Comments
DeliveryReceiptAction	Integer	Read/Write	<p>The action to take for delivery receipt messages.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0: Reject the Message • 1: Accept the Message • 2: Relay the Message • 3: Accept and Relay the Message <p>For 2 and 3, values have to provide RelayAddress.</p>
RelayAddress	String (320)	Read/Write	<p>Select the address to which system relays voicemail, email, fax, or delivery receipts when Connection is configured to relay that message type. This field is not editable unless you have selected Relay the Message or Accept and Relay the Message as the message action for one or more message types.</p> <p>Note In order to configure Connection to relay messages, you must first configure an SMTP Smart Host on the System Settings > SMTP Configuration > Smart Host page. Enter a combination of text and tokens that Connection replaces with a value from the user profile. (For example, Connection replaces %Alias% with the alias from each user profile when editing the corresponding user.)</p>

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Notification Devices

User Template Notification Devices

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
```

From the above URI, get the notification devices object ID:

```
https://<connectionserver>/vmrest/usertemplates/<usertemplateobjectid>/usertemplatenotificationdevices
```

Pager

The following URI can be used to view the pager device by using user template notification device object ID:

```
GET https://<connection-server>/vmrest/usertemplates/<user-template-object-id>/user-templatenotificationdevices/user-template-pager-devices/<user-template-notification-device-object-id>
Request Body: Updating Pager
<UserTemplatePagerDevice>
  <Active>true</Active>
  <DisplayName>Pager1</DisplayName>
  <InitialDelay>1</InitialDelay>
  <RepeatNotify>true</RepeatNotify>
  <RepeatInterval>1</RepeatInterval>
  <EventList>AllMessage</EventList>
  <RetriesOnBusy>4</RetriesOnBusy>
  <BusyRetryInterval>5</BusyRetryInterval>
  <RetriesOnRna>4</RetriesOnRna>
  <RnaRetryInterval>15</RnaRetryInterval>
  <RetriesOnSuccess>0</RetriesOnSuccess>
</UserTemplatePagerDevice>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note To activate notification device <PhoneNumber> parameter is mandatory and <RepeatInterval > parameter is mandatory to enable repeat notify. The provide values can be changed and values are given in above table.

JSON Example

To view pager devices, do the following:

```
GET
https://<connection-server>/vmrestvmrest/usertemplates/<user-template-object-id>/user-templatenotificationdevices/
user-template-pager-devices/<user-template-notification-device-object-id>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Explanation of Fields: Pager

```
{
  "URI":"/vmrest/userTemplates/6164ac2d-e8ec-441a-93a0-95f8e18a655c/userTemplateNotificationDevices/userTemplatePagerDevices/ad6bdb87-7ab6-4a2a-b4fb-5dae6fd6804c"

  "TransmitForcedAuthorizationCode":"false"
  "BusyRetryInterval":"5"
  "DialDelay":"1"
  "RetriesOnBusy":"4"
  "RetriesOnRna":"4"
  "RingsToWait":"4"
  "RnaRetryInterval":"15"
  "SendCount":"true"
  "WaitConnect":"true"
  "MediaSwitchObjectId":"0ad0b88c-4a70-4cf7-913e-d5d7a921caca"
  "PhoneSystemURI":"/vmrest/phonesystems/0ad0b88c-4a70-4cf7-913e-d5d7a921caca"
  "ObjectId":"ad6bdb87-7ab6-4a2a-b4fb-5dae6fd6804c"
  "Active":"false"
  "DeviceName":"Pager"
  "DisplayName":"Pager"
  "MaxBody":"512"
  "MaxSubject":"64"
  "SubscriberObjectId":"6164ac2d-e8ec-441a-93a0-95f8e18a655c"
  "UserURI":"/vmrest/users/6164ac2d-e8ec-441a-93a0-95f8e18a655c"
  "SendCallerId":"true"
  "Undeletable":"true"
  "SuccessRetryInterval":"1"
  "RetriesOnSuccess":"0"
  "EventList":"NewVoiceMail"
  "ScheduleSetObjectId":"5fc5a5d7-eaf6-4f4d-80cf-f76f3893ac0e"
  "InitialDelay":"0"
  "RepeatInterval":"0"
  "RepeatNotify":"false"
}
```

Response Code: 200

Explanation of Fields: Pager

Parameter	Data Type	Operation	Comments
Active	Boolean	Read/Write	Enable notification device. Default value: False
DisplayName	String	Read/Write	Name of notification device
DeviceName	String	Read Only	Device name of notification device which can't be changed.
FailDeviceObjectId	String	Read/Write	Have to provide notification device object id. To move back to "Do nothing option", don't provide any object Id in this parameter.

Parameter	Data Type	Operation	Comments
EventList	String	Read/Write	<p>Values can be:</p> <ul style="list-style-type: none"> • All messages: AllMessage • All message urgent only: AllUrgentMessage • All Voice messages: NewVoiceMail • All voice message urgent only: NewUrgentVoiceMai • Dispatch messages: DispatchMessage • Dispatch message urgent only: UrgentDispatchMessage • Fax messages: NewFax • Fax messages urgent only: NewUrgentFax • All voice messages and fax message urgent only: NewUrgentFax,NewVoiceMail • All voice message urgent only and fax message: NewUrgentFax,NewUrgentVoiceMail • Fax message and all voice message: NewFax,NewVoiceMail
PhoneNumber	Integer	Read/Write	To activate notification device phone number is mandatory.
AfterDialDigits	String (32)	Read/Write	The extra digits (if any) that Cisco Unity Connection will dial after the phone number. For numeric pagers, the extra digits are shown on the pager display.
DialDelay	Integer		The amount of time (in seconds) Cisco Unity Connection will wait after detecting a successful call before dialing specified additional digits (if any). Additional digits are contained in AfterDialDigits.
InitialDelay	Integer	Read/Write	<p>The amount of time (in minutes) from the time a message is received until the message notification triggers (if the message matches the criteria).</p> <p>Default Value: 0 Range: 0-120</p>

Parameter	Data Type	Operation	Comments
RingsToWait	Integer	Read/Write	The number of rings Cisco Unity Connection will wait before hanging up if the device does not answer. Default value: 4 Range: 1-100
RetriesOnBusy	Integer	Read/Write	The number of times Cisco Unity Connection will retry the notification device if it is busy. Default value: 4 Range: 0-100
BusyRetryInterval	Integer	Read/Write	The amount of time (in minutes) Cisco Unity Connection will wait between tries if the device is busy. Default value: 5 Range: 1-100
RetriesOnRna	Integer	Read/Write	The number of times Cisco Unity Connection will retry the notification device if the device does not answer. Default value: 4 Range: 0-100
RnaRetryInterval	Integer	Read/Write	The amount of time (in minutes) Cisco Unity Connection will wait between tries if the device does not answer. Default value: 15 Range: 1-100
RetriesOnSuccess	Integer	Read/Write	The number of times Cisco Unity Connection will retry the notification device if it is successful. Default value: 0 Range: 0-100
SuccessRetryInterval	Integer	Read/Write	The amount of time (in minutes) Cisco Unity Connection will wait between tries if the device is successful. Default value: 1 Range: 1-100
MediaSwitchObjectid	String	Read/Write	The unique identifier of the MediaSwitch objects to use for notification.

Phone Devices

Phone devices are of 3 types: work phone, home phone and mobile phone. You have to provide phone device object id to edit any of the 3 devices. All the parameters are same as of pager except 1. That is `<PromptForId>true</PromptForId>`. The following URI can be used to view the phone device using user template notification object ID:

```
GET https://<connection-
server>/vmrest/usertemplates/<usertemplateobjectid>/usertemplatenotificationdevices/usertemplatephonedevice
es/<usertemplatenotificationdeviceobjectid>
```

HTML Devices

The following URI can be used to view the html devices using user template notification object ID:

```
GET https://<connection-
server>/vmrest/usertemplates/<usertemplateobjectid>/usertemplatenotificationdevices/usertemplatehtmldevice
es/<usertemplatenotificationdeviceobjectid>
Request Body: To update an HTML Device
<UserTemplateHtmlDevice>
  <Active>true</Active>
  <SmtpAddress>tenant@cisco.com</SmtpAddress>
  <DisableMobileNumberFromPCA>>false</DisableMobileNumberFromPCA>
  <HeaderText>erwr</HeaderText>
</UserTemplateHtmlDevice>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note To activate the SmtpAddress parameter is mandatory.

Explanation of Fields: HTML Device

Parameter	Data Type	Operation	Comment
DeviceName	String	Read/Write	Device name of HTML notification device.
EventList	String	Read/Write	By default it is NewVoiceMail.
SmtpAddress	String	Read/Write	SMTP address to be notified.
NotificationTemplateID	String	Read/Write	HTML notification templates.
DisableMobileNumberFromPCA	Boolean	Read/Write	Disable Outdial Number From Cisco PCA. Default value: False
CallbackNumber	Integer	Read/Write	Outdial number.

Parameter	Data Type	Operation	Comment
DisableTemplateSelectionFromPCA	Boolean	Read/Write	Disable HTML Template selection From Cisco PCA. Default value: False

SMTP Devices

The following URI can be used to view the SMTP devices using user template notification object ID:

```
GET https://<connection
server>/rest/user-templates/<user-template-object-id>/user-template-notification-devices/user-templates-smtp-devices/<user-template-notification-device-object-id>
Request Body: SMTP Devices
<UserTemplateSmtDevice>
<StaticText>ritu</StaticText>
<Active>true</Active>
<DeviceName>SMTP</DeviceName>
  <SendCallerId>>false</SendCallerId>
  <SendPcaLink>true</SendPcaLink>
  <Undeletable>true</Undeletable>
  <HeaderText>erwr</HeaderText>
  <FooterText>efs</FooterText>
  <EventList>AllMessage, CalendarAppointment, CalendarMeeting</EventList>
</UserTemplateSmtDevice>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of fields: SMTP Devices

Parameter	Data Type	Operation	Comment
Active	Boolean	Read/Write	Enable SMTP notification device. SMTP address is mandatory to enable it. Default value: False
SmtAddress	String	Read/Write	SMTP address to be notified.
InitialDelay	Integer	Read/Write	Delay before the First Notification Attempt
RepeatNotify	Boolean	Read/Write	Repeat Notification if there are Still New Messages. Default value: False
RepeatInterval	Integer	Read/Write	Notification Repeat Interval

Parameter	Data Type	Operation	Comment
EventList	String	Read/Write	Values can be: <ul style="list-style-type: none"> • All messages: AllMessage • All message urgent only: AllUrgentMessage • All Voice messages: NewVoiceMail • All voice message urgent only: NewUrgentVoiceMai • Dispatch messages: DispatchMessage • Dispatch message urgent only: UrgentDispatchMessage • Fax messages: NewFax • Fax messages urgent only: NewUrgentFax • All voice messages and fax message urgent only: NewUrgentFax,NewVoiceMail • All voice message urgent only and fax message: NewUrgentFax,NewUrgentVoiceMail • Fax message and all voice message: NewFax,NewVoiceMail • Calendar Appointment: CalendarAppointment • Calendar meeting: CalendarMeeting
PhoneNumbe	Integer	Read/Write	From which number SMTP notification is sent.
HeaderText	String	Read/Write	Message Header
StaticText	String	Read/Write	Message text
FooterText	String	Read/Write	Message footer
SendCallerId	Boolean	Read/Write	Include Message Information in Message Text. Default value: True
SendCount	Boolean	Read/Write	Include Message Count in Message Text. Default value: True

Parameter	Data Type	Operation	Comment
SendPcaLink	Boolean	Read/Write	Include a Link to the Cisco Unity Connection Web Inbox in Message Text. Default value: False

Creating a new Notification device

The following URI can be used to create a pager device:

```
POST https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/useremplatenotificationdevices/usertemplatepagerdevices
Request Body:
<UserTemplateNotificationDevice>
  <DisplayName>Newpager</DisplayName>
  <MediaSwitchObjectId>8adf6869-4afc-4455-9fd5-d05b68ca6630</MediaSwitchObjectId>
</UserTemplateNotificationDevice>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

```
/vmrest/usertemplates/<objectid>/useremplatenotificationdevices/<objectid>
```

Phone system Id is mandatory to create pager device.

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Phone Menu

User Template Phone Menu

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
```

Updating Phone menu fields

```
Request Body:
<UserTemplate>
  <PromptVolume>50</PromptVolume>
  <PromptSpeed>100</PromptSpeed>
  <IsClockMode24Hour>>false</IsClockMode24Hour>
  <ConversationTui>SubMenu</ConversationTui>
  <MessageLocatorSortOrder>1</MessageLocatorSortOrder>
  <JumpToMessagesOnLogin>>false</JumpToMessagesOnLogin>
</UserTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Updating Conversation fields

Example 1: Edit call actions

```
<User>
  <ExitAction>1</ExitAction>
</User>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: Edit call handler

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>PHTransfer</ExitTargetConversation>
  <ExitTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</ExitTargetHandlerObjectId>
</User>
```

The following URI can be used to view call handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/callhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 3: Interview handler

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>PHInterview</ExitTargetConversation>
  <ExitTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</ExitTargetHandlerObjectId>
</User>
```

The following is an example of the GET request that shows the interview handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/interviewhandlers
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 4: Directory handler

The following is an example of the GET request that shows the directory handler template object ID:

```
GET https://<connection-server>/vmrest/handlers/directoryhandlers
```

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>AD</ExitTargetConversation>
  <ExitTargetHandlerObjectId>c1fc1029-55f4-40dc-a553-40b75664ed8a</ExitTargetHandlerObjectId>
</User>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 5: Conversation

Request Body: for broadcast message administrator

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>BroadcastMessageAdministrator</ExitTargetConversation>
</UserTemplate>
```

The following is the response from the *PUT* request for broadcast message administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for caller system transfer

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>SystemTransfer</ExitTargetConversation>
</User>
```

The following is the response from the *PUT* request for caller system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for greeting administrator

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>GreetingAdministrator</ExitTargetConversation>
</User>
```

The following is the response from the *PUT* request for greeting administrator and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for sign in

```
<UserTemplate>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>SubSignIn</ExitTargetConversation>
</UserTemplate>
```

The following is the response from the *PUT* request for sign in and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Request Body: for user system transfer

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>SubSysTransfer</ExitTargetConversation>
</User>
```

The following is the response from the *PUT* request for user system transfer and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 6: Users with Mailbox

```
<User>
  <ExitAction>2</ExitAction>
  <ExitTargetConversation>PHTransfer</ExitTargetConversation>
  <ExitTargetHandlerObjectId>71cb381b-fd16-4ba8-8a1d-e71684e57b0e</ExitTargetHandlerObjectId>
</User>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example To set exit action, do the following:

```
PUT https://<connection-server>/vmrest/users/<userobjectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

```
{
  "ExitAction": "2",
  "ExitTargetConversation": "SubSysTransfer"
}
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameters	Values
useBriefPrompts	*True: Brief • False: Full

Parameters	Values
PromptVolume	*25: Low <ul style="list-style-type: none"> • 50: Medium • 100: High
PromptSpeed	*50: Slow <ul style="list-style-type: none"> • 100: Normal • 150: Fast • 200: Fastest
IsClockMode24Hour	*True: 24-Hour Clock (00:00 - 23:59) <ul style="list-style-type: none"> • False: 12-Hour Clock (12:00 AM - 11:59 PM)
ConversationTUI	*SubMenu: Classic Conversation <ul style="list-style-type: none"> • SubMenu_Alternate_Custom: Custom keypad mapping1 • SubMenu_Alternate_Custom1: Custom keypad mapping1 • SubMenu_AlternateN: Alternate Keypad Mapping(N) • SubMenu_AlternateS: Alternate Keypad Mapping(S) • SubMenu_AlternateX: Alternate Keypad Mapping (X) • SubMenuOpt1: Optional conversation1 • SubMenu_AlternateI: Standard Conversation
MessageLocatorSortOrde	*1: Last In, First Out <ul style="list-style-type: none"> • 2: First In, First Out



Note PromptVolume and PromptSpeed parameters must be of the same range given in the table.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Playback Message Settings

Playback Message Settings

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrest/usertemplates/<user-template-object-id>
```

Edit Parameters

```
Request Body:
<UserTemplate>
  <Volume>50</Volume>
  <Speed>100</Speed>
  <SayTotalNew>true</SayTotalNew>
  <SayTotalNewVoice>true</SayTotalNewVoice>
  <SayTotalNewEmail>false</SayTotalNewEmail>
  <SayTotalNewFax>false</SayTotalNewFax>
  <SayTotalReceipts>false</SayTotalReceipts>
  <SayTotalSaved>true</SayTotalSaved>
  <SayTotalDraftMsg>false</SayTotalDraftMsg>
  <MessageTypeMenu>false</MessageTypeMenu>
  <NewMessageSortOrder>2</NewMessageSortOrder>
  <SaveMessageOnHangup>1</SaveMessageOnHangup>
  <DeletedMessageSortOrder>1</DeletedMessageSortOrder>
  <SaySender>true</SaySender>
  <SaySenderExtension>false</SaySenderExtension>
  <SayAni>true</SayAni>
  <SayMsgNumber>true</SayMsgNumber>
  <SayTimestampBefore>true</SayTimestampBefore>
  <AutoAdvanceMsgs>false</AutoAdvanceMsgs>
  <ConfirmDeleteMessage>true</ConfirmDeleteMessage>
</UserTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note To sort the message type:

- for new message: <NewMessageSortOrder>2</NewMessageSortOrder>
- for saved message: <SaveMessageSortOrder>1</SaveMessageSortOrder>
- for deleted message: <DeletedMessageSortOrder>1</DeletedMessageSortOrder>

All the possible values for above three parameters are given in the table.

Explanation of Data Fields

Parameter	Data Type	Operation	Description
Volume	Integer	Read/Write	<p>The audio volume expressed as a percentage that Cisco Unity Connection uses to play back message. The range can vary from 0 to 100.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • 25: Low • 50: Medium • 100: High <p>Default value: 50</p>

Parameter	Data Type	Operation	Description
Speed	Integer	ReadWrite	The audio speed system uses to play back messages to the subscriber. The range can vary from 0 to 200. <ul style="list-style-type: none"> • 50: Slow • 100: Normal • 150: Fast • 200: Fastest Default value: 100
SaveMessageOnHangup	Boolean	ReadWrite	A flag indicating when hanging up while listening to a new message, whether the message is marked new again or is marked read. Possible Values: <ul style="list-style-type: none"> • false: New • true: Saved Default Value: false
NewMessageSortOrder	Integer	ReadWrite	The order in which Cisco Unity Connection will sort new messages. Possible values: <ul style="list-style-type: none"> • 1: Newest First • 2: Oldest First Default Value: 1
SavedMessageSortOrder	Integer	ReadWrite	The order in which Cisco Unity Connection will sort saved messages.. Possible values: <ul style="list-style-type: none"> • 1: Newest First • 2: Oldest First Default Value: 2
DeletedMessageSortOrder	Integer	ReadWrite	The order in which Cisco Unity Connection presents deleted messages to the subscriber. Possible values: <ul style="list-style-type: none"> • 1: Newest First • 2: Oldest First Default Value: 2



Note Volume and Speed parameters must be of the same range given in the table.

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Post Greeting Recordings

User Template Post Greeting Recordings

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
```

From the above UR, get the call handler primary template object ID:

```
GET https://<connection-server>/vmrestvmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>
```

Update Post Greeting Recording Settings

```
Request Body:  
<CallhandlerPrimaryTemplate>  
  <PlayPostGreetingRecording>1</PlayPostGreetingRecording>  
</CallhandlerPrimaryTemplate>
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update post greeting recording settings, do the following:

```
Request URI:  
PUT https://<connection-server>/vmrest/callhandlerprimarytemplates/<ObjectId>  
Accept: application/json  
Content-type: application/json  
Connection: keep-alive  
Request Body:  
{  
  "PlayPostGreetingRecording": "1"  
}
```

The following is the response from the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameters	Values
PlayPostGreetingRecording	<ul style="list-style-type: none"> • 0 • D • N • P • F • 1 • P • F • b • A • G • 2 • P • F • G • b • F • G
PostGreetingRecordingObjectId	Object Id of post greeting

Cisco Unity Connection Provisioning Interface (CUPI) API -- Send Message Settings

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Transfer Rules

Transfer Rules API

Administrator can use this API to create/update/delete/fetch the transfer rules. Various attributes of transfer rules can also be updated using this API. The following are the examples to access various types of transfer rules:

- To view call handler primary templates of a particular user template use the URI:

```
GET
https://<connection-server>/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>
```

- From call handler primary template use the URI to view transfer options:

```
vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/transferoptions
```

- To view the alternate transfer rule use the URI:

```
GET
https://<connection-server>/vmrest/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/transferoptions/Alternate
```

- To view closed transfer rule use the URI:

```
GET
https://<connection-server>/vmrest/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/transferoptions/Off%20Hours
```

- To view standard transfer rule use the URI:

```
GET
https://<connection-server>/vmrest/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/transferoptions/Standard
```

Viewing the Alternate Transfer Rule

The following is an example of the GET request that lists the details of alternate transfer rule:

```
GET
https://<connection-server>/vmrest/vmrest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/transferoptions/Alternate
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<TransferOption>
<URI>/vmrest/callhandlerprimarytemplates/45e0a6f4-43c4-472a-8ffb-f6124aa549d0/transferoptions/Alternate</URI>
<CallHandlerObjectId>45e0a6f4-43c4-472a-8ffb-f6124aa549d0</CallHandlerObjectId>
<CallhandlerURI>/vmrest/callhandlerprimarytemplates/45e0a6f4-43c4-472a-8ffb-f6124aa549d0</CallhandlerURI>
<TransferOptionType>Alternate</TransferOptionType>
<Action>1</Action>
<RnaAction>1</RnaAction>
<TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
<TransferAnnounce>>false</TransferAnnounce>
<TransferConfirm>>false</TransferConfirm>
<TransferDtDetect>>false</TransferDtDetect>
<TransferHoldingMode>0</TransferHoldingMode>
<TransferIntroduce>>false</TransferIntroduce>
<TransferRings>4</TransferRings>
<TransferScreening>>false</TransferScreening>
<TransferType>0</TransferType>
<MediaSwitchObjectId>221ee752-5147-4326-9990-d4a138674f9e</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/221ee752-5147-4326-9990-d4a138674f9e</PhoneSystemURI>
<UsePrimaryExtension>>true</UsePrimaryExtension>
<PlayTransferPrompt>>true</PlayTransferPrompt>
<PersonalCallTransfer>>false</PersonalCallTransfer>
<Enabled>>false</Enabled>
</TransferOption>
```

```
Response Code: 200
```

JSON Example

To view the alternate transfer rule, do the following:

```
Request URI:  
GET  
https://<connection-server>/vmrest/callhandlerprimarytemplates/<callhandlerprimarytemplatesobjectid>/transferoptions  
Accept: application/json  
Content-type: application/json  
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
"@total": "3"
"TransferOption": [
{
"URI": "/vmrest/callhandlerprimarytemplates/02dcae3e-2e7c-4997-a36e-0f5276281078/transferoptions/Alternate"
"CallHandlerObjectId": "02dcae3e-2e7c-4997-a36e-0f5276281078"
"CallhandlerURI": "/vmrest/callhandlerprimarytemplates/02dcae3e-2e7c-4997-a36e-0f5276281078"
"TransferOptionType": "Alternate"
"Action": "1"
"RnaAction": "1"
"TransferAnnounce": "false"
"TransferConfirm": "false"
"TransferDtDetect": "false"
"TransferHoldingMode": "0"
"TransferIntroduce": "false"
"TransferRings": "4"
"TransferScreening": "false"
"TransferType": "0"
"MediaSwitchObjectId": "7c654c70-e76c-4e47-b8f6-fa92cec6755e"
"PhoneSystemURI": "/vmrest/phonesystems/7c654c70-e76c-4e47-b8f6-fa92cec6755e"
"UsePrimaryExtension": "true"
"PlayTransferPrompt": "true"
"PersonalCallTransfer": "false"
"Enabled": "true"
}
{
"URI": "/vmrest/callhandlerprimarytemplates/02dcae3e-2e7c-4997-a36e-0f5276281078/transferoptions/Off%20Hours"
"CallHandlerObjectId": "02dcae3e-2e7c-4997-a36e-0f5276281078"
"CallhandlerURI": "/vmrest/callhandlerprimarytemplates/02dcae3e-2e7c-4997-a36e-0f5276281078"
"TransferOptionType": "Off Hours"
"Action": "1"
"RnaAction": "1"
"TransferAnnounce": "false"
"TransferConfirm": "false"
"TransferDtDetect": "false"
"TransferHoldingMode": "0"
"TransferIntroduce": "false"
"TransferRings": "4"
"TransferScreening": "false"
"TransferType": "0"
"MediaSwitchObjectId": "7c654c70-e76c-4e47-b8f6-fa92cec6755e"
"PhoneSystemURI": "/vmrest/phonesystems/7c654c70-e76c-4e47-b8f6-fa92cec6755e"
"UsePrimaryExtension": "true"
"PlayTransferPrompt": "true"
"PersonalCallTransfer": "false"
"Enabled": "true"
}
{
"URI": "/vmrest/callhandlerprimarytemplates/02dcae3e-2e7c-4997-a36e-0f5276281078/transferoptions/Standard"
"CallHandlerObjectId": "02dcae3e-2e7c-4997-a36e-0f5276281078"
"CallhandlerURI": "/vmrest/callhandlerprimarytemplates/02dcae3e-2e7c-4997-a36e-0f5276281078"
"TransferOptionType": "Standard"
"Action": "1"
"RnaAction": "1"
"TransferAnnounce": "false"
"TransferConfirm": "false"
"TransferDtDetect": "false"
"TransferHoldingMode": "0"
"TransferIntroduce": "false"
"TransferRings": "4"
"TransferScreening": "false"
"TransferType": "0"
"MediaSwitchObjectId": "7c654c70-e76c-4e47-b8f6-fa92cec6755e"
"PhoneSystemURI": "/vmrest/phonesystems/7c654c70-e76c-4e47-b8f6-fa92cec6755e"
}
}

```

```

"UsePrimaryExtension":"true"
"PlayTransferPrompt":"true"
"PersonalCallTransfer":"false"
"Enabled":"true"
}
]
}

```

Response Code: 200

Updating Transfer Option

The following is an example of the GET request that updates the transfer option:

```

GET
https://<connection-server>/v1rest/v1rest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/transferoptions/Alternate

```

```

<TransferOption>
<Action>0</Action>
<TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
<TransferAnnounce>false</TransferAnnounce>
<TransferConfirm>false</TransferConfirm>
<TransferHoldingMode>0</TransferHoldingMode>
<TransferIntroduce>false</TransferIntroduce>
<TransferRings>4</TransferRings>
<TransferScreening>false</TransferScreening>
<TransferType>0</TransferType>
</TransferOption>

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

To update the transfer rule, do the following:

```

Request URI:
PUT
https://<connection-server>/v1rest/callhandlerprimarytemplates/<CallhandlerprimarytemplatesObjectId>/transferoptions/Alternate
Accept: application/json
Content-type: application/json
Connection: keep-alive
Request Body:
{
  "Action": "1",
  "TransferAnnounce": "false",
  "TransferConfirm": "false",
  "TransferHoldingMode": "0",
  "TransferIntroduce": "false",
  "TransferRings": "4",
  "TransferScreening": "false",
  "TransferType": "0"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Use the following code snippet to change action to "Enable with no end date":

```
<TransferOption>
<Enabled>true</Enabled>
<TimeExpires></TimeExpires>
</TransferOption>
```



Note Same way closed transfer rule can be edited and for standard transfer rule status cannot be updated.

Explanation of Data Fields

Parameter	Data Type	Operations	Comments
TransferOptionType	String(64)	Read Only	The type of transfer option, e.g. "Standard," "Off Hours," or "Alternate."
Enabled	Boolean	ReadWrite	To enable transfer rules. Possible values: <ul style="list-style-type: none"> • true • false Default value: false
TimeExpires	DateTime	ReadWrite	The date and time when this transfer option expires. If the transfer rule is enabled, the value is NULL or a date in the future. If the transfer rule is disabled, the value is a past date.
Actions	Integer	ReadWrite	A flag indicating whether Cisco Unity Connection transfers the call to the call handler greeting or attempts to transfer the call to an extension. Values can be: <ul style="list-style-type: none"> • 0: Greeting • 1: Extension
TransferType	Integer	ReadWrite	The type of call transfer Cisco Unity Connection will perform - supervised or unsupervised (also referred to as "Release to Switch" transfer). Values: <ul style="list-style-type: none"> • 0: Release to Switch • 1: Supervise Transfer

Parameter	Data Type	Operations	Comments
TransferRings	Integer	Read/Write	<p>The number of times the extension rings before Cisco Unity Connection considers it a "ring no answer" and plays the subscriber or handler greeting.</p> <p>Applies only when the "TransferType" column is set to supervised (1). This value should never be less than 2 for a supervised transfer. Possible Values: 2-20 Default value: 4</p>
PlayTransferPrompt	Boolean	Read/Write	<p>Enables "Wait While I Transfer Your Call" Prompt.</p> <p>Values:</p> <ul style="list-style-type: none"> • false: System will not play the "Wait while I transfer your call" prompt prior to transfer. • true: System will play the "Wait while I transfer your call" prompt prior to transfer. <p>Default value: true</p>
TransferHoldingMode	Integer	Read/Write	<p>The action Cisco Unity Connection will take when the extension is busy.</p> <p>Applies only when the "TransferType" column is set to supervised (1). Values:</p> <ul style="list-style-type: none"> • 0: Send callers to voicemail. • 1: Put callers on hold without asking. • 2: Ask callers to hold.
TransferAnnounce	Boolean	Read/Write	<p>A flag indicating whether Cisco Unity Connection plays "transferring call" when the subscriber answers the phone.</p> <p>Requires a "TransferType" of supervised (1). Values:</p> <ul style="list-style-type: none"> • false: Do not say "Transferring call" when the subscriber answers the phone • true: Say "Transferring call" when the subscriber answers the phone <p>Default value: false</p>
TransferIntroduce	Boolean	Read/Write	<p>A flag indicating whether Cisco Unity Connection will say "call for <recorded name of the call handler>" when the subscriber answers the phone.</p> <p>Requires a "TransferType" of supervised (1). This functionality is normally used when a single extension number is being shared by multiple subscribers or a scenario where the subscriber who is the message recipient takes calls for more than one dialed extension. The introduction alerts the subscriber who answers that the call is for the call handler. Default value: false</p>

Parameter	Data Type	Operations	Comments
TransferConfirm	Boolean	ReadWrite	<p>A flag indicating whether Cisco Unity Connection prompts the subscriber to accept or refuse a call ("Press 1 to take the call or 2 and I'll take a message"). If the call is accepted, it is transferred to the subscriber phone. If the call is refused, Cisco Unity Connection plays the applicable subscriber greeting.</p> <p>Requires a "TransferType" of supervised (1). Typically this is used in conjunction with the call screening option ("TransferScreening" column) enabled. This combination enables the subscriber to hear the name of the caller and then decide if they want to take the call or not.</p> <p>Values:</p> <ul style="list-style-type: none"> • false: Transfer confirm disabled • true: Transfer confirm enabled <p>Default value: false</p>
TransferScreening	Boolean	ReadWrite	<p>Requires a "TransferType" of supervised (1).</p> <p>Normally this column is used along with "TransferConfirm" to allow the subscriber to screen calls. Values:</p> <ul style="list-style-type: none"> • false: Call screening disabled • true: Ask and record caller name <p>Default value: false</p>

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template

User Templates API

Administrator can use this API to create/update/delete/fetch the user template. Various attributes of user template can also be updated using this API.

Listing the User Templates

The request can be used to fetch the list of all user templates. It can also be used to fetch the list of user templates based on specific partition object ID, COS object ID, mailbox store object ID, phone system, call handler object ID.

```
GET https://<connection-server>/vmrest/usertemplates
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<UserTemplates total="1">
  <UserTemplate>
    <URI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-2b13f76bf631</URI>
    <ObjectId>c2056af2-bed7-4a0d-9039-2b13f76bf631</ObjectId>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
    <UseDefaultLanguage>true</UseDefaultLanguage>
    <UseDefaultTimeZone>true</UseDefaultTimeZone>
    <Alias>Texoma_User_Template1</Alias>
    <City/>
    <State/>
    <Country>US</Country>
    <PostalCode/>
    <Manager/>
    <Building/>
    <Address/>
    <DisplayName>Texoma_User_Template1</DisplayName>
    <BillingId/>
    <TimeZone>190</TimeZone>
    <CreationTime>2012-12-26 13:04:28.9</CreationTime>
    <CosObjectId>0ef61610-a729-4b0d-9476-cab095028db3</CosObjectId>
    <CosURI>/vmrest/coses/0ef61610-a729-4b0d-9476-cab095028db3</CosURI>
    <Language>1033</Language>
    <LocationObjectId>27a67e01-bcb4-4012-8b1b-f0a08b736087</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/27a67e01-b
cb4-4012-8b1b-f0a08b736087</LocationURI>
    <AddressMode>0</AddressMode>
    <ClockMode>0</ClockMode>
    <ConversationTui>SubMenu</ConversationTui>
    <GreetByName>true</GreetByName>
    <ListInDirectory>true</ListInDirectory>
    <IsVmEnrolled>true</IsVmEnrolled>
    <SayCopiedNames>true</SayCopiedNames>
    <SayDistributionList>true</SayDistributionList>
    <SayMsgNumber>true</SayMsgNumber>
    <SaySender>true</SaySender>
    <SayTimestampAfter>true</SayTimestampAfter>
    <SayTimestampBefore>>false</SayTimestampBefore>
    <SayTotalNew>>false</SayTotalNew>
    <SayTotalNewEmail>>false</SayTotalNewEmail>
    <SayTotalNewFax>>false</SayTotalNewFax>
    <SayTotalNewVoice>true</SayTotalNewVoice>
    <SayTotalReceipts>>false</SayTotalReceipts>
    <SayTotalSaved>true</SayTotalSaved>
    <Speed>100</Speed>
    <MediaSwitchObjectId>b6df8cb3-b3ce-4797-84f3-5559049df8e8</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/b6df8cb3-b3ce-4797-84f3-
5559049df8e8</PhoneSystemURI>
    <Undeletable>>false</Undeletable>
    <UseBriefPrompts>>false</UseBriefPrompts>
    <Volume>50</Volume>
    <EnAltGreetDontRingPhone>>false</EnAltGreetDontRingPhone>
    <EnAltGreetPreventSkip>>false</EnAltGreetPreventSkip>
    <EnAltGreetPreventMsg>>false</EnAltGreetPreventMsg>
    <EncryptPrivateMessages>>false</EncryptPrivateMessages>
    <DeletedMessageSortOrder>2</DeletedMessageSortOrder>
    <SayAltGreetWarning>>false</SayAltGreetWarning>
    <SaySenderExtension>>false</SaySenderExtension>
    <SayAni>>false</SayAni>
    <ExitCallActionObjectId>0463e49b-cde4-4c30-877c-acfe25966a42</ExitCallActionObjectId>

    <CallAnswerTimeout>4</CallAnswerTimeout>
    <CallHandlerObjectId>83c9b890-6659-4c0f-8be6-8a1a85efee7e</CallHandlerObjectId>

  <CallhandlerURI>/vmrest/callhandlerprimarytemplates/83c9b890-6659-4c0f-8be6-8a1a85efee7e</CallhandlerURI>

```

```

<DisplayNameRule>1</DisplayNameRule>
<DoesntExpire>>false</DoesntExpire>
<CantChange>>false</CantChange>
<MailboxStoreObjectId>e983490d-78a5-45aa-b9a0-31f51460a5bd</MailboxStoreObjectId>
<SavedMessageStackOrder>1234567</SavedMessageStackOrder>
<NewMessageStackOrder>1234567</NewMessageStackOrder>
<MessageLocatorSortOrder>1</MessageLocatorSortOrder>
<SavedMessageSortOrder>2</SavedMessageSortOrder>
<NewMessageSortOrder>1</NewMessageSortOrder>
<MessageTypeMenu>>false</MessageTypeMenu>
<EnablePersonalRules>>true</EnablePersonalRules>
<RecordUnknownCallerName>>true</RecordUnknownCallerName>
<RingPrimaryPhoneFirst>>false</RingPrimaryPhoneFirst>
<PromptSpeed>100</PromptSpeed>
<ExitAction>2</ExitAction>
<ExitTargetConversation>PHGreeting</ExitTargetConversation>
<ExitTargetHandlerObjectId>063956f9-c5ca-4e8b-be67-ff945a8a5d99</ExitTargetHandlerObjectId>
<RepeatMenu>1</RepeatMenu>
<FirstDigitTimeout>5000</FirstDigitTimeout>
<InterdigitDelay>3000</InterdigitDelay>
<PromptVolume>50</PromptVolume>
<DelayAfterGreeting>0</DelayAfterGreeting>
<AddressAfterRecord>>false</AddressAfterRecord>
<ConfirmDeleteMessage>>false</ConfirmDeleteMessage>
<ConfirmDeleteDeletedMessage>>false</ConfirmDeleteDeletedMessage>
<ConfirmDeleteMultipleMessages>>true</ConfirmDeleteMultipleMessages>
<IsClockMode24Hour>>false</IsClockMode24Hour>
<RouteNDRToSender>>true</RouteNDRToSender>
<NotificationType>0</NotificationType>
<SendReadReceipts>1</SendReadReceipts>
<ReceiveQuota>-2</ReceiveQuota>
<SendQuota>-2</SendQuota>
<WarningQuota>-2</WarningQuota>
<IsSetForVmEnrollment>>true</IsSetForVmEnrollment>
<VoiceNameRequired>>false</VoiceNameRequired>
<SendBroadcastMsg>>false</SendBroadcastMsg>
<UpdateBroadcastMsg>>false</UpdateBroadcastMsg>
<ConversationVui>VuiStart</ConversationVui>
<SpeechCompleteTimeout>0</SpeechCompleteTimeout>
<SpeechIncompleteTimeout>750</SpeechIncompleteTimeout>
<UseVui>>false</UseVui>
<SkipPasswordForKnownDevice>>false</SkipPasswordForKnownDevice>
<JumpToMessagesOnLogin>>true</JumpToMessagesOnLogin>
<EnableMessageLocator>>false</EnableMessageLocator>
<MessageAgingPolicyObjectId>6780a194-6efd-4311-819f-494a082bb093</MessageAgingPolicyObjectId>
<MessageAgingPolicyURI>/vmrest/messageagingpolicies/6780a194-6efd-4311-819f-494a082bb093</MessageAgingPolicyURI>
<AssistantRowsPerPage>5</AssistantRowsPerPage>
<InboxMessagesPerPage>20</InboxMessagesPerPage>
<InboxAutoRefresh>15</InboxAutoRefresh>
<InboxAutoResolveMessageRecipients>>true</InboxAutoResolveMessageRecipients>
<PcaAddressBookRowsPerPage>5</PcaAddressBookRowsPerPage>
<ReadOnly>>false</ReadOnly>
<EnableTts>>true</EnableTts>
<ConfirmationConfidenceThreshold>60</ConfirmationConfidenceThreshold>
<AnnounceUpcomingMeetings>60</AnnounceUpcomingMeetings>
<SpeechConfidenceThreshold>40</SpeechConfidenceThreshold>
<SpeechSpeedVsAccuracy>50</SpeechSpeedVsAccuracy>
<SpeechSensitivity>50</SpeechSensitivity>
<EnableVisualMessageLocator>>false</EnableVisualMessageLocator>
<ContinuousAddMode>>false</ContinuousAddMode>

```

```

<NameConfirmation>>false</NameConfirmation>
<CommandDigitTimeout>1500</CommandDigitTimeout>
<SaveMessageOnHangup>>false</SaveMessageOnHangup>
<SendMessageOnHangup>1</SendMessageOnHangup>
<SkipForwardTime>5000</SkipForwardTime>
<SkipReverseTime>5000</SkipReverseTime>
<UseShortPollForCache>>false</UseShortPollForCache>
<SearchByExtensionSearchSpaceObjectId>2e0da21b-54e4-4b51-9f09-
960049a5e806</SearchByExtensionSearchSpaceObjectId>
<SearchByExtensionSearchSpaceURI>/vmrest/searchspaces/2e0da21b-54e4-4b51-9f09-
960049a5e806</SearchByExtensionSearchSpaceURI>

<SearchByNameSearchSpaceObjectId>2e0da21b-54e4-4b51-9f09-960049a5e806</SearchByNameSearchSpaceObjectId>

<SearchByNameSearchSpaceURI>/vmrest/searchspaces/2e0da21b-54e4-4b51-9f09-960049a5e806</SearchByNameSearchSpaceURI>

  <PartitionObjectId>c6ff147e-c32c-4ade-8f12-46427c795c21</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/c6ff147e-c32c-4ade-8f12-46427c795c21</PartitionURI>
  <UseDynamicNameSearchWeight>>false</UseDynamicNameSearchWeight>
  <LdapType>0</LdapType>
  <EnableMessageBookmark>>false</EnableMessageBookmark>
  <SayTotalDraftMsg>>false</SayTotalDraftMsg>
  <EnableSaveDraft>>false</EnableSaveDraft>
  <RetainUrgentMessageFlag>>false</RetainUrgentMessageFlag>
  <SayMessageLength>>false</SayMessageLength>
  <CreateSmtProxyFromCorp>>false</CreateSmtProxyFromCorp>
  <AutoAdvanceMsgs>>false</AutoAdvanceMsgs>
  <SaySenderAfter>>false</SaySenderAfter>
  <SaySenderExtensionAfter>>false</SaySenderExtensionAfter>
  <SayMsgNumberAfter>>false</SayMsgNumberAfter>
  <SayAniAfter>>false</SayAniAfter>
  <SayMessageLengthAfter>>false</SayMessageLengthAfter>
  <UserTemplateRolesURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-
2b13f76bf631/usertemplateroles</UserTemplateRolesURI>

<UserTemplateNotificationDevicesURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-2b13f76bf631/usertemplatenotificationdevices</UserTemplateNotificationDevicesURI>

<UserTemplateExternalServiceAccountsURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-2b13f76bf631/user-template-external-service-accounts</UserTemplateExternalServiceAccountsURI>

<UserTemplateWebPasswordURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-2b13f76bf631/credential/password</UserTemplateWebPasswordURI>

  <UserTemplateVoicePinURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-
2b13f76bf631/credential/pin</UserTemplateVoicePinURI>
  <UserTemplateMessageActionURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-
2b13f76bf631/usertemplatemessageactions</UserTemplateMessageActionURI>
</UserTemplate>
</UserTemplates>

```

Response Code: 200

JSON Example

To view the list of user templates, do the following:

```

Request URI:
GET https://<connection-server>/vmrest/usertemplates
Accept: application/json
Content_type: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
  "@total": "1"
  "UserTemplate": \[
  {
    "URI": "/vmrest/usertemplates/6164ac2d-e8ec-441a-93a0-95f8e18a655c"
    "ObjectId": "6164ac2d-e8ec-441a-93a0-95f8e18a655c"
    "TenantObjectId": "fe6541fb-b42c-44f2-8404-ded14cbf7438"
    "UseDefaultLanguage": "true"
    "UseDefaultTimeZone": "true"
    "Alias": "voicemailusertemplate"
    "DisplayName": "Voice Mail User Template"
    "TimeZone": "190"
    "CreationTime": "2013-02-25T09:39:25Z"
    "CosObjectId": "0b59d616-6434-443a-95aa-00b9d7315d54"
    "CosURI": "/vmrest/coses/0b59d616-6434-443a-95aa-00b9d7315d54"
    "Language": "1033"
    "LocationObjectId": "cff1347e-87af-4409-bead-d1970625f82e"

"LocationURI": "/vmrest/locations/connectionlocations/cff1347e-87af-4409-bead-d1970625f82e"

    "AddressMode": "0"
    "ClockMode": "0"
    "ConversationTui": "SubMenu"
    "GreetByName": "true"
    "ListInDirectory": "true"
    "IsVmEnrolled": "true"
    "SayCopiedNames": "true"
    "SayDistributionList": "true"
    "SayMsgNumber": "true"
    "SaySender": "true"
    "SayTimestampAfter": "true"
    "SayTimestampBefore": "false"
    "SayTotalNew": "false"
    "SayTotalNewEmail": "false"
    "SayTotalNewFax": "false"
    "SayTotalNewVoice": "true"
    "SayTotalReceipts": "false"
    "SayTotalSaved": "true"
    "Speed": "100"
    "MediaSwitchObjectId": "0ad0b88c-4a70-4cf7-913e-d5d7a921caca"
    "PhoneSystemURI": "/vmrest/phonesystems/0ad0b88c-4a70-4cf7-913e-d5d7a921caca"
    "Undeletable": "true"
    "UseBriefPrompts": "false"
    "Volume": "50"
    "EnAltGreetDontRingPhone": "false"
    "EnAltGreetPreventSkip": "false"
    "EnAltGreetPreventMsg": "false"
    "EncryptPrivateMessages": "false"
    "DeletedMessageSortOrder": "2"
    "SayAltGreetWarning": "false"
    "SaySenderExtension": "false"
    "SayAni": "false"
    "ExitCallActionObjectId": "38f2eab0-a78c-49a2-8aee-ff562844d5db"
    "CallAnswerTimeout": "4"
    "CallHandlerObjectId": "6bcd837d-f1cf-43c2-b199-85b457858a16"
    "CallhandlerURI": "/vmrest/callhandlerprimarytemplates/6bcd837d-f1cf-43c2-b199-85b457858a16"
    "DisplayNameRule": "1"
    "DoesntExpire": "false"
    "CantChange": "false"
    "MailboxStoreObjectId": "02089c75-e8a2-4724-a570-9bed7768e716"
    "SavedMessageStackOrder": "1234567"
    "NewMessageStackOrder": "1234567"
    "MessageLocatorSortOrder": "1"
  }
}

```

```

"SavedMessageSortOrder": "2"
"NewMessageSortOrder": "1"
"MessageTypeMenu": "false"
"EnablePersonalRules": "true"
"RecordUnknownCallerName": "true"
"RingPrimaryPhoneFirst": "false"
"PromptSpeed": "100"
"ExitAction": "2"
"ExitTargetConversation": "PHGreeting"
"ExitTargetHandlerObjectId": "1e0bc010-d9aa-4e1a-b001-a1b40f028d4f"
"RepeatMenu": "1"
"FirstDigitTimeout": "5000"
"InterdigitDelay": "3000"
"PromptVolume": "50"
"DelayAfterGreeting": "0"
"AddressAfterRecord": "false"
"ConfirmDeleteMessage": "false"
"ConfirmDeleteDeletedMessage": "false"
"ConfirmDeleteMultipleMessages": "true"
"IsClockMode24Hour": "false"
"RouteNDRToSender": "true"
"NotificationType": "0"
"SendReadReceipts": "1"
"ReceiveQuota": "-2"
"SendQuota": "-2"
"WarningQuota": "-2"
"IsSetForVmEnrollment": "true"
"VoiceNameRequired": "false"
"SendBroadcastMsg": "false"
"UpdateBroadcastMsg": "false"
"ConversationVui": "VuiStart"
"SpeechCompleteTimeout": "0"
"SpeechIncompleteTimeout": "750"
"UseVui": "false"
"SkipPasswordForKnownDevice": "false"
"JumpToMessagesOnLogin": "true"
"EnableMessageLocator": "false"
"MessageAgingPolicyObjectId": "adac77f4-8a77-430d-8836-0fc9aef3fef5"
"MessageAgingPolicyURI": "/vmrest/messageagingpolicies/adac77f4-8a77-430d-8836-0fc9aef3fef5"

"AssistantRowsPerPage": "5"
"InboxMessagesPerPage": "20"
"InboxAutoRefresh": "15"
"InboxAutoResolveMessageRecipients": "true"
"PcaAddressBookRowsPerPage": "5"
"ReadOnly": "false"
"EnableTts": "true"
"ConfirmationConfidenceThreshold": "60"
"AnnounceUpcomingMeetings": "60"
"SpeechConfidenceThreshold": "40"
"SpeechSpeedVsAccuracy": "50"
"SpeechSensitivity": "50"
"EnableVisualMessageLocator": "false"
"ContinuousAddMode": "false"
"NameConfirmation": "false"
"CommandDigitTimeout": "1500"
"SaveMessageOnHangup": "false"
"SendMessageOnHangup": "1"
"SkipForwardTime": "5000"
"SkipReverseTime": "5000"
"UseShortPollForCache": "false"
"SearchByExtensionSearchSpaceObjectId": "2e836e16-f715-4a18-bb7c-

```

Listing Specific Tenant Related User Templates by System Administrator

```

ee5e33281706"
"SearchByExtensionSearchSpaceURI":"/vmrest/searchspaces/2e836e16-f715-4a18-bb7c-
ee5e33281706"
"SearchByNameSearchSpaceObjectId":"2e836e16-f715-4a18-bb7c-ee5e33281706"
"SearchByNameSearchSpaceURI":"/vmrest/searchspaces/2e836e16-f715-4a18-bb7c-
ee5e33281706"
"PartitionObjectId":"97bf6afe-346e-4275-967e-43c50be79d32"
"PartitionURI":"/vmrest/partitions/97bf6afe-346e-4275-967e-43c50be79d32"
"UseDynamicNameSearchWeight":"false"
"LdapType":"0"
"EnableMessageBookmark":"false"
"SayTotalDraftMsg":"false"
"EnableSaveDraft":"false"
"RetainUrgentMessageFlag":"false"
"SayMessageLength":"false"
"CreateSmtpProxyFromCorp":"false"
"AutoAdvanceMsgs":"false"
"SaySenderAfter":"false"
"SaySenderExtensionAfter":"false"
"SayMsgNumberAfter":"false"
"SayAniAfter":"false"
"SayMessageLengthAfter":"false"
"UserTemplateRolesURI":"/vmrest/usertemplates/6164ac2d-e8ec-441a-93a0-
95f8e18a655c/usertemplateroles"
"UserTemplateNotificationDevicesURI":"/vmrest/usertemplates/6164ac2d-e8ec-441a-93a0-
95f8e18a655c/usertemplatenotificationdevices"
"TemplateExternalServiceAccountsURI":"/vmrest/usertemplates/6164ac2d-e8ec-441a-93a0-
95f8e18a655c/templateexternalserviceaccounts"
"UserTemplateWebPasswordURI":"/vmrest/usertemplates/6164ac2d-e8ec-441a-93a0-
95f8e18a655c/credential/password"
"UserTemplateVoicePinURI":"/vmrest/usertemplates/6164ac2d-e8ec-441a-93a0-
95f8e18a655c/credential/pin"
"UserTemplateMessageActionURI":"/vmrest/usertemplates/6164ac2d-e8ec-441a-93a0-
95f8e18a655c/usertemplatemessageactions"
}
\}
}

```

Response Code: 200

Listing Specific Tenant Related User Templates by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectID to list the specific tenant related user templates using the following URI:

```
GET https://<connection-server>/vmrest/usertemplates?query=(TenantObjectId is
<Tenant-ObjectId>)
```

To get the TenantObjectID, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Viewing the Details of Specific User Template

The following is an example of the GET request that lists the details of specific user template represented by the provided value of object ID:

```
GET https://<connection-server>/vmrest/usertemplates/<usertemplateobjectId>
```


The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<UserTemplate>
  <URI> /vmrest/usertemplates/c8af2544-2bc9-44fa-b713-e80f306cf781 </URI>
  <ObjectId>c8af2544-2bc9-44fa-b713-e80f306cf781</ObjectId>
  <UseDefaultLanguage>>true</UseDefaultLanguage>
  <UseDefaultTimeZone>>true</UseDefaultTimeZone>
  <Alias>NewCiscoTemplate2</Alias>
  <City/>
  <State/>
  <Country>US</Country>
  <PostalCode/>
  <Department/>
  <Manager/>
  <Building/>
  <Address/>
  <DisplayName>testmonica</DisplayName>
  <BillingId/>
  <TimeZone>190</TimeZone>
  <CreationTime>2012-06-26 05:02:22.05</CreationTime>
  <CosObjectId>7be9b3f3-1200-403f-984a-04c07b7c5a7b</CosObjectId>
  <CosURI>/vmrest/coses/7be9b3f3-1200-403f-984a-04c07b7c5a7b</CosURI>
  <Language>1033</Language>
  <LocationObjectId>6d4ff2e5-3f26-4a19-b2fa-beca79b4c5e9 </LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/6d4ff2e5-3f26-4a19-b2fa-
  beca79b4c5e9</LocationURI>
  <AddressMode>0</AddressMode>
  <ClockMode>0</ClockMode>
  <ConversationTui>SubMenu</ConversationTui>
  <GreetByName>true</GreetByName>
  <ListInDirectory>true</ListInDirectory>
  <IsVmEnrolled>true</IsVmEnrolled>
  <SayCopiedNames>true</SayCopiedNames>
  <SayDistributionList>true</SayDistributionList>
  <SayMsgNumber>true</SayMsgNumber>
  <SaySender>true</SaySender>
  <SayTimestampAfter>true</SayTimestampAfter>
  <SayTimestampBefore>>false</SayTimestampBefore>
  <SayTotalNew>>false</SayTotalNew>
  <SayTotalNewEmail>>false</SayTotalNewEmail>
  <SayTotalNewFax>>false</SayTotalNewFax>
  <SayTotalNewVoice>true</SayTotalNewVoice>
  <SayTotalReceipts>>false</SayTotalReceipts>
  <SayTotalSaved>true</SayTotalSaved>
  <Speed>100</Speed>
  <MediaSwitchObjectId>1fb12b1c-cf14-4634-b73d-9b9c58ecdf68</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/1fb12b1c-cf14-4634-b73d-
  9b9c58ecdf68</PhoneSystemURI>
  <Undeletable>>false</Undeletable>
  <UseBriefPrompts>>false</UseBriefPrompts>
  <Volume>50</Volume>
  <EnAltGreetDontRingPhone>>false</EnAltGreetDontRingPhone>
  <EnAltGreetPreventSkip>>false</EnAltGreetPreventSkip>
  <EnAltGreetPreventMsg>>false</EnAltGreetPreventMsg>
  <EncryptPrivateMessages>>false</EncryptPrivateMessages>
  <DeletedMessageSortOrder>2</DeletedMessageSortOrder>
  <SayAltGreetWarning>>false</SayAltGreetWarning>
  <SaySenderExtension>>false</SaySenderExtension>
  <SayAni>>false</SayAni>
  <ExitCallActionObjectId>27cbb3a8-f040-4ee9-9686-620c43e3d725</ExitCallActionObjectId>
  <CallAnswerTimeout>4</CallAnswerTimeout>
  <CallHandlerObjectId>9a5ac35a-0df8-4ebb-8e19-77f936dfd263</CallHandlerObjectId>
  <CallhandlerURI>/vmrest/callhandlerprimarytemplates/9a5ac35a-0df8-4ebb-8e19-
  77f936dfd263</CallhandlerURI>
  <DisplayNameRule>1</DisplayNameRule>
  <DoesntExpire>>false</DoesntExpire>

```

```

<CantChange>>false</CantChange>
<MailboxStoreObjectId>cfc43112-601b-4764-ba92-b0220e9d7f23</MailboxStoreObjectId>
<SavedMessageStackOrder>1234567</SavedMessageStackOrder>
<NewMessageStackOrder>1234567</NewMessageStackOrder>
<MessageLocatorSortOrder>1</MessageLocatorSortOrder>
<SavedMessageSortOrder>2</SavedMessageSortOrder>
<NewMessageSortOrder>1</NewMessageSortOrder>
<MessageTypeMenu>>false</MessageTypeMenu>
<EnablePersonalRules>>true</EnablePersonalRules>
<RecordUnknownCallerName>>true</RecordUnknownCallerName>
<RingPrimaryPhoneFirst>>false</RingPrimaryPhoneFirst>
<PromptSpeed>100</PromptSpeed>
<ExitAction>2</ExitAction>
<ExitTargetConversation>PHTransfer</ExitTargetConversation>
<ExitTargetHandlerObjectId>7ae69f21-1c99-4cc1-96c3-a1bbellfd4ca</ExitTargetHandlerObjectId>

<RepeatMenu>1</RepeatMenu>
<FirstDigitTimeout>5000</FirstDigitTimeout>
<InterdigitDelay>3000</InterdigitDelay>
<PromptVolume>50</PromptVolume>
<AddressAfterRecord>>false</AddressAfterRecord>
<ConfirmDeleteMessage>>false</ConfirmDeleteMessage>
<ConfirmDeleteDeletedMessage>>false</ConfirmDeleteDeletedMessage>
<ConfirmDeleteMultipleMessages>>true</ConfirmDeleteMultipleMessages>
<IsClockMode24Hour>>false</IsClockMode24Hour>
<RouteNDRToSender>>true</RouteNDRToSender>
<NotificationType>0</NotificationType>
<SendReadReceipts>0</SendReadReceipts>
<ReceiveQuota>-1</ReceiveQuota>
<SendQuota>-1</SendQuota>
<WarningQuota>-1</WarningQuota>
<IsSetForVmEnrollment>>true</IsSetForVmEnrollment>
<VoiceNameRequired>>false</VoiceNameRequired>
<SendBroadcastMsg>>true</SendBroadcastMsg>
<UpdateBroadcastMsg>>false</UpdateBroadcastMsg>
<ConversationVui>VuiStart</ConversationVui>
<SpeechCompleteTimeout>0</SpeechCompleteTimeout>
<SpeechIncompleteTimeout>750</SpeechIncompleteTimeout>
<UseVui>>false</UseVui>
<SkipPasswordForKnownDevice>>false</SkipPasswordForKnownDevice>
<JumpToMessagesOnLogin>>true</JumpToMessagesOnLogin>
<EnableMessageLocator>>false</EnableMessageLocator>
<MessageAgingPolicyObjectId>2e02eca6-270b-4b7f-a153-f03ea74d403d</MessageAgingPolicyObjectId>
<MessageAgingPolicyURI>/vmrest/messageagingpolicies/2e02eca6-270b-4b7f-a153-f03ea74d403d</MessageAgingPolicyURI>
<AssistantRowsPerPage>5</AssistantRowsPerPage>
<InboxMessagesPerPage>20</InboxMessagesPerPage>
<InboxAutoRefresh>15</InboxAutoRefresh>
<InboxAutoResolveMessageRecipients>>true</InboxAutoResolveMessageRecipients>
<PcaAddressBookRowsPerPage>5</PcaAddressBookRowsPerPage>
<ReadOnly>>false</ReadOnly>
<EnableTts>>true</EnableTts>
<ConfirmationConfidenceThreshold>60</ConfirmationConfidenceThreshold>
<AnnounceUpcomingMeetings>60</AnnounceUpcomingMeetings>
<SpeechConfidenceThreshold>40</SpeechConfidenceThreshold>
<SpeechSpeedVsAccuracy>50</SpeechSpeedVsAccuracy>
<SpeechSensitivity>50</SpeechSensitivity>
<EnableVisualMessageLocator>>false</EnableVisualMessageLocator>
<ContinuousAddMode>>false</ContinuousAddMode>
<NameConfirmation>>false</NameConfirmation>
<CommandDigitTimeout>1500</CommandDigitTimeout>
<SaveMessageOnHangup>>false</SaveMessageOnHangup>

```

```

<SendMessageOnHangup>1</SendMessageOnHangup>
<SkipForwardTime>5000</SkipForwardTime>
<SkipReverseTime>5000</SkipReverseTime>
<UseShortPollForCache>false</UseShortPollForCache>
<SearchByExtensionSearchSpaceObjectId>25e2e004-c194-4593-9961-
bdcaf5dd7189</SearchByExtensionSearchSpaceObjectId>
<SearchByExtensionSearchSpaceURI>/vmrest/searchspaces/25e2e004-c194-4593-9961-
bdcaf5dd7189</SearchByExtensionSearchSpaceURI>
<SearchByNameSearchSpaceObjectId>25e2e004-c194-4593-9961-
bdcaf5dd7189</SearchByNameSearchSpaceObjectId>
<SearchByNameSearchSpaceURI>/vmrest/searchspaces/25e2e004-c194-4593-9961-
bdcaf5dd7189</SearchByNameSearchSpaceURI>
<PartitionObjectId>12101df7-ecd2-4a48-b5b9-9a96b5f85a25</PartitionObjectId>
<PartitionURI>/vmrest/partitions/12101df7-ecd2-4a48-b5b9-9a96b5f85a25</PartitionURI>
<UseDynamicNameSearchWeight>false</UseDynamicNameSearchWeight>
<LdapType>0</LdapType>
<EnableMessageBookmark>false</EnableMessageBookmark>
<SayTotalDraftMsg>false</SayTotalDraftMsg>
<EnableSaveDraft>false</EnableSaveDraft>
<RetainUrgentMessageFlag>false</RetainUrgentMessageFlag>
<SayMessageLength>false</SayMessageLength>
<CreateSmtProxyFromCorp>false</CreateSmtProxyFromCorp>
<AutoAdvanceMsgs>false</AutoAdvanceMsgs>
<SaySenderAfter>false</SaySenderAfter>
<SaySenderExtensionAfter>false</SaySenderExtensionAfter>
<SayMsgNumberAfter>false</SayMsgNumberAfter>
<SayAniAfter>false</SayAniAfter>
<SayMessageLengthAfter>false</SayMessageLengthAfter>
<UserTemplateRolesURI>/vmrest/usertemplates/c8af2544-2bc9-44fa-b713-
e80f306cf781/usertemplateroles</UserTemplateRolesURI>
<UserTemplateNotificationDevicesURI>/vmrest/usertemplates/c8af2544-2bc9-44fa-b713-
e80f306cf781/usertemplatenotificationdevices</UserTemplateNotificationDevicesURI>
<UserTemplateWebPasswordURI>/vmrest/usertemplates/c8af2544-2bc9-44fa-b713-
e80f306cf781/credential/password</UserTemplateWebPasswordURI>
<UserTemplateVoicePinURI>/vmrest/usertemplates/c8af2544-2bc9-44fa-b713-
e80f306cf781/credential/pin</UserTemplateVoicePinURI>
<UserTemplateMessageActionURI>/vmrest/usertemplates/c8af2544-2bc9-44fa-b713-
e80f306cf781/usertemplatemessageactions</UserTemplateMessageActionURI>
</UserTemplate>

```

Response Code: 200

JSON Example

To view the particular user template, do the following:

```

Request URI:
GET https://<connection-server>/vmrest/usertemplates/<usertemplateobjectId>
Accept: application/json
Content_type: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":"/vmrest/usertemplates/a46d269a-6614-485b-8649-099afef0604d"
  "ObjectId":"a46d269a-6614-485b-8649-099afef0604d"
  "UseDefaultLanguage":"true"
  "UseDefaultTimeZone":"true"
  "Alias":"voicemailusertemplate"
  "DisplayName":"Voice Mail User Template"
  "TimeZone":"190"
  "CreationTime":"2013-02-21T11:39:11Z"
  "CosObjectId":"c93854b3-c59f-44e7-a6a9-0a6e17578672"
  "CosURI":"/vmrest/coses/c93854b3-c59f-44e7-a6a9-0a6e17578672"
  "Language":"1033"
  "LocationObjectId":"830e1a2d-8e90-459f-88f7-700497ba975c"
  "LocationURI":"/vmrest/locations/connectionlocations/830e1a2d-8e90-459f-88f7-700497ba975c"
  "AddressMode":"0"
  "ClockMode":"0"
  "ConversationTui":"SubMenu"
  "GreetByName":"true"
  "ListInDirectory":"true"
  "IsVmEnrolled":"true"
  "SayCopiedNames":"true"
  "SayDistributionList":"true"
  "SayMsgNumber":"true"
  "SaySender":"true"
  "SayTimestampAfter":"true"
  "SayTimestampBefore":"false"
  "SayTotalNew":"false"
  "SayTotalNewEmail":"false"
  "SayTotalNewFax":"false"
  "SayTotalNewVoice":"true"
  "SayTotalReceipts":"false"
  "SayTotalSaved":"true"
  "Speed":"100"
  "MediaSwitchObjectId":"caf093ef-5e7b-47dd-9db7-9df360d2923e"
  "PhoneSystemURI":"/vmrest/phonesystems/caf093ef-5e7b-47dd-9db7-9df360d2923e"
  "Undeletable":"true"
  "UseBriefPrompts":"false"
  "Volume":"50"
  "EnAltGreetDontRingPhone":"false"
  "EnAltGreetPreventSkip":"false"
  "EnAltGreetPreventMsg":"false"
  "EncryptPrivateMessages":"false"
  "DeletedMessageSortOrder":"2"
  "SayAltGreetWarning":"false"
  "SaySenderExtension":"false"
  "SayAni":"false"
  "ExitCallActionObjectId":"ecc8570c-c0da-493e-a520-b125529cfee1"
  "CallAnswerTimeout":"4"
  "CallHandlerObjectId":"f4f87905-c20a-4df3-b20e-446c1798df19"
  "CallhandlerURI":"/vmrest/callhandlerprimarytemplates/f4f87905-c20a-4df3-b20e-446c1798df19"
  "DisplayNameRule":"1"
  "DoesntExpire":"false"
  "CantChange":"false"
  "MailboxStoreObjectId":"90e5847b-3a87-4c92-a753-eda6ea0fdb4c"
  "SavedMessageStackOrder":"1234567"
  "NewMessageStackOrder":"1234567"
  "MessageLocatorSortOrder":"1"
  "SavedMessageSortOrder":"2"
  "NewMessageSortOrder":"1"
  "MessageTypeMenu":"false"
  "EnablePersonalRules":"true"
  "RecordUnknownCallerName":"true"
}
```

Viewing the Details of Specific User Template

```

"RingPrimaryPhoneFirst": "false"
"PromptSpeed": "100"
"ExitAction": "2"
"ExitTargetConversation": "PHGreeting"
"ExitTargetHandlerObjectId": "d085ebc6-99ac-46a5-92f3-d26f52701585"
"RepeatMenu": "1"
"FirstDigitTimeout": "5000"
"InterdigitDelay": "3000"
"PromptVolume": "50"
"AddressAfterRecord": "false"
"ConfirmDeleteMessage": "false"
"ConfirmDeleteDeletedMessage": "false"
"ConfirmDeleteMultipleMessages": "true"
"IsClockMode24Hour": "false"
"RouteNDRToSender": "true"
"NotificationType": "0"
"SendReadReceipts": "1"
"ReceiveQuota": "-2"
"SendQuota": "-2"
"WarningQuota": "-2"
"IsSetForVmEnrollment": "true"
"VoiceNameRequired": "false"
"SendBroadcastMsg": "false"
"UpdateBroadcastMsg": "false"
"ConversationVui": "VuiStart"
"SpeechCompleteTimeout": "0"
"SpeechIncompleteTimeout": "750"
"UseVui": "false"
"SkipPasswordForKnownDevice": "false"
"JumpToMessagesOnLogin": "true"
"EnableMessageLocator": "false"
"MessageAgingPolicyObjectId": "12b765a8-a67b-47f6-8ede-3e02aea9f4fe"
"MessageAgingPolicyURI": "/vmrest/messageagingpolicies/12b765a8-a67b-47f6-8ede-3e02aea9f4fe"
"AssistantRowsPerPage": "5"
"InboxMessagesPerPage": "20"
"InboxAutoRefresh": "15"
"InboxAutoResolveMessageRecipients": "true"
"PcaAddressBookRowsPerPage": "5"
"ReadOnly": "false"
"EnableTts": "true"
"ConfirmationConfidenceThreshold": "60"
"AnnounceUpcomingMeetings": "60"
"SpeechConfidenceThreshold": "40"
"SpeechSpeedVsAccuracy": "50"
"SpeechSensitivity": "50"
"EnableVisualMessageLocator": "false"
"ContinuousAddMode": "false"
"NameConfirmation": "false"
"CommandDigitTimeout": "1500"
"SaveMessageOnHangup": "false"
"SendMessageOnHangup": "1"
"SkipForwardTime": "5000"
"SkipReverseTime": "5000"
"UseShortPollForCache": "false"
"SearchByExtensionSearchSpaceObjectId": "7aaf45b8-ab06-4dda-af16-378b04a95912"
"SearchByExtensionSearchSpaceURI": "/vmrest/searchspaces/7aaf45b8-ab06-4dda-af16-378b04a95912"
"SearchByNameSearchSpaceObjectId": "7aaf45b8-ab06-4dda-af16-378b04a95912"
"SearchByNameSearchSpaceURI": "/vmrest/searchspaces/7aaf45b8-ab06-4dda-af16-378b04a95912"
"PartitionObjectId": "9c010254-1493-4e1a-9e47-fe2494792744"
"PartitionURI": "/vmrest/partitions/9c010254-1493-4e1a-9e47-fe2494792744"
"UseDynamicNameSearchWeight": "false"

```

```

"LdapType": "0"
"EnableMessageBookmark": "false"
"SayTotalDraftMsg": "false"
"EnableSaveDraft": "false"
"RetainUrgentMessageFlag": "false"
"SayMessageLength": "false"
"CreateSmtProxyFromCorp": "false"
"AutoAdvanceMsgs": "false"
"SaySenderAfter": "false"
"SaySenderExtensionAfter": "false"
"SayMsgNumberAfter": "false"
"SayAniAfter": "false"
"SayMessageLengthAfter": "false"
"UserTemplateRolesURI": "/vmrest/usertemplates/a46d269a-6614-485b-8649-099afef0604d/usertemplateroles"
"UserTemplateNotificationDevicesURI": "/vmrest/usertemplates/a46d269a-6614-485b-8649-099afef0604d/usertemplatenotificationdevices"
"TemplateExternalServiceAccountsURI": "/vmrest/usertemplates/a46d269a-6614-485b-8649-099afef0604d/templateexternalserviceaccounts"
"UserTemplateWebPasswordURI": "/vmrest/usertemplates/a46d269a-6614-485b-8649-099afef0604d/credential/password"
"UserTemplateVoicePinURI": "/vmrest/usertemplates/a46d269a-6614-485b-8649-099afef0604d/credential/pin"
"UserTemplateMessageActionURI": "/vmrest/usertemplates/a46d269a-6614-485b-8649-099afef0604d/usertemplatemessageactions"
}

```

Response Code: 200

Viewing the Details of the User Templates Based on Partition Object ID

The following is an example of the GET request that lists the details of specific user template represented by the provided value of partition object ID:

```

GET
https://<connection-server>/vmrest/usertemplates?query=(PartitionObjectId%20is%20<PartitionObjectId>)

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Viewing the Details of the User Templates Based on Partition Object ID

```

<UserTemplate>
  <URI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-2b13f76bf631</URI>
  <ObjectId>c2056af2-bed7-4a0d-9039-2b13f76bf631</ObjectId>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <UseDefaultTimeZone>true</UseDefaultTimeZone>
  <Alias>Texoma_User_Template1</Alias>
  <City/>
  <State/>
  <Country>US</Country>
  <PostalCode/>
  <Manager/>
  <Building/>
  <Address/>
  <DisplayName>Texoma_User_Template1</DisplayName>
  <BillingId/>
  <TimeZone>190</TimeZone>
  <CreationTime>2012-12-26 13:04:28.9</CreationTime>
  <CosObjectId>0ef61610-a729-4b0d-9476-cab095028db3</CosObjectId>
  <CosURI>/vmrest/coses/0ef61610-a729-4b0d-9476-cab095028db3</CosURI>
  <Language>1033</Language>
  <LocationObjectId>27a67e01-bcb4-4012-8b1b-f0a08b736087</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/27a67e01-bcb4-4012-8b1b-
f0a08b736087</LocationURI>
  <AddressMode>0</AddressMode>
  <ClockMode>0</ClockMode>
  <ConversationTui>SubMenu</ConversationTui>
  <GreetByName>true</GreetByName>
  <ListInDirectory>true</ListInDirectory>
  <IsVmEnrolled>true</IsVmEnrolled>
  <SayCopiedNames>true</SayCopiedNames>
  <SayDistributionList>true</SayDistributionList>
  <SayMsgNumber>true</SayMsgNumber>
  <SaySender>true</SaySender>
  <SayTimestampAfter>true</SayTimestampAfter>
  <SayTimestampBefore>>false</SayTimestampBefore>
  <SayTotalNew>>false</SayTotalNew>
  <SayTotalNewEmail>>false</SayTotalNewEmail>
  <SayTotalNewFax>>false</SayTotalNewFax>
  <SayTotalNewVoice>true</SayTotalNewVoice>
  <SayTotalReceipts>>false</SayTotalReceipts>
  <SayTotalSaved>true</SayTotalSaved>
  <Speed>100</Speed>
  <MediaSwitchObjectId>b6df8cb3-b3ce-4797-84f3-5559049df8e8</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/b6df8cb3-b3ce-4797-84f3-
5559049df8e8</PhoneSystemURI>
  <Undeletable>>false</Undeletable>
  <UseBriefPrompts>>false</UseBriefPrompts>
  <Volume>50</Volume>
  <EnAltGreetDontRingPhone>>false</EnAltGreetDontRingPhone>
  <EnAltGreetPreventSkip>>false</EnAltGreetPreventSkip>
  <EnAltGreetPreventMsg>>false</EnAltGreetPreventMsg>
  <EncryptPrivateMessages>>false</EncryptPrivateMessages>
  <DeletedMessageSortOrder>2</DeletedMessageSortOrder>
  <SayAltGreetWarning>>false</SayAltGreetWarning>
  <SaySenderExtension>>false</SaySenderExtension>
  <SayAni>>false</SayAni>
  <ExitCallActionObjectId>0463e49b-cde4-4c30-877c-acfe25966a42</ExitCallActionObjectId>
  <CallAnswerTimeout>4</CallAnswerTimeout>
  <CallHandlerObjectId>83c9b890-6659-4c0f-8be6-8a1a85efee7e</CallHandlerObjectId>
  <CallHandlerURI>/vmrest/callhandlerprimarytemplates/83c9b890-6659-4c0f-8be6-
8a1a85efee7e</CallHandlerURI>
  <DisplayNameRule>1</DisplayNameRule>
  <DoesntExpire>>false</DoesntExpire>
  <CantChange>>false</CantChange>

```



```

<MailboxStoreObjectId>e983490d-78a5-45aa-b9a0-31f51460a5bd</MailboxStoreObjectId>
<SavedMessageStackOrder>1234567</SavedMessageStackOrder>
<NewMessageStackOrder>1234567</NewMessageStackOrder>
<MessageLocatorSortOrder>1</MessageLocatorSortOrder>
<SavedMessageSortOrder>2</SavedMessageSortOrder>
<NewMessageSortOrder>1</NewMessageSortOrder>
<MessageTypeMenu>>false</MessageTypeMenu>
<EnablePersonalRules>>true</EnablePersonalRules>
<RecordUnknownCallerName>>true</RecordUnknownCallerName>
<RingPrimaryPhoneFirst>>false</RingPrimaryPhoneFirst>
<PromptSpeed>100</PromptSpeed>
<ExitAction>2</ExitAction>
<ExitTargetConversation>PHGreeting</ExitTargetConversation>
<ExitTargetHandlerObjectId>063956f9-c5ca-4e8b-be67-ff945a8a5d99</ExitTargetHandlerObjectId>
<RepeatMenu>1</RepeatMenu>
<FirstDigitTimeout>5000</FirstDigitTimeout>
<InterdigitDelay>3000</InterdigitDelay>
<PromptVolume>50</PromptVolume>
<DelayAfterGreeting>0</DelayAfterGreeting>
<AddressAfterRecord>>false</AddressAfterRecord>
<ConfirmDeleteMessage>>false</ConfirmDeleteMessage>
<ConfirmDeleteDeletedMessage>>false</ConfirmDeleteDeletedMessage>
<ConfirmDeleteMultipleMessages>>true</ConfirmDeleteMultipleMessages>
<IsClockMode24Hour>>false</IsClockMode24Hour>
<RouteNDRToSender>>true</RouteNDRToSender>
<NotificationType>0</NotificationType>
<SendReadReceipts>1</SendReadReceipts>
<ReceiveQuota>-2</ReceiveQuota>
<SendQuota>-2</SendQuota>
<WarningQuota>-2</WarningQuota>
<IsSetForVmEnrollment>>true</IsSetForVmEnrollment>
<VoiceNameRequired>>false</VoiceNameRequired>
<SendBroadcastMsg>>false</SendBroadcastMsg>
<UpdateBroadcastMsg>>false</UpdateBroadcastMsg>
<ConversationVui>VuiStart</ConversationVui>
<SpeechCompleteTimeout>0</SpeechCompleteTimeout>
<SpeechIncompleteTimeout>750</SpeechIncompleteTimeout>
<UseVui>>false</UseVui>
<SkipPasswordForKnownDevice>>false</SkipPasswordForKnownDevice>
<JumpToMessagesOnLogin>>true</JumpToMessagesOnLogin>
<EnableMessageLocator>>false</EnableMessageLocator>
<MessageAgingPolicyObjectId>6780a194-6efd-4311-819f-494a082bb093</MessageAgingPolicyObjectId>
<MessageAgingPolicyURI>/vmrest/messageagingpolicies/6780a194-6efd-4311-819f-494a082bb093</MessageAgingPolicyURI>
<AssistantRowsPerPage>5</AssistantRowsPerPage>
<InboxMessagesPerPage>20</InboxMessagesPerPage>
<InboxAutoRefresh>15</InboxAutoRefresh>
<InboxAutoResolveMessageRecipients>>true</InboxAutoResolveMessageRecipients>
<PcaAddressBookRowsPerPage>5</PcaAddressBookRowsPerPage>
<ReadOnly>>false</ReadOnly>
<EnableTts>>true</EnableTts>
<ConfirmationConfidenceThreshold>60</ConfirmationConfidenceThreshold>
<AnnounceUpcomingMeetings>60</AnnounceUpcomingMeetings>
<SpeechConfidenceThreshold>40</SpeechConfidenceThreshold>
<SpeechSpeedVsAccuracy>50</SpeechSpeedVsAccuracy>
<SpeechSensitivity>50</SpeechSensitivity>
<EnableVisualMessageLocator>>false</EnableVisualMessageLocator>
<ContinuousAddMode>>false</ContinuousAddMode>
<NameConfirmation>>false</NameConfirmation>
<CommandDigitTimeout>1500</CommandDigitTimeout>
<SaveMessageOnHangup>>false</SaveMessageOnHangup>
<SendMessageOnHangup>1</SendMessageOnHangup>

```

```

<SkipForwardTime>5000</SkipForwardTime>
<SkipReverseTime>5000</SkipReverseTime>
<UseShortPollForCache>>false</UseShortPollForCache>
<SearchByExtensionSearchSpaceObjectId>2e0da21b-54e4-4b51-9f09-
960049a5e806</SearchByExtensionSearchSpaceObjectId>
<SearchByExtensionSearchSpaceURI>/vmrest/searchspaces/2e0da21b-54e4-4b51-9f09-
960049a5e806</SearchByExtensionSearchSpaceURI>
<SearchByNameSearchSpaceObjectId>2e0da21b-54e4-4b51-9f09-
960049a5e806</SearchByNameSearchSpaceObjectId>
<SearchByNameSearchSpaceURI>/vmrest/searchspaces/2e0da21b-54e4-4b51-9f09-
960049a5e806</SearchByNameSearchSpaceURI>
<PartitionObjectId>c6ff147e-c32c-4ade-8f12-46427c795c21</PartitionObjectId>
<PartitionURI>/vmrest/partitions/c6ff147e-c32c-4ade-8f12-46427c795c21</PartitionURI>
<UseDynamicNameSearchWeight>>false</UseDynamicNameSearchWeight>
<LdapType>0</LdapType>
<EnableMessageBookmark>>false</EnableMessageBookmark>
<SayTotalDraftMsg>>false</SayTotalDraftMsg>
<EnableSaveDraft>>false</EnableSaveDraft>
<RetainUrgentMessageFlag>>false</RetainUrgentMessageFlag>
<SayMessageLength>>false</SayMessageLength>
<CreateSmtProxyFromCorp>>false</CreateSmtProxyFromCorp>
<AutoAdvanceMsgs>>false</AutoAdvanceMsgs>
<SaySenderAfter>>false</SaySenderAfter>
<SaySenderExtensionAfter>>false</SaySenderExtensionAfter>
<SayMsgNumberAfter>>false</SayMsgNumberAfter>
<SayAniAfter>>false</SayAniAfter>
<SayMessageLengthAfter>>false</SayMessageLengthAfter>
<UserTemplateRolesURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-
2b13f76bf631/usertemplateroles</UserTemplateRolesURI>
<UserTemplateNotificationDevicesURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-
2b13f76bf631/usertemplatenotificationdevices</UserTemplateNotificationDevicesURI>
<TemplateExternalServiceAccountsURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-
2b13f76bf631/templateexternalserviceaccounts</TemplateExternalServiceAccountsURI>
<UserTemplateWebPasswordURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-
2b13f76bf631/credential/password</UserTemplateWebPasswordURI>
<UserTemplateVoicePinURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-
2b13f76bf631/credential/pin</UserTemplateVoicePinURI>
<UserTemplateMessageActionURI>/vmrest/usertemplates/c2056af2-bed7-4a0d-9039-
2b13f76bf631/usertemplatemessageactions</UserTemplateMessageActionURI>
</UserTemplate>

```

Response Code: 200

JSON Example

To view the details of the user templates based on partition object ID, do the following:

```

Request URI:
GET
https://<connection-server>/vmrest/usertemplates?query=(PartitionObjectId%20is%20<PartitionObjectId>)
Accept: application/json
Content_type: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":"/vmrest/usertemplates/a46d269a-6614-485b-8649-099afef0604d"
  "ObjectId":"a46d269a-6614-485b-8649-099afef0604d"
  "UseDefaultLanguage":"true"
  "UseDefaultTimeZone":"true"
  "Alias":"voicemailusertemplate"
  "DisplayName":"Voice Mail User Template"
  "TimeZone":"190"
  "CreationTime":"2013-02-21T11:39:11Z"
  "CosObjectId":"c93854b3-c59f-44e7-a6a9-0a6e17578672"
  "CosURI":"/vmrest/coses/c93854b3-c59f-44e7-a6a9-0a6e17578672"
  "Language":"1033"
  "LocationObjectId":"830e1a2d-8e90-459f-88f7-700497ba975c"
  "LocationURI":"/vmrest/locations/connectionlocations/830e1a2d-8e90-459f-88f7-700497ba975c"
  "AddressMode":"0"
  "ClockMode":"0"
  "ConversationTui":"SubMenu"
  "GreetByName":"true"
  "ListInDirectory":"true"
  "IsVmEnrolled":"true"
  "SayCopiedNames":"true"
  "SayDistributionList":"true"
  "SayMsgNumber":"true"
  "SaySender":"true"
  "SayTimestampAfter":"true"
  "SayTimestampBefore":"false"
  "SayTotalNew":"false"
  "SayTotalNewEmail":"false"
  "SayTotalNewFax":"false"
  "SayTotalNewVoice":"true"
  "SayTotalReceipts":"false"
  "SayTotalSaved":"true"
  "Speed":"100"
  "MediaSwitchObjectId":"caf093ef-5e7b-47dd-9db7-9df360d2923e"
  "PhoneSystemURI":"/vmrest/phonesystems/caf093ef-5e7b-47dd-9db7-9df360d2923e"
  "Undeletable":"true"
  "UseBriefPrompts":"false"
  "Volume":"50"
  "EnAltGreetDontRingPhone":"false"
  "EnAltGreetPreventSkip":"false"
  "EnAltGreetPreventMsg":"false"
  "EncryptPrivateMessages":"false"
  "DeletedMessageSortOrder":"2"
  "SayAltGreetWarning":"false"
  "SaySenderExtension":"false"
  "SayAni":"false"
  "ExitCallActionObjectId":"ecc8570c-c0da-493e-a520-b125529cfee1"
  "CallAnswerTimeout":"4"
  "CallHandlerObjectId":"f4f87905-c20a-4df3-b20e-446c1798df19"
  "CallhandlerURI":"/vmrest/callhandlerprimarytemplates/f4f87905-c20a-4df3-b20e-446c1798df19"
  "DisplayNameRule":"1"
  "DoesntExpire":"false"
  "CantChange":"false"
  "MailboxStoreObjectId":"90e5847b-3a87-4c92-a753-eda6ea0fdb4c"
  "SavedMessageStackOrder":"1234567"
  "NewMessageStackOrder":"1234567"
  "MessageLocatorSortOrder":"1"
  "SavedMessageSortOrder":"2"
  "NewMessageSortOrder":"1"
  "MessageTypeMenu":"false"
  "EnablePersonalRules":"true"
  "RecordUnknownCallerName":"true"
}
```

Viewing the Details of the User Templates Based on Partition Object ID

```

"RingPrimaryPhoneFirst":"false"
"PromptSpeed":"100"
"ExitAction":"2"
"ExitTargetConversation":"PHGreeting"
"ExitTargetHandlerObjectId":"d085ebc6-99ac-46a5-92f3-d26f52701585"
"RepeatMenu":"1"
"FirstDigitTimeout":"5000"
"InterdigitDelay":"3000"
"PromptVolume":"50"
"AddressAfterRecord":"false"
"ConfirmDeleteMessage":"false"
"ConfirmDeleteDeletedMessage":"false"
"ConfirmDeleteMultipleMessages":"true"
"IsClockMode24Hour":"false"
"RouteNDRToSender":"true"
"NotificationType":"0"
"SendReadReceipts":"1"
"ReceiveQuota":"-2"
"SendQuota":"-2"
"WarningQuota":"-2"
"IsSetForVmEnrollment":"true"
"VoiceNameRequired":"false"
"SendBroadcastMsg":"false"
"UpdateBroadcastMsg":"false"
"ConversationVui":"VuiStart"
"SpeechCompleteTimeout":"0"
"SpeechIncompleteTimeout":"750"
"UseVui":"false"
"SkipPasswordForKnownDevice":"false"
"JumpToMessagesOnLogin":"true"
"EnableMessageLocator":"false"
"MessageAgingPolicyObjectId":"12b765a8-a67b-47f6-8ede-3e02aea9f4fe"
"MessageAgingPolicyURI":"/vmrest/messageagingpolicies/12b765a8-a67b-47f6-8ede-3e02aea9f4fe"
"AssistantRowsPerPage":"5"
"InboxMessagesPerPage":"20"
"InboxAutoRefresh":"15"
"InboxAutoResolveMessageRecipients":"true"
"PcaAddressBookRowsPerPage":"5"
"ReadOnly":"false"
"EnableTts":"true"
"ConfirmationConfidenceThreshold":"60"
"AnnounceUpcomingMeetings":"60"
"SpeechConfidenceThreshold":"40"
"SpeechSpeedVsAccuracy":"50"
"SpeechSensitivity":"50"
"EnableVisualMessageLocator":"false"
"ContinuousAddMode":"false"
"NameConfirmation":"false"
"CommandDigitTimeout":"1500"
"SaveMessageOnHangup":"false"
"SendMessageOnHangup":"1"
"SkipForwardTime":"5000"
"SkipReverseTime":"5000"
"UseShortPollForCache":"false"
"SearchByExtensionSearchSpaceObjectId":"7aaf45b8-ab06-4dda-af16-378b04a95912"

"SearchByExtensionSearchSpaceURI":"/vmrest/searchspaces/7aaf45b8-ab06-4dda-af16-378b04a95912"

"SearchByNameSearchSpaceObjectId":"7aaf45b8-ab06-4dda-af16-378b04a95912"
"SearchByNameSearchSpaceURI":"/vmrest/searchspaces/7aaf45b8-ab06-4dda-af16-378b04a95912"
"PartitionObjectId":"9c010254-1493-4e1a-9e47-fe2494792744"

```

```

"PartitionURI":"/vmrest/partitions/9c010254-1493-4e1a-9e47-fe2494792744"
"UseDynamicNameSearchWeight":"false"
"LdapType":"0"
"EnableMessageBookmark":"false"
"SayTotalDraftMsg":"false"
"EnableSaveDraft":"false"
"RetainUrgentMessageFlag":"false"
"SayMessageLength":"false"
"CreateSmtProxyFromCorp":"false"
"AutoAdvanceMsgs":"false"
"SaySenderAfter":"false"
"SaySenderExtensionAfter":"false"
"SayMsgNumberAfter":"false"
"SayAniAfter":"false"
"SayMessageLengthAfter":"false"
"UserTemplateRolesURI":"/vmrest/usertemplates/a46d269a-6614-485b-8649-099afe0604d/usertemplateroles"
"UserTemplateNotificationDevicesURI":"/vmrest/usertemplates/a46d269a-6614-485b-8649-099afe0604d/usertemplatenotificationdevices"
"TemplateExternalServiceAccountsURI":"/vmrest/usertemplates/a46d269a-6614-485b-8649-099afe0604d/templateexternalserviceaccounts"
"UserTemplateWebPasswordURI":"/vmrest/usertemplates/a46d269a-6614-485b-8649-099afe0604d/credential/password"
"UserTemplateVoicePinURI":"/vmrest/usertemplates/a46d269a-6614-485b-8649-099afe0604d/credential/pin"
"UserTemplateMessageActionURI":"/vmrest/usertemplates/a46d269a-6614-485b-8649-099afe0604d/usertemplatemessageactions"
}

```

Response Code: 200



Note Same way user templates can be viewed for particular COS object ID, mailbox store object ID, phone system and call handler object ID.

- PartitionObjectId can be viewed from <https://<connection-server>/vmrest/partitions>
- COSObjectId : <https://<connection-server>/vmrest/coses>
- PhoneSystem : <https://<connection-server>/vmrest/phonesystems>

Creating a User Template

The request can be used to create the User Template. It can be used to create the User Template with specific Partition Object ID, COS, MailboxStoreObjectId, Phone System. The following is an example of the POST request that creates a new user template:

```

POST https://<connection-server>/vmrest/usertemplates?templateAlias=voicemailusertemplate
Request Body:
<UserTemplate>
  <Alias>ABC_user template</Alias>
  <DisplayName>ABC@user template</DisplayName>
</UserTemplate>

```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

Response Code: 201

JSON Example

To create user template:

```
POST https://<connection-server>/vmrest/usertemplates?templateAlias=voicemailusertemplate
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Alias": "voicemailusertemplate1",
  "DisplayName": "Voice Mail User Template 1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Creating a User Template with Specific Partition Object ID

The request can be used to create the User Template. It can be used to create the User Template with specific Partition Object ID, COS, MailboxStoreObjectId, Phone System. The following is an example of the POST request that creates a new user template:

```
POST https://<connection-server>/vmrest/usertemplates?templateAlias=voicemailusertemplate
Request Body:
<UserTemplate>
  <Alias>ABCs_user template</Alias>
  <DisplayName>ABCs@user template</DisplayName>
  <PartitionObjectId>00c25bc8-d3d0-45ec-a786-fcf7a35593cf</PartitionObjectId>
</UserTemplate>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```



Note Get partition object Id from " https://<connection-server>/vmrest/partitions ". In same way users templates can be created using specific COS object ID, MailboxStoreObjectId, Phone System.

JSON Example

To create user template with specific partition ID, do the following:

```
Request URI:
POST https://<connection-server>/vmrest/usertemplates?templateAlias=<TemplatealiasName>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Alias": "voicemailusertemplate12",
  "DisplayName": "Voice Mail User Templater12",
  "PartitionObjectId": "be52d373-25c4-416c-81c1-b82479061192"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Updating Fields of User Templates

The request can be used to update the fields of a user template. It can be used to update Alias, Display Name, Time Zone, Language, COS, Partition Object ID, Phone System and Basic Setting fields of a user template. The following is an example of the PUT request that updates a user template:

```
PUT https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
Request Body:
<UserTemplate>
  <Alias>ABCD_user template</Alias>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <Language>1033</Language>
  <UseDefaultTimeZone>true</UseDefaultTimeZone>
  <TimeZone>190</TimeZone>
  <CosObjectId>6f054167-6f6c-4ed5-a498-1776337871ee</CosObjectId>
  <MediaSwitchObjectId>221ee752-5147-4326-9990-d4a138674f9e</MediaSwitchObjectId>
</UserTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update fields of a user template:

```
PUT https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Alias": "ABC_user template",
  "DisplayName": "Auser template",
  "UseDefaultLanguage": "false",
  "TimeZone": "190",
  "MediaSwitchObjectId": "caf093ef-5e7b-47dd-9db7-9df360d2923e",
  "CosObjectId": "c93854b3-c59f-44e7-a6a9-0a6e17578672"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Update Country Code of the User Template

To view the country code, use the following URI:

```
GET https://<connection-server>/vmrest/languagemap
```

And to check language check; use last 2 characters of language check to change the country code.

The following is an example of the PUT request that updates the country code of a user template:

```
PUT https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
Request Body:
<UserTemplate>
  <Country>SA</Country>
</UserTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update the country code of a user template, do the following:

```
Request URI:
PUT https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Country": "XY"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note Country code must only have 2 character codes.

Update Language of User Template

To view the language code, use the following URI:

```
PUT https://<connection-server>/vmrest/languagemap
```

And check language code; use that language code to change language of user template.

The following is an example of the PUT request that updates the language of a user template:

```
PUT https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
Request Body:
<UserTemplate>
  <Language>1025</Language>
</UserTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update the language of a user template, do the following:

```
Request URI:
PUT https://<connection-server>/vmrest/usertemplates/< usertemplateobjectid >
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Language": "1025"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Delete the User Template

The following is an example of the DELETE request that can be used to delete a user template:

```
DELETE https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
```

```
Response Code: 204
```

JSON Example

To delete a user template, do the following:

```
Request URI:
DELETE https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
```

```
Response Code: 204
```

Updating Password Settings and Changing Passwords

Example 1: Updating voicemail password The following is an example of the PUT request that can be used to update the voicemail password:

```
PUT https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/credential/pin
Request Body:
<UserTemplateCredential>
  <Credentials>142536</Credentials>
</UserTemplateCredential>
```

The following is the response from the above *PUT* request for updating credentials and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note Voicemail should be in numeric only.

JSON Example

To update the credentials, do the following:

```
Request URI:
PUT https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/credential/pin
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Credentials": "10255"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: To update the fields The following is the response from the above *PUT* request for updating fields and the actual response will depend upon the information given by you:

```
Request Body:
<UserTemplateCredential>
  <DoesntExpire>true</DoesntExpire>
  <Locked>false</Locked>
  <CantChange>false</CantChange>
  <CredMustChange>false</CredMustChange>
  <CredentialPolicyObjectId>58f0dc20-f8fc-467d-a648-b5ffbba87dd9</CredentialPolicyObjectId>
</UserTemplateCredential>
```

```
Response Code: 204
```



Note Updating fields can be done only when "CredMustChange" parameter is false and in order to change authentication rule and to view authentication rule use the following URI:

```
GET https://<connection-server>/vmrest /authenticationrules
```

Example 3: Updating web application password The following is an example of the PUT request that can be used to update the web application password:

```
PUT
https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/credential/password
Request Body:
<UserTemplateCredential>
  <Credentials>Cisco123</Credentials>
</UserTemplateCredential>
```

The following is the response from the above *PUT* request for updating credentials and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note Web password should be in alphanumeric only.

JSON Example

To update the credentials, do the following:

```
Request URI:
PUT
https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/credential/password
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Credentials":"10255",
  "CantChange":"false",
  "DoesntExpire":"true",
  "Locked":"false",
  "CredMustChange":"false",
  "CredentialPolicyObjectId":"7b282b66-73b1-4989-9d94-3d105b6ef5e8"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

The following is the response from the above *PUT* request for updating fields and the actual response will depend upon the information given by you:

```
Request Body:
<UserTemplateCredential>
  <DoesntExpire>true</DoesntExpire>
  <Locked>false</Locked>
  <CantChange>false</CantChange>
  <CredMustChange>false</CredMustChange>
  <CredentialPolicyObjectId>58f0dc20-f8fc-467d-a648-b5ffbba87dd9</CredentialPolicyObjectId>
</UserTemplateCredential>
```

```
Response Code: 204
```



Note Updating fields can be done only when "CredMustChange" parameter is false and in order to change authentication rule and to view authentication rule use the following URI:

```
GET https://<connection-server>/vmrest /authenticationrules
```

Adding or Deleting Roles

To view the roles object ID use the following URI:

```
GET https://<connection-server>/vmrest/roles
```

Example 1: Adding the roles The following is an example of the POST request that can be used to add the roles:

```
PUT https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/usertemplateroles
Request Body:
<UserTemplateRole>
  <RoleObjectId>4f077e4e-61c7-4ce8-a58a-2c4bc6089319</RoleObjectId>
</UserTemplateRole>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

JSON Example

To add the roles, do the following:

```
Request URI:
POST
https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/usertemplateroles
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "RoleObjectId": "04d0f1ef-a8c6-454a-8cf0-0e8db7bb2b15"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Example 2: Viewing roles of user template The following is an example of the GET request that can be used to view the roles:

```
GET https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/usertemplateroles
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<UserTemplateRole>
  <URI>/vmrest/usertemplates/d8054a3a-6c09-4a25-9880-6589d2f1dc85/usertemplateroles/973e143e-af15-4ef4-a7c1-5fafd9cc53d4</URI>
  <ObjectId>973e143e-af15-4ef4-a7c1-5fafd9cc53d4</ObjectId>
  <UserObjectId>d8054a3a-6c09-4a25-9880-6589d2f1dc85</UserObjectId>
  <UserURI>/vmrest/users/d8054a3a-6c09-4a25-9880-6589d2f1dc85</UserURI>
  <RoleObjectId>ba166947-41e8-4ec9-ad14-03658d91240e</RoleObjectId>
  <RoleURI>/vmrest/roles/ba166947-41e8-4ec9-ad14-03658d91240e</RoleURI>
  <RoleName>Audit Administrator</RoleName>
  <Alias>ABCD_user template</Alias>
</UserTemplateRole>
```

```
Response Code: 200
```

JSON Example

To view the roles, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/usertemplateroles
Accept: application/json
Content_type: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1"
  "UserTemplateRole":
  {
    "URI": "/vmrest/usertemplates/a9272189-720b-44b3-86e0-df7ef519599c/usertemplateroles/167b7661-ee8b-4c83-8867-decb88ec0c1c"
    "ObjectId": "167b7661-ee8b-4c83-8867-decb88ec0c1c"
    "UserObjectId": "a9272189-720b-44b3-86e0-df7ef519599c"
    "UserURI": "/vmrest/users/a9272189-720b-44b3-86e0-df7ef519599c"
    "RoleObjectId": "04d0f1ef-a8c6-454a-8cf0-0e8db7bb2b15"
    "RoleURI": "/vmrest/roles/04d0f1ef-a8c6-454a-8cf0-0e8db7bb2b15"
    "RoleName": "Help Desk Administrator"
    "Alias": "tenant005_usertemplate_1"
  }
}
```

Response Code: 200

Example 3: Delete role of user template The following is an example of the DELETE request that can be used to view the roles:

```
DELETE
https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/usertemplateroles/<usertemplaterolesId>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

To delete role of user template, do the following:

```
Request URI:
DELETE
https://<connection-server>/vmrest/usertemplates/<usertemplateobjectid>/usertemplateroles/<usertemplateroleid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

Parameter	Data Type	Operations	Comments
Alias	String(64)	Read/Write	A unique text name for addressable objects: Global Users, Contacts, DistributionLists, and PersonalGroups.
Display Name	String(64)	Read/Write	Enter a descriptive name for the user template.
ObjectId	String(36)	Read-Only	Specifies a globally unique, system-generated identifier for a UserSubscriber object.
TenantObjectId	String(36)	Read-Only	The unique identifier of the tenant to which the user template belongs. This field is reflected in the response only if the user template belongs to a particular tenant.
UseDefaultLanguage	Boolean	Read/Write	<p>Possible values can be:</p> <ul style="list-style-type: none"> • False: The language is the default language defined for the user template. • True: The language is derived from the location to which this user template belongs. <p>Default value: False</p>
UseDefaultTimeZone	Boolean	Read/Write	<p>Possible values can be:</p> <ul style="list-style-type: none"> • False: The time zone is the default time zone defined for the user template. • True: The time zone is derived from the location to which this user template belongs. <p>Default value: False</p>
City	String(64)	Read/Write	Enter the city. (optional)
State	String(64)	Read/Write	Enter the state. (optional)
Country	String(2)	Read/Write	Enter the country. (optional)
PostalCode	String(40)	Read/Write	Enter the Postal code (optional)
Department	String(64)	Read/Write	Enter the users department. (optional)
Manager	String(64)	Read/Write	Enter the name of the manager. (optional)
Address	String(64)	Read/Write	Enter the user address .(optional)
BillingId	String(32)	Read/Write	Billing ID can be used for organization-specific information, such as accounting information, department names, or project codes.
TimeZone	Integer	Read/Write	Select the desired time zone for the user, or check the Use System Default Time Zone check box.
CreationTime	DateTime	Read-Only	The date and time the user template was created.
CosObjectId	String(36)	Read/Write	The unique identifier of the COS (Class of Service) object to which this user template account is associated.

Parameter	Data Type	Operations	Comments
Language	Integer	Read/Write	Select Use System Default Language or select a language from the list
VoiceName	String	Read/Write	Wav file that contains recorded name.
LocationObjectId	String(36)	Read-Only	The unique identifier of the LocationVMS object to which this user belongs.
AddressMode	Integer	Default	The default method the subscriber will use to address messages to other subscribers. Possible options are: <ul style="list-style-type: none"> • 0=LastNameFirst • 1=Extension • 2=FirstNameFirst
ClockMode	Integer	Read-Only	The time format used for the message timestamps that the subscriber hears when they listen to their messages over the phone. Possible options are: <ul style="list-style-type: none"> • 0=SystemDefaultClock • 1=HourClock12 • 2=HourClock24
ConversationTUI	String(36)	Read-Only	The name of the conversation the subscriber uses to set up, send, and retrieve messages.
GreetByName	Boolean	Read-Only	A flag indicating whether the subscriber hears his/her name when they log into their mailbox over the phone. Values can be: <ul style="list-style-type: none"> • False: Do not play the name. • True: Play the recorded voice name. Default value: True
ListInDirectory	Boolean	Read/Write	A flag indicating whether system should list the subscriber in the phone directory for outside callers. Possible values can be: <ul style="list-style-type: none"> • False: Do not list the subscriber in the phone directory. • True: List the subscriber in the phone directory. Default value: True

Parameter	Data Type	Operations	Comments
IsVmEnrolled	Boolean	Read/Write	<p>A flag indicating whether system plays the enrollment conversation (record a voice name, indicate if they are listed in the directory, etc.) for the subscriber when they login.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: The enrollment conversation is not played for the subscriber when they login. • True: The enrollment conversation is played for the subscriber when they login. <p>Default value: True</p>
SayCopiedNames	Boolean	Read/Write	<p>A flag indicating whether system announces the "copied" names during message playback for a subscriber.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce copied names. • True: Announce copied names. <p>Default value: True</p>
SayDistributionList	Boolean	Read/Write	<p>A flag indicating whether system announces the distribution list that sends a message, if applicable.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce the distribution list. • True: Announce the distribution list. <p>Default value: True</p>
SayMsgNumber	Boolean	Read/Write	<p>A flag indicating whether system announces the position of each message in the stack (i.e., 'Message 1', 'Message 2', etc.) during message playback for the subscriber.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not play the message number. • True: Play the message number. <p>Default value: True</p>
SaySender	Boolean	Read/Write	<p>A flag indicating whether system announces the sender of a message during message playback for the subscriber.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce the sender. • True: Announce the sender. <p>Default value: True</p>

Parameter	Data Type	Operations	Comments
SayTimeStampAfter	Boolean	Read/Write	<p>A flag indicating whether system announces the timestamp after it plays back each message for the subscriber.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce the timestamp after each message is played. • True: Announce the timestamp after each message is played. <p>Default value: True</p>
SayTimeStampBefore	Boolean	Read/Write	<p>A flag indicating whether system announces the timestamp before it plays back each for the subscriber.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce the timestamp before each message is played. • True Announce the timestamp before each message is played. <p>Default value: False</p>
SayTotalNew	Boolean	Read/Write	<p>A flag indicating whether system announces the total number of new messages in the subscriber mailbox.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce total number of new messages. • True: Announce the total number of new messages in the subscriber mailbox. <p>Default value: False</p>
SayTotalNewEmail	Boolean	Read/Write	<p>A flag indicating whether system announces the total number of new e-mail messages in the subscriber mailbox.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce total number of new e-mail messages. • True: Announce the total number of new e-mail messages in the subscriber mailbox. <p>Default value: False</p>

Parameter	Data Type	Operations	Comments
SayTotalNewFax	Boolean	Read/Write	<p>A flag indicating whether system announces the total number of new fax messages in the subscriber mailbox.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce total number of new fax messages. • True: Announce the total number of new fax messages in the subscriber mailbox. <p>Default value: False</p>
SayTotalNewVoice	Boolean	Read/Write	<p>A flag indicating whether system announces the total number of new voice messages in the subscriber mailbox.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce total number of new voice messages. • True: Announce the total number of new voice messages in the subscriber mailbox. <p>Default value: True</p>
SayTotalReceipts	Boolean	Read/Write	<p>A flag indicating whether system announces the total number of new receipts in the subscriber mailbox.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce total number of new receipts. • True: Announce the total number of new receipts in the subscriber mailbox. <p>Default value: False</p>
SayTotalSaved	Boolean	Read/Write	<p>A flag indicating whether system announces the total number of saved messages in the subscriber mailbox.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Do not announce total number of saved messages. • True: Announce the total number of saved messages in the subscriber mailbox. <p>Default value: True</p>
Speed	Integer	Read/Write	The audio speed system uses to play back messages to the subscriber. Range: 0-200.
MediaSwitchObjectId	String(36)	Read-Only	The unique identifier of the MediaSwitch object Cisco Unity Connection uses for subscriber Telephone Record and Playback (TRAP) sessions and to dial MWI on or off requests when the Cisco Unity Connection system has dual switch integration.

Parameter	Data Type	Operations	Comments
Undeletable	Boolean	Read/Write	Tells whether it can be deleted by administrator or not.
UseBriefPrompts	Boolean	Read/Write	A flag indicating whether the subscriber hears brief or full phone menus when accessing system over the phone. Default value: False
Volume	Integer	Read/Write	The audio volume expressed as a percentage that Cisco Unity Connection uses to play back message. Range: 0-100
EnAltGreetDontRingPhone	Boolean	Read-Only	A flag indicating whether a caller is prevented from being transferred to the subscriber phone when the subscriber alternate greeting is turned on. Values can be: <ul style="list-style-type: none"> • False: Ring the phone. • True: Send the caller to the alternate greeting. Default value: False
EnAltGreetPreventSkip	Boolean	Read-Only	A flag indicating whether callers can skip the greeting while it is playing when the alternate greeting is turned on. Values can be: <ul style="list-style-type: none"> • False: If alternate greeting is active, callers cannot skip the greeting\ • True: If alternate greeting is active, callers can skip the greeting. Default value: False
EnAltGreetPreventMsg	Boolean	Read-Only	A flag indicating whether callers can leave a message after the greeting when the subscriber alternate greeting is turned on. Values can be: <ul style="list-style-type: none"> • False: If alternate greeting is active, callers can leave a message for the subscriber • True: If alternate greeting is active, callers cannot leave a message for the subscriber. Default value: False
EncryptPrivateMessages	Boolean	Read-Only	A flag indicating whether system encrypts messages from the subscriber that are marked private. Values can be: <ul style="list-style-type: none"> • False: Do not encrypt private messages. • True: Encrypt private messages. Default value: False

Parameter	Data Type	Operations	Comments
DeletedMessageSortOrder	Integer	Read-Only	The order in which system presents deleted messages to the subscriber.
SayAltGreetWarning	Boolean	Read-Only	A flag indicating whether Cisco Unity Connection notifies the subscriber when they login via the phone (plays conversation) or CPCA (displays a warning banner) if their alternate greeting is turned on. Values can be: <ul style="list-style-type: none"> • False: Do not notify the subscriber that their alternate greeting is turned on. • True: Notify the subscriber when they login if their alternate greeting is turned on. Default value: False
SaySenderExtension	Boolean	Read-Only	A flag indicating whether Cisco Unity Connection during message playback, plays the primary extension information of the subscriber who sent the message after playing the sender's voice name. Values can be: <ul style="list-style-type: none"> • False: Do not play the extension information of the subscriber who sent the message. • True: After playing the sender's voice name, play the primary extension information of the subscriber who sent the message. Default value: False
SayAni	Boolean	Read-Only	A flag indicating whether Cisco Unity Connection plays the Automatic Number Identification (ANI) information during message playback for voice messages from unidentified callers. Default value: False
ExitCallActionObjectId	String(36)	Read-Only	The unique identifier of the CallAction object that is taken when a caller exits the subscriber conversation by pressing the * key or timing out.
CallAnswerTimeout	Integer	Read/Write	The number of rings to wait for a subscriber destination to answer before the call is forwarded to the subscriber's primary phone.
CallHandlerObjectId	String(36)	Read-Only	The unique identifier of the primary CallHandler object for the subscriber.
DisplayNameRule	Integer	Read/Write	The format for generating the user display name.

Parameter	Data Type	Operations	Comments
DoesntExpire	Boolean	Read/Write	<p>A flag indicating whether or not the user credential will automatically expire (and the user required to change the credential upon its expiration) based on a defined schedule. Regardless, the user still may change the credential (if allowed by CantChange).</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: The user credential will automatically expire. The expiration of the credential is controlled by the value of the column tbl_CredentialPolicy->MaxDays. • True: The user credential will not automatically expire. <p>Default value: False</p>
CantChange	Boolean	Read-Only	<p>A flag indicating whether the user can set/change their credential (i.e., the credential specified by the associated credential policy).</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: User is allowed to change their credential. • True: User cannot change their credential. <p>Default value: False</p>
MailboxStoreObjectId	String(36)	Read-Only	The unique identifier of the MailboxStore object where a mailbox is created for a new subscriber created with this template.
SavedMessageStackOrder	String(36)	Read/Write	<p>The order in which system plays the following types of saved messages:</p> <ul style="list-style-type: none"> • Urgent voice messages • Non-urgent voice messages • Urgent fax messages • Non-urgent fax messages • Urgent e-mail messages • Non-urgent e-mail messages • Receipts and notices
NewMessageStackOrder	String(36)	Read/Write	<p>The order in which system plays the following types new messages:</p> <ul style="list-style-type: none"> • Urgent voice messages • Non-urgent voice messages* Urgent fax messages • Non-urgent fax messages • Urgent e-mail messages • Non-urgent e-mail messages • Receipts and notices

Parameter	Data Type	Operations	Comments
MessageLocatorSortOrder	Integer	Read/Write	The order in which system will sort messages when the "Message Locator" feature is enabled.
SavedMessageSortOrder	Integer	Read/Write	The order in which system will sort saved messages.
NewMessageSortOrder	Integer	Read/Write	The order in which system will sort new messages.
MessageTypeMenu	Boolean	Read/Write	A flag indicating whether system plays the message type menu when the subscriber logs on to system over the phone. Values can be: <ul style="list-style-type: none"> • False: Do not play message type menu. • True: Play message type menu. Default value: False
EnablePersonalRules	Boolean	Read/Write	A flag indicating whether a subscriber's personal rules are enabled. Subscribers can use this setting to disable all personal rules at once. Values can be: <ul style="list-style-type: none"> • False: Call routing rules disabled for subscriber. • 1: Call routing rules enabled for subscriber. • True: Call routing rules enabled for subscriber. Default value: True
ForcedAuthorizationCode	String(36)	Read/Only	A valid authorization code that is entered prior to extending calls to classes of dialed numbers, for example, external, toll and international calls.
RecordUnknownCallerName	Boolean	Read/Write	A flag indicating whether a caller should be promoted to record his/her name if Unity does not receive caller id. Default value: True
RingPrimaryPhoneFirst	Boolean	Read/Write	A flag indicating whether a subscriber's primary phone should be rung before trying other destinations in a personal group. Default value: False
PromptSpeed	Integer	Read/Write	The audio speed system uses to play back prompts to the subscriber.
ExitAction	Integer	Read/Write	Type of call action to take, e.g., hang-up, go to another object, etc.
ExitTargetConversation	String(64)	Read/Write	The name of the conversation to which the caller is routed.
ExitTargetHandlerObjectId	String(36)	Read/Only	The unique identifier of the specific object to send along to the target conversation.

Parameter	Data Type	Operations	Comments
RepeatMenu	Integer	Read/Write	The number of times to repeat a menu in TUI. Possible range 0-250
FirstDigitTimeout	Integer	Read/Write	The amount of time to wait (in milliseconds) for first digits when collecting touch tones. Range: 500-10000.
InterdigitDelay	Integer	Read-Only	The amount of time to wait (in milliseconds) for input between touch tones when collecting digits in TUI. Range: 1000-10000
PromptVolume	Integer	Read/Write	The volume level for playback of system prompts. Range: 0-100.
DelayAfterGreeting	Integer	Read/Write	The amount of time (in milliseconds) Cisco Unity Connection will delay after playing greeting. Range: 0-50000.
ClientMatterCode	String(40)	Read-Only	The client matter code to transmit to Call Manger when a phone number is dialed on an outbound call. The CMC is entered after a phone number is dialed so that the customer can assign account or billing codes to the call. Whether or not the CMC will be transmitted is dictated by a setting on outbound call. The subscriber's CMC is used only if the outbound call doesn't have its own CMC.
AddressAfterRecord	Boolean	Read/Write	A flag indicating whether the subscriber will be prompted to address message before or after it is recorded. Values can be: <ul style="list-style-type: none"> • False: Prompt subscriber to address message before recording. • True: Prompt subscriber to address message after recording. Default value: False
ConfirmDeleteMessage	Boolean	Read/Write	A flag indicating whether system will request confirmation from a subscriber before proceeding with a deletion of a single new or saved message. Values can be: <ul style="list-style-type: none"> • False: system will not request confirmation from a subscriber before proceeding with a deletion of a single new or saved message. • True: system will request confirmation from a subscriber before proceeding with a deletion of a single new or saved message. Default value: False

Parameter	Data Type	Operations	Comments
ConfirmDeleteMultipleMessage	Boolean	Read/Write	<p>A flag indicating whether system allows the subscriber to choose which message they want to delete or whether system permanently deletes the specified type of messages. A change what system does when subscribers press 3 > 2 > 2 from the Main menu to permanently delete multiple deleted messages at once.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: System does not prompt the subscriber to choose, and instead permanently deletes the type of messages you specify: either deleted voice messages or all deleted messages (voice, fax, and e-mail, as applicable). • True: System allows the subscriber to choose which messages they want to delete; subscriber can either delete their deleted voice messages or delete all of their deleted messages. <p>Default value: True</p>
PabLastImported	String(36)	Read/Only	The date and time when the personal address book was last imported from a groupware package into the personal groups for a user.
IsClockMode24Hour	Boolean	Read/Write	<p>The time format used for the message timestamps that the subscriber hears when they listen to their messages over the phone.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: 12-Hour clock - The subscriber hears message timestamps in the time format of a 12-hour clock. For example, a subscriber will hear 1:00 PM when listening to the timestamp of a message left at 1:00 PM. • True: 24-Hour clock - The subscriber hears message timestamps in the time format of a 24-hour clock. For example, a subscriber will hear 13:00 when listening to the timestamp of a message left at 1:00 PM. <p>Default value: False</p>
RouteNDRToSender	Boolean	Read/Write	For an undeliverable message, whether NDR messages will appear in the subscriber mailbox or are deleted by the system.
NotificationType	Integer	Read/Write	The notification type to use for this mailbox created.

Parameter	Data Type	Operations	Comments
SendReadReceipts	Integer	Read/Write	A flag indicating whether the mailbox created with this subscriber allows the system to send read receipts on its behalf. Values can be: <ul style="list-style-type: none"> • 0: Disable • 1: Enable
SendQuota	Integer	Read/Write	The mailbox size (in bytes) send limit. (2048 MB) Values can be: <ul style="list-style-type: none"> • 1: The quota is unlimited. • 2: The default system quota is assigned.
WarningQuota	Integer	Read/Write	The mailbox size (in bytes) warning limit. (2048 MB) Values can be: <ul style="list-style-type: none"> • 1: The quota is unlimited. • 2: The default system quota is assigned.
ReceiveQuota	Integer	Read/Write	The mailbox size (in bytes) receive limit. (2048 MB) Values can be: <ul style="list-style-type: none"> • 1: The quota is unlimited. • 2: The default system quota is assigned.
MailboxDn	String(36)	Read-Only	The distinguished name of the mailbox.
SynchScheduleObjectId	String(36)	Read-Only	The unique identifiers of the Schedule object to use for synchronization Calendar information from groupware (such as Exchange).
IsSetForVmEnrollment	Boolean	Read-Only	Temporary placeholder until IsVmEnrolled can be phased out.
SendBroadcastMsg	Boolean	Read/Write	A flag indicating whether the subscriber may send broadcast messages. Values can be: <ul style="list-style-type: none"> • False: Cannot send broadcast messages. • True: Can send broadcast messages. Default value: False

Parameter	Data Type	Operations	Comments
UpdateBroadcastMsg	Boolean	ReadWrite	<p>A flag indicating whether the subscriber has the ability to update broadcast messages that are active or will be active in the future.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Cannot update broadcast messages. • True: Can update broadcast messages. <p>Default value: False</p>
ConversationVUI	Boolean	ReadWrite	The VUI conversation assigned to the subscriber.
SpeechCompleteTimeout	Integer	ReadOnly	Specifies the required length of silence (in milliseconds) following user speech before the recognizer finalizes a result.
SpeechIncompleteTimeout	Integer	ReadOnly	Specifies the required length of silence (in milliseconds) from when the speech prior to the silence matches an active grammar.
UseVui	Boolean	ReadWrite	<p>A flag indicating whether the speech recognition conversation is the default conversation for the subscriber.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Speech recognition conversation is not default conversation for the subscriber. • True: Speech recognition conversation is the default conversation for the subscriber. <p>Default value: False</p>
SkipPasswordForKnownDevice	Boolean	ReadWrite	<p>A flag indicating whether the subscriber will be asked for his/her PIN when attempting to sign-in from a known device.</p> <p>Default value: False</p>
JumpToMessagesOnLogin	Boolean	ReadWrite	<p>A flag indicating whether the subscriber conversation jumps directly to the first message in the message stack after subscriber sign-in.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Subscriber conversation does not jump directly to first message in the message stack after subscriber sign-in. • True: Subscriber conversation jumps directly to the first message in the message stack after subscriber sign-in. <p>Default value: True</p>

Parameter	Data Type	Operations	Comments
EnableMessageLocator	Boolean	Read/Write	<p>A flag indicating whether the message locator feature is enabled for the subscriber.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Message locator feature is disabled for subscriber. • True: Message locator feature is enabled for subscriber. <p>Default value: False</p>
MessageAgingPolicyObjectId	String(36)	Read-Only	The unique identifier of the MessageAgingPolicy object that applies to the mailbox created for a new subscriber created with this template.
AssistantRowsPerPage	Integer	Read-Only	This controls the number of entries to display per page for all tables in the Unity Assistant, e.g. the Private List Members table.
InboxMessagesPerPage	Integer	Read-Only	The number of messages Unity Inbox displays in a page.
InboxAutoRefresh	Integer	Read-Only	The rate (in minutes) at which Unity Inbox performs a refresh.
InboxAutoResolveMessageRecipients	Integer	Read-Only	A flag indicating whether Cisco Unity Connection automatically resolves a recipient address entered in the To, Cc or Bcc fields to a subscriber or distribution list. Known as the "AutoResolve" feature.
PcaAddressBookRowsPerPage	Integer	Read-Only	Controls the number of matching entries the Address Book displays per page, when a search is performed. The Address Book is used across multiple PCA applications and so this setting applies globally.
PcaHomePage	String(36)	Read-Only	The Home Page is the first page that is displayed after logging in to the PCA.
EnableTts	Boolean	Read/Write	<p>A flag indicating whether TTS is enabled for the subscriber. Only relevant if TTS enabled in User's COS also.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: TTS is disabled for the subscriber. • True: TTS is enabled for the subscriber <p>Default value: True</p>
ConfirmationConfidenceThreshold	Integer	Read-Only	Voice Recognition Confirmation Confidence Threshold.
AnnounceUpcomingMeetings	Integer	Read-Only	The amount ahead of time, in minutes, that Connection will warn the subscriber of upcoming meetings when the subscriber calls into the system.

Parameter	Data Type	Operations	Comments
SpeechConfidenceThreshold	Integer	Read-Only	When the engine matches a spoken phrase, it associates a confidence level with that conclusion. This parameter determines what confidence level should be considered a successful match. A higher value means the engine is will report fewer successful matches, but it will be more confident in the matches that it reports. Range: 0-100.
SpeechSpeedVsAccuracy	Integer	Read-Only	Sets accuracy and performance of speech.
SpeechSensitivity	Integer	Read-Only	A variable level of sound sensitivity that enables the speech engine to filter out background noise and not mistake it for speech.
EnableVisualMessageLocator	Boolean	Read/Write	<p>A flag indicating whether the visual message locator feature is enabled for the subscriber. The visual message locator feature presents a list of messages on the subscriber's IP phone display for the subscriber to select from visually.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Visual message locator feature disabled for subscriber. • True: Visual message locator feature enabled for subscriber. <p>Default value: False</p>
ContinuousAddMode	Boolean	Read/Write	<p>A flag indicating whether when addressing, after entering one recipient name, whether the subscriber is asked to enter another name or assume the subscriber is finished adding names and is ready to move on to recording the message or applying message options.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: Unity Connection prompts subscribers to press 1 to add more recipients. • True: Unity Connection does not prompt subscribers to press 1 to add more recipients. Instead, subscribers continue entering recipient names or extensions (as applicable) until they indicate that they have completed addressing. <p>Default value: False</p>
NameConfirmation	Boolean	Read/Write	<p>Whether voice name of the user or distribution list is played or not.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • False: No voice name played. • True: Voice name of subscriber or DL is played. <p>Default value: False</p>

Parameter	Data Type	Operations	Comments
CommandDigitTimeout	Integer(4)	Read-Only	The amount of time (in milliseconds) between digits on a multiple digit menu command entry (i.e. different than the inter digit timeout that is used for strings of digits such as extensions and transfer strings). Default value: 1500 Range: 250-5000
SaveMessageOnHangup	Boolean	Read/Write	A flag indicating when hanging up while listening to a new message, whether the message is marked new again or is marked read. Values can be: <ul style="list-style-type: none"> • False: Message is marked new again. • True: Message is marked read. Default value: False
SkipForwardTime	Integer(4)	Read-Only	Indicates the amount of time (in milliseconds) to jump forward when skipping ahead in a voice or TTS message using either DTMF or voice commands while reviewing messages. Default Value: 5000 Range: 1000-60000
SkipReverseTime	Integer(4)	Read-Only	Indicates the amount of time (in milliseconds) to jump backward when skipping in reverse in a voice or TTS message using either DTMF or voice commands while reviewing messages. Default Value: 5000 Range: 1000-60000
UseShortPollForCache	Boolean	Read-Only	A flag indicating whether the user's polling cycle for retrieving calendar information will be the shorter "power user" polling cycle. Values can be: <ul style="list-style-type: none"> • False: The subscriber's polling cycle is determined by the system default polling cycle. (default value) (System configuration setting "Normal Calendar Caching Poll Interval"). • True: The shorter "power user" polling cycle is used. (System configuration setting "Short Calendar Caching Poll Interval"). Default value: False
SearchByExtensionSearchSpaceObjectid	String(36)	Read-Only	The unique identifier of the SearchSpace which is used to limit the visibility to dialable/addressable objects when searching by extension (dial string).

Parameter	Data Type	Operations	Comments
SearchByNameSearchSpaceObjectId	String(36)	Read-Only	The unique identifier of the SearchSpace which is used to limit the visibility to dilatable/addressable objects when searching by name (character string).
PartitionObjectId	String(36)	Read/Write	The unique identifier of the Partition to which a subscriber's DtmfAccessId created with this template will be assigned.
UseDynamicNameSearchWeight	Boolean	Read-Only	Use dynamic name search weight. When this user addresses objects, the name search weight for those objects will automatically be incremented.
LdapCcmPkid	String(36)	Read/Write	The pkid of associated end user in the sleeping SeaDragon database.
LdapType	Integer	Read-Only	The LDAP configuration information for the user.
FaxServerObjectId	String(36)	Read-Only	The unique identifier of the FaxServer object for the subscriber.
LdapCcmUserId	String(36)	Read-Only	The userid of associated end user in the sleeping SeaDragon database.
XferString	String(36)	Read-Only	Alternate transfer option.
EnableMessageBookmark	Boolean	Read/Write	A flag indicating whether Message Bookmark is enabled for the subscriber. Values can be: <ul style="list-style-type: none"> • False: Message Bookmark feature is disabled for subscriber. • True: Message Bookmark feature is enabled for subscriber. Default value: False
SayTotalDraftMsg	Boolean	Read/Write	A flag indicating whether Cisco Unity Connection announces the total number of draft messages in the subscriber mailbox. Values can be: <ul style="list-style-type: none"> • False: Do not announce total number of draft messages. • True: Announce the total number of draft messages in the subscriber mailbox. Default value: False

Parameter	Data Type	Operations	Comments
EnableSaveDraft	Boolean	Read/Write	A flag indicating whether the save draft message feature is enabled for the subscriber. Values can be: <ul style="list-style-type: none"> • False: Do not save draft messages. • True: Save draft messages. Default value: False
RetainUrgentMessageFlag	Boolean	Read/Write	Urgent message flag on a message is retained for both reply and forward message actions. Default value: False
SayMessageLength	Boolean	Read/Write	A flag indicating whether Cisco Unity Connection announces the length of each message during message playback. Default value: False
CreateSmtpProxyFromCorp	Boolean	Read/Write	SMTP proxy address matching the corporate e-mail address created for user.
AutoAdvanceMsgs	Boolean	Read-Only	A flag indicating that the conversation will, during playback, advance to the next message in the playback stack automatically after it is done playing the after message menu. Values can be: <ul style="list-style-type: none"> • False: Do not automatically skip to the next message after playing the after message menu once. • True: Do advanced automatically to the next message after playing the after message menu once. Default value: False
SaySenderAfter	Boolean	Read-Only	This flag works exactly the same as the SaySender flag on a user, except the conversation plays the sender in the message footer. Default value: False
SaySenderExtensionAfter	Boolean	Read-Only	This flag works exactly the same as the SaySenderExtension flag on a user, except the conversation plays the sender's extension in the message footer. Default value: False
SayMsgNumberAfter	Boolean	Read-Only	This flag works exactly the same as the SayMsgNumber flag on a user, except the conversation plays the message number in the message footer. Default value: False

Parameter	Data Type	Operations	Comments
SayAniAfter	Boolean	Read-Only	This flag works exactly the same as the SayAni flag on a user, except the conversation plays the ani in the message footer. Default value: False
SayMessageLengthAfter	Boolean	Read-Only	This flag works exactly the same as the SayMessageLength flag on a user, except the conversation plays the message length in the message footer. Default value: False



CHAPTER 34

Cisco Unity Connection Provisioning Interface (CUPI) API for User Template Settings

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- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Default User Template, on page 364](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- User Template VoiceMail PIN , on page 368](#)
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Cisco Unity Connection Provisioning Interface (CUPI) API -- Basic User Template Information

About User Templates

This page contains information on how to use the API to create, list, modify, and delete user templates. When you create user accounts, you base each account on a user template. Creating new user accounts on a template minimizes the number of settings that must be modified on individual user accounts, making the job of creating user accounts easier.

Cisco Unity Connection comes with predefined user templates too, which you can modify but not delete. For more information on default user template, see **Default User Template** section.

Listing and Viewing User Templates

Generic Examples to List User Templates

Example 1

The following is an example of the GET request that lists all the User Templates:

```
https://<connection_server>/vmrest/usertemplates
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<UserTemplates total="1">
<UserTemplate>
  <URI>/vmrest/usertemplates/7553408b-3415-43db-aa82-3b2dc78062d1</URI>
  <ObjectId>7553408b-3415-43db-aa82-3b2dc78062d1</ObjectId>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <UseDefaultTimeZone>true</UseDefaultTimeZone>
  <Alias>voicemailusertemplate</Alias>
  <DisplayName>Voice Mail User Template</DisplayName>
  <TimeZone>190</TimeZone>
  <CreationTime>2012-06-25T06:07:31Z</CreationTime>
  <CosObjectId>7be9b3f3-1200-403f-984a-04c07b7c5a7b</CosObjectId>
  <CosURI>/vmrest/coses/7be9b3f3-1200-403f-984a-04c07b7c5a7b</CosURI>
  <Language>1033</Language>
  <LocationObjectId>6d4ff2e5-3f26-4a19-b2fa-beca79b4c5e9</LocationObjectId>
  <LocationURI>
    /vmrest/locations/connectionlocations/6d4ff2e5-3f26-4a19-b2fa-beca79b4c5e9
  </LocationURI>
  <AddressMode>0</AddressMode>
  <ClockMode>0</ClockMode>
  <ConversationTui>SubMenu</ConversationTui>
  <GreetByName>true</GreetByName>
  <ListInDirectory>true</ListInDirectory>
  <IsVmEnrolled>true</IsVmEnrolled>
  <SayCopiedNames>true</SayCopiedNames>
  <SayDistributionList>true</SayDistributionList>
  <SayMsgNumber>true</SayMsgNumber>
  <SaySender>true</SaySender>
  <SayTimestampAfter>true</SayTimestampAfter>
  <SayTimestampBefore>false</SayTimestampBefore>
  <SayTotalNew>false</SayTotalNew>
  <SayTotalNewEmail>false</SayTotalNewEmail>
  <SayTotalNewFax>false</SayTotalNewFax>
  <SayTotalNewVoice>true</SayTotalNewVoice>
  <SayTotalReceipts>false</SayTotalReceipts>
  <SayTotalSaved>true</SayTotalSaved>
  <Speed>100</Speed>
  <MediaSwitchObjectId>
    1fb12b1c-cf14-4634-b73d-9b9c58ecdf68
  </MediaSwitchObjectId>
  <PhoneSystemURI>
    /vmrest/phonesystems/1fb12b1c-cf14-4634-b73d-9b9c58ecdf68
  </PhoneSystemURI>
  <Undeletable>true</Undeletable>
  <UseBriefPrompts>false</UseBriefPrompts>
  <Volume>50</Volume>
  <EnAltGreetDontRingPhone>false</EnAltGreetDontRingPhone>
  <EnAltGreetPreventSkip>false</EnAltGreetPreventSkip>
  <EnAltGreetPreventMsg>false</EnAltGreetPreventMsg>
  <EncryptPrivateMessages>false</EncryptPrivateMessages>
  <DeletedMessageSortOrder>2</DeletedMessageSortOrder>
  <SayAltGreetWarning>false</SayAltGreetWarning>
  <SaySenderExtension>false</SaySenderExtension>
  <SayAni>false</SayAni>
  <ExitCallActionObjectId>
    a365e3c0-d8ed-4874-9810-cedb074dfe33
  </ExitCallActionObjectId>
  <CallAnswerTimeout>4</CallAnswerTimeout>
  <CallHandlerObjectId>f700f378-9656-45ea-94ff-c0462592999e</CallHandlerObjectId>
  <CallhandlerURI>
    /vmrest/callhandlerprimarytemplates/f700f378-9656-45ea-94ff-c0462592999e
  </CallhandlerURI>
  <DisplayNameRule>1</DisplayNameRule>
  <DoesntExpire>false</DoesntExpire>
  <CantChange>false</CantChange>

```

```

<MailboxStoreObjectId>cfc43112-601b-4764-ba92-b0220e9d7f23</MailboxStoreObjectId>
<SavedMessageStackOrder>1234567</SavedMessageStackOrder>
<NewMessageStackOrder>1234567</NewMessageStackOrder>
<InboxAutoResolveMessageRecipients>>true</InboxAutoResolveMessageRecipients>
<PcaAddressBookRowsPerPage>5</PcaAddressBookRowsPerPage>
<ReadOnly>>false</ReadOnly>
<EnableTts>>true</EnableTts>
<ConfirmationConfidenceThreshold>60</ConfirmationConfidenceThreshold>
<AnnounceUpcomingMeetings>60</AnnounceUpcomingMeetings>
<SpeechConfidenceThreshold>40</SpeechConfidenceThreshold>
<SpeechSpeedVsAccuracy>50</SpeechSpeedVsAccuracy>
<SpeechSensitivity>50</SpeechSensitivity>
<EnableVisualMessageLocator>>false</EnableVisualMessageLocator>
<ContinuousAddMode>>false</ContinuousAddMode>
<NameConfirmation>>false</NameConfirmation>
<CommandDigitTimeout>1500</CommandDigitTimeout>
<SaveMessageOnHangup>>false</SaveMessageOnHangup>
<SendMessageOnHangup>1</SendMessageOnHangup>
<SkipForwardTime>5000</SkipForwardTime>
<SkipReverseTime>5000</SkipReverseTime>
<UseShortPollForCache>>false</UseShortPollForCache>
<SearchByExtensionSearchSpaceObjectId>
25e2e004-c194-4593-9961-bdcaf5dd7189
</SearchByExtensionSearchSpaceObjectId>
<SearchByExtensionSearchSpaceURI>
/vmrest/searchspaces/25e2e004-c194-4593-9961-bdcaf5dd7189
</SearchByExtensionSearchSpaceURI>
<SearchByNameSearchSpaceObjectId>
25e2e004-c194-4593-9961-bdcaf5dd7189
</SearchByNameSearchSpaceObjectId>
<SearchByNameSearchSpaceURI>
/vmrest/searchspaces/25e2e004-c194-4593-9961-bdcaf5dd7189
</SearchByNameSearchSpaceURI>
<PartitionObjectId>12101df7-ecd2-4a48-b5b9-9a96b5f85a25</PartitionObjectId>
<PartitionURI>
/vmrest/partitions/12101df7-ecd2-4a48-b5b9-9a96b5f85a25
</PartitionURI>
<UseDynamicNameSearchWeight>>false</UseDynamicNameSearchWeight>
<LdapType>0</LdapType>
<EnableMessageBookmark>>false</EnableMessageBookmark>
<SayTotalDraftMsg>>false</SayTotalDraftMsg>
<EnableSaveDraft>>false</EnableSaveDraft>
<RetainUrgentMessageFlag>>false</RetainUrgentMessageFlag>
<SayMessageLength>>false</SayMessageLength>
<CreateSmtProxyFromCorp>>false</CreateSmtProxyFromCorp>
<AutoAdvanceMsgs>>false</AutoAdvanceMsgs>
<SaySenderAfter>>false</SaySenderAfter>
<SaySenderExtensionAfter>>false</SaySenderExtensionAfter>
<SayMsgNumberAfter>>false</SayMsgNumberAfter>
<SayAniAfter>>false</SayAniAfter>
<SayMessageLengthAfter>>false</SayMessageLengthAfter>
<UserTemplateRolesURI>
/vmrest/usertemplates/7553408b-3415-43db-aa82-3b2dc78062d1/usertemplateroles
</UserTemplateRolesURI>
<UserTemplateNotificationDevicesURI>
/vmrest/usertemplates/7553408b-3415-43db-aa823b2dc78062d1/usertemplatenotificationdevices
</UserTemplateNotificationDevicesURI>
<UserTemplateWebPasswordURI>
/vmrest/usertemplates/7553408b-3415-43db-aa82-3b2dc78062d1/credential/password
</UserTemplateWebPasswordURI>
<UserTemplateVoicePinURI>
/vmrest/usertemplates/7553408b-3415-43db-aa82-3b2dc78062d1/credential/pin
</UserTemplateVoicePinURI>

```

```
<UserTemplateMessageActionURI>  
/vmrest/usertemplates/7553408b-3415-43db-aa82-3b2dc78062d1/usertemplatemessageactions  
</UserTemplateMessageActionURI>  
</UserTemplate>
```

Response Code: 200

Example 2

The following is an example of the GET request that lists the User Template as represented by <objectId>:

```
https://<connection_server>/vmrest/usertemplates/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<UserTemplate>
  <URI>
  /vmrest/usertemplates/c8af2544-2bc9-44fa-b713-e80f306cf781
  </URI>
  <ObjectId>
  c8af2544-2bc9-44fa-b713-e80f306cf781
  </ObjectId>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <UseDefaultTimeZone>true</UseDefaultTimeZone>
  <Alias>NewCiscoTemplate2</Alias>
  <City/>
  <State/>
  <Country>US</Country>
  <PostalCode/>
  <Department/>
  <Manager/>
  <Building/>
  <Address/>
  <DisplayName>testmonica</DisplayName>
  <BillingId/>
  <TimeZone>190</TimeZone>
  <CreationTime>2012-06-26 05:02:22.05</CreationTime>
  <CosObjectId>7be9b3f3-1200-403f-984a-04c07b7c5a7b</CosObjectId>
  <CosURI>/vmrest/coses/7be9b3f3-1200-403f-984a-04c07b7c5a7b</CosURI>
  <Language>1033</Language>
  <LocationObjectId>
  6d4ff2e5-3f26-4a19-b2fa-beca79b4c5e9
  </LocationObjectId>
  <LocationURI>
  /vmrest/locations/connectionlocations/6d4ff2e5-3f26-4a19-b2fa-beca79b4c5e9
  </LocationURI>
  <AddressMode>0</AddressMode>
  <ClockMode>0</ClockMode>
  <ConversationTui>SubMenu</ConversationTui>
  <GreetByName>true</GreetByName>
  <ListInDirectory>true</ListInDirectory>
  <IsVmEnrolled>true</IsVmEnrolled>
  <SayCopiedNames>true</SayCopiedNames>
  <SayDistributionList>true</SayDistributionList>
  <SayMsgNumber>true</SayMsgNumber>
  <SaySender>true</SaySender>
  <SayTimestampAfter>true</SayTimestampAfter>
  <SayTimestampBefore>false</SayTimestampBefore>
  <SayTotalNew>false</SayTotalNew>
  <SayTotalNewEmail>false</SayTotalNewEmail>
  <SayTotalNewFax>false</SayTotalNewFax>
  <SayTotalNewVoice>true</SayTotalNewVoice>
  <SayTotalReceipts>false</SayTotalReceipts>
  <SayTotalSaved>true</SayTotalSaved>
  <Speed>100</Speed>
  <MediaSwitchObjectId>
  1fb12b1c-cf14-4634-b73d-9b9c58ecdf68
  </MediaSwitchObjectId>
  <PhoneSystemURI>
  /vmrest/phonesystems/1fb12b1c-cf14-4634-b73d-9b9c58ecdf68
  </PhoneSystemURI>
  <Undeletable>false</Undeletable>
  <UseBriefPrompts>false</UseBriefPrompts>
  <Volume>50</Volume>
  <EnAltGreetDontRingPhone>false</EnAltGreetDontRingPhone>
  <EnAltGreetPreventSkip>false</EnAltGreetPreventSkip>
  <EnAltGreetPreventMsg>false</EnAltGreetPreventMsg>
  <EncryptPrivateMessages>false</EncryptPrivateMessages>
  <DeletedMessageSortOrder>2</DeletedMessageSortOrder>

```

```

<SayAltGreetWarning>>false</SayAltGreetWarning>
<SaySenderExtension>>false</SaySenderExtension>
<SayAni>>false</SayAni>
<ExitCallActionObjectId>
27cbb3a8-f040-4ee9-9686-620c43e3d725
</ExitCallActionObjectId>
<CallAnswerTimeout>4</CallAnswerTimeout>
<CallHandlerObjectId>
9a5ac35a-0df8-4ebb-8e19-77f936dfd263
</CallHandlerObjectId>
<CallhandlerURI>
/vmrest/callhandlerprimarytemplates/9a5ac35a-0df8-4ebb-8e19-77f936dfd263
</CallhandlerURI>
<DisplayNameRule>1</DisplayNameRule>
<DoesntExpire>>false</DoesntExpire>
<CantChange>>false</CantChange>
<MailboxStoreObjectId>
cfc43112-601b-4764-ba92-b0220e9d7f23
</MailboxStoreObjectId>
<SavedMessageStackOrder>1234567</SavedMessageStackOrder>
<NewMessageStackOrder>1234567</NewMessageStackOrder>
<MessageLocatorSortOrder>1</MessageLocatorSortOrder>
<SavedMessageSortOrder>2</SavedMessageSortOrder>
<NewMessageSortOrder>1</NewMessageSortOrder>
<MessageTypeMenu>>false</MessageTypeMenu>
<EnablePersonalRules>>true</EnablePersonalRules>
<RecordUnknownCallerName>>true</RecordUnknownCallerName>
<RingPrimaryPhoneFirst>>false</RingPrimaryPhoneFirst>
<PromptSpeed>100</PromptSpeed>
<ExitAction>2</ExitAction>
<ExitTargetConversation>PHTransfer</ExitTargetConversation>
<ExitTargetHandlerObjectId>
7ae69f21-1c99-4cc1-96c3-albbellfd4ca
</ExitTargetHandlerObjectId>
<RepeatMenu>1</RepeatMenu>
<FirstDigitTimeout>5000</FirstDigitTimeout>
<InterdigitDelay>3000</InterdigitDelay>
<PromptVolume>50</PromptVolume>
<AddressAfterRecord>>false</AddressAfterRecord>
<ConfirmDeleteMessage>>false</ConfirmDeleteMessage>
<ConfirmDeleteDeletedMessage>>false</ConfirmDeleteDeletedMessage>
<ConfirmDeleteMultipleMessages>>true</ConfirmDeleteMultipleMessages>
<IsClockMode24Hour>>false</IsClockMode24Hour>
<RouteNDRToSender>>true</RouteNDRToSender>
<NotificationType>0</NotificationType>
<SendReadReceipts>0</SendReadReceipts>
<ReceiveQuota>-1</ReceiveQuota>
<SendQuota>-1</SendQuota>
<WarningQuota>-1</WarningQuota>
<IsSetForVmEnrollment>>true</IsSetForVmEnrollment>
<VoiceNameRequired>>false</VoiceNameRequired>
<SendBroadcastMsg>>true</SendBroadcastMsg>
<UpdateBroadcastMsg>>false</UpdateBroadcastMsg>
<ConversationVui>VuiStart</ConversationVui>
<SpeechCompleteTimeout>0</SpeechCompleteTimeout>
<SpeechIncompleteTimeout>750</SpeechIncompleteTimeout>
<UseVui>>false</UseVui>
<SkipPasswordForKnownDevice>>false</SkipPasswordForKnownDevice>
<JumpToMessagesOnLogin>>true</JumpToMessagesOnLogin>
<EnableMessageLocator>>false</EnableMessageLocator>
<MessageAgingPolicyObjectId>
2e02eca6-270b-4b7f-a153-f03ea74d403d
</MessageAgingPolicyObjectId>
<MessageAgingPolicyURI>

```

```

/vmrest/messageagingpolicies/2e02eca6-270b-4b7f-a153-f03ea74d403d
</MessageAgingPolicyURI>
<AssistantRowsPerPage>5</AssistantRowsPerPage>
<InboxMessagesPerPage>20</InboxMessagesPerPage>
<InboxAutoRefresh>15</InboxAutoRefresh>
<InboxAutoResolveMessageRecipients>true</InboxAutoResolveMessageRecipients>
<PcaAddressBookRowsPerPage>5</PcaAddressBookRowsPerPage>
<ReadOnly>>false</ReadOnly>
<EnableTts>>true</EnableTts>
<ConfirmationConfidenceThreshold>60</ConfirmationConfidenceThreshold>
<AnnounceUpcomingMeetings>60</AnnounceUpcomingMeetings>
<SpeechConfidenceThreshold>40</SpeechConfidenceThreshold>
<SpeechSpeedVsAccuracy>50</SpeechSpeedVsAccuracy>
<SpeechSensitivity>50</SpeechSensitivity>
<EnableVisualMessageLocator>>false</EnableVisualMessageLocator>
<ContinuousAddMode>>false</ContinuousAddMode>
<NameConfirmation>>false</NameConfirmation>
<CommandDigitTimeout>1500</CommandDigitTimeout>
<SaveMessageOnHangup>>false</SaveMessageOnHangup>
<SendMessageOnHangup>1</SendMessageOnHangup>
<SkipForwardTime>5000</SkipForwardTime>
<SkipReverseTime>5000</SkipReverseTime>
<UseShortPollForCache>>false</UseShortPollForCache>
<SearchByExtensionSearchSpaceObjectId>
25e2e004-c194-4593-9961-bdcdf5dd7189
</SearchByExtensionSearchSpaceObjectId>
<SearchByExtensionSearchSpaceURI>
/vmrest/searchspaces/25e2e004-c194-4593-9961-bdcdf5dd7189
</SearchByExtensionSearchSpaceURI>
<SearchByNameSearchSpaceObjectId>
25e2e004-c194-4593-9961-bdcdf5dd7189
</SearchByNameSearchSpaceObjectId>
<SearchByNameSearchSpaceURI>
/vmrest/searchspaces/25e2e004-c194-4593-9961-bdcdf5dd7189
</SearchByNameSearchSpaceURI>
<PartitionObjectId>
12101df7-ecd2-4a48-b5b9-9a96b5f85a25
</PartitionObjectId>
<PartitionURI>
/vmrest/partitions/12101df7-ecd2-4a48-b5b9-9a96b5f85a25
</PartitionURI>
<UseDynamicNameSearchWeight>>false</UseDynamicNameSearchWeight>
<LdapType>0</LdapType>
<EnableMessageBookmark>>false</EnableMessageBookmark>
<SayTotalDraftMsg>>false</SayTotalDraftMsg>
<EnableSaveDraft>>false</EnableSaveDraft>
<RetainUrgentMessageFlag>>false</RetainUrgentMessageFlag>
<SayMessageLength>>false</SayMessageLength>
<CreateSmtProxyFromCorp>>false</CreateSmtProxyFromCorp>
<AutoAdvanceMsgs>>false</AutoAdvanceMsgs>
<SaySenderAfter>>false</SaySenderAfter>
<SaySenderExtensionAfter>>false</SaySenderExtensionAfter>
<SayMsgNumberAfter>>false</SayMsgNumberAfter>
<SayAniAfter>>false</SayAniAfter>
<SayMessageLengthAfter>>false</SayMessageLengthAfter>
<UserTemplateRolesURI>
/vmrest/usertemplates/c8af2544-2bc9-44fa-b713-e80f306cf781/usertemplateroles
</UserTemplateRolesURI>
<UserTemplateNotificationDevicesURI>
/vmrest/usertemplates/c8af2544-2bc9-44fa-b713-e80f306cf781/usertemplatenotificationdevices
</UserTemplateNotificationDevicesURI>
<UserTemplateWebPasswordURI>
/vmrest/usertemplates/c8af2544-2bc9-44fa-b713-e80f306cf781/credential/password

```



```
</UserTemplateWebPasswordURI>
<UserTemplateVoicePinURI>
  /vmrest/usertemplates/c8af2544-2bc9-44fa-b713-e80f306cf781/credential/pin
</UserTemplateVoicePinURI>
<UserTemplateMessageActionURI>
  /vmrest/usertemplates/c8af2544-2bc9-44fa-b713-e80f306cf781/usertemplatemessageactions
</UserTemplateMessageActionURI>
</UserTemplate>
```

Response Code: 200

JSON Examples to List User Templates

Example 1

The following is an example of the GET request that lists all the User Templates:

```
https://<connection_server>/vmrest/usertemplates/
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

Generic Examples to List User Templates

```

{
"@total": "2",
"UserTemplate":
{
  "URI": "/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d",
  "ObjectId": "885dd0af-bdb1-401f-b4e9-6bd9fc8d594d",
  "UseDefaultLanguage": "true",
  "UseDefaultTimeZone": "true",
  "Alias": "voicemailusertemplate",
  "DisplayName": "Voice Mail User Template",
  "TimeZone": "4",
  "CreationTime": "2012-07-29T14:10:26Z",
  "CosObjectId": "362bf7f9-7cec-4f59-86dd-6c058a9100ef",
  "CosURI": "/vmrest/coses/362bf7f9-7cec-4f59-86dd-6c058a9100ef",
  "Language": "1033",
  "LocationObjectId": "3a403c9c-04c8-496a-ba76-23faaaae5a95",
  "LocationURI":
  "/vmrest/locations/connectionlocations/3a403c9c-04c8-496a-ba76-23faaaae5a95",
  "AddressMode": "0",
  "ClockMode": "0",
  "ConversationTui": "SubMenu",
  "GreetByName": "true",
  "ListInDirectory": "true",
  "IsVmEnrolled": "true",
  "SayCopiedNames": "true",
  "SayDistributionList": "true",
  "SayMsgNumber": "true",
  "SaySender": "true",
  "SayTimestampAfter": "true",
  "SayTimestampBefore": "false",
  "SayTotalNew": "false",
  "SayTotalNewEmail": "false",
  "SayTotalNewFax": "false",
  "SayTotalNewVoice": "true",
  "SayTotalReceipts": "false",
  "SayTotalSaved": "true",
  "Speed": "100",
  "MediaSwitchObjectId": "0d15753c-e1b4-4865-b00b-999a1ccf56ce",
  "PhoneSystemURI":
  "/vmrest/phonesystems/0d15753c-e1b4-4865-b00b-999a1ccf56ce",
  "Undeletable": "true",
  "UseBriefPrompts": "false",
  "Volume": "50",
  "EnAltGreetDontRingPhone": "false",
  "EnAltGreetPreventSkip": "false",
  "EnAltGreetPreventMsg": "false",
  "EncryptPrivateMessages": "false",
  "DeletedMessageSortOrder": "2",
  "SayAltGreetWarning": "false",
  "SaySenderExtension": "false",
  "SayAni": "false",
  "ExitCallActionObjectId": "6352cf7d-89f8-4748-bac5-8878889c3d56",
  "CallAnswerTimeout": "4",
  "CallHandlerObjectId": "c9069370-3631-4d36-a53a-1ac4e8d8f444",
  "CallhandlerURI":
  "/vmrest/callhandlerprimarytemplates/c9069370-3631-4d36-a53a-1ac4e8d8f444",
  "DisplayNameRule": "1",
  "DoesntExpire": "false",
  "CantChange": "false",
  "MailboxStoreObjectId": "6d2eb9ad-3caf-41d2-b3db-4451d95057fe",
  "SavedMessageStackOrder": "1234567",
  "NewMessageStackOrder": "1234567",
  "MessageLocatorSortOrder": "1",
  "SavedMessageSortOrder": "2",

```

```
"NewMessageSortOrder": "1",
"MessageTypeMenu": "false",
"EnablePersonalRules": "true",
"RecordUnknownCallerName": "true",
"RingPrimaryPhoneFirst": "false",
"PromptSpeed": "100",
"ExitAction": "2",
"ExitTargetConversation": "PHGreeting",
"ExitTargetHandlerObjectId": "708d5a59-95bb-4804-979b-c56b2f7d719a",
"RepeatMenu": "1",
"FirstDigitTimeout": "5000",
"InterdigitDelay": "3000",
"PromptVolume": "50",
"DelayAfterGreeting": "0",
"AddressAfterRecord": "false",
"ConfirmDeleteMessage": "false",
"ConfirmDeleteDeletedMessage": "false",
"ConfirmDeleteMultipleMessages": "true",
"IsClockMode24Hour": "false",
"RouteNDRToSender": "true",
"NotificationType": "0",
"SendReadReceipts": "1",
"ReceiveQuota": "2147483647",
"SendQuota": "2147483647",
"WarningQuota": "2147483647",
"IsSetForVmEnrollment": "true",
"VoiceNameRequired": "false",
"SendBroadcastMsg": "false",
"UpdateBroadcastMsg": "false",
"ConversationVui": "VuiStart",
"SpeechCompleteTimeout": "0",
"SpeechIncompleteTimeout": "750",
"UseVui": "false",
"SkipPasswordForKnownDevice": "false",
"JumpToMessagesOnLogin": "true",
"EnableMessageLocator": "false",
"MessageAgingPolicyObjectId": "a4b9216a-9360-4f9b-8937-cc66fba0ebbe",
"MessageAgingPolicyURI":
"/vmrest/messageagingpolicies/a4b9216a-9360-4f9b-8937-cc66fba0ebbe",
"AssistantRowsPerPage": "5",
"InboxMessagesPerPage": "20",
"InboxAutoRefresh": "15",
"InboxAutoResolveMessageRecipients": "true",
"PcaAddressBookRowsPerPage": "5",
"ReadOnly": "false",
"EnableTts": "true",
"ConfirmationConfidenceThreshold": "60",
"AnnounceUpcomingMeetings": "60",
"SpeechConfidenceThreshold": "40",
"SpeechSpeedVsAccuracy": "50",
"SpeechSensitivity": "50",
"EnableVisualMessageLocator": "false",
"ContinuousAddMode": "false",
"NameConfirmation": "false",
"CommandDigitTimeout": "1500",
"SaveMessageOnHangup": "false",
"SendMessageOnHangup": "1",
"SkipForwardTime": "12345",
"SkipReverseTime": "54321",
"UseShortPollForCache": "false",
"SearchByExtensionSearchSpaceObjectId":
"a3933806-a995-443e-8704-498c03377bf7",
"SearchByExtensionSearchSpaceURI":
"/vmrest/searchspaces/a3933806-a995-443e-8704-498c03377bf7",
```

```

"SearchByNameSearchSpaceObjectId":
"a3933806-a995-443e-8704-498c03377bf7",
"SearchByNameSearchSpaceURI":
"/vmrest/searchspaces/a3933806-a995-443e-8704-498c03377bf7",
"PartitionObjectId": "6ac064a3-79d6-4a52-a3d3-f4311be5c28c",
"PartitionURI":
"/vmrest/partitions/6ac064a3-79d6-4a52-a3d3-f4311be5c28c",
"UseDynamicNameSearchWeight": "false",
"LdapType": "0",
"EnableMessageBookmark": "false",
"SayTotalDraftMsg": "false",
"EnableSaveDraft": "false",
"RetainUrgentMessageFlag": "false",
"SayMessageLength": "false",
"CreateSmtProxyFromCorp": "false",
"AutoAdvanceMsgs": "false",
"SaySenderAfter": "false",
"SaySenderExtensionAfter": "false",
"SayMsgNumberAfter": "true",
"SayAniAfter": "false",
"SayMessageLengthAfter": "false",
"UserTemplateRolesURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/usertemplateroles",
"UserTemplateNotificationDevicesURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/usertemplatenotificationdevices",

"TemplateExternalServiceAccountsURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/templateexternalserviceaccounts",

"UserTemplateWebPasswordURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/credential/password",
"UserTemplateVoicePinURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/credential/pin",
"UserTemplateMessageActionURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/usertemplatemessageactions",

"DefaultUserTemplateURI": "/vmrest/userdefaulttemplates"
},
{
"URI": "/vmrest/usertemplates/7426a16f-e735-4854-9ab6-7463728ea4f7",
"ObjectId": "7426a16f-e735-4854-9ab6-7463728ea4f7",
"UseDefaultLanguage": "true",
"UseDefaultTimeZone": "true",
"Alias": "AdminTest",
"DisplayName": "Admin test",
"TimeZone": "4",
"CreationTime": "2012-08-28T10:57:12Z",
"CosObjectId": "362bf7f9-7cec-4f59-86dd-6c058a9100ef",
"CosURI": "/vmrest/coses/362bf7f9-7cec-4f59-86dd-6c058a9100ef",
"Language": "1033",
"LocationObjectId": "3a403c9c-04c8-496a-ba76-23faaaae5a95",
"LocationURI":
"/vmrest/locations/connectionlocations/3a403c9c-04c8-496a-ba76-23faaaae5a95",
"AddressMode": "0",
"ClockMode": "0",
"ConversationTui": "SubMenu",
"GreetByName": "true",
"ListInDirectory": "true",
"IsVmEnrolled": "true",
"SayCopiedNames": "true",
"SayDistributionList": "true",
"SayMsgNumber": "true",

```

```
"SaySender": "true",
"SayTimestampAfter": "true",
"SayTimestampBefore": "false",
"SayTotalNew": "false",
"SayTotalNewEmail": "false",
"SayTotalNewFax": "false",
"SayTotalNewVoice": "true",
"SayTotalReceipts": "false",
"SayTotalSaved": "true",
"Speed": "100",
"MediaSwitchObjectId": "0d15753c-e1b4-4865-b00b-999a1ccf56ce",
"PhoneSystemURI":
"/vmrest/phonesystems/0d15753c-e1b4-4865-b00b-999a1ccf56ce",
"Undeletable": "false",
"UseBriefPrompts": "false",
"Volume": "50",
"EnAltGreetDontRingPhone": "false",
"EnAltGreetPreventSkip": "false",
"EnAltGreetPreventMsg": "false",
"EncryptPrivateMessages": "false",
"DeletedMessageSortOrder": "2",
"SayAltGreetWarning": "false",
"SaySenderExtension": "false",
"SayAni": "false",
"ExitCallActionObjectId": "38d9d3d2-2f70-4e4c-a3bd-54c8e96df9f6",
"CallAnswerTimeout": "4",
"CallHandlerObjectId": "ee01a097-2c78-4f36-9400-c0a6e0159419",
"CallhandlerURI":
"/vmrest/callhandlerprimarytemplates/ee01a097-2c78-4f36-9400-c0a6e0159419",
"DisplayNameRule": "1",
"DoesntExpire": "false",
"CantChange": "false",
"MailboxStoreObjectId": "6d2eb9ad-3caf-41d2-b3db-4451d95057fe",
"SavedMessageStackOrder": "1234567",
"NewMessageStackOrder": "1234567",
"MessageLocatorSortOrder": "1",
"SavedMessageSortOrder": "2",
"NewMessageSortOrder": "1",
"MessageTypeMenu": "false",
"EnablePersonalRules": "true",
"RecordUnknownCallerName": "true",
"RingPrimaryPhoneFirst": "false",
"PromptSpeed": "100",
"ExitAction": "2",
"ExitTargetConversation": "PHGreeting",
"ExitTargetHandlerObjectId": "708d5a59-95bb-4804-979b-c56b2f7d719a",
"RepeatMenu": "1",
"FirstDigitTimeout": "5000",
"InterdigitDelay": "3000",
"PromptVolume": "50",
"DelayAfterGreeting": "0",
"AddressAfterRecord": "false",
"ConfirmDeleteMessage": "false",
"ConfirmDeleteDeletedMessage": "false",
"ConfirmDeleteMultipleMessages": "true",
"IsClockMode24Hour": "false",
"RouteNDRToSender": "true",
"NotificationType": "0",
"SendReadReceipts": "1",
"ReceiveQuota": "2147483647",
"SendQuota": "2147483647",
"WarningQuota": "2147483647",
"IsSetForVmEnrollment": "true",
"VoiceNameRequired": "false",
```

Generic Examples to List User Templates

```

"SendBroadcastMsg": "false",
"UpdateBroadcastMsg": "false",
"ConversationVui": "VuiStart",
"SpeechCompleteTimeout": "0",
"SpeechIncompleteTimeout": "750",
"UseVui": "false",
"SkipPasswordForKnownDevice": "false",
"JumpToMessagesOnLogin": "true",
"EnableMessageLocator": "false",
"MessageAgingPolicyObjectId": "a4b9216a-9360-4f9b-8937-cc66fba0ebbe",
"MessageAgingPolicyURI":
"/vmrest/messageagingpolicies/a4b9216a-9360-4f9b-8937-cc66fba0ebbe",
"AssistantRowsPerPage": "5",
"InboxMessagesPerPage": "20",
"InboxAutoRefresh": "15",
"InboxAutoResolveMessageRecipients": "true",
"PcaAddressBookRowsPerPage": "5",
"ReadOnly": "false",
"EnableTts": "true",
"ConfirmationConfidenceThreshold": "60",
"AnnounceUpcomingMeetings": "60",
"SpeechConfidenceThreshold": "40",
"SpeechSpeedVsAccuracy": "50",
"SpeechSensitivity": "50",
"EnableVisualMessageLocator": "false",
"ContinuousAddMode": "false",
"NameConfirmation": "false",
"CommandDigitTimeout": "1500",
"SaveMessageOnHangup": "false",
"SendMessageOnHangup": "1",
"SkipForwardTime": "12345",
"SkipReverseTime": "54321",
"UseShortPollForCache": "false",
"SearchByExtensionSearchSpaceObjectId":
"a3933806-a995-443e-8704-498c03377bf7",
"SearchByExtensionSearchSpaceURI":
"/vmrest/searchspaces/a3933806-a995-443e-8704-498c03377bf7",
"SearchByNameSearchSpaceObjectId":
"a3933806-a995-443e-8704-498c03377bf7",
"SearchByNameSearchSpaceURI":
"/vmrest/searchspaces/a3933806-a995-443e-8704-498c03377bf7",
"PartitionObjectId":
"6ac064a3-79d6-4a52-a3d3-f4311be5c28c",
"PartitionURI":
"/vmrest/partitions/6ac064a3-79d6-4a52-a3d3-f4311be5c28c",
"UseDynamicNameSearchWeight": "false",
"LdapType": "0",
"EnableMessageBookmark": "false",
"SayTotalDraftMsg": "false",
"EnableSaveDraft": "false",
"RetainUrgentMessageFlag": "false",
"SayMessageLength": "false",
"CreateSmtProxyFromCorp": "false",
"AutoAdvanceMsgs": "false",
"SaySenderAfter": "false",
"SaySenderExtensionAfter": "false",
"SayMsgNumberAfter": "true",
"SayAniAfter": "false",
"SayMessageLengthAfter": "false",
"UserTemplateRolesURI":
"/vmrest/usertemplates/7426a16f-e735-4854-9ab6-7463728ea4f7/usertemplateroles",
"UserTemplateNotificationDevicesURI":
"/vmrest/usertemplates/7426a16f-e735-4854-9ab6-7463728ea4f7/usertemplatenotificationdevices",

```

```
"TemplateExternalServiceAccountsURI":  
"/vmrest/usertemplates/7426a16f-e735-4854-9ab6-7463728ea4f7/templateexternalserviceaccounts",  
  
"UserTemplateWebPasswordURI":  
"/vmrest/usertemplates/7426a16f-e735-4854-9ab6-7463728ea4f7/credential/password",  
"UserTemplateVoicePinURI":  
"/vmrest/usertemplates/7426a16f-e735-4854-9ab6-7463728ea4f7/credential/pin",  
"UserTemplateMessageActionURI":  
"/vmrest/usertemplates/7426a16f-e735-4854-9ab6-7463728ea4f7/usertemplatemessageactions",  
  
"DefaultUserTemplateURI": "/vmrest/userdefaulttemplates"  
}  
}
```

Response Code: 200

Example 2

The following is an example of the GET request that lists the User Template as represented by <objectId>:

```
https://<connection_server>/vmrest/usertemplates/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

Generic Examples to List User Templates

```

{
  "URI": "/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d",
  "ObjectId": "885dd0af-bdb1-401f-b4e9-6bd9fc8d594d",
  "UseDefaultLanguage": "true",
  "UseDefaultTimeZone": "true",
  "Alias": "voicemailusertemplate",
  "DisplayName": "Voice Mail User Template",
  "TimeZone": "4",
  "CreationTime": "2012-07-29T14:10:26Z",
  "CosObjectId": "362bf7f9-7cec-4f59-86dd-6c058a9100ef",
  "CosURI": "/vmrest/coses/362bf7f9-7cec-4f59-86dd-6c058a9100ef",
  "Language": "1033",
  "LocationObjectId": "3a403c9c-04c8-496a-ba76-23faaaae5a95",
  "LocationURI":
  "/vmrest/locations/connectionlocations/3a403c9c-04c8-496a-ba76-23faaaae5a95",
  "AddressMode": "0",
  "ClockMode": "0",
  "ConversationTui": "SubMenu",
  "GreetByName": "true",
  "ListInDirectory": "true",
  "IsVmEnrolled": "true",
  "SayCopiedNames": "true",
  "SayDistributionList": "true",
  "SayMsgNumber": "true",
  "SaySender": "true",
  "SayTimestampAfter": "true",
  "SayTimestampBefore": "false",
  "SayTotalNew": "false",
  "SayTotalNewEmail": "false",
  "SayTotalNewFax": "false",
  "SayTotalNewVoice": "true",
  "SayTotalReceipts": "false",
  "SayTotalSaved": "true",
  "Speed": "100",
  "MediaSwitchObjectId": "0d15753c-e1b4-4865-b00b-999a1ccf56ce",
  "PhoneSystemURI":
  "/vmrest/phonesystems/0d15753c-e1b4-4865-b00b-999a1ccf56ce",
  "Undeletable": "true",
  "UseBriefPrompts": "false",
  "Volume": "50",
  "EnAltGreetDontRingPhone": "false",
  "EnAltGreetPreventSkip": "false",
  "EnAltGreetPreventMsg": "false",
  "EncryptPrivateMessages": "false",
  "DeletedMessageSortOrder": "2",
  "SayAltGreetWarning": "false",
  "SaySenderExtension": "false",
  "SayAni": "false",
  "ExitCallActionObjectId": "6352cf7d-89f8-4748-bac5-8878889c3d56",
  "CallAnswerTimeout": "4",
  "CallHandlerObjectId": "c9069370-3631-4d36-a53a-1ac4e8d8f444",
  "CallhandlerURI":
  "/vmrest/callhandlerprimarytemplates/c9069370-3631-4d36-a53a-1ac4e8d8f444",
  "DisplayNameRule": "1",
  "DoesntExpire": "false",
  "CantChange": "false",
  "MailboxStoreObjectId": "6d2eb9ad-3caf-41d2-b3db-4451d95057fe",
  "SavedMessageStackOrder": "1234567",
  "NewMessageStackOrder": "1234567",
  "MessageLocatorSortOrder": "1",
  "SavedMessageSortOrder": "2",
  "NewMessageSortOrder": "1",
  "MessageTypeMenu": "false",
  "EnablePersonalRules": "true",

```



```
"RecordUnknownCallerName": "true",
"RingPrimaryPhoneFirst": "false",
"PromptSpeed": "100",
"ExitAction": "2",
"ExitTargetConversation": "PHGreeting",
"ExitTargetHandlerObjectId": "708d5a59-95bb-4804-979b-c56b2f7d719a",
"RepeatMenu": "1",
"FirstDigitTimeout": "5000",
"InterdigitDelay": "3000",
"PromptVolume": "50",
"AddressAfterRecord": "false",
"ConfirmDeleteMessage": "false",
"ConfirmDeleteDeletedMessage": "false",
"ConfirmDeleteMultipleMessages": "true",
"IsClockMode24Hour": "false",
"RouteNDRToSender": "true",
"NotificationType": "0",
"SendReadReceipts": "1",
"ReceiveQuota": "2147483647",
"SendQuota": "2147483647",
"WarningQuota": "2147483647",
"IsSetForVmEnrollment": "true",
"VoiceNameRequired": "false",
"SendBroadcastMsg": "false",
"UpdateBroadcastMsg": "false",
"ConversationVui": "VuiStart",
"SpeechCompleteTimeout": "0",
"SpeechIncompleteTimeout": "750",
"UseVui": "false",
"SkipPasswordForKnownDevice": "false",
"JumpToMessagesOnLogin": "true",
"EnableMessageLocator": "false",
"MessageAgingPolicyObjectId": "a4b9216a-9360-4f9b-8937-cc66fba0ebbe",
"MessageAgingPolicyURI":
"/vmrest/messageagingpolicies/a4b9216a-9360-4f9b-8937-cc66fba0ebbe",
"AssistantRowsPerPage": "5",
"InboxMessagesPerPage": "20",
"InboxAutoRefresh": "15",
"InboxAutoResolveMessageRecipients": "true",
"PcaAddressBookRowsPerPage": "5",
"ReadOnly": "false",
"EnableTts": "true",
"ConfirmationConfidenceThreshold": "60",
"AnnounceUpcomingMeetings": "60",
"SpeechConfidenceThreshold": "40",
"SpeechSpeedVsAccuracy": "50",
"SpeechSensitivity": "50",
"EnableVisualMessageLocator": "false",
"ContinuousAddMode": "false",
"NameConfirmation": "false",
"CommandDigitTimeout": "1500",
"SaveMessageOnHangup": "false",
"SendMessageOnHangup": "1",
"SkipForwardTime": "12345",
"SkipReverseTime": "54321",
"UseShortPollForCache": "false",
"SearchByExtensionSearchSpaceObjectId":
"a3933806-a995-443e-8704-498c03377bf7",
"SearchByExtensionSearchSpaceURI":
"/vmrest/searchspaces/a3933806-a995-443e-8704-498c03377bf7",
"SearchByNameSearchSpaceObjectId":
"a3933806-a995-443e-8704-498c03377bf7",
"SearchByNameSearchSpaceURI":
"/vmrest/searchspaces/a3933806-a995-443e-8704-498c03377bf7",
```

```

"PartitionObjectId":
"6ac064a3-79d6-4a52-a3d3-f4311be5c28c",
"PartitionURI":
"/vmrest/partitions/6ac064a3-79d6-4a52-a3d3-f4311be5c28c",
"UseDynamicNameSearchWeight": "false",
"LdapType": "0",
"EnableMessageBookmark": "false",
"SayTotalDraftMsg": "false",
"EnableSaveDraft": "false",
"RetainUrgentMessageFlag": "false",
"SayMessageLength": "false",
"CreateSmtProxyFromCorp": "false",
"AutoAdvanceMsgs": "false",
"SaySenderAfter": "false",
"SaySenderExtensionAfter": "false",
"SayMsgNumberAfter": "true",
"SayAniAfter": "false",
"SayMessageLengthAfter": "false",
"UserTemplateRolesURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/usertemplateroles",
"UserTemplateNotificationDevicesURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/usertemplatenotificationdevices",
"TemplateExternalServiceAccountsURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/templateexternalserviceaccounts",
"UserTemplateWebPasswordURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/credential/password",
"UserTemplateVoicePinURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/credential/pin",
"UserTemplateMessageActionURI":
"/vmrest/usertemplates/885dd0af-bdb1-401f-b4e9-6bd9fc8d594d/usertemplatemessageactions",
"DefaultUserTemplateURI": "/vmrest/userdefaulttemplates"
}

```

Response Code: 200

Adding User Template

Example 1

The following is an example of the POST request that adds the User Templates:

```
https://<connection_server>/vmrest/usertemplates?templateAlias=voicemailusertemplate
```

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```

<UserTemplate>
  <DisplayName>DemoUserTemplate</DisplayName>
  <Alias>DemoUserTemplate</Alias>
</UserTemplate>

```

Response Code: 201

Example 2

The following is a JSON example of the POST request that adds the User Templates:

```
https://<connection_server>/vmrest/usertemplates?templateAlias=voicemailusertemplate
```

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
{
  "Alias": "adminTemplate1",
  "DisplayName": "Admin Voice Mail Template"
}
```

```
Response Code: 201
```

Modifying a User Template

Example 1

The following is an example of the PUT request that modifies the user template as represented by <objectId>:

```
https://<connection_server>/vmrest/usertemplate/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<UserTemplate>
<SendBroadcastMsg>true</SendBroadcastMsg>
<GreetByName>true</GreetByName>
<ListInDirectory>true</ListInDirectory>
<IsVmEnrolled>true</IsVmEnrolled>
<SayCopiedNames>true</SayCopiedNames>
<SayDistributionList>true</SayDistributionList>
<SayMsgNumber>true</SayMsgNumber>
</UserTemplate>
```

```
Response Code: 204
```

Example 2

The following is a JSON example of the PUT request that modifies the user template as represented by <objectId>:

```
https://<connection_server>/vmrest/usertemplate/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
{
  "SendBroadcastMsg" : "true",
  "GreetByName" : "true",
  "ListInDirectory" : "true",
  "IsVmEnrolled" : "true",
  "SayCopiedNames" : "true",
  "SayDistributionList" : "true",
  "SayMsgNumber" : "true"
}
```

```
Response Code: 204
```

You can also modify the following for a user template:

- User Template Voicemail PIN
- User Template Transfer Options
- User Template Caller Input
- User Template Greetings
- User Template Notification Devices
- User Template External Services
- User Template External Service Accounts

Deleting User Templates

The following is an example of the DELETE request that deletes a User Template as represented by <objectId>:

```
https://<connection_server>/vmrest/usertemplates/<objectId>
```

The output for this request returns the successful response code.

```
Response Code: 204
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Default User Template

About Default Templates

This section contains information on how to list and modify default User Templates. Cisco Unity Connection comes with the following predefined user templates, which you can modify but not delete:

- Voice Mail User Template
- Administrator Template

Listing Default Templates

Example 1

The following is an example of the GET request that lists the default User Templates:

```
https://<connection_server>/vmrest/userdefaulttemplates
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<DefaultUserTemplates total="2">
<DefaultUserTemplate>
  <URI>
    /vmrest/defaultusertemplates/48caecef-6f7a-47aa-91cb-019b761f6e69
  </URI>
  <ObjectId>48caecef-6f7a-47aa-91cb-019b761f6e69</ObjectId>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <UseDefaultTimeZone>true</UseDefaultTimeZone>
  <Alias>administratortemplate1</Alias>
  <City/>
  <State/>
  <Country>US</Country>
  <PostalCode/>
  <Department/>
  <Building/>
  <Address/>
  <DisplayName>Administrator Template</DisplayName>
  <BillingId/>
  <TimeZone>190</TimeZone>
  <CreationTime>2012-07-09T07:27:43Z</CreationTime>
  <Language>1033</Language>
  <LocationObjectId>be27976c-6e6e-419f-853d-b3764881dfb0</LocationObjectId>
  <LocationURI>
    /vmrest/locations/connectionlocations/be27976c-6e6e-419f-853d-b3764881dfb0
  </LocationURI>
  <DisplayNameRule>1</DisplayNameRule>
  <DoesntExpire>>false</DoesntExpire>
  <CantChange>>false</CantChange>
  <RouteNDRToSender>true</RouteNDRToSender>
  <Undeletable>true</Undeletable>
  <ReadOnly>>false</ReadOnly>
  <PartitionObjectId>c2ecf6c5-b3c2-45f4-99fc-e065056501d5</PartitionObjectId>
  <PartitionURI>
    /vmrest/partitions/c2ecf6c5-b3c2-45f4-99fc-e065056501d5
  </PartitionURI>
  <LdapType>0</LdapType>
  <CreateSmtProxyFromCorp>>false</CreateSmtProxyFromCorp>
  <DefaultUserTemplateWebPasswordURI>
    /vmrest/usertemplates/48caecef-6f7a-47aa-91cb-019b761f6e69/credential/password
  </DefaultUserTemplateWebPasswordURI>
  <DefaultUserTemplateVoicePinURI>
    /vmrest/usertemplates/48caecef-6f7a-47aa-91cb-019b761f6e69/credential/pin
  </DefaultUserTemplateVoicePinURI>
</DefaultUserTemplate>
<DefaultUserTemplate>
  <URI>
    /vmrest/defaultusertemplates/bc0eedd5-0483-4362-a091-5f89d27b7b3c
  </URI>
  <ObjectId>bc0eedd5-0483-4362-a091-5f89d27b7b3c</ObjectId>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <UseDefaultTimeZone>true</UseDefaultTimeZone>
  <Alias>voicemailusertemplate</Alias>
  <DisplayName>Voice Mail User Template</DisplayName>
  <TimeZone>190</TimeZone>
  <CreationTime>2012-07-09T07:27:44Z</CreationTime>
  <CosObjectId>305a9699-03a8-41d0-9215-0fcd32d600b0</CosObjectId>
  <CosURI>/vmrest/coses/305a9699-03a8-41d0-9215-0fcd32d600b0</CosURI>
  <Language>1033</Language>
  <LocationObjectId>be27976c-6e6e-419f-853d-b3764881dfb0</LocationObjectId>
  <LocationURI>
    /vmrest/locations/connectionlocations/be27976c-6e6e-419f-853d-b3764881dfb0
  </LocationURI>
  <DisplayNameRule>1</DisplayNameRule>
  <DoesntExpire>>false</DoesntExpire>

```

Listing Default Templates

```

<CantChange>>false</CantChange>
<MailboxStoreObjectId>15dd71c8-2ba1-4efa-a34e-01613a0d2ef7</MailboxStoreObjectId>
<RouteNDRToSender>true</RouteNDRToSender>
<Undeletable>true</Undeletable>
<ReadOnly>>false</ReadOnly>
<PartitionObjectId>c2ecf6c5-b3c2-45f4-99fc-e065056501d5</PartitionObjectId>
<PartitionURI>
  /vmrest/partitions/c2ecf6c5-b3c2-45f4-99fc-e065056501d5
</PartitionURI>
<LdapType>0</LdapType>
<CreateSmtProxyFromCorp>>false</CreateSmtProxyFromCorp>
<DefaultUserTemplateWebPasswordURI>
  /vmrest/usertemplates/bc0eedd5-0483-4362-a091-5f89d27b7b3c/credential/password
</DefaultUserTemplateWebPasswordURI>
<DefaultUserTemplateVoicePinURI>
  /vmrest/usertemplates/bc0eedd5-0483-4362-a091-5f89d27b7b3c/credential/pin
</DefaultUserTemplateVoicePinURI>
</DefaultUserTemplate>
</DefaultUserTemplates>

```

Response code: 200

Example 2

The following is an example of the GET request that lists a specified default User Templates:

```
https://<connection_server>/vmrest/userdefaulttemplates/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<DefaultUserTemplate>
  <URI>
    /vmrest/defaultusertemplates/48caecef-6f7a-47aa-91cb-019b761fce69
  </URI>
  <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <UseDefaultTimeZone>true</UseDefaultTimeZone>
  <Alias>administratortemplate1</Alias>
  <City/>
  <State/>
  <Country>US</Country>
  <PostalCode/>
  <Department/>
  <Building/>
  <Address/>
  <DisplayName>Administrator Template</DisplayName>
  <BillingId/>
  <TimeZone>190</TimeZone>
  <CreationTime>2012-07-09T07:27:43Z</CreationTime>
  <Language>1033</Language>
  <LocationObjectId>be27976c-6e6e-419f-853d-b3764881dfb0</LocationObjectId>
  <LocationURI>
    /vmrest/locations/connectionlocations/be27976c-6e6e-419f-853d-b3764881dfb0
  </LocationURI>
  <DisplayNameRule>1</DisplayNameRule>
  <DoesntExpire>>false</DoesntExpire>
  <CantChange>>false</CantChange>
  <RouteNDRToSender>>true</RouteNDRToSender>
  <Undeletable>>true</Undeletable>
  <ReadOnly>>false</ReadOnly>
  <PartitionObjectId>c2ecf6c5-b3c2-45f4-99fc-e065056501d5</PartitionObjectId>
  <PartitionURI>
    /vmrest/partitions/c2ecf6c5-b3c2-45f4-99fc-e065056501d5
  </PartitionURI>
  <LdapType>0</LdapType>
  <CreateSmtProxyFromCorp>>false</CreateSmtProxyFromCorp>
  <DefaultUserTemplateWebPasswordURI>
    /vmrest/usertemplates/48caecef-6f7a-47aa-91cb-019b761fce69/credential/password
  </DefaultUserTemplateWebPasswordURI>
  <DefaultUserTemplateVoicePinURI>
    /vmrest/usertemplates/48caecef-6f7a-47aa-91cb-019b761fce69/credential/pin
  </DefaultUserTemplateVoicePinURI>
</DefaultUserTemplate>

```

Response code: 200

Modifying Default Templates

The following is an example of the PUT request that modifies the Default User Templates:

```
https://<connection_server>/vmrest/userdefaulttemplates/<objectId>
```

The actual response will depend upon the information given by you.

```

<DefaultUserTemplate>
  <City>San Jose</City>
  <State>CA</State>
  <Country>US</Country>
</DefaultUserTemplate>

```

```
Response code: 204
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template VoiceMail PIN

Changing User Template Voicemail PIN

The following is an example of the PUT request that modifies the user template Voicemail PIN represented by <objectId>:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/credential/pin
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<UserTemplateCredential>
<Credentials>abcd@1234</Credentials>
</UserTemplateCredential>
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Transfer Options

About Transfer Options

Every user template with a mailbox has an associated call handler template, and thus transfers options. Transfer Options are also referred to as Transfer Rules.

Listing and Viewing

The settings on each transfer option can be read by the GET command. Perform the following steps to list the transfer options for a user template:

Step 1 Do the following GET command to list all the user templates:

```
https://<connection_server>/vmrest/usertemplates
```

Step 2 Do the following GET command to list the user template of your choice represented by the <user-template-id>:

```
https://<connection_server>/vmrest/usertemplates/<objectId>
```

Step 3 The following URI is the response from the above GET command:

```
https://<connection_server>/vmrest/callhandlerprimarytemplates/<callhandlerprimarytemplates-id>
```


Step 4 The following URI is the response from the above GET command:

```
https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>/transferoptions
```

What to do next

Every user template and call handler template has three transfer options:

- Standard
- Off Hours
- Alternate

Each transfer option can be accessed through a GET request:

- `https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>/transferoptions/Alternate`
- `https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>/transferoptions/off%20Hours`
- `https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>/transferoptions/Standard`

TimeExpires is the field that determines if a transfer option is enabled or disabled. To enable a transfer option, **TimeExpires** must be set to a future date, which is the date that the transfer option will expire (be disabled). To disable a transfer option, simply set **TimeExpires** to a date in the past. Also, if **TimeExpires** is set to null that means it is enabled indefinitely (however, note that currently CUPI offers no ability to set this field to null). **TimeExpires** is always treated as GMT. Any required time zone conversion is the responsibility of the client.

Action is the field that determines if the transfer option will transfer calls to an extension or directly to the greetings. The **Action** field is a custom type. A value of 0 denotes that the call will be sent directly to the greetings. A value of 1 denotes that the call will be transferred to an extension.

Several settings are specific to how the transfer option should transfer the call (assuming that the **Action** is set to 1):

- **TransferType**
- **Extension**
- **TransferRings**

TransferType determines whether the transfer will be released (a value of 0) or supervised (a value of 1).

Extension indicates the extension that the call will transfer to.

TransferRings is the number of times Connection will ring the extension before it considers the call a ring-no-answer (RNA), and pulls the call back to play the greeting. This value is only used when the **TransferType** is set to 1 (a supervised transfer).

UsePrimaryExtension is a boolean that is a bit of an oddity. When the value is set to true, the **Extension** is set to the primary extension of the user. However, note the following caveat when using this field: if **UsePrimaryExtension** is set to true and the **Extension** field is set to a value in the same PUT, an error will be thrown. Because setting **UsePrimaryExtension** to true causes the **Extension** field to be set to a specific value, you cannot also explicitly set the **Extension** field in the same PUT; one or the other can occur, but not both. An error will also be thrown if **UsePrimaryExtension** is set to false and no value is given for the **Extension** field in the same PUT. In other words, if you set **UsePrimaryExtension** to false, you must provide a new **Extension** in the same PUT.

PersonalCallTransfer is a boolean that determines whether personal call transfer rules will be used instead of the basic transfer rules. If **PersonalCallTransfer** is set to true, then instead of using any of the settings of this transfer rule, the call will be sent to the personal call transfer rules of the user to be acted on. If **PersonalCallTransfer** is set to false, then the basic transfer rule is used. If you are using personal call transfer rules, set this to true; otherwise, leave it set to false. It's that simple.

Creating

Note that you cannot use CUPI to create transfer options.

Updating

To enable the Alternate transfer option until March 9, 2020, you would use the following PUT request:

```
https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>/transferoptions/Alternate
```

To disable the Alternate transfer option you would do a PUT request with the **TimeExpires** field set to a date in the past as in this example:

Example 1

```
https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>/transferoptions/Alternate
```

```
<?xml version="1.0" encoding="UTF-8"?>
<TransferOption>
  <TimeExpires>1976-03-09 00:00:00.0</TimeExpires>
</TransferOption>
```

```
Response Code: 204
```

Example 2

```
https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>/transferoptions/Alternate
```

```
<?xml version="1.0" encoding="UTF-8"?>
<TransferOption>
  <TransferHoldingMode>1</TransferHoldingMode>
</TransferOption>
```

```
Response Code: 204
```

Deleting

Note that you cannot use CUPI to delete transfer options.

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Caller Input

About Caller Input

This page contains information on how to use the API to list and modify Caller Input. Caller input settings define actions that Cisco Unity Connection takes in response to phone keys pressed by callers.

For more information on caller inputs, see
[Cisco_Unity_Connection_Provisioning_Interface_\(CUPI\)_API_--_Caller_Input_Keys](#)

Listing and Viewing Caller Input

The following is an example of a GET that lists all caller inputs of all types for the specified user template:

```
https://<connection_server>/vmrest/callhandlerprimarytemplates
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<MenuEntries total="12">
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menueentries/*
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>*
</TouchtoneKey>
<Locked>>true</Locked>
<Action>2</Action>
<TargetConversation>SubSignIn</TargetConversation>
<ObjectId>1d111b26-d50c-44a3-bfcc-0b60f2e3207a
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menueentries/#
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>#</TouchtoneKey>
<Locked>>true</Locked>
<Action>5</Action>
<ObjectId>3e3d796b-ffd3-4388-a2bf-b2cca2cf0b9c
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menueentries/0
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>0</TouchtoneKey>
<Locked>>false</Locked>
<Action>2</Action>
<TargetConversation>PHTransfer</TargetConversation>
<TargetHandlerObjectId>e4c32c78-42c6-495e-83c5-4a4a17c0cb7f</TargetHandlerObjectId>
<ObjectId>050b1a62-b237-457d-a027-d2c3289eab20
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menueentries/1
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>1</TouchtoneKey>
<Locked>>false</Locked>
<Action>0</Action>
<ObjectId>31a8cba0-8deb-4266-b83b-57a6c1a33ebb
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menueentries/2
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>

```

```
<TouchtoneKey>2</TouchtoneKey>
<Locked>>false</Locked>
<Action>0</Action>
<ObjectId>f7e0cca3-e864-480b-bcd5-84f290587cbf
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menuentries/3
</URI><CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>3</TouchtoneKey>
<Locked>>false</Locked>
<Action>0</Action>
<ObjectId>910a7722-5cc1-4f98-b6b5-d9ac0c11440f
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menuentries/4
</URI><CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>4</TouchtoneKey>
<Locked>>false</Locked>
<Action>0</Action>
<ObjectId>da2588dc-557e-4671-892b-edde2987d4c0
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menuentries/5
</URI><CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>5</TouchtoneKey>
<Locked>>false</Locked>
<Action>0</Action>
<ObjectId>15c55592-df99-46d0-9a96-19a6ecff2bd5
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menuentries/6
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>6</TouchtoneKey>
<Locked>>false</Locked>
<Action>0</Action>
<ObjectId>bdb6a884-269e-4aab-9ff7-997453e69642
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menuentries/7
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>7</TouchtoneKey>
<Locked>>false</Locked>
```

```

<Action>2</Action>
<TargetConversation>PHTransfer</TargetConversation>
<TargetHandlerObjectId>b659a96c-6949-4d78-a899-93a2407baf28
</TargetHandlerObjectId>
<ObjectId>11e69e5d-1223-4727-ad8c-1dbe3f8f8ce5
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menuentries/8
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>8</TouchtoneKey>
<Locked>>false</Locked>
<Action>0</Action>
<ObjectId>333a6147-cd06-4d71-9def-417cb70c8ebf
</ObjectId>
</MenuEntry>
<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menuentries/9
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>9</TouchtoneKey>
<Locked>>false</Locked>
<Action>0</Action>
<ObjectId>eb66e91d-2a82-425a-88f5-f2c058c2491e</ObjectId>
</MenuEntry>
</MenuEntries>

```

Response Code: 200

Modifying a Caller Input

The following is an example of the PUT request that modifies the caller input as represented by <callerinputId>:

```
https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```

<MenuEntry>
<URI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444/menuentries/*
</URI>
<CallHandlerObjectId>c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/c9069370-3631-4d36-a53a-1ac4e8d8f444
</CallhandlerURI>
<TouchtoneKey>*
</TouchtoneKey>
<Locked>>true</Locked>
<Action>2</Action>
<TargetConversation>SubSignIn</TargetConversation>
<ObjectId>1d111b26-d50c-44a3-bfcc-0b60f2e3207a
</ObjectId>
</MenuEntry>

```

Response Code: 204

Explanation of Data Fields

The following chart lists all of the data fields available on Caller.

Field Name	Writable?	Available Values	Explanation/Comment
ObjectId	Read Only	All	ObjectId of the Device.
OneKeyDelay	Read/Write	0-10000	Indicate the amount of time that Cisco Unity Connection waits for additional input after callers press a single key that is not locked. Default: 1500
EnablePrependDigits	Read/Write	true/false	Enable to simulate abbreviated extensions by using prepended digits for call handlers and user mailboxes. Default: false
PrependDigits	Read/Write	Data Length[40]	Enter the digits that are prepended to any extension that a caller dials while listening to the greeting of the user.
TouchtoneKey	Read/Write	Length(1)	Edit caller input settings.
Locked	Read/Write	true/false	Indicates whether Cisco Unity Connection allows additional input (Unlocked) or ignores additional input (Locked). Default: false
Action	Read/Write	2-Go to an object such as a call handler, directory handler or interview handler. 1- HangUp 0-ignore 6-RestartGreeting 8- Route from next calling route 5- Skip Greeting 4- Take message 7- Transfer to Alternate contact number	Indicates the action that Cisco Unity Connection takes when a caller presses the key.

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Greetings

Listing and Viewing

The following GET allows users templates to listen to and modify their personal greeting:

```
https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>/usertemplategreetings
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:


```

<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<UserTemplateGreetings total="7">
<UserTemplateGreeting>
  <CallHandlerObjectId>a254488a-7f96-4737-9df4-886e3f4b88af</CallHandlerObjectId>

<CallhandlerURI>/vmrest/callhandlerprimarytemplates/a254488a-7f96-4737-9df4-886e3f4b88af</CallhandlerURI>

  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>1</PlayWhat>
  <RepromptDelay>20</RepromptDelay>
  <Reprompts>30</Reprompts>
  <TimeExpires>2012-10-06 09:25:00.0</TimeExpires>
  <GreetingType>Alternate</GreetingType>
  <AfterGreetingAction>2</AfterGreetingAction>
  <AfterGreetingTargetConversation>PHTransfer</AfterGreetingTargetConversation>

<AfterGreetingTargetHandlerObjectId>9e96f34b-22bc-429a-8852-46fbceeff182</AfterGreetingTargetHandlerObjectId>

  <PlayRecordMessagePrompt>>false</PlayRecordMessagePrompt>
  <EnableTransfer>>false</EnableTransfer>
  <EnablePersonalVideoRecording>>false</EnablePersonalVideoRecording>
  <PlayRecordVideoMessagePrompt>>false</PlayRecordVideoMessagePrompt>
  <EnAltGreetDontRingPhone>>true</EnAltGreetDontRingPhone>
  <EnAltGreetPreventSkip>>true</EnAltGreetPreventSkip>
  <EnAltGreetPreventMsg>>true</EnAltGreetPreventMsg>
  <LanguageCode>1033</LanguageCode>
</UserTemplateGreeting>
<UserTemplateGreeting>
  <CallHandlerObjectId>a254488a-7f96-4737-9df4-886e3f4b88af</CallHandlerObjectId>

<CallhandlerURI>/vmrest/callhandlerprimarytemplates/a254488a-7f96-4737-9df4-886e3f4b88af</CallhandlerURI>

  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>0</PlayWhat>
  <RepromptDelay>2</RepromptDelay>
  <Reprompts>0</Reprompts>
  <TimeExpires>2020-10-06 09:25:00.0</TimeExpires>
  <GreetingType>Busy</GreetingType>
  <AfterGreetingAction>4</AfterGreetingAction>
  <PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
  <EnableTransfer>>true</EnableTransfer>
  <EnablePersonalVideoRecording>>false</EnablePersonalVideoRecording>
  <PlayRecordVideoMessagePrompt>>false</PlayRecordVideoMessagePrompt>
  <LanguageCode>1033</LanguageCode>
</UserTemplateGreeting>
<UserTemplateGreeting>
  <CallHandlerObjectId>a254488a-7f96-4737-9df4-886e3f4b88af</CallHandlerObjectId>

<CallhandlerURI>/vmrest/callhandlerprimarytemplates/a254488a-7f96-4737-9df4-886e3f4b88af</CallhandlerURI>

  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>0</PlayWhat>
  <RepromptDelay>2</RepromptDelay>
  <Reprompts>0</Reprompts>
  <GreetingType>Error</GreetingType>
  <AfterGreetingAction>6</AfterGreetingAction>
  <AfterGreetingTargetConversation>PHGreeting</AfterGreetingTargetConversation>

<AfterGreetingTargetHandlerObjectId>08313019-91db-4aed-8ef3-af13a4a72e22</AfterGreetingTargetHandlerObjectId>

  <PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
  <EnableTransfer>>false</EnableTransfer>
  <EnablePersonalVideoRecording>>false</EnablePersonalVideoRecording>
  <PlayRecordVideoMessagePrompt>>false</PlayRecordVideoMessagePrompt>

```

```

    <LanguageCode>1033</LanguageCode>
  </UserTemplateGreeting>
<UserTemplateGreeting>
  <CallHandlerObjectId>a254488a-7f96-4737-9df4-886e3f4b88af</CallHandlerObjectId>

<CallhandlerURI>/vmrest/callhandlerprimarytemplates/a254488a-7f96-4737-9df4-886e3f4b88af</CallhandlerURI>

  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>0</PlayWhat>
  <RepromptDelay>2</RepromptDelay>
  <Reprompts>0</Reprompts>
  <TimeExpires>2013-01-01 00:00:00.0</TimeExpires>
  <GreetingType>Internal</GreetingType>
  <AfterGreetingAction>4</AfterGreetingAction>
  <PlayRecordMessagePrompt>>false</PlayRecordMessagePrompt>
  <EnableTransfer>>false</EnableTransfer>
  <EnablePersonalVideoRecording>>false</EnablePersonalVideoRecording>
  <PlayRecordVideoMessagePrompt>>false</PlayRecordVideoMessagePrompt>
  <LanguageCode>1033</LanguageCode>
</UserTemplateGreeting>
<UserTemplateGreeting>
  <CallHandlerObjectId>a254488a-7f96-4737-9df4-886e3f4b88af</CallHandlerObjectId>

<CallhandlerURI>/vmrest/callhandlerprimarytemplates/a254488a-7f96-4737-9df4-886e3f4b88af</CallhandlerURI>

  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>0</PlayWhat>
  <RepromptDelay>2</RepromptDelay>
  <Reprompts>0</Reprompts>
  <TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
  <GreetingType>Off Hours</GreetingType>
  <AfterGreetingAction>4</AfterGreetingAction>
  <PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
  <EnableTransfer>>false</EnableTransfer>
  <EnablePersonalVideoRecording>>false</EnablePersonalVideoRecording>
  <PlayRecordVideoMessagePrompt>>false</PlayRecordVideoMessagePrompt>
  <LanguageCode>1033</LanguageCode>
</UserTemplateGreeting>
<UserTemplateGreeting>
  <CallHandlerObjectId>a254488a-7f96-4737-9df4-886e3f4b88af</CallHandlerObjectId>

<CallhandlerURI>/vmrest/callhandlerprimarytemplates/a254488a-7f96-4737-9df4-886e3f4b88af</CallhandlerURI>

  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>0</PlayWhat>
  <RepromptDelay>2</RepromptDelay>
  <Reprompts>0</Reprompts>
  <GreetingType>Standard</GreetingType>
  <AfterGreetingAction>4</AfterGreetingAction>
  <PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
  <EnableTransfer>>false</EnableTransfer>
  <EnablePersonalVideoRecording>>false</EnablePersonalVideoRecording>
  <PlayRecordVideoMessagePrompt>>false</PlayRecordVideoMessagePrompt>
  <LanguageCode>1033</LanguageCode>
</UserTemplateGreeting>
<UserTemplateGreeting>
  <CallHandlerObjectId>a254488a-7f96-4737-9df4-886e3f4b88af</CallHandlerObjectId>

<CallhandlerURI>/vmrest/callhandlerprimarytemplates/a254488a-7f96-4737-9df4-886e3f4b88af</CallhandlerURI>

  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>0</PlayWhat>
  <RepromptDelay>2</RepromptDelay>
  <Reprompts>0</Reprompts>

```

```

<TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
<GreetingType>Holiday</GreetingType>
<AfterGreetingAction>4</AfterGreetingAction>
<PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
<EnableTransfer>>false</EnableTransfer>
<EnablePersonalVideoRecording>>false</EnablePersonalVideoRecording>
<PlayRecordVideoMessagePrompt>>false</PlayRecordVideoMessagePrompt>
<LanguageCode>1033</LanguageCode>
</UserTemplateGreeting>
</UserTemplateGreetings>

```

Response Code: 200

The `{greeting type}` can be any one of the following:

- Standard
- Alternate
- Busy
- Closed
- Holiday
- Error
- Internal

Each greeting can be accessed through the following various GET requests:

- https://<connection_server>/vmrest/usertemplate/greetings/Alternate
- https://<connection_server>/vmrest/usertemplate/greetings/Busy
- https://<connection_server>/vmrest/usertemplate/greetings/Error
- https://<connection_server>/vmrest/usertemplate/greetings/Internal
- https://<connection_server>/vmrest/usertemplate/greetings/Off%20Hours
- https://<connection_server>/vmrest/usertemplate/greetings/Standard
- https://<connection_server>/vmrest/usertemplate/greetings/Holiday

Creating Greetings

Note that you cannot use CUPI to create Greetings.

Modifying Greetings

The following is an example of the PUT request that modifies the personal greeting as represented by `<greetingtype>`:

```
https://<connection_server>/vmrest/callhandlerprimarytemplates/<objectId>/usertemplategreetings/<Greeting-type>
```

The following is an example of the response from the above `*PUT*` request and the actual response will depend upon the information given by you:

```

<UserTemplateGreeting>
<EnableTransfer>>true</EnableTransfer>
  <RepromptDelay>454354</RepromptDelay>
  <Reprompts>30</Reprompts>
</UserTemplateGreeting>

```

```
Response Code: 204
```

Deleting Greetings

Note that you cannot use CUPI to delete Greetings.

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Settings Notification Devices

About Notification Devices

This page contains information on how to use the API to create, list, update, and delete Notification Devices.

Cisco Unity Connection supports four different types of Notification Devices:

- Phone Devices
- Pager Devices
- HTML Devices
- SMTP Devices

The generic Notification Device resource contains the data fields that are common to most or all of the specialized Device resources, which in turn may contain additional data fields that are specific to certain Device resources. A listing of all data fields, including a description of what they mean and which specialized Device types support them, can be found later in this document.

In order to create, update, or delete a Notification Device, an API user must use the appropriate specialized Device resource. In other words, an API user can retrieve all of a user's Notification Devices, but if they then want to update a particular Phone Device, they must do the update operation on the Phone Device resource, not the Notification Device resource. This will be explained in more detail below.

The Notification Device resource and the four specialized Device resources contain data fields from the Device objects in the database, plus some data fields from the Notification Rule object. From an API user's perspective, this detail may not usually be important, but it is worth mentioning that the Device resources collapse two database objects into a single resource. This can be safely done because there is always a one-to-one mapping in the database of Notification Devices and Notification Rules.

The factory default User Template for Voicemail Users contains five Notification Devices: three Phone Devices (Home, Work, and Mobile), one Pager Device, one HTML device, and one SMTP Device. Any of these default Notification Devices can be modified, and new Devices of any of four specialized types (phone, pager, HTML, and SMTP) can be created or deleted.

Listing and Viewing Notification Devices

Example 1

The following is an example of a GET that lists all Notification Devices of all types for the specified User Template:

```
https://<connection-server>/vmrest/usertemplates/<objectId>/usertemplatenotificationdevices
```

The following is the response from the above *GET* request. Notice that this list contains a mix of different types of specialized Devices, since the request was for a list of all Notification Devices. The Type field indicates the specialized Device type for each Notification Device (1 = Phone, 2 = Pager, 4 = SMTP, 8 = HTML).

Listing and Viewing Notification Devices

```

<UserTemplateNotificationDevices total="7">
<UserTemplateNotificationDevice>

<URL>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/usernotificationdevices/22b1e3cc-f13d-4349-8811-a196132781a3</URL>

<SubscriberObjectId>85a845d3-063d-4641-aa70-8b536282bffb</SubscriberObjectId>
<UserURI>/vmrest/users/85a845d3-063d-4641-aa70-8b536282bffb</UserURI>
<ObjectId>22b1e3cc-f13d-4349-8811-a196132781a3</ObjectId>
<DisplayName>Pager</DisplayName>
<Active>>false</Active>
<BusyRetryInterval>5</BusyRetryInterval>
<Type>2</Type>
<DialDelay>1</DialDelay>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<RetriesOnBusy>4</RetriesOnBusy>
<RetriesOnRna>4</RetriesOnRna>
<RingsToWait>4</RingsToWait>
<RnaRetryInterval>15</RnaRetryInterval>
<SendCount>>true</SendCount>
<WaitConnect>>true</WaitConnect>
<MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b</PhoneSystemURI>

<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
<DeviceName>Pager</DeviceName>
<PromptForId>>false</PromptForId>
<SendCallerId>>true</SendCallerId>
<SendPcaLink>>false</SendPcaLink>
<Undeletable>>true</Undeletable>
<MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
<DetectTransferLoop>>false</DetectTransferLoop>
<SuccessRetryInterval>1</SuccessRetryInterval>
<RetriesOnSuccess>0</RetriesOnSuccess>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>a884af0a-dd5f-4597-8bc7-31a61e8b612a</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</UserTemplateNotificationDevice>
<UserTemplateNotificationDevice>

<URL>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/usernotificationdevices/d2e67ebc-a987-441d-a168-88d1d7dc49c2</URL>

<SubscriberObjectId>85a845d3-063d-4641-aa70-8b536282bffb</SubscriberObjectId>
<UserURI>/vmrest/users/85a845d3-063d-4641-aa70-8b536282bffb</UserURI>
<ObjectId>d2e67ebc-a987-441d-a168-88d1d7dc49c2</ObjectId>
<DisplayName>PagerDevice</DisplayName>
<Active>>false</Active>
<BusyRetryInterval>5</BusyRetryInterval>
<Type>2</Type>
<DialDelay>1</DialDelay>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<RetriesOnBusy>4</RetriesOnBusy>
<RetriesOnRna>4</RetriesOnRna>
<RingsToWait>4</RingsToWait>
<RnaRetryInterval>15</RnaRetryInterval>
<SendCount>>true</SendCount>
<WaitConnect>>true</WaitConnect>
<MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b</PhoneSystemURI>

<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>

```

```

<DeviceName>Other</DeviceName>
<PromptForId>>false</PromptForId>
<SendCallerId>>true</SendCallerId>
<SendPcaLink>>false</SendPcaLink>
<Undeletable>>false</Undeletable>
<MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
<DetectTransferLoop>>false</DetectTransferLoop>
<SuccessRetryInterval>1</SuccessRetryInterval>
<RetriesOnSuccess>0</RetriesOnSuccess>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>a884af0a-dd5f-4597-8bc7-31a61e8b612a</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</UserTemplateNotificationDevice>
<UserTemplateNotificationDevice>

<URL>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/usertemplatnotificationdevices/53bd701a-7301-49d0-8404-9769b38094cd</URL>

<SubscriberObjectId>85a845d3-063d-4641-aa70-8b536282bffb</SubscriberObjectId>
<UserURI>/vmrest/users/85a845d3-063d-4641-aa70-8b536282bffb</UserURI>
<ObjectId>53bd701a-7301-49d0-8404-9769b38094cd</ObjectId>
<DisplayName>Work Phone</DisplayName>
<Active>>false</Active>
<BusyRetryInterval>5</BusyRetryInterval>
<Conversation>SubNotify</Conversation>
<Type>1</Type>
<DialDelay>1</DialDelay>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<RetriesOnBusy>4</RetriesOnBusy>
<RetriesOnRna>4</RetriesOnRna>
<RingsToWait>4</RingsToWait>
<RnaRetryInterval>15</RnaRetryInterval>
<SendCount>>false</SendCount>
<WaitConnect>>true</WaitConnect>
<MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b</PhoneSystemURI>

<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
<DeviceName>Work Phone</DeviceName>
<PromptForId>>false</PromptForId>
<SendCallerId>>false</SendCallerId>
<SendPcaLink>>false</SendPcaLink>
<Undeletable>>true</Undeletable>
<MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
<DetectTransferLoop>>false</DetectTransferLoop>
<SuccessRetryInterval>0</SuccessRetryInterval>
<RetriesOnSuccess>0</RetriesOnSuccess>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>a884af0a-dd5f-4597-8bc7-31a61e8b612a</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</UserTemplateNotificationDevice>
<UserTemplateNotificationDevice>

<URL>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/usertemplatnotificationdevices/fa8d720c-7c03-4506-867f-780636b00c13</URL>

<SubscriberObjectId>85a845d3-063d-4641-aa70-8b536282bffb</SubscriberObjectId>
<UserURI>/vmrest/users/85a845d3-063d-4641-aa70-8b536282bffb</UserURI>
<ObjectId>fa8d720c-7c03-4506-867f-780636b00c13</ObjectId>
<DisplayName>Home Phone</DisplayName>
<Active>>false</Active>

```

```

<BusyRetryInterval>5</BusyRetryInterval>
<Conversation>SubNotify</Conversation>
<Type>1</Type>
<DialDelay>1</DialDelay>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<RetriesOnBusy>4</RetriesOnBusy>
<RetriesOnRna>4</RetriesOnRna>
<RingsToWait>4</RingsToWait>
<RnaRetryInterval>15</RnaRetryInterval>
<SendCount>>false</SendCount>
<WaitConnect>>true</WaitConnect>
<MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b</PhoneSystemURI>

<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
<DeviceName>Home Phone</DeviceName>
<PromptForId>>false</PromptForId>
<SendCallerId>>false</SendCallerId>
<SendPcaLink>>false</SendPcaLink>
<Undeletable>>true</Undeletable>
<MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
<DetectTransferLoop>>false</DetectTransferLoop>
<SuccessRetryInterval>0</SuccessRetryInterval>
<RetriesOnSuccess>0</RetriesOnSuccess>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>a884af0a-dd5f-4597-8bc7-31a61e8b612a</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</UserTemplateNotificationDevice>
<UserTemplateNotificationDevice>

<URI>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/usernotificationdevices/24cd2817-2911-4668-b740-24369c4b0d19</URI>

<SubscriberObjectId>85a845d3-063d-4641-aa70-8b536282bffb</SubscriberObjectId>
<UserURI>/vmrest/users/85a845d3-063d-4641-aa70-8b536282bffb</UserURI>
<ObjectId>24cd2817-2911-4668-b740-24369c4b0d19</ObjectId>
<DisplayName>Mobile Phone</DisplayName>
<Active>>false</Active>
<BusyRetryInterval>5</BusyRetryInterval>
<Conversation>SubNotify</Conversation>
<Type>1</Type>
<DialDelay>1</DialDelay>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<RetriesOnBusy>4</RetriesOnBusy>
<RetriesOnRna>4</RetriesOnRna>
<RingsToWait>4</RingsToWait>
<RnaRetryInterval>15</RnaRetryInterval>
<SendCount>>false</SendCount>
<WaitConnect>>true</WaitConnect>
<MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b</PhoneSystemURI>

<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
<DeviceName>Mobile Phone</DeviceName>
<PromptForId>>false</PromptForId>
<SendCallerId>>false</SendCallerId>
<SendPcaLink>>false</SendPcaLink>
<Undeletable>>true</Undeletable>
<MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
<DetectTransferLoop>>false</DetectTransferLoop>
<SuccessRetryInterval>0</SuccessRetryInterval>

```



```

<RetriesOnSuccess>0</RetriesOnSuccess>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>a884af0a-dd5f-4597-8bc7-31a61e8b612a</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</UserTemplateNotificationDevice>
<UserTemplateNotificationDevice>
<URL>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/usertemplatenotificationdevices/d6871a13-4680-428a-a839-afb6d3b46b6b</URL>
<SubscriberObjectId>85a845d3-063d-4641-aa70-8b536282bffb</SubscriberObjectId>
<UserURI>/vmrest/users/85a845d3-063d-4641-aa70-8b536282bffb</UserURI>
<ObjectId>d6871a13-4680-428a-a839-afb6d3b46b6b</ObjectId>
<DisplayName>SMTP</DisplayName>
<Active>>false</Active>
<BusyRetryInterval>0</BusyRetryInterval>
<Type>4</Type>
<DialDelay>0</DialDelay>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<RetriesOnBusy>0</RetriesOnBusy>
<RetriesOnRna>0</RetriesOnRna>
<RingsToWait>0</RingsToWait>
<RnaRetryInterval>0</RnaRetryInterval>
<SendCount>>true</SendCount>
<WaitConnect>>false</WaitConnect>
<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>
<DeviceName>SMTP</DeviceName>
<PromptForId>>false</PromptForId>
<SendCallerId>>true</SendCallerId>
<SendPcaLink>>false</SendPcaLink>
<Undeletable>>true</Undeletable>
<DetectTransferLoop>>false</DetectTransferLoop>
<SuccessRetryInterval>0</SuccessRetryInterval>
<RetriesOnSuccess>0</RetriesOnSuccess>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>a884af0a-dd5f-4597-8bc7-31a61e8b612a</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</UserTemplateNotificationDevice>
<UserTemplateNotificationDevice>
<URL>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/usertemplatenotificationdevices/9f2f0ce2-0567-421a-bd89-973ceecb8518</URL>
<SubscriberObjectId>85a845d3-063d-4641-aa70-8b536282bffb</SubscriberObjectId>
<UserURI>/vmrest/users/85a845d3-063d-4641-aa70-8b536282bffb</UserURI>
<ObjectId>9f2f0ce2-0567-421a-bd89-973ceecb8518</ObjectId>
<DisplayName>HTML</DisplayName>
<Active>>false</Active>
<BusyRetryInterval>0</BusyRetryInterval>
<Type>8</Type>
<DialDelay>0</DialDelay>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<RetriesOnBusy>0</RetriesOnBusy>
<RetriesOnRna>0</RetriesOnRna>
<RingsToWait>0</RingsToWait>
<RnaRetryInterval>0</RnaRetryInterval>
<SendCount>>false</SendCount>
<SmtpAddress>aaaa</SmtpAddress>
<WaitConnect>>false</WaitConnect>
<TransmitForcedAuthorizationCode>>false</TransmitForcedAuthorizationCode>

```

```

<DeviceName>HTML</DeviceName>
<PromptForId>>false</PromptForId>
<SendCallerId>>false</SendCallerId>
<SendPcaLink>>false</SendPcaLink>
<Undeletable>>true</Undeletable>
<DetectTransferLoop>>false</DetectTransferLoop>
<SuccessRetryInterval>0</SuccessRetryInterval>
<RetriesOnSuccess>0</RetriesOnSuccess>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>a884af0a-dd5f-4597-8bc7-31a61e8b612a</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</UserTemplateNotificationDevice>
</UserTemplateNotificationDevices>

```

Response Code: 200

Example 2

The following is an example of a GET that lists a particular Notification Devices for the specified User Template:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/usertemplatenotificationdevices/<objectId>
```

The following is the response from the above *GET* request.

```

<UserTemplateNotificationDevice>
<URI>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/usertemplatenotificationdevices/9f2f0ce2-0567-421a-bd89-973ceecb8518</URI>
<SubscriberObjectId>85a845d3-063d-4641-aa70-8b536282bffb</SubscriberObjectId>
<UserURI>/vmrest/users/85a845d3-063d-4641-aa70-8b536282bffb</UserURI>
<ObjectId>9f2f0ce2-0567-421a-bd89-973ceecb8518</ObjectId>
<DisplayName>HTML</DisplayName>
<Active>>false</Active>
<Type>8</Type>
<MaxBody>512</MaxBody>
<MaxSubject>64</MaxSubject>
<SmtpAddress>aaaa</SmtpAddress>
<DeviceName>HTML</DeviceName>
<Undeletable>>true</Undeletable>
<EventList>NewVoiceMail</EventList>
<ScheduleSetObjectId>a884af0a-dd5f-4597-8bc7-31a61e8b612a</ScheduleSetObjectId>
<InitialDelay>0</InitialDelay>
<RepeatInterval>0</RepeatInterval>
<RepeatNotify>>false</RepeatNotify>
</UserTemplateNotificationDevice>
</pre>
Response Code: 200

```

Adding a New Notification Device

This section contains information on how to create notification devices:

- Adding Pager Notification Device
- Adding Phone Notification Device
- Adding HTML Notification Device

- Adding SMTP Notification Device
- Adding Pager Notification Device

Adding Pager Notification Device

The following is an example of the POST request that adds a Pager Notification Device:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/notificationdevices/<objectId>
```

The actual response will depend upon the information given by you.

```
<UserTemplatePagerDevice>  
<DisplayName>pager1</DisplayName>  
<MediaSwitchObjectId>2b6324a2-d66f-4f25-9572-decf88c9a0b7</MediaSwitchObjectId>  
<PhoneNumber>5656</PhoneNumber>  
</UserTemplatePagerDevice>
```

```
Response Code: 201
```

Adding Phone Notification Device

The following is an example of the POST request that adds a Phone Notification Device:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/notificationdevices/<objectId>
```

The actual response will depend upon the information given by you.

```
<UserTemplatePhoneDevice>  
<DisplayName>pager1</DisplayName>  
<MediaSwitchObjectId>2b6324a2-d66f-4f25-9572-decf88c9a0b7</MediaSwitchObjectId>  
<PhoneNumber>5656</PhoneNumber>  
</UserTemplatePhoneDevice>
```

```
Response Code: 201
```

Adding HTML Notification Device

The following is an example of the POST request that adds a HTML Notification Device:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/notificationdevices/<objectId>
```

The actual response will depend upon the information given by you.

```
<UserTemplateHtmlDevice>  
<DisplayName>Html</DisplayName>  
< SmtAddress> a@cisco.com</SmtAddress>  
<CallbackNumber>1111</CallbackNumber>  
</UserTemplateHtmlDevice>
```

```
Response Code: 201
```

Adding SMTP Notification Device

The following is an example of the POST request that adds a HTML Notification Device:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/notificationdevices/<objectId>
```

The actual response will depend upon the information given by you.

```
<UserTemplateSmtDevice>
  <DisplayName>SMTP</DisplayName>
  <SmtAddress> a@cisco.com</SmtAddress>
  <PhoneNumber>5656</PhoneNumber>
</UserTemplateSmtDevice>
```

```
Response Code: 201
```

Modifying Notification Device

The following is an example of the PUT request that modifies a Notification Device as represented by <objectId>:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/usertemplatenotificationdevices/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<UserTemplatePhoneDevice>
  <Active>>false</Active>
  <RepeatInterval>0</RepeatInterval>
  <RepeatNotify>>true</RepeatNotify>
  <PhoneNumber>123456</PhoneNumber>
  <AfterDialDigits>11111</AfterDialDigits>
  <DialDelay>0</DialDelay>
  <RingsToWait>100</RingsToWait>
  <RetriesOnBusy>4</RetriesOnBusy>
  <RetriesOnRna>4</RetriesOnRna>
  <BusyRetryInterval>1</BusyRetryInterval>
  <RnaRetryInterval>100</RnaRetryInterval>
  <RetriesOnRna>100</RetriesOnRna>
  <MediaSwitchObjectId>1fb12b1c-cf14-4634-b73d-9b9c58ecdf68</MediaSwitchObjectId>
  <PromptForId>>false</PromptForId>
  <EventList>NewUrgentFax,UrgentDispatchMessage</EventList>
</UserTemplatePhoneDevice>
```

```
Response Code: 204
```

Deleting a New Notification Device

The following is an example of the DELETE request that deletes a Notification Device as represented by <notificationdeviceid>:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/usertemplatenotificationdevices/<objectId>
```

The output for this request returns the successful response code.

```
Response Code: 204
```

Explanation of Data Fields

[Cisco_Unity_Connection_Provisioning_Interface_\(CUPI\)_API_-_Notification_Devices#Explanation_of_Data_Fields](#)

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Settings Video Service Account

Listing the User Template Video Service Account

The following is an example of GET request that displays user template settings video service account:

```
GET:
https://<server-ip>/vmrest/usertemplates/981d804d-7a81-4171-b33e-8a4b12e0c309/usertemplatevideoserviceaccounts
```

The following is an example of response from the above *GET* request and the actual result will depend upon the information that has been provided by you:

```
200
OK

<UserTemplateVideoServiceAccounts total="1">
  <UserTemplateVideoServiceAccount>

<URI>/vmrest/usertemplates/981d804d-7a81-4171-b33e-8a4b12e0c309/usertemplatevideoserviceaccount/88397230-91a7-4248-910d-11e9fd5a8dc3</URI>

  <ConnectorFactoryObjectId>bf9e3b86-4306-4da3-a958-40f9197c99bd</ConnectorFactoryObjectId>

  <IsConnectorMapped>>true</IsConnectorMapped>
  <ObjectId>88397230-91a7-4248-910d-11e9fd5a8dc3</ObjectId>
  <UserTemplateObjectId>981d804d-7a81-4171-b33e-8a4b12e0c309</UserTemplateObjectId>

<UserTemplateURI>/vmrest/usertemplates/981d804d-7a81-4171-b33e-8a4b12e0c309</UserTemplateURI>

  <ConnectorFactoryName>test</ConnectorFactoryName>
  <MediaServerType>0</MediaServerType>
</UserTemplateVideoServiceAccount>
</UserTemplateVideoServiceAccounts>
```

JSON Example

The following is an example to list a new video service template:

Request URI:

```
GET:
https://<connection-ip-address>/vmrest/usertemplates/<TemplateObjectid>/usertemplatevideoserviceaccounts
```

The following is the response from the above *GET* request:

```

200
Ok
{
  "UserTemplateVideoServiceAccounts": {
    "-total": "1",
    "UserTemplateVideoServiceAccount": {
      "URI":
"/vmrest/usertemplates/b98c46a4-ceaa-43df-bac6-4bd0620dc904/usertemplatevideoserviceaccounts/56b22a57-ffdc-4056-a5a9-5aa1d0987271",

      "ConnectorFactoryObjectId": "dbd26014-fe57-4d00-bd5a-a1df1bdae6a2",
      "IsConnectorMapped": "true",
      "ObjectId": "56b22a57-ffdc-4056-a5a9-5aa1d0987271",
      "UserTemplateObjectId": "b98c46a4-ceaa-43df-bac6-4bd0620dc904",
      "UserTemplateURI": "/vmrest/usertemplates/b98c46a4-ceaa-43df-bac6-4bd0620dc904",
      "ConnectorFactoryName": "video",
      "MediaServerType": "0"
    }
  }
}

```

Creating the User Template Video Service Account

The following is an example of POST request that can be used to create a new user template video service account:

```

POST:
https://<server-ip>/vmrest/usertemplates/<templateobjectid>/usertemplatevideoserviceaccounts

```

Request Body:

```

<UserTemplateVideoServiceAccount>
  <ConnectorFactoryObjectId>bf9e3b86-4306-4da3-a958-40f9197c99bd</ConnectorFactoryObjectId>

  <IsConnectorMapped>true</IsConnectorMapped>
  <ConnectorFactoryName>test</ConnectorFactoryName>
  <MediaServerType>0</MediaServerType>
</UserTemplateVideoServiceAccount>

```

Response Code:

```

201 OK

```

The following is the response from the above POST request and the actual response will depend upon the information given by you:

```

/vmrest/usertemplates/981d804d-7a81-4171-b33e-8a4b12e0c309/usertemplatevideoserviceaccount/88397230-91a7-4248-910d-11e9fd5a8dc3

```

JSON Example

The following is an example to create a video service template:

Request URI:

```

POST:https://<connection-ip-address>/vmrest/usertemplates/<TemplateObjectid>/usertemplatevideoserviceaccounts
Accept: application/json
Content-type: application/json

```

The following is an example of the above POST request:

```
{
  "TemplateVideoService": { "ConnectorFactoryObjectId": "dbd26014-fe57-4d00-bd5a-
    a1df1bdae6a2",
    "ConnectorFactoryName": "myservice"
  }
}
```

The following is the response from the above POST request:

```
/vmrest/usertemplates/<TemplateObjectId>/ usertemplatevideoserviceaccounts
/<TemplateObjectId>/
```

Updating the User Template Video Service Account

The following is an example of the PUT request to update the user template video service account:

```
PUT:
https://<server-ip>/vmrest/usertemplates/<templateobjectId>/usertemplatevideoserviceaccounts/<objectId>
```

Request Body:

```
<UserTemplateVideoServiceAccount>
<ConnectorFactoryObjectId>bf9e3b86-4306-4da3-a958-40f9197c99bd</ConnectorFactoryObjectId>

<IsConnectorMapped>>true</IsConnectorMapped>
<ConnectorFactoryName>test</ConnectorFactoryName>
<MediaServerType>0</MediaServerType>
</UserTemplateVideoServiceAccount>
```

Response Code:

```
204 OK
```

JSON Example

The following is an example to update a video service template:

Request URI:

```
PUT:
https://<connection-ip-address>/vmrest/usertemplates/<TemplateObjectId>/usertemplatevideoserviceaccounts/<ObjectId>
Accept: application/json
Content-type: application/json
```

The following is an example of the PUT request:

```
{
  "TemplateVideoService": {
    "IsConnectorMapped": "false ",
    "ConnectorFactoryName": "myservice",
    "MediaServerType": "0"
  }
}
```

The following is the response from the above PUT request:

```
204
```

Deleting the User Template Video Service Account

The following is an example of DELETE request that deletes user template settings video service account:

Request URI:

```
Request URI
:https://<server-ip>/vmrest/usertemplates/<templateobjectid>/usertemplatevideoserviceaccounts/<objectid>
```

Below is the response code from the above DELETE request:

```
204 OK
```

JSON Example

The following is an example to delete video service template:

Request URI:

```
DELETE :
https://<connection-ip-address>/vmrest/usertemplates/<TemplateObjectId>/usertemplatevideoserviceaccounts/<ObjectId>
Accept: application/json
Content-type: application/json
```

The following is the response from the above DELETE request:

```
200
```

Explanation of Data Fields

The following chart lists all of the data fields:

Parameters	Operation	Data Type	Comment
ConnectorFactoryName	Read	String	Name Of The Video Service
MediaServerType	Read	Integer	Media Server Used For Video
ConnectorFactoryObjectId	Read	String	Objectid of Video service created
TemplateObjectId	Read	String	Objectid of Voice Mail User Template
TemplateVideoServiceObjectId	Read	String	Objectid of Video Service Template created
IsConnectorMapped	Read, Update	Boolean	Validate if the Video Service Account is connected to the Video service



CHAPTER 35

Cisco Unity Connection Provisioning Interface (CUPI) API for Call Handler Template

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- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Call Handler Template APIs, on page 398](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Enumeration Types, on page 414](#)
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Cisco Unity Connection Provisioning Interface (CUPI) API -- Caller Input APIs

Caller Inputs API

To get the caller input URI, follow the steps given below:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

From above URI get the call handler URI:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
```

To edit caller inputs, you need to get the menu entries:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/menuentries
```

Listing the Caller Inputs

The following is an example of the GET request that fetch the list of caller inputs:

```
GET https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>/templatemenuentries
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<TemplateMenuEntries total="2">
  <TemplateMenuEntry>
    <URI>/vmrest/callhandlertemplates/5f6e1043-5edf-4646-90ac-
836910ac1a4c/templatemenuentries/*</URI>
    <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
    <CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-
836910ac1a4c</CallhandlerURI>
    <TouchtoneKey>*</TouchtoneKey>
    <Locked>>false</Locked>
    <Action>4</Action>
    <ObjectId>de3dce46-1887-489c-9244-ae8b421fe107</ObjectId>
  </TemplateMenuEntry>
  <TemplateMenuEntry>
    <URI>/vmrest/callhandlertemplates/5f6e1043-5edf-4646-90ac-
836910ac1a4c/templatemenuentries/#</URI>
    <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
    <CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-
836910ac1a4c</CallhandlerURI>
    <TouchtoneKey>#</TouchtoneKey>
    <Locked>>false</Locked>
    <Action>5</Action>
    <ObjectId>17ec06a9-6990-4a95-8417-6e22957fcbe5</ObjectId>
  </TemplateMenuEntry>
</TemplateMenuEntries>
```

Response Code: 200

JSON Example

To view the list of caller inputs, do the following:

```
Request URI:
GET:
https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>/templatemenuentries
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
  "@total": "2"
  "TemplateMenuEntry":
  {
    "URI": "/vmrest/callhandlertemplates/a2f8fb8f-68ee-4a17-90a0-
    bff0308b5b1a/templatemenueentries/*"
    "CallHandlerObjectId": "a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a"
    "CallhandlerURI": "/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-
    bff0308b5b1a"
    "TouchtoneKey": "*"
    "Locked": "true"
    "Action": "2"
    "TargetConversation": "SubSignIn"
    "ObjectId": "17184311-90ac-4654-8e26-cfbc08138851"
  },
  {
    "URI": "/vmrest/callhandlertemplates/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a/templatemenueentries/#"

    "CallHandlerObjectId": "a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a"
    "CallhandlerURI": "/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-
    bff0308b5b1a"
    "TouchtoneKey": "#"
    "Locked": "true"
    "Action": "5"
    "ObjectId": "27eb298c-22a1-4ed7-813b-61c144bc0fdc"
  },
  ]
}

```

Response Code: 200

Viewing the Details of Specific Caller Input

The following is an example of the GET request that lists the details of specific caller input:

```
GET https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-
objectid>/templatemenueentries/<TouchToneKey>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<TemplateMenuEntry>
  <URI>/vmrest/callhandlertemplates/5f6e1043-5edf-4646-90ac-
836910ac1a4c/templatemenueentries/5</URI>
  <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
  <CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-
836910ac1a4c</CallhandlerURI>
  <TouchtoneKey>5</TouchtoneKey>
  <Locked>>false</Locked>
  <Action>0</Action>
  <ObjectId>f076155c-80b1-4538-bcc7-c901a6eafbae</ObjectId>
</TemplateMenuEntry>

```

Response Code: 200

JSON Example

To view a particular caller input, do the following:

```
Request URI:
GET:
https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>/templatemenuentries/<TouchToneKey>
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":"/vmrest/callhandlertemplates/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a/templatemenuentries/*"
  "CallHandlerObjectId":"a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a"
  "CallHandlerURI":"/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a"
  "TouchtoneKey":"*"
  "Locked":"true"
  "Action":"2"
  "TargetConversation":"SubSignIn"
  "ObjectId":"17184311-90ac-4654-8e26-cfbe08138851"
}
```

```
Response Code: 200
```

Updating a Caller Input

The following is an example of the PUT request that updates a specific caller input:

```
PUT https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>/templatemenuentries/<TouchToneKey>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<TemplateMenuEntry>
  <Action>7</Action>
  <TransferNumber>1000</TransferNumber>
  <TransferType> 1</TransferType>
  <TransferRings>2</TransferRings>
</TemplateMenuEntry>
```

```
Response Code: 204
```

JSON Example

To update a particular caller input, do the following:

```
Request URI:
PUT:
https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>/templatemenuentries/<TouchToneKey>
Accept: application/json
Content_type: application/json
Connection: keep_alive
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
URI	Read Only	String	URI of the call handler menu entries.
CallHandlerObjectId	Read Only	String	A transfer rule can belong only to a call handler object. No other object can own a menu entry.
CallHandlerURI	Read Only	String	URI of the call handler that is being referenced.
TouchtoneKey	Read Only	String	The character on the touch-tone keypad that this menu entry corresponds to (*, #, 0,1...9).
Locked	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection ignores additional input after callers press this key.</p> <p>A locked menu entry does not allow additional dialing after this choice is entered, but Cisco Unity Connection will immediately take the associated action. If the action is set to "Ignore" (0), the key is thrown out and the greeting continues playing as normal. Any other action is taken immediately without waiting to determine if the caller is going to dial an extension. Possible Values:</p> <ul style="list-style-type: none"> • false: Unlocked - Additional dialing after this choice is entered is allowed • true: Locked - Additional dialing is ignored <p>Default value: false</p>
Action	Read/Write	Integer	<p>Specifies the action to be taken in the event of the key press.</p> <p>Default value: 0</p>
TargetConversion	Read/Write	String	<p>Specifies the conversation to go to after taking a message.</p> <p>Default value: 0</p>
TargetHandlerObjectId	Read/Write	String	The unique identifier of the specific object to send along to the target conversation.
ObjectId	Read Only	String	Object ID of the caller input.
TransferNumber	Read/Write	Integer	The phone number associated with the alternate contact.
DisplayName	Read/Write	String	The display name associated with the alternate contact number.
TransferType	Read/Write	Integer	<p>The type of call transfer Cisco Unity Connection will perform - supervised or unsupervised (also referred to as "Release to Switch" transfer).</p> <p>Default value: 0</p>

Parameter	Operations	Data Type	Comments
TransferRings	Read/Write	Integer	The number of times the extension rings before Cisco Unity Connection considers it a "ring no answer" and plays the subscriber or handler greeting Possible value can range from 2-20 Default Value: 4

Cisco Unity Connection Provisioning Interface (CUPI) API -- Call Handler Template APIs

Call Handler Templates APIs

Each call handler that you add in Cisco Unity Connection is based on a template. Settings from the template are applied as the call handler is created. Unity Connection comes with one default call handler template, which has settings that are suitable for most call handlers. You can also create new templates. Before you create call handlers, review the settings in the template that you plan to use and determine whether you need to make changes or create new templates. For each template, you should consider enabling the transfer, caller input, greetings, and message settings that will be needed for the call handlers that you plan to create. Following Points should be noted:-

- If you change settings on a call handler template, the new settings are in effect only for new call handlers that are created by using that template. Changes to template settings do not affect existing call handlers.
- Deleting a call handler template does not affect any call handlers that were based on that template when they were created.
- Default Template cannot be deleted.

Administrator can use this API to create/update/delete/fetch the system call handler templates. Various attributes of a call handler template can also be updated using this API.

Listing the Call Handler Templates

The following is an example of the GET request that fetch the list of call handler templates:

```
GET https://<connection-server>/vmrest/callhandlertemplates
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<CallhandlerTemplates total="1">
  <CallhandlerTemplate>
    <URI>/vmrest/callhandlertemplates/5024347a-aac2-463a-98c8-a745a805dc3b</URI>
    <CreationTime>2013-01-10T09:23:20Z</CreationTime>
    <Language>1033</Language>
    <DisplayName>System Call Handler Template1</DisplayName>
    <UseDefaultLanguage>>false</UseDefaultLanguage>
    <UseDefaultTimeZone>>true</UseDefaultTimeZone>
    <Undeletable>>true</Undeletable>
    <LocationObjectId>22646a82-1f17-4b42-beec-9cdfd69508c5</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/22646a82-1f17-4b42-beec-9cdfd69508c5</LocationURI>
    <EditMsg>>true</EditMsg>
    <IsPrimary>>false</IsPrimary>
    <MaxMsgLen>300</MaxMsgLen>
    <OneKeyDelay>1500</OneKeyDelay>
    <ScheduleSetObjectId>10fee566-b137-4652-a378-db8a872a161d</ScheduleSetObjectId>
    <ScheduleSetURI>/vmrest/schedulesets/10fee566-b137-4652-a378-db8a872a161d</ScheduleSetURI>
    <SendUrgentMsg>0</SendUrgentMsg>
    <IsTemplate>true</IsTemplate>
    <ObjectId>5024347a-aac2-463a-98c8-a745a805dc3b</ObjectId>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
    <RecipientDistributionListObjectId>f7408e6e-822e-494b-ab29-cff3cf9e0bd9</RecipientDistributionListObjectId>
    <RecipientDistributionListURI>/vmrest/distributionlists/f7408e6e-822e-494b-ab29-cff3cf9e0bd9</RecipientDistributionListURI>
    <AfterMessageAction>2</AfterMessageAction>
    <AfterMessageTargetConversation>PHGreeting</AfterMessageTargetConversation>
    <AfterMessageTargetHandlerObjectId>16cf736f-7254-4654-ab09-08fe743332a9</AfterMessageTargetHandlerObjectId>
    <TimeZone>190</TimeZone>
    <MediaSwitchObjectId>abf4b7d1-89d5-45c2-bdc8-d3b13f5040f5</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/abf4b7d1-89d5-45c2-bdc8-d3b13f5040f5</PhoneSystemURI>
    <UseCallLanguage>>false</UseCallLanguage>
    <SendSecureMsg>>false</SendSecureMsg>
    <EnablePrependDigits>>false</EnablePrependDigits>
    <DispatchDelivery>>false</DispatchDelivery>
    <CallSearchSpaceObjectId>f3beb4e4-0be5-417f-9491-e233c6d4a40e</CallSearchSpaceObjectId>
    <CallSearchSpaceURI>/vmrest/searchspaces/f3beb4e4-0be5-417f-9491-e233c6d4a40e</CallSearchSpaceURI>
    <InheritSearchSpaceFromCall>true</InheritSearchSpaceFromCall>
    <PartitionObjectId>5ec15c45-ace9-41ad-a6c4-b56081c79717</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/5ec15c45-ace9-41ad-a6c4-b56081c79717</PartitionURI>
    <PlayPostGreetingRecording>0</PlayPostGreetingRecording>
    <SendPrivateMsg>0</SendPrivateMsg>
    <PlayAfterMessage>1</PlayAfterMessage>
    <GreetingsURI>/vmrest/callhandlertemplates/5024347a-aac2-463a-98c8-a745a805dc3b/templategreetings</GreetingsURI>
    <TransferOptionsURI>/vmrest/callhandlertemplates/5024347a-aac2-463a-98c8-a745a805dc3b/templatetransferoptions</TransferOptionsURI>
    <MenuEntriesURI>/vmrest/callhandlertemplates/5024347a-aac2-463a-98c8-a745a805dc3b/templatemenueentries</MenuEntriesURI>
  </CallhandlerTemplate>
</CallhandlerTemplates>

```

Response Code: 200

JSON Example

To view the list of call handler templates, do the following:

```
Request URI:  
GET: https://<connection-server>/vmrest/callhandlertemplates  
Accept: application/json  
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:


```

{
  "@total": "1"
  "CallhandlerTemplate": [
    {
      "URI": "/vmrest/callhandlertemplates/7a022382-8d0a-4289-880d-d2a432494b02"
      "CreationTime": "2013-02-25T09:39:23Z"
      "Language": "1033"
      "DisplayName": "System Call Handler Template"
      "UseDefaultLanguage": "true"
      "UseDefaultTimeZone": "true"
      "Undeletable": "true"
      "LocationObjectId": "cff1347e-87af-4409-bead-d1970625f82e"
      "LocationURI": "/vmrest/locations/connectionlocations/cff1347e-87af-4409-bead-d1970625f82e"
      "EditMsg": "true"
      "IsPrimary": "false"
      "MaxMsgLen": "300"
      "OneKeyDelay": "1500"
      "ScheduleSetObjectId": "5fc5a5d7-eaf6-4f4d-80cf-f76f3893ac0e"
      "ScheduleSetURI": "/vmrest/schedulesets/5fc5a5d7-eaf6-4f4d-80cf-f76f3893ac0e"
      "SendUrgentMsg": "0"
      "IsTemplate": "true"
      "ObjectId": "7a022382-8d0a-4289-880d-d2a432494b02"
      "TenantObjectId": "fe6541fb-b42c-44f2-8404-ded14cbf7438",
      "RecipientDistributionListObjectId": "dea18b5b-4493-4715-a558-cb85778fd823"
      "RecipientDistributionListURI": "/vmrest/distributionlists/dea18b5b-4493-4715-a558-cb85778fd823"
      "AfterMessageAction": "2"
      "AfterMessageTargetConversation": "PHGreeting"
      "AfterMessageTargetHandlerObjectId": "c6af281b-dc8b-45b4-a1e9-ecccc523d5fb2"
      "TimeZone": "190"
      "MediaSwitchObjectId": "0ad0b88c-4a70-4cf7-913e-d5d7a921caca"
      "PhoneSystemURI": "/vmrest/phonesystems/0ad0b88c-4a70-4cf7-913e-d5d7a921caca"
      "UseCallLanguage": "true"
      "SendSecureMsg": "false"
      "EnablePrependDigits": "false"
      "DispatchDelivery": "false"
      "CallSearchSpaceObjectId": "2e836e16-f715-4a18-bb7c-ee5e33281706"
      "CallSearchSpaceURI": "/vmrest/searchspaces/2e836e16-f715-4a18-bb7c-ee5e33281706"
      "InheritSearchSpaceFromCall": "true"
      "PartitionObjectId": "97bf6afe-346e-4275-967e-43c50be79d32"
      "PartitionURI": "/vmrest/partitions/97bf6afe-346e-4275-967e-43c50be79d32"
      "PlayPostGreetingRecording": "0"
      "SendPrivateMsg": "0"
      "PlayAfterMessage": "1"
      "GreetingsURI": "/vmrest/callhandlertemplates/7a022382-8d0a-4289-880d-d2a432494b02/templategreetings"
      "TransferOptionsURI": "/vmrest/callhandlertemplates/7a022382-8d0a-4289-880d-d2a432494b02/templatetransferoptions"
      "MenuEntriesURI": "/vmrest/callhandlertemplates/7a022382-8d0a-4289-880d-d2a432494b02/templatemenuentries"
    }
  ]
}

```

Response Code: 200

Listing Specific Tenant Related Call Handler Templates by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectId to list the specific tenant related call handler templates using the following URI:

```
GET https://<connection-server>/vmrest/callhandlertemplates?query=(TenantObjectId is
<Tenant-ObjectId>)
```

To get the TenantObjectID, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Viewing the Details of Specific Call Handler Template

The following is an example of the GET request that lists the details of specific call handler template represented by the provided value of call handler template object ID:

```
GET https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<CallhandlerTemplate>
  <URI>/vmrest/callhandlertemplates/edcd2336-2c01-49d1-89ff-8746466e0a5e</URI>
  <CreationTime>2013-01-12T11:40:19Z</CreationTime>
  <Language>1033</Language>
  <DisplayName>CallHandler1</DisplayName>
  <UseDefaultLanguage>>false</UseDefaultLanguage>
  <UseDefaultTimeZone>>true</UseDefaultTimeZone>
  <Undeletable>>false</Undeletable>
  <LocationObjectId>22646a82-1f17-4b42-beec-9cdfd69508c5</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/22646a82-1f17-4b42-beec-9cdfd69508c5</LocationURI>
  <EditMsg>>true</EditMsg>
  <IsPrimary>>false</IsPrimary>
  <MaxMsgLen>300</MaxMsgLen>
  <OneKeyDelay>1500</OneKeyDelay>
  <ScheduleSetObjectId>10fee566-b137-4652-a378-db8a872a161d</ScheduleSetObjectId>
  <ScheduleSetURI>/vmrest/schedulesets/10fee566-b137-4652-a378-db8a872a161d</ScheduleSetURI>
  <SendUrgentMsg>0</SendUrgentMsg>
  <IsTemplate>>true</IsTemplate>
  <ObjectId>edcd2336-2c01-49d1-89ff-8746466e0a5e</ObjectId>
  <RecipientSubscriberObjectId>f74c4f98-598e-4c47-bf1a-2b78fc2c2953</RecipientSubscriberObjectId>
  <RecipientUserURI>/vmrest/users/f74c4f98-598e-4c47-bf1a-2b78fc2c2953</RecipientUserURI>

  <AfterMessageAction>1</AfterMessageAction>
  <TimeZone>190</TimeZone>
  <MediaSwitchObjectId>abf4b7d1-89d5-45c2-bdc8-d3b13f5040f5</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/abf4b7d1-89d5-45c2-bdc8-d3b13f5040f5</PhoneSystemURI>
  <UseCallLanguage>>false</UseCallLanguage>
  <SendSecureMsg>>false</SendSecureMsg>
  <EnablePrependDigits>>false</EnablePrependDigits>
  <DispatchDelivery>>false</DispatchDelivery>
  <CallSearchSpaceObjectId>f3beb4e4-0be5-417f-9491-e233c6d4a40e</CallSearchSpaceObjectId>

  <CallSearchSpaceURI>/vmrest/searchspaces/f3beb4e4-0be5-417f-9491-e233c6d4a40e</CallSearchSpaceURI>
  <InheritSearchSpaceFromCall>>true</InheritSearchSpaceFromCall>
  <PartitionObjectId>5ec15c45-ace9-41ad-a6c4-b56081c79717</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/5ec15c45-ace9-41ad-a6c4-b56081c79717</PartitionURI>
  <PlayPostGreetingRecording>0</PlayPostGreetingRecording>
  <SendPrivateMsg>0</SendPrivateMsg>
  <PlayAfterMessage>1</PlayAfterMessage>
  <GreetingsURI>/vmrest/callhandlertemplates/edcd2336-2c01-49d1-89ff-8746466e0a5e/templategreetings</GreetingsURI>
  <TransferOptionsURI>/vmrest/callhandlertemplates/edcd2336-2c01-49d1-89ff-8746466e0a5e/templatetransferoptions</TransferOptionsURI>
  <MenuEntriesURI>/vmrest/callhandlertemplates/edcd2336-2c01-49d1-89ff-8746466e0a5e/templatemenuentries</MenuEntriesURI>
</CallhandlerTemplate>

```

Response Code: 200

JSON Example

To view a specific call handler template, do the following:

```

Request URI:
GET: https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>
Accept: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":"/vmrest/callhandlertemplates/93b8ada5-c92f-47e6-8d24-9c269293d63c"
  "CreationTime":"2013-02-26T06:45:09Z"
  "Language":"1033"
  "DisplayName":"Call_Handler1"
  "UseDefaultLanguage":"true"
  "UseDefaultTimeZone":"false"
  "Undeletable":"false"
  "LocationObjectId":"cff1347e-87af-4409-bead-d1970625f82e"
  "LocationURI":"/vmrest/locations/connectionlocations/cff1347e-87af-4409-bead-d1970625f82e"
  "EditMsg":"true"
  "IsPrimary":"false"
  "MaxMsgLen":"500"
  "OneKeyDelay":"1500"
  "ScheduleSetObjectId":"5c42abd2-84a5-4fcf-84cf-d0a19c70f207"
  "ScheduleSetURI":"/vmrest/schedulesets/5c42abd2-84a5-4fcf-84cf-d0a19c70f207"
  "SendUrgentMsg":"1"
  "IsTemplate":"true"
  "ObjectId":"93b8ada5-c92f-47e6-8d24-9c269293d63c"
  "RecipientDistributionListObjectId":"8337a757-b074-42ff-85bd-acda2dfd5d28"
  "RecipientDistributionListURI":"/vmrest/distributionlists/8337a757-b074-42ff-85bd-acda2dfd5d28"
  "AfterMessageAction":"2"
  "AfterMessageTargetConversation":"AD"
  "AfterMessageTargetHandlerObjectId":"4783cb28-79a6-409a-bf57-18f8208b4e61"
  "TimeZone":"190"
  "MediaSwitchObjectId":"343dc222-2d1a-4a19-a5b6-894725542475"
  "PhoneSystemURI":"/vmrest/phonesystems/343dc222-2d1a-4a19-a5b6-894725542475"
  "UseCallLanguage":"true"
  "SendSecureMsg":"false"
  "EnablePrependDigits":"false"
  "DispatchDelivery":"true"
  "CallSearchSpaceObjectId":"2e836e16-f715-4a18-bb7c-ee5e33281706"
  "CallSearchSpaceURI":"/vmrest/searchspaces/2e836e16-f715-4a18-bb7c-ee5e33281706"
  "InheritSearchSpaceFromCall":"true"
  "PartitionObjectId":"44bdcf73-d5c1-4866-957d-fb35686cbe76"
  "PartitionURI":"/vmrest/partitions/44bdcf73-d5c1-4866-957d-fb35686cbe76"
  "PlayPostGreetingRecording":"2"
  "SendPrivateMsg":"0"
  "PlayAfterMessage":"2"
  "GreetingsURI":"/vmrest/callhandlertemplates/93b8ada5-c92f-47e6-8d24-9c269293d63c/templategreetings"
  "TransferOptionsURI":"/vmrest/callhandlertemplates/93b8ada5-c92f-47e6-8d24-9c269293d63c/templatetransferoptions"
}
```

Response Code: 200

Creating a New Call Handler Template

Mandatory parameters are:

- Display Name
- Phone System - Fetch phone systems using URI: <https://<connection-server>/vmrest/phonesystems>
- Message recipient - The message recipient can be a distribution list or a user. Use the following URI to fetch users or distribution lists respectively.

- `https://<connection-server>/vmrest/users`
- `https://<connection-server>/vmrest/distributionlists`

The following is an example of the POST request that creates a new call handler template:

```
POST https://<connection-server>/vmrest/callhandlertemplates
Request Body:
<CallhandlerTemplate>
  <DisplayName>System Call Handler Template1</DisplayName>
  <RecipientSubscriberObjectId>f74c4f98-598e-4c47-bf1a-
  2b78fc2c2953</RecipientSubscriberObjectId>
  <MediaSwitchObjectId>abf4b7d1-89d5-45c2-bdc8-d3b13f5040f5</MediaSwitchObjectId>
</CallhandlerTemplate>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

JSON Example

To create a new call handler template, do the following:

```
Request URI:
POST: https://<connection-server>/vmrest/callhandlertemplates
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "DisplayName": "Tenant",
  "RecipientDistributionListObjectId": "8337a757-b074-42ff-85bd-acda2dfd5d28",
  "MediaSwitchObjectId": "343dc222-2d1a-4a19-a5b6-894725542475"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Delete the Call Handler Template

The following is an example of the DELETE request that can be used to delete a call handler template:

```
DELETE https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To delete a call handler template, do the following:

```
Request URI:
DELETE:
https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Assigning a Schedule to a Call Handler Template

The following is an example of the PUT request that can be used to assign a schedule to a call handler template:

```
PUT https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>
The ScheduleSetObjectId can be fetched using the URI
https://<connection-server>/vmrest/schedulesets.
```

```
<CallhandlerTemplate>
  <ScheduleSetObjectId>eb11c6cc-fc9e-4651-8c01-8f0b2e421918</ScheduleSetObjectId>
</CallhandlerTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To assign a schedule to a call handler template, do the following:

```
Request URI:
PUT: https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
```

```
{
  "ScheduleSetObjectId": "5c42abd2-84a5-4fcf-84cf-d0a19c70f207"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Updating Partition of the Call Handler Template

This PUT request can be used to assign partition to a call handler template.

```
PUT https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>
```

To fetch PartitionObjectId, use the URI <https://<connection-server>/vmrest/partitions>.

```
<CallhandlerTemplate>
  <PartitionObjectId>46a0377b-00d7-40a0-8738-81106fc730ea</PartitionObjectId>
</CallhandlerTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update partition of call handler template, do the following:

```
<pre>
PUT: https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
</pre>
```

```
{
  "PartitionObjectId": "fe2fe907-bdcb-416e-89b7-c1bb130d0f98"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Updating Language Option of the Call Handler Template

This PUT request can be used to update language for a call handler template. To know languages installed on the server following URI can be used:

```
PUT https://<connection-server>/vmrest/installedlanguages
PUT https://<connection-server>/vmrest/callhandlertemplates<callhandlertemplate-objectid>
```

Example 1: The Inherit language field from the call is selected but the UseDefaultLanguage field is not updated

```
<CallhandlerTemplate>
  <UseDefaultLanguage>>true</UseDefaultLanguage>
  <UseCallLanguage>>false</UseCallLanguage>
</CallhandlerTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note The Inherit Language field from the call is selected but this the UseDefaultLanguage field is not updated in the database as the language field is missing as the Language field is NULL and UseDefaultLanguage is by default set to TRUE.

Example 2: The Inherit language field from the call is selected and the UseDefaultLanguage field is updated

```
Request Body:
<CallhandlerTemplate>
  <UseCallLanguage>true</UseCallLanguage>
  <UseDefaultLanguage>false</UseDefaultLanguage>
  <Language>1033</Language>
</CallhandlerTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note The Inherit Language field from the call is selected but the UseDefaultLanguage field is updated in the database as the Language field is specified. The Inherit Language field from the call is selected but the UseDefaultLanguage field is updated in the database as the Language field is specified. Language code for installed language can be fetched from: <https://<connection-server>/vmrest/installedlanguages> Language code can be fetched from the URI: <https://<connection-server>/vmrest/languagemap> The below table specify the details of value for each field:

UseCallLanguage	UseDefaultLanguage	Language	Description
false	true	Null/Language Code	This will select the default language.
true	true/false	Null/Language Code	This will inherit the language from user.
false	false	Language Code	This will select the particular language as per the code.

JSON Example

To update language option of call handler template, do the following:

```
Request URI:
PUT: https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "UseCallLanguage":"true",
  "UseDefaultLanguage":"false",
  "Language":"1033"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```


Updating Timezone of a Call Handler Template

This PUT request can be used to update timezone for a call handler template. It can be set to default or particular timezone. The mandatory fields for this request are:

- UseDefaultTimeZone
- TimeZone

To know timzones installed on the server following URI can be used:

<https://<connection-server>/vmrest/timezones>

```
PUT https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>
Request Body:
<CallhandlerTemplate>
  <UseDefaultTimeZone>false</UseDefaultTimeZone>
  <TimeZone>190</TimeZone>
</CallhandlerTemplate>
```

Response Code: 204

JSON Example

To update timezone of call handler template, do the following:

```
Request URI:
PUT: https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "UseDefaultTimeZone":"false",
  "TimeZone":"190"
}
```

Response Code: 204

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
URI	Read Only	String	Call Handler Template URI
AfterMessageAction	Read/Write	Integer	Specifies the after message action. Possible Values Refer to the table 1 under the section Enum Type as given at the end of the document Default value: 1

Parameter	Operations	Data Type	Comments
AfterMessageTargetConversation	Read/Write	String	Specifies DisplayName of the conversation to go to after taking a message. Possible Values Refer to the table 11 under the section Enum type as given at the end of document.
AfterMessageTargetHandlerObjectId	Read/Write	String(36)	The Unique Identifier of the call action object that Cisco Unity Connection performs after taking a message.
CallSearchspaceObjectId	Read/Write	String(36)	Is present only if a search space is selected. URI To fetch possible values of CallSearchspaceObjectId : <a href="https://<connection-server>/vmrest/searchspaces">https://<connection-server>/vmrest/searchspaces
CallSearchSpaceURI	Read Only	String	URL for search spaces
CreationTime	Read Only	DateTime	Specifies the creation date and time of the call handler. Format: YYYY-MM-DDThh:mm:ssZ. The default value is the current system date and time
DispatchDelivery	Read/Write	Boolean	A flag indicating that all messages left for the call handler is for dispatch delivery. Possible Values <ul style="list-style-type: none"> • false:- specifies no dispatch delivery. • true:- specifies dispatch delivery. Default value is false
DisplayName	Read/Write	String(64)	Name of the Call Handler Template
EditMsg	Read/Write	Boolean	A flag that determines whether the caller can edit messages. Possible Values <ul style="list-style-type: none"> • false : Callers cannot edit messages • true : Callers can edit messages Default value is true.
EnablePrependDigits	Read/Write	Boolean	Specifies if Prepend Digits to Dialed Extensions is enabled. Possible Values <ul style="list-style-type: none"> • false:- System will not prepend digits when dialing the transfer extension • true:- System will prepend digits when dialing the transfer extension Default value is false

Parameter	Operations	Data Type	Comments
InheritSeachSpaceFromCall	Read/Write	Boolean	Specifies if the search space is to be inherited from the call. Possible Values: <ul style="list-style-type: none"> • true:- Inherit from call. • false:- Do not inherit from call. Default value is true
IsPrimary	Read Only	Boolean	A flag indicating whether this is a "primary" call handler for a subscriber, or an "application" call handler. Note:- Each subscriber is associated with a call handler, which is referred to as the "primary call handler" for that subscriber. An "application call handler" is just a normal call handler. Possible Values: <ul style="list-style-type: none"> • false: Not a primary call handler • true: Primary call handler Default value is false.
IsTemplate	Read Only	Boolean	Used to provide default values for selected columns when creating new call handlers. Possible Values: <ul style="list-style-type: none"> • false: Not a template • true: Is a template Default value is true
Language	Read/Write	Integer	The Windows Locale ID (LCID) which identifies the language that Cisco Unity Connection plays the handler system prompts.
LocationObjectId	Read Only	String(36)	The unique identifier of the Location object to which this handler belongs.
LocationURI	Read Only	String	Specifies the URI of locations
MaxMsgLen	Read/Write	Integer	The maximum recording length (in seconds) for messages left by unidentified callers. This value is used when the call handler is set to an action of "Take Message" (either by an after greeting action in the messagingrule table or via a user input action in the menuentry table. This value only gets applied to unidentified callers leaving a message. This value is not used for subscriber-subscriber messaging. Instead the COS for the calling subscriber determines the maximum recorded message length. Possible Values: Range 1-3600 default value is 300

Parameter	Operations	Data Type	Comments
MediaSwitchObjectId	Read/Write	String(36)	Specifies the object Id of the Phone System the call handler belongs to. URI To fetch MediaSwitchObjectId :https://<connection-server>/vmrest/phonesystems
PhoneSystemURI	Read Only	String	Specifies the URI of Phone Systems
ObjectId	Read Only	String(36)	Object Id of the Call Handler Template.
TenantObjectId	Read Only	String(36)	The unique identifier of the tenant to which the call handler templates belong. This field is reflected in the response only if the call handler template belong to a particular tenant.
OneKeyDelay	Read/Write	Integer	The amount of time (in milliseconds) that Cisco Unity Connection waits for additional input after callers press a single key that is not locked. If there is no input within this time, Cisco Unity Connection performs the action assigned to the single key. When a caller interrupts a greeting with a digit, Cisco Unity Connection will wait this number of milliseconds to see if they are going to enter more digits. Once this timeout is reached (or the caller terminates the input with a #), Cisco Unity Connection will do a look-up of the resulting string of numbers for a match with a DTMFAccessID value in the dialing domain. If a match is found, the call is sent to the matching object. If no match is found, the "Error greeting" for the call handler is invoked. If a key is "locked" then this value does not apply. Instead action is taken immediately on that key instead of allowing more digits. A value of 0 disables one key input. Possible Values: Range:- 0 - 10000 Default value is 1500
PartitionObjectId	Read/Write	String(36)	Specifies the object Id of the partition the Call Handler belongs to. URI To fetch PartitionObjectId :https://<connection-server>/vmrest/partitions
PartitionURI	Read Only	String	Specifies the URI of partitions.
PlayAfterMessage	Read/Write	Integer	Specifies what should be played after the message Possible Values: Refer to the table 3 under the section Enum Type as given at the end of the document Default Value: 1
PlayAfterMessageRecordingObjectId	Read/Write	String(36)	Object Id of the recording. URI To fetch its value :https://<connection-server>/vmrest/postgreetingrecordings from above URI get objectid.

Parameter	Operations	Data Type	Comments
PlayPostGreetingReording	Read/Write	Integer	Indicates whether the recording referenced by PostGreetingRecordingObjectId should be played. Possible Values: Refer to the table 2 under the section Enum type as given at the end of document. Default value is 0
PostGreetingRecordingObjectId	Read/Write	String(36)	Specifies the object Id of the Post Greeting recording. URI To fetch its value: <a href="https://<connection-server>/vmrest/postgreetingrecordings">https://<connection-server>/vmrest/postgreetingrecordings from above URI get objectid.
PostGreetingURI	Read Only	String	URI of the Post Greeting Recording
PrependDigits	Read/Write	String	Touch-Tone digits to be prepended to extension when dialing transfer number (#, 0,1...9,*). Digits, plus, hash and asterisk only are allowed
RecipientDistributionListObjectId	Read/Write	String(36)	Object Id of the distribution list that is the message recipient. URI To fetch its value: <a href="https://<connection-server>/vmrest/">https://<connection-server>/vmrest/ from above URI get objectid.
RecipientDistributaionListURI	Read Only	String	URI of distribution lists
RecipientSubscriberObjectId	Read/Write	String(36)	Object id of a User with a mailbox that is the message recipient.
ScheduleSetObjectId	Read/Write	String(36)	Object Id of the schedule set assigned to the Call Handler.
ScheduleSetURI	Read Only	String	Specifies the URI of schedule sets.
SendPrivateMsg	Read/Write	Integer	Determines if an outside caller can mark their message as private. Possible Values: Refer to the table 4 under the section Enum type as given at the end of document. Default value is 0
SendSecureMsg	Read/Write	Boolean	A flag indicating whether an unidentified caller can mark a message as "secure." Default value is false
SendUrgentMsg	Read/Write	Integer	A flag indicating whether an unidentified caller can mark a message as "urgent." Possible Values: Refer to the table 5 under the section Enum type as given at the end of document. Default value is 0(Never)
TimeZone	Read/Write	Integer	Used when the UseDefaultTimezone is set to false. To know the Integer Time Zone codes for the Time Zones installed on the server following URI can be used: <a href="https://<connection-server>/vmrest/timezones">https://<connection-server>/vmrest/timezones Example: 190 is the code for (GMT+05:30) Asia/Kolkata

Parameter	Operations	Data Type	Comments
UseCallLanguage	Read/Write	Boolean	A flag indicating whether Cisco Unity Connection will use the language assigned to the call. Possible values: <ul style="list-style-type: none"> • true • false Default value is true
UseDefaultLanguage	Read/Write	Boolean	A flag that is dependent on the value of Language Field. if Language is set to Null, UseDefaultLanguage is set to true.if any language is specified, UseDefaultLanguage is set to false
UseDefaultTimeZone	Read/Write	Boolean	A flag indicating whether Cisco Unity Connection will use the system default Time Zone. Possible values: <ul style="list-style-type: none"> • true • false Default value is false
GreetingsURI	Read Only	String	Specifies the URI of greetings.
TransferOptionsURI	Read Only	String	Specifies the URI of transfer options.
MenuEntriesURI	Read Only	String	Specifies the URI of menu entries.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Enumeration Types

Enumeration Type

Call Actions

Name	Value	Description
Ignore	0	Ignore - no action taken.
Hangup	1	Hangup - the call is immediately terminated.
Goto	2	Goto - go to an object such as a call handler, directory handler or interview handler.
Error	3	Error - play the error greeting.
TakeMsg	4	Take a message.
SkipGreeting	5	Skip greeting.

Name	Value	Description
RestartGreeting	6	RestartGreeting - restart greeting on current handler
TransferAltContact	7	Transfer to Alternate Contact Number
RouteFromNextRule	8	Route From Next Call Routing Rule

Play Post Greeting Recording

Name	Value	Description
No	0	Don't play the recording
Always	1	Always play the configured recording
External	2	Play the recording for external calls only

Play After Message Recording

Name	Value	Description
No	0	Don't play the recording
Always	1	Play system default
Standard	2	Play recording

Send Private Message

Name	Value	Description
Never	0	No messages are marked private.
Always	1	All messages are marked private.
Ask	2	Ask the outside caller if they wish to mark the message as private.

Send Urgent Message

Name	Value	Description
Never	0	Messages left by unidentified calls are never marked urgent.
Always	1	All messages left by unidentified callers are marked urgent.
Ask	2	Cisco Unity Connection asks unidentified callers whether to mark their messages urgent.

Play What

Name	Value	Description
SystemGreeting	0	Cisco Unity Connection plays a prerecorded greeting along with the recorded name of the subscriber (for example, "Sorry, <subscriber name> is not available"). If the subscriber does not have a recorded name, Cisco Unity Connection plays the subscriber extension instead. When a greeting is enabled but not recorded, Cisco Unity Connection plays a prerecorded system greeting.
Recorded Greeting	1	Use a personal recording for the call handler (or subscriber). This can be recorded over the phone or from the Cisco Unity Connection Administration and CPCA administrative interfaces on the call handler/subscriber.
NoGreeting	2	No greeting is played.

Transfer Rule Action

Name	Value	Description
PlayGreeting	0	Cisco Unity Connection transfers the call to the call handler greeting.
Transfer	1	Cisco Unity Connection transfers the call to the number in the "Extension" column in tbl_TransferOption.

Call Handler RNA Action

Name	Value	Description
PlayGreeting	1	After the number of rings (as defined by "TransferRings" column), pull back the call and transfer the call to the appropriate greeting.
Release	0	Release the call to the phone system.

Call Handler Hold Mode

Name	Value	Description
No	0	Cisco Unity Connection prompts the caller to leave a message and allows the caller to dial another extension.
Yes	1	Cisco Unity Connection plays a prompt indicating that the extension is busy. The caller is put on hold. Note that this hold is not performed by the phone system.
Ask	2	Cisco Unity Connection gives the caller the options of holding, leaving a message, or dialing another extension.

Transfer Type

Name	Value	Description
Supervised	1	Listen for busy, ring no answer.
Unsupervised	0	Just let the switch to do the transfer, and do not stay on the line and take action on RNA or busy.

AfterMessageTargetConversation/ AfterGreetingTargetConversation/ TargetConversation

The AfterMessageTargetConversation/AfterGreetingTargetConversation/TargetConversation fields are read/write, and can take the following values. Although it is not an enumeration type, only certain string values are valid conversation names. For some conversations, it is required to specify their respective TargetHandlerObjectIds as well AfterMessageHandlerObjectid, AfterGreetingHandlerObjectId, and TargethandlerObjectId.

Value	Description	Target Handler
AD	Directory conversation	Directory Handler
PHTransfer	Transfer to a user or call handler	Use or Call Handler
PHGreeting	Play greeting of a user or call handler	Use or Call Handler
PHInterview	Interview Conversation	Interview Handler
Attempt Forward	Forwards the call to the user's greeting if the forwarding number matches a user	NA
Attempt SignIn	Sends the call to a user's sign-in if the calling number matches a user	NA
BroadcastMessageAdministrator	Sends the call to a conversation for sending broadcast messages	NA
SystemTransfer	Sends the call to a conversation allowing the caller to transfer to a number they specify (assuming the restriction table allows it).	NA
CheckedOutGuest	Sends the call to a conversation for checked-out hotel guests.	NA
GreetingsAdministrator	Sends the call to a conversation allowing changing greetings by phone.	NA
ReverseTrapConv	Connects to Visual Voicemail.	NA
SubSignIn	Sends the call to the sign-in conversation, which prompts the user to enter their ID.	NA
ConvUtilsLiveRecord	Sends the call to the live-record pilot number configured on Call Manager.	NA
SubSysTransfer	Sends the call to a conversation allowing the caller to transfer to a number they specify (assuming the restriction table allows it). However, requires user sign-in first, so unknown callers cannot use it.	NA

Greeting Type

Greeting	Description
Alternate	Alternate - can be used for a variety of special situations, such as vacations, leave of absence, or a holiday. An alternate greeting overrides all other greetings.
Busy	Busy - plays when the extension is busy. A busy greeting overrides the standard, off hours, and internal greetings.
Error	Error - plays when a caller attempts to dial an extension that does not exist on the system during a greeting.
Internal	Internal - plays to internal callers only. An internal greeting overrides the standard and off hours greetings.
Off Hours	Off hours - plays during the closed (non business) hours defined for the active schedule. An off hours greeting overrides the standard greeting, and thus limits the standard greeting to the open hours defined for the active schedule.
Standard	Standard - plays at all times unless overridden by another greeting. You cannot disable the standard greeting.
Holiday	Holiday - plays when holiday schedule is encountered unless overridden by an alternate greeting.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Greetings APIs

Greetings API

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

From the above URI, get the call handler object ID:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>
```

The following URI can be used to view the greetings:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings
```

The following URI can be used to view the alternate greeting:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Alternate
```

The following URI can be used to view the busy greeting:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Busy
```

The following URI can be used to view the error greeting:

```
GET
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Error
```

The following URI can be used to view the closed greeting:

```
GET
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Off%20Hours
```

The following URI can be used to view the standard greeting:

```
GET
https://<connection-server>/vmrest/handlers/callhandlers/<CallhandlerObjectId>/greetings/Standard
```

The following URI can be used to view the holiday greeting:

```
GET https://<connection-server>/vmrest/callhandlers/<CallhandlerObjectId>/greetings/Holiday
```

Listing the Greetings

The following is an example of the GET request that fetch the list of greetings:

```
GET https://<connection-server>/vmrest/ callhandlertemplates/<callhandlertemplate-
objectid>/templategreetings
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<TemplateGreetings total="2">
  <TemplateGreeting>
    <URI>/vmrest/callhandlertemplates/5f6e1043-5edf-4646-90ac-
836910ac1a4c/templategreetings/Alternate</URI>
    <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
    <CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-
836910ac1a4c</CallhandlerURI>
    <IgnoreDigits>>false</IgnoreDigits>
    <PlayWhat>0</PlayWhat>
    <RepromptDelay>2</RepromptDelay>
    <Reprompts>0</Reprompts>
    <TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
    <GreetingType>Alternate</GreetingType>
    <AfterGreetingAction>4</AfterGreetingAction>
    <PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
    <EnableTransfer>>false</EnableTransfer>
  </TemplateGreeting>
  <TemplateGreeting>
    <URI>/vmrest/callhandlertemplates/5f6e1043-5edf-4646-90ac-
836910ac1a4c/templategreetings/Busy</URI>
    <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
    <CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-
836910ac1a4c</CallhandlerURI>
    <IgnoreDigits>>false</IgnoreDigits>
    <PlayWhat>0</PlayWhat>
    <RepromptDelay>2</RepromptDelay>
    <Reprompts>0</Reprompts>
    <TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
    <GreetingType>Busy</GreetingType>
    <AfterGreetingAction>4</AfterGreetingAction>
    <PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
    <EnableTransfer>>false</EnableTransfer>
  </TemplateGreeting>
</TemplateGreetings>

```

Response Code: 200

JSON Example

To view the list of greetings, do the following:

```

Request URI:
GET:
https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>/templategreetings
Accept: appliaction/json
Conenction: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
  "@total": "2"
  "TemplateGreeting": [
    {
      "URI": "/vmrest/callhandlertemplates/a2f8fb8f-68ee-4a17-90a0-
bff0308b5bla/templategreetings/Alternate"
      "CallHandlerObjectId": "a2f8fb8f-68ee-4a17-90a0-bff0308b5bla"
      "CallhandlerURI": "/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-
bff0308b5bla"
      "IgnoreDigits": "false"
      "PlayWhat": "0"
      "RepromptDelay": "2"
      "Reprompts": "0"
      "TimeExpires": "1972-01-01 00:00:00.0"
      "GreetingType": "Alternate"
      "AfterGreetingAction": "4"
      "PlayRecordMessagePrompt": "true"
      "EnableTransfer": "false"
    },
    {
      "URI": "/vmrest/callhandlertemplates/a2f8fb8f-68ee-4a17-90a0-
bff0308b5bla/templategreetings/Busy"
      "CallHandlerObjectId": "a2f8fb8f-68ee-4a17-90a0-bff0308b5bla"
      "CallhandlerURI": "/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-
bff0308b5bla"
      "IgnoreDigits": "false"
      "PlayWhat": "0"
      "RepromptDelay": "2"
      "Reprompts": "0"
      "TimeExpires": "1972-01-01 00:00:00.0"
      "GreetingType": "Busy"
      "AfterGreetingAction": "4"
      "PlayRecordMessagePrompt": "true"
      "EnableTransfer": "false"
    },
  ]
}

```

Response Code: 200

Viewing the Details of Specific Greeting

The following is an example of the GET request that lists the details of specific greeting:

```

GET https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-
objectid>/templategreetings/<Greetingname>

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<TemplateGreeting>
  <URI>/vmrest/callhandlertemplates/5f6e1043-5edf-4646-90ac-
836910ac1a4c/templategreetings/Alternate</URI>
  <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
  <CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-
836910ac1a4c</CallhandlerURI>
  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>0</PlayWhat>
  <RepromptDelay>2</RepromptDelay>
  <Reprompts>0</Reprompts>
  <TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
  <GreetingType>Alternate</GreetingType>
  <AfterGreetingAction>4</AfterGreetingAction>
  <PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
  <EnableTransfer>>false</EnableTransfer>
</TemplateGreeting>
```

Response Code: 200

JSON Example

To view a specific greeting, do the following:

```
Request URI:
GET:
https://<connection-server>/vmrest/callhandlertemplates/<Callhandler-template-objectid>/templategreetings/<Greetingname>
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/callhandlertemplates/a2f8fb8f-68ee-4a17-90a0-
bff0308b5b1a/templategreetings/Alternate"
  "CallHandlerObjectId": "a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a"
  "CallhandlerURI": "/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a"
  "IgnoreDigits": "false"
  "PlayWhat": "0"
  "RepromptDelay": "2"
  "Reprompts": "0"
  "TimeExpires": "1972-01-01 00:00:00.0"
  "GreetingType": "Alternate"
  "AfterGreetingAction": "4"
  "PlayRecordMessagePrompt": "true"
  "EnableTransfer": "false"
}
```

Response Code: 200

Updating a Greeting

The following is an example of the GET request that updates the details of specific greeting:

```

PUT
https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>/templategreetings/<Greetingname>
Response Body:
<TemplateGreeting>
  <PlayWhat>1</PlayWhat>
  <PlayRecordMessagePrompt>true</PlayRecordMessagePrompt>
</TemplateGreeting>

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update a particular greeting, do the following:

```

Request URI:
PUT:
https://<connection-server>/vmrest/callhandlertemplates/<Callhandler-template-objectid>/templategreetings/<Greetingname>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "PlayWhat": "1",
  "PlayRecordMessagePrompt": "true"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
URI	Read Only	String	URI of greetings
CallHandlerObjectId	Read Only	String	The unique identifier of the call handler object to which this greeting rule belongs.
TemplateCallHandlerURI	Read/Write	String	URI of the call handler.

Parameter	Operations	Data Type	Comments
IgnoreDigits	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection takes action in response to touchtone keys pressed by callers during the greeting.</p> <p>This column overrides all the Menu Entry settings when this greeting is active. This has the same effect as setting all the menu entry keys for this handler to "locked". It is a shorthand way of locking callers into the greeting so they cannot get out until it completes. Possible values:</p> <ul style="list-style-type: none"> • false: Caller input enabled during greeting • true: Caller input ignored during greeting <p>Default Value: false</p>
PlayWhat	Read/Write	Integer	<p>The source for the greeting when this greeting is active.</p> <p>Refer to the section Enumeration Type.<<Link will be mentioned later>> Default Value: 0</p>
RepromptDelay	Read/Write	Integer	<p>The amount of time (in seconds) that Cisco Unity Connection waits without receiving any input from a caller before Cisco Unity Connection prompts the caller again. The range of this field can vary from 0 to 100.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • 0: Do not wait without receiving caller input and do not replay greeting. • 1 or greater: Wait this number of seconds without receiving any input from the caller before playing the greeting again. <p>Default Value: 2</p>
Reprompts	Read/Write	Integer	<p>The number of times to reprompt a caller. After the number of times indicated here, Cisco Unity Connection performs the after-greeting action.</p> <p>This column is typically used when an audio text application is expecting input from a caller. The range of this field can vary from 0 to 100. Possible values:</p> <ul style="list-style-type: none"> • 0: Do not re-prompt - Cisco Unity Connection will play the greeting once and then the after-greeting action is taken. • 1 or greater: Number of times to re-prompt. <p>The "RepromptDelay" value determines how many seconds to wait in between replays. Default Value: 0</p>

Parameter	Operations	Data Type	Comments
GreetingType	Read Only	String	Specifies the greeting type. Refer to the section Enumeration Type.<<Link will be mentioned later>> Default value: Standard
AfterGreetingAction	Read/Write	Integer	The type of call action to take, e.g., hang-up, goto another object, etc. Refer to the section Enumeration Type.<<Link will be mentioned later>> Default value: 4
AfterGreetingTargetConversation	Read/Write	String	Specifies the conversation to go to after the greeting is played. Refer to the section Enumeration Type.<<Link will be mentioned later>>
AfterGreetingTargetHandleObjectid	Read/Write	String	The unique identifier of the call action object that Cisco Unity Connection performs after the greeting is played.
TimeExpires	Read/Write	DateTime	The date and time when the greeting rule expires. The greeting rule is considered not expired (enabled), if the value is NULL or a future date. The greeting rule is considered expired (disabled), the value is in the past. The "Enhanced Alternate Greeting" feature uses this column to specify how long the subscriber wants their alternate greeting enabled. The standard greeting rule should never be disabled. The field is not displayed when the Greeting field is enabled with no end date and end time.
PlayRecordMessagePrompt	Read/Write	Boolean	A flag indicating whether the "Record your message at the tone..." prompt prior to recording a message. Values: <ul style="list-style-type: none"> • true - Play Record Message prompt is enabled. • false - Play Record prompt is disabled. Default Value: true
EnableTransfer	Read/Write	Boolean	A flag indicating when an extension is dialed at the greeting and the extension is not available whether to transfer to another extension. Values: <ul style="list-style-type: none"> • true: Allows transfer • false: Does not allow Default Value: false

Cisco Unity Connection Provisioning Interface (CUPI) API -- Message Settings APIs

Message Settings APIs

Administrator can use this API to fetch the message settings.

Updating a Message Setting

The following is an example of the PUT request that updates the message settings:

```
PUT https://<connection-server>/vmrest/callhandlertemplates/<callhandler-objectid>
Request Body:
<CallhandlerTemplate>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>SystemTransfer</AfterMessageTargetConversation>
</CallhandlerTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update message setting, do the following:

```
Request URI:
PUT: https://<connection-server>/vmrest/callhandlertemplates/<calhandler-objectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "AfterMessageAction": "2",
  "AfterMessageTargetConversation": "SystemTransfer"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Post Greeting Recordings APIs

Post Greeting Recordings APIs

Administrator can use this API to fetch the post greeting recordings. It can be used to fetch the list of post greeting recordings and also a single instance of post greeting recordings.

Updating a Post Greeting Recordings

The following is an example of the PUT request that updates the post greeting recordings:

```
PUT https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>
Request Body:
<CallhandlerTemplate>
  <PlayPostGreetingRecording>2</PlayPostGreetingRecording>
  <PostGreetingRecordingObjectId>0c6ab589-f289-4d4b-b3b7-e4ec96bb783e</PostGreetingRecordingObjectId>
</CallhandlerTemplate>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update post greeting recordings, do the following:

```
Request URI:
PUT: https://<connection-server>/vmrest/callhandlertemplates/<callhandler-template-objectid>
Accept: applicaiton/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "PlayPostGreetingRecording": "1",
  "PostGreetingRecordingObjectId": "0c6ab589-f289-4d4b-b3b7-e4ec96bb783e"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Transfer Rule APIs

TransferRulesAPIs

Administrator can use this API to fetch the transfer rules. It can be used to fetch the list of transfer rules and also a single instance of transfer rules.

Listing the Transfer Rules

The following is an example of the GET request that fetch the list of transfer rules:

```
GET https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-  
objectid>/templatetransferoptions
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<TemplateTransferOptions total="2">
  <TemplateTransferOption>
    <URI>/vmrest/callhandlertemplates/5f6e1043-5edf-4646-90ac-
836910ac1a4c/templatetransferoptions/Alternate</URI>
    <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
    <CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-
836910ac1a4c</CallhandlerURI>
    <TransferOptionType>Alternate</TransferOptionType>
    <Action>0</Action>
    <RnaAction>1</RnaAction>
    <TransferAnnounce>>false</TransferAnnounce>
    <TransferConfirm>>false</TransferConfirm>
    <TransferDtDetect>>false</TransferDtDetect>
    <TransferHoldingMode>0</TransferHoldingMode>
    <TransferIntroduce>>false</TransferIntroduce>
    <TransferRings>4</TransferRings>
    <TransferScreening>>false</TransferScreening>
    <TransferType>0</TransferType>
    <MediaSwitchObjectId>abf4b7d1-89d5-45c2-bdc8-
d3b13f5040f5</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/abf4b7d1-89d5-45c2-bdc8-
d3b13f5040f5</PhoneSystemURI>
    <UsePrimaryExtension>>true</UsePrimaryExtension>
    <PlayTransferPrompt>>true</PlayTransferPrompt>
    <PersonalCallTransfer>>false</PersonalCallTransfer>
    <Enabled>>true</Enabled>
  </TemplateTransferOption>
  <TemplateTransferOption>
    <URI>/vmrest/callhandlertemplates/5f6e1043-5edf-4646-90ac-
836910ac1a4c/templatetransferoptions/Off Hours</URI>
    <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
    <CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-
836910ac1a4c</CallhandlerURI>
    <TransferOptionType>Off Hours</TransferOptionType>
    <Action>0</Action>
    <RnaAction>1</RnaAction>
    <TransferAnnounce>>false</TransferAnnounce>
    <TransferConfirm>>false</TransferConfirm>
    <TransferDtDetect>>false</TransferDtDetect>
    <TransferHoldingMode>0</TransferHoldingMode>
    <TransferIntroduce>>false</TransferIntroduce>
    <TransferRings>4</TransferRings>
    <TransferScreening>>false</TransferScreening>
    <TransferType>0</TransferType>
    <MediaSwitchObjectId>abf4b7d1-89d5-45c2-bdc8-
d3b13f5040f5</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/abf4b7d1-89d5-45c2-bdc8-
d3b13f5040f5</PhoneSystemURI>
    <UsePrimaryExtension>>true</UsePrimaryExtension>
    <PlayTransferPrompt>>true</PlayTransferPrompt>
    <PersonalCallTransfer>>false</PersonalCallTransfer>
    <Enabled>>true</Enabled>
  </TemplateTransferOption>
</TemplateTransferOptions>

```

Response Code: 200

JSON Example

To list the transfer rules, do the following:

Listing the Transfer Rules

```

Request URI:
GET:
https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-objectid>/templatetransferoptions
Accept: application/json
Connection: keep_alive
The following is the response from the above *GET* request and the actual response will
depend upon the information given by you:
{
  "@total": "2"
  "TemplateTransferOption": [
    {
      "URI": "/vmrest/callhandlertemplates/e07ee639-bf8a-4c37-9d6a-0b51beee65c7/templatetransferoptions/Alternate"
      "CallHandlerObjectId": "e07ee639-bf8a-4c37-9d6a-0b51beee65c7"
      "CallhandlerURI": "/vmrest/handlers/callhandlers/e07ee639-bf8a-4c37-9d6a-0b51beee65c7"
      "TransferOptionType": "Alternate"
      "Action": "0"
      "RnaAction": "1"
      "TransferAnnounce": "false"
      "TransferConfirm": "false"
      "TransferDtDetect": "false"
      "TransferHoldingMode": "0"
      "TransferIntroduce": "false"
      "TransferRings": "4"
      "TransferScreening": "false"
      "TransferType": "1"
      "MediaSwitchObjectId": "f92e948f-6bd4-4891-ab8b-a3d930688305"
      "PhoneSystemURI": "/vmrest/phonesystems/f92e948f-6bd4-4891-ab8b-a3d930688305"
      "UsePrimaryExtension": "true"
      "PlayTransferPrompt": "true"
      "PersonalCallTransfer": "false"
      "Enabled": "true"
    },
    {
      "URI": "/vmrest/callhandlertemplates/e07ee639-bf8a-4c37-9d6a-0b51beee65c7/templatetransferoptions/Off Hours"
      "CallHandlerObjectId": "e07ee639-bf8a-4c37-9d6a-0b51beee65c7"
      "CallhandlerURI": "/vmrest/handlers/callhandlers/e07ee639-bf8a-4c37-9d6a-0b51beee65c7"
      "TransferOptionType": "Off Hours"
      "Action": "0"
      "RnaAction": "1"
      "TransferAnnounce": "false"
      "TransferConfirm": "false"
      "TransferDtDetect": "false"
      "TransferHoldingMode": "0"
      "TransferIntroduce": "false"
      "TransferRings": "4"
      "TransferScreening": "false"
      "TransferType": "0"
      "MediaSwitchObjectId": "f92e948f-6bd4-4891-ab8b-a3d930688305"
      "PhoneSystemURI": "/vmrest/phonesystems/f92e948f-6bd4-4891-ab8b-a3d930688305"
      "UsePrimaryExtension": "true"
      "PlayTransferPrompt": "true"
      "PersonalCallTransfer": "false"
      "Enabled": "true"
    }
  ]
}

```

Response Code: 200

Viewing the Details of Specific Transfer Rule

The following is an example of the GET request that lists the details of specific transfer rule:

```
GET https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-
objectId>/templatetransferoptions/<TransferOptionType>
The following is the response from the above *GET* request and the actual response will
depend upon the information given by you:
<TemplateTransferOption>
  <URI>/vmrest/callhandlertemplates/5f6e1043-5edf-4646-90ac-
836910ac1a4c/templatetransferoptions/Alternate</URI>
  <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
  <CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-
836910ac1a4c</CallhandlerURI>
  <TransferOptionType>Alternate</TransferOptionType>
  <Action>0</Action>
  <RnaAction>1</RnaAction>
  <TransferAnnounce>>false</TransferAnnounce>
  <TransferConfirm>>false</TransferConfirm>
  <TransferDtDetect>>false</TransferDtDetect>
  <TransferHoldingMode>0</TransferHoldingMode>
  <TransferIntroduce>>false</TransferIntroduce>
  <TransferRings>4</TransferRings>
  <TransferScreening>>false</TransferScreening>
  <TransferType>0</TransferType>
  <MediaSwitchObjectId>abf4b7d1-89d5-45c2-bdc8-d3b13f5040f5</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/abf4b7d1-89d5-45c2-bdc8-
d3b13f5040f5</PhoneSystemURI>
  <UsePrimaryExtension>>true</UsePrimaryExtension>
  <PlayTransferPrompt>>true</PlayTransferPrompt>
  <PersonalCallTransfer>>false</PersonalCallTransfer>
  <Enabled>>true</Enabled>
</TemplateTransferOption>
```

Response Code: 200

JSON Example

To view the details of a specific transfer rule, do the following:

```

Request URI:
GET: https://<connection-server>/vmrest/callhandlertemplates/<Callhandlertemplate-
objectid>/templatetransferoptions/<TransferOptionType>
Accept: application/json
Connection: keep_alive
The following is the response from the above *GET* request and the actual response will
depend upon the information given by you:
{
  "URI":"/vmrest/callhandlertemplates/e07ee639-bf8a-4c37-9d6a-
0b51beee65c7/templatetransferoptions/Alternate"
  "CallHandlerObjectId":"e07ee639-bf8a-4c37-9d6a-0b51beee65c7"
  "CallhandlerURI":"/vmrest/handlers/callhandlers/e07ee639-bf8a-4c37-9d6a-
0b51beee65c7"
  "TransferOptionType":"Alternate"
  "Action":"0"
  "RnaAction":"1"
  "TransferAnnounce":"false"
  "TransferConfirm":"false"
  "TransferDtDetect":"false"
  "TransferHoldingMode":"0"
  "TransferIntroduce":"false"
  "TransferRings":"4"
  "TransferScreening":"false"
  "TransferType":"1"
  "MediaSwitchObjectId":"f92e948f-6bd4-4891-ab8b-a3d930688305"
  "PhoneSystemURI":"/vmrest/phonesystems/f92e948f-6bd4-4891-ab8b-a3d930688305"
  "UsePrimaryExtension":"true"
  "PlayTransferPrompt":"true"
  "PersonalCallTransfer":"false"
  "Enabled":"true"
}

```

Response Code: 200

Updating a Transfer Rule

The following is an example of the PUT request that updates a transfer rule:

```

PUT https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-
objectid>/templatetransferoptions/<TransferOptionType>
Request Body:
<TemplateTransferOption>
  <Action>1</Action>
  <Extension>1000</Extension>
  <TimeExpires>2012-12-31 12:00:00.0</TimeExpires>
  <Enabled>>true</Enabled>
  <PlayTransferPrompt>>true</PlayTransferPrompt>
  <TransferAnnounce>>true</TransferAnnounce>
  <TransferConfirm>>true</TransferConfirm>
  <TransferIntroduce>>true</TransferIntroduce>
  <TransferScreening>>true</TransferScreening>
  <TransferType>1</TransferType>
</TemplateTransferOption>

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

To update a particular transfer rule, do the following:

```
GET: https://<connection-server>/vmrest/callhandlertemplates/<callhandlertemplate-
objectId>/templatetransferoptions/<TransferOptionType>
Accept: applciation/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Action": "1",
  "TimeExpires": "2012-12-31 12:00:00.0",
  "Extension": "1002",
  "PlayTransferPrompt": "true",
  "TransferAnnounce": "true",
  "TransferConfirm": "true"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameters	Operations	Data Type	Comments
URI	Read Only	String	URI of the call handler transfer options.
CallHandlerTemplateObjectId	Read Only	String	Specifies the call handler object ID
CallHandlerTemplateURI	Read Only	String	URI of the call handler being referenced.
TransferOptionType	Read Only	String	Specifies the transfer option type. There are 3 transfer option type available: <ul style="list-style-type: none"> • Alternate - in effect at all times, overrides standard and offhours. • OffHours - off or closed hours based on specified schedule. • Standard - standard hours based on specified schedule.
Action	Read/Write	Integer	Specifies the transfer rule action. Custom type is Transfer Rule Action. Refer to the section Enumeration Type.<<Link will be mentioned later>> Default value: 0
RnaAction	Read/Write	Integer	Action to take on Ring-No-Answer (RNA) condition. Refer to the section Enumeration Type.<<Link will be mentioned later>>

Parameters	Operations	Data Type	Comments
TimeExpires	Read/Write	Date	<p>Rather than use a simple on and off scheme for enabling transfer options and greetings, Cisco Unity Connection employs a date scheme. If the value is NULL or a date is in the future then the transfer option is considered enabled. If the date is sometime in the past, then the transfer option is considered disabled.</p> <p>The "Standard" transfer option should never be disabled. For primary call handlers associated with subscribers, the "Alternate" transfer option should always be enabled since subscribers have only one transfer option used currently.</p>
TransferAnnounce	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection plays "transferring call" when the subscriber answers the phone. This field requires a "TransferType" of supervised (1).</p> <p>Values can be:</p> <ul style="list-style-type: none"> • false: Do not say "Transferring call" when the subscriber answers the phone • true: Say "Transferring call" when the subscriber answers the phone <p>Default value: false</p>

Parameters	Operations	Data Type	Comments
TransferConfirm	Read/Write	Boolean	<p>The type of call transfer Cisco Unity Connection will perform - supervised or unsupervised (also referred to as "Release to Switch" transfer).</p> <p>Requires a "TransferType" of supervised.</p> <ul style="list-style-type: none"> Unsupervised transfer (also referred to as "Release to Switch" transfer) - Cisco Unity Connection puts the caller on hold, dials the extension, and releases the call to the phone system. When the line is busy or is not answered, the phone system (not Cisco Unity Connection) forwards the call to the subscriber or handler greeting. To use "Unsupervised" transfer, call forwarding must be enabled on the phone system Supervised transfer - Cisco Unity Connection acts as a receptionist, handling the transfer. If the line is busy or the call is not answered, Cisco Unity Connection (not the phone system) forwards the call to the subscriber or handler greeting. Supervised transfer can be used regardless if the phone system forwards calls or not. <p>Typically TransferConfirm is used in conjunction with the call screening option ("TransferScreening" column) enabled. This combination enables the subscriber to hear the name of the caller and then decide if they want to take the call or not. Default Value: false. Values can be:</p> <ul style="list-style-type: none"> false: Transfer confirm disabled true: Transfer confirm enabled <p>Default value: false</p>
TransferDtDetect	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection will check for dial tone before attempting to transfer the call. Requires a "TransferType" of supervised (1).</p> <p>This is usually used for phone systems that do not have "positive disconnect" capabilities to avoid sending terminated calls to the operator console, for instance. Possible values can be:</p> <ul style="list-style-type: none"> false: Do not check for dial tone prior to transferring a call true: Check for dial tone prior to transferring a call <p>Default value:false</p>
TransferHoldingMode	Read/Write	Integer	<p>The action Cisco Unity Connection will take when the extension is busy.</p> <p>Requires a TransferType column value = "Supervised" (1). Default Value: 0</p>

Parameters	Operations	Data Type	Comments
TransferIntroduce	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection will say "call for <recorded name of the call handler>" when the subscriber answers the phone.</p> <p>Requires a "TransferType" of supervised (1). This functionality is normally used when a single extension number is being shared by multiple subscribers or a scenario where the subscriber who is the message recipient takes calls for more than one dialed extension. The introduction alerts the subscriber who answers that the call is for the call handler. Default Value: false.</p>
TransferRings	Read/Write	Integer	<p>The number of times the extension rings before Cisco Unity Connection considers it a "ring no answer" and plays the subscriber or handler greeting.</p> <p>Requires a "TransferType" of supervised (1). The value of this column should never be less than 2 for a supervised transfer. The range can vary from 2 to 20. Default Value: 4</p>
TransferScreening	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection will prompt callers to say their names. When the phone is answered, the subscriber hears "Call from..." before Cisco Unity Connection transfers the call.</p> <p>Requires a "TransferType" of supervised (1). Normally this column is used along with "TransferConfirm" to allow the subscriber to screen calls. Values can be:</p> <ul style="list-style-type: none"> • false: Call screening disabled • true: Ask and record caller name <p>Default Value: false</p>
TransferType	Read/Write	Integer	<p>The type of call transfer Cisco Unity Connection will perform - supervised or unsupervised (also referred to as "Release to Switch" transfer).</p> <ul style="list-style-type: none"> • Unsupervised transfer (also referred to as "Release to Switch" transfer) - Cisco Unity Connection puts the caller on hold, dials the extension, and releases the call to the phone system. When the line is busy or is not answered, the phone system (not Cisco Unity Connection) forwards the call to the subscriber or handler greeting. To use "Unsupervised" transfer, call forwarding must be enabled on the phone system. • Supervised transfer - Cisco Unity Connection acts as a receptionist, handling the transfer. If the line is busy or the call is not answered, Cisco Unity Connection (not the phone system) forwards the call to the subscriber or handler greeting. Supervised transfer can be used regardless if the phone system forwards calls or not. <p>Default value: 0</p>

Parameters	Operations	Data Type	Comments
MediaSwitchObjectId	Read Only	String	The unique identifier of the MediaSwitch object that Cisco Unity Connection uses for transferring the call to the subscriber phone.
PhoneSystemURI	Read Only	String	Specifies the URI of the phone systems
UsePrimaryExtension	Read/Write	Boolean	If extension is null this will be set to 1 (true) to indicate we are using instead the DtmfAccessId for the owning handler or subscriber. Possible Values: <ul style="list-style-type: none"> • false • true Default value: true
Extension	Read/Write	Integer	If an administrator using Cisco Unity Connection Administration chooses to transfer to the extension of a subscriber or call handler, Cisco Unity Connection will automatically enter the DtmfAccessId value pulled from the DtmfAccessId table for the call handler into this column. Note- Digits, hash, comma, asterisk, plus are allowed.
PlayTransferprompt	Read/Write	Boolean	A flag indicating whether the "Wait while I transfer your call" prompt should be played prior to transferring a call. Values can be: <ul style="list-style-type: none"> • true - Play Transfer prompt is enabled. • false - Play transfer prompt is disabled. Default Value: true
PersonalCallTransfer	Read/Write	Boolean	A flag indicating whether or not Personal Call Transfer Rules are used for the specific Transfer Option. Values can be: <ul style="list-style-type: none"> • false: Not enabled • true: Enabled Default value: false
Enabled	Read/Write	Boolean	Indicate whether the transfer option is enabled or not. To enable rule till particular end date TimeExpires should also be specified and to enable transfer rule with no end date, the TimeExpires field should be empty. Possible value: <ul style="list-style-type: none"> • true: enabled • false: disabled Default value: true This means transfer rules are enabled with no end date by default.



CHAPTER 36

Cisco Unity Connection Provisioning Interface (CUPI) API for Distribution List

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Distribution List APIs, on page 439](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Distribution List Members APIs, on page 453](#)

Cisco Unity Connection Provisioning Interface (CUPI) API -- Distribution List APIs

Distribution List APIs

Administrator can use this API to create/update/delete/fetch the distribution lists. You can update various attributes of distribution list using this API. Also members in a distribution list can be added/deleted/fetched using this API.

Listing the Distribution Lists

The following is an example of the GET request that fetch the list of distribution list:

```
GET https://<connection-server>/vmrest/distributionlists
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<DistributionLists total="3">
  <DistributionList>
    <URI>/vmrest/distributionlists/24865f76-fa95-412d-bc56-a48ef9e1531a</URI>
    <ObjectId>24865f76-fa95-412d-bc56-a48ef9e1531a</ObjectId>
    <Alias>undeliverablemessages</Alias>
    <DisplayName>Undeliverable Messages</DisplayName>
    <LocationObjectId>bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationURI>
    <PartitionObjectId>d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</PartitionObjectId>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
    <PartitionURI>/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</PartitionURI>
    <DistributionListMembersURI>/vmrest/distributionlists/24865f76-fa95-412d-bc56-a48ef9e1531a/distributionlistmembers</DistributionListMembersURI>
    <AlternateNamesURI>/vmrest/alternatenames?query=(DistributionListObjectId%20is%2024865f76-fa95-412d-bc56-a48ef9e1531a)</AlternateNamesURI>
  </DistributionList>
  <DistributionList>
    <URI>/vmrest/distributionlists/f3e492dc-822b-43fb-be2f-416b972fb642</URI>
    <ObjectId>f3e492dc-822b-43fb-be2f-416b972fb642</ObjectId>
    <Alias>allvoicemailusers</Alias>
    <DisplayName>All Voice Mail Users</DisplayName>
    <LocationObjectId>bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationURI>
    <DtmfAccessId>99991</DtmfAccessId>
    <PartitionObjectId>d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</PartitionURI>
    <DistributionListMembersURI>/vmrest/distributionlists/f3e492dc-822b-43fb-be2f-416b972fb642/distributionlistmembers</DistributionListMembersURI>
    <AlternateNamesURI>/vmrest/alternatenames?query=(DistributionListObjectId%20is%20f3e492dc-822b-43fb-be2f-416b972fb642)</AlternateNamesURI>
  </DistributionList>
  <DistributionList>
    <URI>/vmrest/distributionlists/c34b145e-b1f4-40de-9031-bc83703f0b1c</URI>
    <ObjectId>c34b145e-b1f4-40de-9031-bc83703f0b1c</ObjectId>
    <Alias>allvoicemailenabledcontacts</Alias>
    <DisplayName>All Voicemail-Enabled Contacts</DisplayName>
    <LocationObjectId>bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationURI>
    <DtmfAccessId>99992</DtmfAccessId>
    <PartitionObjectId>d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</PartitionURI>
    <DistributionListMembersURI>/vmrest/distributionlists/c34b145e-b1f4-40de-9031-bc83703f0b1c/distributionlistmembers</DistributionListMembersURI>
    <AlternateNamesURI>/vmrest/alternatenames?query=(DistributionListObjectId%20is%20c34b145e-b1f4-40de-9031-bc83703f0b1c)</AlternateNamesURI>
  </DistributionList>
</DistributionLists>

```

Response Code: 204

JSON Example

To get distribution lists, do the following:


```
Request URI:
GET https://<connection-server>/vmrest/distributionlists
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2"
  "DistributionList": [
    {
      "URI": "/vmrest/distributionlists/d9e61ace-3ece-4722-b331-ed57a73ef9eb"
      "ObjectId": "d9e61ace-3ece-4722-b331-ed57a73ef9eb"
      "Alias": "undeliverablemessages"
      "DisplayName": "Undeliverable Messages"
      "LocationObjectId": "830e1a2d-8e90-459f-88f7-700497ba975c"

      "LocationURI": "/vmrest/locations/connectionlocations/830e1a2d-8e90-459f-88f7-700497ba975c"

      "PartitionObjectId": "9c010254-1493-4e1a-9e47-fe2494792744"
      "TenantObjectId": "fe6541fb-b42c-44f2-8404-ded14cbf7438"
      "PartitionURI": "/vmrest/partitions/9c010254-1493-4e1a-9e47-fe2494792744"

      "DistributionListMembersURI": "/vmrest/distributionlists/d9e61ace-3ece-4722-b331-ed57a73ef9eb/distributionlistmembers"

      "AlternateNamesURI": "/vmrest/alternatenames?query=(DistributionListObjectId%20is%20d9e61ace-3ece-4722-b331-ed57a73ef9eb)"
    }
    {
      "URI": "/vmrest/distributionlists/alfcfd8b-8749-465b-abe1-b578a8565107"
      "ObjectId": "alfcfd8b-8749-465b-abe1-b578a8565107"
      "Alias": "allvoicemailusers"
      "DisplayName": "All Voice Mail Users"
      "LocationObjectId": "830e1a2d-8e90-459f-88f7-700497ba975c"

      "LocationURI": "/vmrest/locations/connectionlocations/830e1a2d-8e90-459f-88f7-700497ba975c"

      "DtmfAccessId": "99991"
      "PartitionObjectId": "9c010254-1493-4e1a-9e47-fe2494792744"
      "PartitionURI": "/vmrest/partitions/9c010254-1493-4e1a-9e47-fe2494792744"

      "DistributionListMembersURI": "/vmrest/distributionlists/alfcfd8b-8749-465b-abe1-b578a8565107/distributionlistmembers"

      "AlternateNamesURI": "/vmrest/alternatenames?query=(DistributionListObjectId%20is%20alfcfd8b-8749-465b-abe1-b578a8565107)"
    }
  ]
}
```

```
Response Code: 200
```

Listing Specific Tenant Related Distribution Lists by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectId to list the specific tenant related distribution lists using the following URI:

```
GET https://<connection-server>/vmrest/distributionlists?query=(TenantObjectId is
<Tenant-ObjectId>)
```

To get the TenantObjectId, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Viewing the Specific Distribution List

The following is an example of the GET request that lists the details of specific distribution list represented by the provided value of distribution list object ID:

```
GET https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<DistributionList>
  <URI>/vmrest/distributionlists/c34b145e-b1f4-40de-9031-bc83703f0b1c</URI>
  <ObjectId>c34b145e-b1f4-40de-9031-bc83703f0b1c</ObjectId>
  <Alias>allvoicemailenabledcontacts</Alias>
  <CreationTime>2013-02-14T05:05:42Z</CreationTime>
  <DisplayName>All Voicemail-Enabled Contacts</DisplayName>
  <DtmfName>2558642362453622</DtmfName>
  <IsPublic>true</IsPublic>
  <Undeletable>true</Undeletable>
  <VoiceName>d5814a39-94df-4498-acfd-93728a607be7.wav</VoiceName>
  <VoiceFileURI>/vmrest/voicefiles/d5814a39-94df-4498-acfd-93728a607be7.wav</VoiceFileURI>

  <VoiceNameURI>/vmrest/distributionlists/c34b145e-b1f4-40de-9031-
bc83703f0b1c/voicename</VoiceNameURI>
  <LocationObjectId>bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-
2da8756eeb6f</LocationURI>
  <DtmfAccessId>99992</DtmfAccessId>
  <AllowContacts>true</AllowContacts>
  <AllowForeignMessage>false</AllowForeignMessage>
  <PartitionObjectId>d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</PartitionURI>
  <DistributionListMembersURI>/vmrest/distributionlists/c34b145e-b1f4-40de-9031-
bc83703f0b1c/distributionlistmembers</DistributionListMembersURI>
  <AlternateNamesURI>/vmrest/alternatenames?query=(DistributionListObjectId%20is%20c34b14
5e-b1f4-40de-9031-bc83703f0b1c)</AlternateNamesURI>
</DistributionList>
```

```
Response Code: 200
```

JSON Example

To get a distribution list for a particular partitions, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/distributionlists/d9e61ace-3ece-4722-b331-ed57a73ef9eb"
  "ObjectId": "d9e61ace-3ece-4722-b331-ed57a73ef9eb"
  "Alias": "undeliverablemessages"
  "CreationTime": "2013-02-21T11:39:08Z"
  "DisplayName": "Undeliverable Messages"
  "DtmfName": "8633548372253637"
  "IsPublic": "true"
  "Undeletable": "true"
  "VoiceName": "487e3db3-3782-4d30-a000-ef0d03ae22a2.wav"
  "VoiceFileURI": "/vmrest/voicefiles/487e3db3-3782-4d30-a000-ef0d03ae22a2.wav"
  "VoiceNameURI": "/vmrest/distributionlists/d9e61ace-3ece-4722-b331-ed57a73ef9eb/voicename"
  "LocationObjectId": "830e1a2d-8e90-459f-88f7-700497ba975c"
  "LocationURI": "/vmrest/locations/connectionlocations/830e1a2d-8e90-459f-88f7-700497ba975c"
  "AllowContacts": "false"
  "AllowForeignMessage": "false"
  "PartitionObjectId": "9c010254-1493-4e1a-9e47-fe2494792744"
  "PartitionURI": "/vmrest/partitions/9c010254-1493-4e1a-9e47-fe2494792744"
  "DistributionListMembersURI": "/vmrest/distributionlists/d9e61ace-3ece-4722-b331-ed57a73ef9eb/distributionlistmembers"
  "AlternateNamesURI": "/vmrest/alternatenames?query=(DistributionListObjectId%20is%20d9e61ace-3ece-4722-b331-ed57a73ef9eb)"
}
```

Response Code: 200

Getting the Distribution List Based on an Query

The following is an example of the GET request that lists the details of specific distribution list represented by the provided value of partition object ID:

```
GET https://<connection-server>/vmrest/distributionlists?query=(PartitionObjectId%20is%20<objectId of the partition>)
```

Where the partition object Id can be fetched using the following request

```
GET https://<connection-server>/vmrest/partitions
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<DistributionLists total="3">
  <DistributionList>
    <URI>/vmrest/distributionlists/2fe64511-1b69-4d97-b27b-ef383af4b194</URI>
    <ObjectId>2fe64511-1b69-4d97-b27b-ef383af4b194</ObjectId>
    <Alias>undeliverablemessages</Alias>
    <DisplayName>Undeliverable Messages</DisplayName>
    <LocationObjectId>42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationURI>
    <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionURI>
    <DistributionListMembersURI>/vmrest/distributionlists/2fe64511-1b69-4d97-b27b-ef383af4b194/distributionlistmembers</DistributionListMembersURI>
    <AlternateNamesURI>/vmrest/alternatenames?query=(DistributionListObjectId%20is%202fe64511-1b69-4d97-b27b-ef383af4b194)</AlternateNamesURI>
  </DistributionList>
  <DistributionList>
    <URI>/vmrest/distributionlists/d37dfc67-04c2-48d3-9a7a-f2b316a09840</URI>
    <ObjectId>d37dfc67-04c2-48d3-9a7a-f2b316a09840</ObjectId>
    <Alias>allvoicemailusers</Alias>
    <DisplayName>All Voice Mail Users</DisplayName>
    <LocationObjectId>42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationURI>
    <DtmfAccessId>99991</DtmfAccessId>
    <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionURI>
    <DistributionListMembersURI>/vmrest/distributionlists/d37dfc67-04c2-48d3-9a7a-f2b316a09840/distributionlistmembers</DistributionListMembersURI>
    <AlternateNamesURI>/vmrest/alternatenames?query=(DistributionListObjectId%20is%20d37dfc67-04c2-48d3-9a7a-f2b316a09840)</AlternateNamesURI>
  </DistributionList>
  <DistributionList>
    <URI>/vmrest/distributionlists/160da8fe-2171-4bf7-9009-e95db94f823e</URI>
    <ObjectId>160da8fe-2171-4bf7-9009-e95db94f823e</ObjectId>
    <Alias>allvoicemailenabledcontacts</Alias>
    <DisplayName>All Voicemail-Enabled Contacts</DisplayName>
    <LocationObjectId>42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff</LocationURI>
    <DtmfAccessId>99992</DtmfAccessId>
    <PartitionObjectId>da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b</PartitionURI>
    <DistributionListMembersURI>/vmrest/distributionlists/160da8fe-2171-4bf7-9009-e95db94f823e/distributionlistmembers</DistributionListMembersURI>
    <AlternateNamesURI>/vmrest/alternatenames?query=(DistributionListObjectId%20is%20160da8fe-2171-4bf7-9009-e95db94f823e)</AlternateNamesURI>
  </DistributionList>
</DistributionLists>

```

Response Code: 200

JSON Example

To get a particular distribution list, do the following:

```

Request URI:
GET
https://<connection-server>/vmrest/distributionlists?query=(PartitionObjectId%20is%20<objectId
of the partition>)
Accept: application/json
Connection: keep-alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
  "@total": "3"
  "DistributionList": [
    {
      "URI": "/vmrest/distributionlists/2fe64511-1b69-4d97-b27b-ef383af4b194"
      "ObjectId": "2fe64511-1b69-4d97-b27b-ef383af4b194"
      "Alias": "undeliverablemessages"
      "DisplayName": "Undeliverable Messages"
      "LocationObjectId": "42a9ab40-490d-4819-9bfb-8ddce4f430ff"
      "LocationURI": "/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff"
      "PartitionObjectId": "da2114bf-cde7-43d8-9709-cd3895a9d41b"
      "PartitionURI": "/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b"
      "DistributionListMembersURI": "/vmrest/distributionlists/2fe64511-1b69-4d97-b27b-ef383af4b194/distributionlistmembers"
      "AlternateNamesURI": "/vmrest/alternatenames?query=(DistributionListObjectId%20is%202fe64511-1b69-4d97-b27b-ef383af4b194)"
    }
    {
      "URI": "/vmrest/distributionlists/d37dfc67-04c2-48d3-9a7a-f2b316a09840"
      "ObjectId": "d37dfc67-04c2-48d3-9a7a-f2b316a09840"
      "Alias": "allvoicemailusers"
      "DisplayName": "All Voice Mail Users"
      "LocationObjectId": "42a9ab40-490d-4819-9bfb-8ddce4f430ff"
      "LocationURI": "/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff"
      "DtmfAccessId": "99991"
      "PartitionObjectId": "da2114bf-cde7-43d8-9709-cd3895a9d41b"
      "PartitionURI": "/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b"
      "DistributionListMembersURI": "/vmrest/distributionlists/d37dfc67-04c2-48d3-9a7a-f2b316a09840/distributionlistmembers"
      "AlternateNamesURI": "/vmrest/alternatenames?query=(DistributionListObjectId%20is%20d37dfc67-04c2-48d3-9a7a-f2b316a09840)"
    }
    {
      "URI": "/vmrest/distributionlists/160da8fe-2171-4bf7-9009-e95db94f823e"
      "ObjectId": "160da8fe-2171-4bf7-9009-e95db94f823e"
      "Alias": "allvoicemailenabledcontacts"
      "DisplayName": "All Voicemail-Enabled Contacts"
      "LocationObjectId": "42a9ab40-490d-4819-9bfb-8ddce4f430ff"
      "LocationURI": "/vmrest/locations/connectionlocations/42a9ab40-490d-4819-9bfb-8ddce4f430ff"
      "DtmfAccessId": "99992"
      "PartitionObjectId": "da2114bf-cde7-43d8-9709-cd3895a9d41b"
      "PartitionURI": "/vmrest/partitions/da2114bf-cde7-43d8-9709-cd3895a9d41b"
      "DistributionListMembersURI": "/vmrest/distributionlists/160da8fe-2171-4bf7-9009-e95db94f823e/distributionlistmembers"
      "AlternateNamesURI": "/vmrest/alternatenames?query=(DistributionListObjectId%20is%20160da8fe-2171-4bf7-9009-e95db94f823e)"
    }
  ]
}

```

```
Response Code: 200
```

Creating a Distribution List

The following is an example of the POST request that creates a new distribution list where the mandatory field is alias:

```
POST https://<connection-server>/vmrest/distributionlists
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Request Body:
<DistributionList>
  <Alias>Texoma_allvoicemailusersDL_1 </Alias>
  <DisplayName>Texoma_allvoicemailusersDL_1</DisplayName>
</DistributionList>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/distributionlists/3049a03c-108d-40aa-a989-0b008f07656c
```

JSON Example

To create distribution list, do the following:

```
Request URI:
POST https://<connection-server>/vmrest/distributionlists
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "Alias": "Texoma1"
  "DisplayName": "Texoma 1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/distributionlists/dd043e9a-3f34-47eb-a72a-1b4b41e5f9d7
```

Delete the Distribution List

This request can be used to delete a distribution list.

```
DELETE: https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To delete a distribution list, do the following:

```
DELETE https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Updating the Distribution List

The following is an example of the PUT request that can be used to update the distribution list by replicating remote sites over inter-site links, adding contacts in distribution list, and accepting messages from foreign systems.

```
PUT https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
```

Example 1: Replicate to remote sites over inter-site links is enabled, disable add contacts in distribution list, and disallow messages from users on remote voice messaging systems that are configured as VPIM locations.

```
Request Body:
<DistributionList>
  <AllowContacts>false</AllowContacts>
  <AllowForeignMessage>false</AllowForeignMessage>
</DistributionList>
```

```
Response Code: 204
```

JSON Example:

```
PUT https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "AllowContacts": "false",
  "AllowForeignMessage": "false"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: Replicate to remote sites over inter-site links is disabled, enable add contacts in distribution list, and disallow messages from users on remote voice messaging systems that are configured as VPIM locations.

```
Request Body:
<DistributionList>
  <AllowContacts>true</AllowContacts>
  <AllowForeignMessage>false</AllowForeignMessage>
</DistributionList>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example:

```
PUT https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "AllowContacts":"false",
  "AllowForeignMessage":"false"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 3: Replicate to remote sites over inter-site links is enabled, enable add contacts in distribution list, and accept messages from users on remote voice messaging systems that are configured as VPIM locations.

```
Request Body:
<DistributionList>
  <AllowContacts>false</AllowContacts>
  <AllowForeignMessage>true</AllowForeignMessage>
</DistributionList>
The following is the response from the above *PUT* request and the actual response will
depend upon the information given by you:
Response Code: 204
JSON Example:
Request URI:
PUT https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "AllowContacts":"false",
  "AllowForeignMessage":"true"
}
The following is the response from the above *PUT* request and the actual response will
depend upon the information given by you:
Response Code: 204
```

Updating the Distribution List for Tenant

The following is an example of the PUT request that can be used to update the distribution list for Tenants.

```
PUT https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:


```
Request Body:
<DistributionList>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
</DistributionList>
```

The following is the response from the above *PUT* request:

```
Response Code: 204
```

JSON Example :

```
PUT https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "TenantObjectId": "fe6541fb-b42c-44f2-8404-ded14cbf7438"
}
```

Updating the Alternate Names of Distribution Lists

The mandatory fields for creation of an alternate name are FirstName and DistributionListObjectId. The URI to get DistributionListObjectId: https://<connection server>/vmrest/distributionlists.

Example 1: Adding an alternate name for a distribution list

```
POST
https://<connection-server>/vmrest/alternatenames?query=(DistributionListObjectId%20is%20ef4aa84e-97c3-456e-848e-b162a04c9631)

Request Body:
<AlternateName>
    <FirstName>Taxoma_list1</FirstName>
    <DistributionListObjectId>ef4aa84e-97c3-456e-848e-b162a04c9631</DistributionListObjectId>
</AlternateName>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/alternatenames/e091a0f6-031e-440d-abd2-783e5f62511b
```

JSON Example:

```
Request URI:
POST https://<connection-server>/vmrest/alternatenames?query=(DistributionListObjectId%20is%20ef4aa84e-97c3-456e-848e-b162a04c9631)
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "FirstName": "Taxoma_list1",
  "DistributionListObjectId": "ef4aa84e-97c3-456e-848e-b162a04c9631"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/alternatenames/e091a0f6-031e-440d-abd2-783e5f62511b
```

Example 2: Listing the alternate names of a distribution list

```
GET https://<connection-server>/vmrest/
alternatenames?query=(DistributionListObjectId%20is%20ef4aa84e-97c3-456e-848e-b162a04c9631)
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<AlternateNames total="2">
  <AlternateName>
    <URI>/vmrest/alternatenames/865615e9-1c00-4121-acf4-36ee00adb09c</URI>
    <FirstName>Texoma_Alternane Name 1</FirstName>
    <ObjectId>865615e9-1c00-4121-acf4-36ee00adb09c</ObjectId>
    <DistributionListObjectId>e703511f-fa9b-41f2-8662-
23de75fffc96</DistributionListObjectId>
    <DistributionListURI>/vmrest/distributionlists/e703511f-fa9b-41f2-8662-
23de75fffc96</DistributionListURI>
  </AlternateName>
  <AlternateName>
    <URI>/vmrest/alternatenames/af735ef8-b3f3-4c97-a8ec-667e416cfde2</URI>
    <FirstName>Texoma_Alternate Name 2</FirstName>
    <ObjectId>af735ef8-b3f3-4c97-a8ec-667e416cfde2</ObjectId>
    <DistributionListObjectId>e703511f-fa9b-41f2-8662-
23de75fffc96</DistributionListObjectId>
    <DistributionListURI>/vmrest/distributionlists/e703511f-fa9b-41f2-8662-
23de75fffc96</DistributionListURI>
  </AlternateName>
</AlternateNames>
```

```
Response Code: 200
```

JSON Example:

```
GET
https://<connection-server>/vmrest/alternatenames?query=(DistributionListObjectId%20is%20c238c2bf-4037-494d-951b-090468c95dc4)
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1", "AlternateName":
  {
    "URI": "/vmrest/alternatenames/e091a0f6-031e-440d-abd2-783e5f62511b",
    "FirstName": "Taxoma_list1",
    "ObjectId": "e091a0f6-031e-440d-abd2-783e5f62511b",
    "DistributionListObjectId": "c238c2bf-4037-494d-951b-090468c95dc4",
    "DistributionListURI": "/vmrest/distributionlists/c238c2bf-4037-494d-951b-
090468c95dc4"
  }
}
```

```
Response Code: 200
```

Example 3: Deleting an alternate name

```
DELETE https://<connection-server>/vmrest /alternatenames/<AlternateNameObjectId>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example:

```
DELETE https://<connection-server>/vmrest/alternatenames/<AlternateNameObjectId>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 4: Editing an Alternate Name

Note that only first name is editable.

```
PUT https://<connection-server>/vmrest/alternatenames/<AlternateNameObjectId>
Request Body:
<AlternateName>
  <FirstName>Texoma_Alternane Name1</FirstName>
</AlternateName>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example:

```
PUT https://<connection-server>/vmrest/alternatenames/<AlternateNameObjectId>
Accept: application/json
Connection: keep-alive
Request Body:
{
  "FirstName": "Texoma1"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of the Data Fields for Distribution List

Parameter	Operation	Data Type	Comments
Alias	Read/Write	String(64)	Unique name for a distribution List

Parameter	Operation	Data Type	Comments
AllowContacts	Read/Write	Boolean	<p>A flag indicating whether contacts (system, VPIM, virtual) are allowed to be members of this Distribution List. Purpose of this flag is to enable administrators to create a Distribution List whose members are Contacts.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true: allow contacts (system, VPIM, virtual) are allowed to be members of this Distribution List • false: Do not allow contacts (system, VPIM, virtual) are allowed to be members of this Distribution List <p>Default: false</p>
AllowForeignMessage	Read/Write	Boolean	<p>Allow users on remote voice messaging systems that are configured as VPIM locations to send messages to this distribution list. Only valid if the list is for subscribers only (i.e. does not allow contacts)</p> <p>Possible Values:</p> <ul style="list-style-type: none"> • true: allow remote voice messaging • false: Do not allow remote voice messaging. <p>Default: False</p>
CreationTime	Read Only	Datetime	The date and time the system distribution list was created in UTC
DisplayName	Read/Write	String(64)	The unique text name of the system distribution.
DtmfAccessId	Read/Write	String(40)	Extension that the phone system uses to connect to the distribution list. It is an optional field.
DtmfName	Read Only	String(64)	The series of digits corresponding to the numeric keypad mapping on a standard touchtone phone representing the display name of the system distribution list. These digits are used for searching the distribution list by name via the phone.
LocationObjectId	Read Only	String(16)	The unique identifier of the LocationVMS object to which this system distribution list belongs.
ObjectId	Read Only	String(36)	Object Id of the distribution list created.
PartitionObjectId	Read Only	String(36)	The unique identifier of the Partition to which the DistributionList is assigned.
TenantObjectId	Read/Write	String(36)	The unique identifier of the tenant to which the distribution list belongs. This field is reflected in the response only if the distribution list belongs to a particular tenant.
VoiceName	Read/Write	String(40)	The voicename of the distribution List
URI	Read Only	String	URI of the Distribution list

Parameter	Operation	Data Type	Comments
VoiceFileURI	Read Only	String	URI of Voice File
VoiceNameURI	Read Only	String	Voice Name URI
LocationURI	Read Only	String	Location URI
PartitionURI	Read Only	String	Partition URI
PartitionURI	Read Only	String	Distribution List URI
AlternateNamesURI	Read Only	String	Alternate Names URI

Explanation of the Data Fields for Alternate Names of Distribution List

Parameter	Operation	Data Type	Comments
First Name	Read/Write	String (64)	Specifies the alternate name of a distribution list.
ObjectId	Read Only	String (36)	Specifies the objectid of the alternate name.
DistributionListObjectId	Read Only	String (36)	Specifies the object ID of the distribution list.
URI	Read Only	String	Specifies the URI of the alternate name.
DistributionListURI	Read Only	String	Specifies the URI of distribution list.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Distribution List Members APIs

Distribution List Members APIs

Administrator can use this API to create/update/delete/fetch the distribution list members. You can update various attributes of distribution list members using this API.

Listing the Distribution List Members

```
Request URI:
GET https://<connection-
server>/vmrest/distributionlists/<distributionlistObjectId>/distributionlistmember
```

The following is an example of the GET request that fetch the list of distribution list members:

```
GET https://<connection server>/vmrest/distributionlists/ef4aa84e-97c3-456e-848e-
b162a04c9631/distributionlistmembers
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<DistributionListMembers total="1">
  <DistributionListMember>
    <URI>/vmrest/distributionlists/ef4aa84e-97c3-456e-848e-
b162a04c9631/distributionlistmembers/f6712058-3409-49eb-a616-517614766594</URI>
    <DistributionListObjectId>ef4aa84e-97c3-456e-848e-
b162a04c9631</DistributionListObjectId>
    <DistributionListURI>/vmrest/distributionlists/ef4aa84e-97c3-456e-848e-
b162a04c9631</DistributionListURI>
    <MemberUserObjectId>34cc862e-19e4-4689-a4ee-
ee98d83b8319</MemberUserObjectId>
    <MemberUserURI>/vmrest/users/34cc862e-19e4-4689-a4ee-
ee98d83b8319</MemberUserURI>
    <ObjectId>f6712058-3409-49eb-a616-517614766594</ObjectId>
    <Alias>Texoma_UserTemplate_1</Alias>
    <DisplayName>Texoma_UserTemplate_1</DisplayName>
    <AllowForeignMessage>>false</AllowForeignMessage>
    <MemberGlobalUserObjectId>34cc862e-19e4-4689-a4ee-
ee98d83b8319</MemberGlobalUserObjectId>
    <MemberGlobalUserURI>/vmrest/globalusers/34cc862e-19e4-4689-a4ee-
ee98d83b8319</MemberGlobalUserURI>
    <MemberLocationObjectId>0ebale8b-7e39-47a3-865f-ee6a34113f67</MemberLocationObjectId>
</MemberLocationURI>/vmrest/locations/connectionlocations/0ebale8b-7e39-47a3-865f-ee6a34113f67</MemberLocationURI>

    <MemberGlobalUserDignetObjectId>34cc862e-19e4-4689-a4ee-
ee98d83b8319</MemberGlobalUserDignetObjectId>
    <IsUserTemplate>true</IsUserTemplate>
    <LocationObjectId>0ebale8b-7e39-47a3-865f-ee6a34113f67</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/0ebale8b-7e39-47a3-865f-
ee6a34113f67</LocationURI>
  </DistributionListMember>
</DistributionListMembers>
```

```
Response Code: 200
```

JSON Example

To get distribution list members:

```
GET
https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>/distributionlistmembers
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1"
  "DistributionListMember":
  {
    "URI": "/vmrest/distributionlists/dd043e9a-3f34-47eb-a72a-1b4b41e5f9d7/distributionlistmembers/dadd5c1c-1666-486a-94fa-bc681d99bfdb"
    "DistributionListObjectId": "dd043e9a-3f34-47eb-a72a-1b4b41e5f9d7"
    "DistributionListURI": "/vmrest/distributionlists/dd043e9a-3f34-47eb-a72a-1b4b41e5f9d7"
    "MemberUserObjectId": "216c1a3e-7c0e-4527-aa9c-32b2683f04be"
    "MemberUserURI": "/vmrest/users/216c1a3e-7c0e-4527-aa9c-32b2683f04be"
    "ObjectId": "dadd5c1c-1666-486a-94fa-bc681d99bfdb"
    "Alias": "kapill_operator_1"
    "DisplayName": "kapill_operator_1"
    "AllowForeignMessage": "false"
    "MemberGlobalUserObjectId": "216c1a3e-7c0e-4527-aa9c-32b2683f04be"
    "MemberGlobalUserURI": "/vmrest/globalusers/216c1a3e-7c0e-4527-aa9c-32b2683f04be"
    "MemberLocationObjectId": "830e1a2d-8e90-459f-88f7-700497ba975c"
    "MemberLocationURI": "/vmrest/locations/connectionlocations/830e1a2d-8e90-459f-88f7-700497ba975c"
    "MemberGlobalUserDignetObjectId": "216c1a3e-7c0e-4527-aa9c-32b2683f04be"
    "IsUserTemplate": "false"
    "LocationObjectId": "830e1a2d-8e90-459f-88f7-700497ba975c"
    "LocationURI": "/vmrest/locations/connectionlocations/830e1a2d-8e90-459f-88f7-700497ba975c"
  }
}
```

Response Code: 200

Creating a Distribution List Member

You can create a new distribution list member by adding a user or user template or can add another distribution list as a member.

Example 1: Adding a user or user template to a distribution list To get user or user template object ID, you can use the following URIs:

```
GET https://<connection-server>/vmrest/users
GET https://<connection-server>/vmrest/usertemplates
```

The following is an example of the POST request that creates a new distribution list member by adding a user or user template:

```
POST https://<connection-server>/vmrest/distributionlists/ef4aa84e-97c3-456e-848e-b162a04c9631/distributionlistmembers
Request Body:
<DistributionListMember>
  <MemberUserObjectId>6202095f-606b-40d8-889d-f32e2d822f54</MemberUserObjectId>
</DistributionListMember>
```

Response Code: 201

Example 2: Adding another distribution list as a member The following is an example of the POST request that creates a new distribution list member by adding another distribution list as a member:

Delete a Member from the Distribution List

```
POST https://<connection-server>/vmrest/
distributionlists/ef4aa84e-97c3-456e-848e-b162a04c9631/distributionlistmembers
Request Body:
<DistributionListMember>

<MemberDistributionListObjectId>e030d111-d29e-4d11-93fa-4abe73bd50a0</MemberDistributionListObjectId>
</DistributionListMember>
```

```
Response Code: 201
```

JSON Example:

To add a user or user template, do the following:

```
Request URI:
POST
https://<connection-server>/vmrest/distributionlists/<distributionlistObjectId>/distributionlistmembers
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "MemberUserObjectId": "216c1a3e-7c0e-4527-aa9c-32b2683f04be"
}
The following is the response from the above *POST* request and the actual response will
depend upon the information given by you:
Response Code: 201
To add another distribution list as a member:
POST
https://<connection-server>/vmrest/distributionlists/ef4aa84e-97c3-456e-848e-b162a04c9631/distributionlistmembers
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "MemberDistributionListObjectId": "e030d111-d29e-4d11-93fa-4abe73bd50a0"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Delete a Member from the Distribution List

The following request can be used to delete a member from the distribution list:

```
DELETE:
https://<connection-server>/vmrest/distributionlists/<DistributionListObjectId>/distributionlistmembers/<distributionlistmemberObjectId>
```

```
Response Code: 204
```

JSON Example:

```
DELETE
https://<connection-server>/vmrest/distributionlists/<DistributionListObjectId>/distributionlistmembers/<distributionlistmemberObjectId>
Accept: application/json
Connection: keep-alive
```


Response Code: 204

Explanation of the Data Fields for Distribution List Member

Parameter	Operations	Data Type	Comments
URI	Read Only	String	Specifies the URI of the distribution list member.
ObjectId	Read Only	String (36)	Specifies the Object Id of the distribution list member.
DistributionListObjectId	Read Only	String (36)	Specifies the distribution list object ID.
DistributionListURI	Read Only	String	Specifies the URI of the distribution list.
MemberUserObjectId	Read Only	String (36)	Specifies the object ID of user or user template.
MemberGlobalUserObjectId	Read Only	String (36)	Specifies the object ID of the user or user template.
MemberDistributionListObjectId	Read Only	String (36)	Specifies the object ID of the member's distribution list.
MemberGlobalUserDignObjectId	Read Only	String (36)	Specifies the object ID of the user.
MemberLocationObjectId	Read Only	String (36)	Specifies the object ID of the member location.
Alias	Read/Write	String (64)	Specifies the unique name to identify a distribution list.
AllowForeignMessage	Read Only	Boolean	<p>Allow users on remote voice messaging systems that are configured as VPIM locations to send messages to this distribution list.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true: allow remote voice messaging • false: Do not allow remote voice messaging. <p>Default: false</p>
DisplayName	Read/Write	String (64)	Specifies name of the member.
IsUserTemplate	Read Only	Boolean	Specifies if a member is a user template.
MemberLocationURI	Read Only	String	Specifies URI of the location.
MemberGlobalUserURI	Read Only	String	Specifies URI of the user.

Explanation of the Data Fields for Distribution List Member

Parameter	Operations	Data Type	Comments
LocationObjectId	Read Only	String (36)	Specifies location object ID.
LocationURI	Read Only	String	Specifies URI of the location.

-



CHAPTER 37

Cisco Unity Connection Provisioning Interface (CUPI) API -- Call Handler

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Call Handler APIs, on page 459](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Call Handler Owner APIs, on page 479](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Call Handler Enumeration Types, on page 484](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Call Handler Greetings APIs, on page 486](#)
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Cisco Unity Connection Provisioning Interface (CUPI) API -- Call Handler APIs

Call Handler APIs

Call handlers answer calls, greet callers with recorded prompts, provide callers with information and options, route calls, and take messages. They are a basic component of Cisco Unity Connection. Your plan for call handlers can be simple, using only the predefined call handlers, or you can create up to 40,000 new call handlers. You may want to use call handlers in the following ways:

As an automated attendant---A call handler can be used in place of a human operator to answer and direct calls by playing greetings and responding to key presses. The automated attendant can provide a menu of options. For example, "For Sales, press 1; for Service, press 2; for our business hours, press 3".

To offer prerecorded audio text---A call handler can be used to provide information that customers request frequently. For example, "Our normal business hours are Monday through Friday, 8 a.m. to 5 p.m.", or to play a pre-recorded message that all callers hear before they can interact with the system.

As a message recipient---A call handler can be used to take messages for the organization. For example, "All of our customer service representatives are busy. Please state your name, phone number, and account number, and we will return your call as soon as possible."

To transfer calls---A call handler can be used to route callers to a user. For example, after hours, you could transfer calls that come to a technical support call handler directly to the mobile phone of the person who is on call, or to another call handler.

Administrator can use this API to create/update/delete/fetch the call handler. You can update various attributes of call handler using this API.

Listing the Call Handlers

The following is an example of the GET request that fetch the list of call handlers:

```
GET https://<connection-server>/vmrest/handlers/callhandlers
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<Callhandlers total="2">
  <Callhandler>
    <URI>/vmrest/handlers/callhandlers/fc922cfc-6583-471b-b8ab-9971e02418f3</URI>
    <CreationTime>2013-01-02T15:42:48Z</CreationTime>
    <Language>1033</Language>
    <Undeletable>true</Undeletable>
    <VoiceName>9d168d20-303d-4019-b381-cd430e478540.wav</VoiceName>
    <VoiceFileURI>/vmrest/voicefiles/99cbec60-ef57-41a5-a0bd-5d1b79e6b7f7</VoiceFileURI>
    <VoiceNameURI>/vmrest/handlers/callhandlers/fc922cfc-6583-471b-b8ab-9971e02418f3/voicename</VoiceNameURI>
    <LocationObjectId>fa15de52-b98d-4de9-a868-ed02f957e38f</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/fa15de52-b98d-4de9-a868-ed02f957e38f</LocationURI>
    <EditMsg>true</EditMsg>
    <IsPrimary>false</IsPrimary>
    <OneKeyDelay>1500</OneKeyDelay>
    <ScheduleSetObjectId>2eee2b88-8e45-4b77-8b4c-f52aaae39e4</ScheduleSetObjectId>
    <ScheduleSetURI>/vmrest/schedulesets/2eee2b88-8e45-4b77-8b4c-f52aaae39e4</ScheduleSetURI>
    <SendUrgentMsg>0</SendUrgentMsg>
    <MaxMsgLen>300</MaxMsgLen>
    <IsTemplate>false</IsTemplate>
    <ObjectId>fc922cfc-6583-471b-b8ab-9971e02418f3</ObjectId>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
    <RecipientDistributionListObjectId>e93ca9db-8659-4e07-bee6-7af3f5c1a1db</RecipientDistributionListObjectId>
    <RecipientDistributionListURI>/vmrest/distributionlists/e93ca9db-8659-4e07-bee6-7af3f5c1a1db</RecipientDistributionListURI>
    <DisplayName>Opening Greeting</DisplayName>
    <AfterMessageAction>2</AfterMessageAction>
    <AfterMessageTargetConversation>PHGreeting</AfterMessageTargetConversation>
    <AfterMessageTargetHandlerObjectId>2f4b7240-f56a-4644-b22a-b1a346a5a9b2</AfterMessageTargetHandlerObjectId>
    <TimeZone>190</TimeZone>
    <UseDefaultLanguage>true</UseDefaultLanguage>
    <UseDefaultTimeZone>true</UseDefaultTimeZone>
    <MediaSwitchObjectId>2dcf1e57-80d6-43d3-b245-3693fe78397d</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/2dcf1e57-80d6-43d3-b245-3693fe78397d</PhoneSystemURI>
    <UseCallLanguage>true</UseCallLanguage>
    <SendSecureMsg>false</SendSecureMsg>
    <EnablePrependDigits>false</EnablePrependDigits>
    <DispatchDelivery>false</DispatchDelivery>
    <CallSearchSpaceObjectId>1736fdd9-b6f9-4a92-ad25-17d5b8228700</CallSearchSpaceObjectId>
    <CallSearchSpaceURI>/vmrest/searchspaces/1736fdd9-b6f9-4a92-ad25-17d5b8228700</CallSearchSpaceURI>
    <InheritSearchSpaceFromCall>true</InheritSearchSpaceFromCall>
    <PartitionObjectId>0017febb-15bf-4454-9a5c-3b26e19aa14a</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/0017febb-15bf-4454-9a5c-3b26e19aa14a</PartitionURI>
    <PlayPostGreetingRecording>0</PlayPostGreetingRecording>
    <SendPrivateMsg>0</SendPrivateMsg>
    <PlayAfterMessage>1</PlayAfterMessage>
    <GreetingsURI>/vmrest/handlers/callhandlers/fc922cfc-6583-471b-b8ab-9971e02418f3/greetings</GreetingsURI>
    <TransferOptionsURI>/vmrest/handlers/callhandlers/fc922cfc-6583-471b-b8ab-9971e02418f3/transferoptions</TransferOptionsURI>
    <MenuEntriesURI>/vmrest/handlers/callhandlers/fc922cfc-6583-471b-b8ab-9971e02418f3/menuentries</MenuEntriesURI>
    <CallHandlerOwnerURI>/vmrest/handlers/callhandlers/fc922cfc-6583-471b-b8ab-9971e02418f3/callhandlerowners</CallHandlerOwnerURI>
  </Callhandler>
</Callhandler>

```

Listing the Call Handlers

```

<URI>/vmrest/handlers/callhandlers/2f4b7240-f56a-4644-b22a-b1a346a5a9b2</URI>
<CreationTime>2013-01-02T15:42:49Z</CreationTime>
<Language>1033</Language>
<Undeletable>true</Undeletable>
<VoiceName>a797edef-e693-400f-bb7c-8fe889c3d758.wav</VoiceName>
<VoiceFileURI>/vmrest/voicefiles/9a1a20ca-acb3-4ddc-9cde-
0d10a2921427</VoiceFileURI>
<VoiceNameURI>/vmrest/handlers/callhandlers/2f4b7240-f56a-4644-b22a-
b1a346a5a9b2/voicename</VoiceNameURI>
<LocationObjectId>fa15de52-b98d-4de9-a868-ed02f957e38f</LocationObjectId>
<LocationURI>/vmrest/locations/connectionlocations/fa15de52-b98d-4de9-a868-
ed02f957e38f</LocationURI>
<EditMsg>true</EditMsg>
<IsPrimary>>false</IsPrimary>
<OneKeyDelay>1500</OneKeyDelay>
<ScheduleSetObjectId>1cd28472-ced0-44ce-a8f7-cd7692ce7594</ScheduleSetObjectId>
<ScheduleSetURI>/vmrest/schedulesets/1cd28472-ced0-44ce-a8f7-
cd7692ce7594</ScheduleSetURI>
<SendUrgentMsg>0</SendUrgentMsg>
<MaxMsgLen>300</MaxMsgLen>
<IsTemplate>>false</IsTemplate>
<ObjectId>2f4b7240-f56a-4644-b22a-b1a346a5a9b2</ObjectId>
<RecipientDistributionListObjectId>e93ca9db-8659-4e07-bee6-
7af3f5c1a1db</RecipientDistributionListObjectId>
<RecipientDistributionListURI>/vmrest/distributionlists/e93ca9db-8659-4e07-bee6-
7af3f5c1a1db</RecipientDistributionListURI>
<DisplayName>Goodbye</DisplayName>
<AfterMessageAction>1</AfterMessageAction>
<TimeZone>190</TimeZone>
<UseDefaultLanguage>true</UseDefaultLanguage>
<UseDefaultTimeZone>true</UseDefaultTimeZone>
<MediaSwitchObjectId>2dcf1e57-80d6-43d3-b245-
3693fe78397d</MediaSwitchObjectId>
<PhoneSystemURI>/vmrest/phonesystems/2dcf1e57-80d6-43d3-b245-
3693fe78397d</PhoneSystemURI>
<UseCallLanguage>true</UseCallLanguage>
<SendSecureMsg>>false</SendSecureMsg>
<EnablePrependDigits>>false</EnablePrependDigits>
<DispatchDelivery>>false</DispatchDelivery>
<CallSearchSpaceObjectId>1736fdd9-b6f9-4a92-ad25-
17d5b8228700</CallSearchSpaceObjectId>
<CallSearchSpaceURI>/vmrest/searchspaces/1736fdd9-b6f9-4a92-ad25-
17d5b8228700</CallSearchSpaceURI>
<InheritSearchSpaceFromCall>true</InheritSearchSpaceFromCall>
<PartitionObjectId>0017febb-15bf-4454-9a5c-3b26e19aa14a</PartitionObjectId>
<PartitionURI>/vmrest/partitions/0017febb-15bf-4454-9a5c-3b26e19aa14a</PartitionURI>
<PlayPostGreetingRecording>0</PlayPostGreetingRecording>
<SendPrivateMsg>0</SendPrivateMsg>
<PlayAfterMessage>1</PlayAfterMessage>
<GreetingsURI>/vmrest/handlers/callhandlers/2f4b7240-f56a-4644-b22a-
b1a346a5a9b2/greetings</GreetingsURI>
<TransferOptionsURI>/vmrest/handlers/callhandlers/2f4b7240-f56a-4644-b22a-
b1a346a5a9b2/transferoptions</TransferOptionsURI>
<MenuEntriesURI>/vmrest/handlers/callhandlers/2f4b7240-f56a-4644-b22a-
b1a346a5a9b2/menueentries</MenuEntriesURI>
<CallHandlerOwnerURI>/vmrest/handlers/callhandlers/2f4b7240-f56a-4644-b22a-
b1a346a5a9b2/callhandlerowners</CallHandlerOwnerURI>
</Callhandler>
</Callhandlers>

```

Response Code: 200

JSON Example

To list of the call handlers, do the following:

```
Request URI:  
GET https://<connection-server>/vmrest/handlers/callhandlers  
Accept: application/json  
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
  "@total": "2",
  "Callhandler": [
    {
      "URI": "/vmrest/handlers/callhandlers/6702cce8-853f-4cbd-8579-35c595213898",
      "CreationTime": "2013-02-14T05:05:43Z",
      "Language": "1033",
      "Undeletable": "true",
      "VoiceName": "43145be7-0101-4ba1-9448-76834baa153f.wav",
      "VoiceFileURI": "/vmrest/voicefiles/2374c796-b006-4b29-a35e-8b0b1d576e50",
      "VoiceNameURI": "/vmrest/handlers/callhandlers/6702cce8-853f-4cbd-8579-35c595213898/voicename",
      "LocationObjectId": "bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
      "LocationURI": "/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
      "EditMsg": "true",
      "IsPrimary": "false",
      "OneKeyDelay": "1500",
      "ScheduleSetObjectId": "96e43ab7-b6c1-49b1-ba27-008b8f8870e4",
      "ScheduleSetURI": "/vmrest/schedulesets/96e43ab7-b6c1-49b1-ba27-008b8f8870e4",
      "SendUrgentMsg": "0",
      "MaxMsgLen": "300",
      "IsTemplate": "false",
      "ObjectId": "6702cce8-853f-4cbd-8579-35c595213898",
      "TenantObjectId": "fe6541fb-b42c-44f2-8404-ded14cbf7438",
      "RecipientDistributionListObjectId": "24865f76-fa95-412d-bc56-a48ef9e1531a",
      "RecipientDistributionListURI": "/vmrest/distributionlists/24865f76-fa95-412d-bc56-a48ef9e1531a",
      "DisplayName": "Opening Greeting",
      "AfterMessageAction": "2",
      "AfterMessageTargetConversation": "PHGreeting",
      "AfterMessageTargetHandlerObjectId": "8c400830-7e92-4908-9ca6-a4b123f1bd19",
      "TimeZone": "190",
      "UseDefaultLanguage": "true",
      "UseDefaultTimeZone": "true",
      "MediaSwitchObjectId": "a984674b-98d1-442e-83a9-2dcc0824af9e",
      "PhoneSystemURI": "/vmrest/phonesystems/a984674b-98d1-442e-83a9-2dcc0824af9e",
      "UseCallLanguage": "true",
      "SendSecureMsg": "false",
      "EnablePrependDigits": "false",
      "DispatchDelivery": "false",
      "CallSearchSpaceObjectId": "5a07d332-6fc5-4a3f-baba-3cb4ea630280",
      "CallSearchSpaceURI": "/vmrest/searchspaces/5a07d332-6fc5-4a3f-baba-3cb4ea630280",
      "InheritSearchSpaceFromCall": "true",
      "PartitionObjectId": "d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
      "PartitionURI": "/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
      "PlayPostGreetingRecording": "0",
      "SendPrivateMsg": "0",
      "PlayAfterMessage": "1",
      "GreetingsURI": "/vmrest/handlers/callhandlers/6702cce8-853f-4cbd-8579-35c595213898/greetings",
      "TransferOptionsURI": "/vmrest/handlers/callhandlers/6702cce8-853f-4cbd-8579-35c595213898/transferoptions",
      "MenuEntriesURI": "/vmrest/handlers/callhandlers/6702cce8-853f-4cbd-8579-35c595213898/menueentries",
      "CallHandlerOwnerURI": "/vmrest/handlers/callhandlers/6702cce8-853f-4cbd-8579-35c595213898/callhandlerowners"
    }
  ],
  {
    "URI": "/vmrest/handlers/callhandlers/426e4f1c-0cf1-43dc-a52b-63db2c0704c5",
    "CreationTime": "2013-02-14T05:05:44Z",
    "Language": "1033",
    "Undeletable": "true",
  }
}

```



```

"VoiceName": "389d2d11-f74c-4df1-9766-098800b8fe74.wav",
"VoiceFileURI": "/vmrest/voicefiles/c8cd8b94-8d2f-47d6-841e-cald3a02bdc2",
"VoiceNameURI": "/vmrest/handlers/callhandlers/426e4f1c-0cf1-43dc-a52b-63db2c0704c5/voicename",
"LocationObjectId": "bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
"LocationURI": "/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
"EditMsg": "true",
"IsPrimary": "false",
"OneKeyDelay": "1500",
"ScheduleSetObjectId": "96e43ab7-b6c1-49b1-ba27-008b8f8870e4",
"ScheduleSetURI": "/vmrest/schedulesets/96e43ab7-b6c1-49b1-ba27-008b8f8870e4",
"SendUrgentMsg": "0",
"MaxMsgLen": "300",
"IsTemplate": "false",
"ObjectId": "426e4f1c-0cf1-43dc-a52b-63db2c0704c5",
"RecipientSubscriberObjectId": "053afdf6-78e8-4a54-9384-e6c32c68dacd",
"RecipientUserURI": "/vmrest/users/053afdf6-78e8-4a54-9384-e6c32c68dacd",
"DisplayName": "Operator",
"AfterMessageAction": "2",
"AfterMessageTargetConversation": "PHGreeting",
"AfterMessageTargetHandlerObjectId": "8c400830-7e92-4908-9ca6-a4b123f1bd19",
"DtmfAccessId": "0",
"TimeZone": "190",
"UseDefaultLanguage": "true",
"UseDefaultTimeZone": "true",
"MediaSwitchObjectId": "a984674b-98d1-442e-83a9-2dcc0824af9e",
"PhoneSystemURI": "/vmrest/phonesystems/a984674b-98d1-442e-83a9-2dcc0824af9e",
"UseCallLanguage": "true",
"SendSecureMsg": "false",
"EnablePrependDigits": "false",
"DispatchDelivery": "false",
"CallSearchSpaceObjectId": "5a07d332-6fc5-4a3f-baba-3cb4ea630280",
"CallSearchSpaceURI": "/vmrest/searchspaces/5a07d332-6fc5-4a3f-baba-3cb4ea630280",
"InheritSearchSpaceFromCall": "true",
"PartitionObjectId": "d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
"PartitionURI": "/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
"PlayPostGreetingRecording": "0",
"SendPrivateMsg": "0",
"PlayAfterMessage": "1",
"GreetingsURI": "/vmrest/handlers/callhandlers/426e4f1c-0cf1-43dc-a52b-63db2c0704c5/greetings",
"TransferOptionsURI": "/vmrest/handlers/callhandlers/426e4f1c-0cf1-43dc-a52b-63db2c0704c5/transferoptions",
"MenuEntriesURI": "/vmrest/handlers/callhandlers/426e4f1c-0cf1-43dc-a52b-63db2c0704c5/menuentries",
"CallHandlerOwnerURI": "/vmrest/handlers/callhandlers/426e4f1c-0cf1-43dc-a52b-63db2c0704c5/callhandlerowners"
}
]
}

```

Response Code: 200

Listing Specific Tenant Related Call Handlers by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectId to list the specific tenant related call handlers using the following URI:

```
GET https://<connection-server>/vmrest/handlers/callhandlers?query=(TenantObjectId is <Tenant-ObjectId>)
```

To get the TenantObjectID, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Viewing the Specific Call Handler

The following is an example of the GET request that lists the details of specific call handler represented by the provided value of call handler ID:

```
GET https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<Callhandler>
  <URI>/vmrest/handlers/callhandlers/4afc0de6-c52c-42e4-99bb-6359bd518f11</URI>
  <CreationTime>2012-12-14T09:32:50Z</CreationTime>
  <Language>1033</Language>
  <Undeletable>>false</Undeletable>
  <VoiceName>a6b5b738-6aa3-467e-a1c9-2061e9f078b2.wav</VoiceName>
  <VoiceFileURI>/vmrest/voicefiles/009caa53-375b-4c84-b287-2d593550b185</VoiceFileURI>
  <VoiceNameURI>/vmrest/handlers/callhandlers/4afc0de6-c52c-42e4-99bb-6359bd518f11/voicename</VoiceNameURI>
  <LocationObjectId>36342486-2f03-4dee-9f92-e0324f25e31c</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/36342486-2f03-4dee-9f92-e0324f25e31c</LocationURI>
  <EditMsg>>true</EditMsg>
  <IsPrimary>>false</IsPrimary>
  <OneKeyDelay>1500</OneKeyDelay>
  <ScheduleSetObjectId>fc3d37bd-eb5e-4425-9820-bd913f77683b</ScheduleSetObjectId>
  <ScheduleSetURI>/vmrest/schedulesets/fc3d37bd-eb5e-4425-9820-bd913f77683b</ScheduleSetURI>
  <SendUrgentMsg>0</SendUrgentMsg>
  <MaxMsgLen>300</MaxMsgLen>
  <IsTemplate>>false</IsTemplate>
  <ObjectId>4afc0de6-c52c-42e4-99bb-6359bd518f11</ObjectId>
  <RecipientSubscriberObjectId>0a082dcd-9f31-4897-b819-dedff7e67484</RecipientSubscriberObjectId>
  <RecipientUserURI>/vmrest/users/0a082dcd-9f31-4897-b819-dedff7e67484</RecipientUserURI>
  <DisplayName>test</DisplayName>
  <AfterMessageAction>2</AfterMessageAction>
  <AfterMessageTargetConversation>SystemTransfer</AfterMessageTargetConversation>
  <DtmfAccessId>2345</DtmfAccessId>
  <TimeZone>190</TimeZone>
  <UseDefaultLanguage>>true</UseDefaultLanguage>
  <UseDefaultTimeZone>>true</UseDefaultTimeZone>
  <MediaSwitchObjectId>7a04d1f8-e71f-431b-a86c-1bb84da153e6</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/7a04d1f8-e71f-431b-a86c-1bb84da153e6</PhoneSystemURI>
  <UseCallLanguage>>false</UseCallLanguage>
  <SendSecureMsg>>true</SendSecureMsg>
  <EnablePrependDigits>>false</EnablePrependDigits>
  <DispatchDelivery>>false</DispatchDelivery>
  <CallSearchSpaceObjectId>d4885446-a1f9-4e4c-810f-168bcc8489af</CallSearchSpaceObjectId>
  <CallSearchSpaceURI>/vmrest/searchspaces/d4885446-a1f9-4e4c-810f-168bcc8489af</CallSearchSpaceURI>
  <InheritSearchSpaceFromCall>>true</InheritSearchSpaceFromCall>
  <PartitionObjectId>a7108db5-c354-4b71-a72f-2c945291bda2</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/a7108db5-c354-4b71-a72f-2c945291bda2</PartitionURI>
  <PlayPostGreetingRecording>2</PlayPostGreetingRecording>
  <PostGreetingRecordingObjectId>1b13cab3-8ae8-4b39-a9e8-51464dc5216d</PostGreetingRecordingObjectId>
  <SendPrivateMsg>2</SendPrivateMsg>
  <PlayAfterMessage>1</PlayAfterMessage>
  <GreetingsURI>/vmrest/handlers/callhandlers/4afc0de6-c52c-42e4-99bb-6359bd518f11/greetings</GreetingsURI>
  <TransferOptionsURI>/vmrest/handlers/callhandlers/4afc0de6-c52c-42e4-99bb-6359bd518f11/transferoptions</TransferOptionsURI>
  <MenuEntriesURI>/vmrest/handlers/callhandlers/4afc0de6-c52c-42e4-99bb-6359bd518f11/menuentries</MenuEntriesURI>
  <CallHandlerOwnerURI>/vmrest/handlers/callhandlers/4afc0de6-c52c-42e4-99bb-6359bd518f11/callhandlerowners</CallHandlerOwnerURI>
</Callhandler>

```

Response Code:200

JSON Example

To view a specific call handler, do the following:

```
Request URI:  
GET https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>  
Accept: application/json  
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
  "URI": "/vmrest/handlers/callhandlers/8c400830-7e92-4908-9ca6-a4b123f1bd19",
  "CreationTime": "2013-02-14T05:05:44Z",
  "Language": "1033",
  "Undeletable": "true",
  "VoiceName": "a05d6040-1494-49eb-94bf-b9019eb79813.wav",
  "VoiceFileURI": "/vmrest/voicefiles/e90706a2-d264-4104-abdf-f8e146799588",
  "VoiceNameURI": "/vmrest/handlers/callhandlers/8c400830-7e92-4908-9ca6-a4b123f1bd19/voicename",
  "LocationObjectId": "bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
  "LocationURI": "/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
  "EditMsg": "true",
  "IsPrimary": "false",
  "OneKeyDelay": "1500",
  "ScheduleSetObjectId": "74205ca1-1f58-466b-a543-13ad7bd4798e",
  "ScheduleSetURI": "/vmrest/schedulesets/74205ca1-1f58-466b-a543-13ad7bd4798e",
  "SendUrgentMsg": "0",
  "MaxMsgLen": "300",
  "IsTemplate": "false",
  "ObjectId": "8c400830-7e92-4908-9ca6-a4b123f1bd19",
  "RecipientDistributionListObjectId": "24865f76-fa95-412d-bc56-a48ef9e1531a",
  "RecipientDistributionListURI": "/vmrest/distributionlists/24865f76-fa95-412d-bc56-a48ef9e1531a",
  "DisplayName": "Goodbye",
  "AfterMessageAction": "1",
  "TimeZone": "190",
  "UseDefaultLanguage": "true",
  "UseDefaultTimeZone": "true",
  "MediaSwitchObjectId": "a984674b-98d1-442e-83a9-2dcc0824af9e",
  "PhoneSystemURI": "/vmrest/phonesystems/a984674b-98d1-442e-83a9-2dcc0824af9e",
  "UseCallLanguage": "true",
  "SendSecureMsg": "false",
  "EnablePrependDigits": "false",
  "DispatchDelivery": "false",
  "CallSearchSpaceObjectId": "5a07d332-6fc5-4a3f-baba-3cb4ea630280",
  "CallSearchSpaceURI": "/vmrest/searchspaces/5a07d332-6fc5-4a3f-baba-3cb4ea630280",
  "InheritSearchSpaceFromCall": "true",
  "PartitionObjectId": "d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
  "PartitionURI": "/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
  "PlayPostGreetingRecording": "0",
  "SendPrivateMsg": "0",
  "PlayAfterMessage": "1",
  "GreetingsURI": "/vmrest/handlers/callhandlers/8c400830-7e92-4908-9ca6-a4b123f1bd19/greetings",
  "TransferOptionsURI": "/vmrest/handlers/callhandlers/8c400830-7e92-4908-9ca6-a4b123f1bd19/transferoptions",
  "MenuEntriesURI": "/vmrest/handlers/callhandlers/8c400830-7e92-4908-9ca6-a4b123f1bd19/menuentries",
  "CallHandlerOwnerURI": "/vmrest/handlers/callhandlers/8c400830-7e92-4908-9ca6-a4b123f1bd19/callhandlerowners"
}

```

Response Code:200

Creating a Call Handler

The following is an example of the POST request that creates a new call handler:

```
POST
https://<connection-server>/vmrest/handlers/callhandlers?templateObjectId=<callHandlerTemplate-ObjectId>
Request Body:
<pre>
<CallHandler>
  <DisplayName>Taxoma_Test</DisplayName>
</CallHandler>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/handlers/callhandlers/8c400830-7e92-4908-9ca6-a4b123f1bd19
```

JSON Example

To create a new call handler, do the following:

```
POST
https://<connection-server>/vmrest/handlers/callhandlers?templateObjectId=<callHandlerTemplate-ObjectId>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "DisplayName": "Texoma1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/handlers/callhandlers/8c400830-7e92-4908-9ca6-a4b123f1bd19
```



Note Make sure that while creating a Call Handler, do not provide the recipient object Id in the request body. By default, Call handler is created with undeliverable messages distribution list as the recipient. You can update the recipient object id using PUT API.

Delete the Call Handler

The following is an example of the DELETE request that can be used to delete a call handler:

```
DELETE https://<connection-server>/vmrest/callhandlers/<callhandler-objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To delete a call handler, do the following:

```
DELETE https://<connection-server>/vmrest/callhandlers/<callhandler-objectid>
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Assigning a Schedule Set to a Call Handler

The following is an example of the PUT request that can be used to assign a schedule set to a call handler:

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>
Request Body:
<Callhandler>
  <ScheduleSetObjectId>9dd6c1d5-249e-4715-8953-396ce2f26314</ScheduleSetObjectId>
</Callhandler>
```

```
Response Code: 204
```

JSON Example

To assign a schedule to a call handler, do the following:

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "ScheduleSetObjectId": "74205ca1-1f58-466b-a543-13ad7bd4798e"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Specify Message Recipient for a Call Handler

The following is an example of the PUT request that can be used to specify message recipient for a call handler:

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>
Request Body:
<Callhandler>
  <RecipientSubscriberObjectId>3c700079-33bb-4897-b1a5-
  23cf19194ecf</RecipientSubscriberObjectId>
</Callhandler>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To specify message recipient for a call handler, do the following:

```
PUT https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "RecipientSubscriberObjectId": "571412d0-6330-433d-8a1f-7f7cb102a09f"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Caller Input Keys

http://docwiki.cisco.com/wiki/Cisco_Unity_Connection_Provisioning_Interface_%28CUPI%29_API_-_Caller_Input_Keys

Updating Caller Input Keys

http://docwiki.cisco.com/wiki/Cisco_Unity_Connection_Provisioning_Interface_%28CUPI%29_API_-_Updating_Caller_Input_Keys

Update the Language of Call Handler

To fetch the language code, use the following URI:

```
GET https://<connection-server>/vmrest/languagemap
```

The below table specify the details of value for each field:

UseCallLanguage	UseDefaultLanguage	Language	Description
false	true	Null/Language Code	This will select the default language.
true	true/false	Null/Language Code	This will inherit the language from user.
false	false	Language Code	This will select the particular language as per the code.

Updating Time Zone of Call Handler

This PUT request can be used to update time zone for a call handler template. It can be set to default or particular time zone. To know time zones installed on the server, you can use the following URI:

```
GET https://<connection-server>/vmrest/timezones
```

For updating time zone of a call handler, the mandatory fields are:

UseDefaultTimeZone

TimeZone


```

PUT https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>
Request Body:
<Callhandler>
  <UseDefaultTimeZone>false</UseDefaultTimeZone>
  <TimeZone>190</TimeZone>
</Callhandler>

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
URI	Read Only	String	Call Handler URI
AfterMessageAction	Read/Write	Integer	Specifies the after message action. Refer to the section Enumeration Type.
AfterMessageTargetConversation	Read/Write	String	The name of the conversation to which the caller is routed. Refer to the section Enumeration Type
AfterMessageTargetHandlerObjectid	Read/Write	String	The Unique Identifier of the call action object that Cisco Unity Connection performs after taking a message.
CallSearchSpaceObjectid	Read/Write	String	The unique identifier of the SearchSpace that is used limit visibility to dialable objects when searching by extension (dial string).
CallSearchSpaceURI	Read Only	String	URL for search spaces.
CreationTime	Read Only	datetime	Specifies the creation date and time of the call handler. Format: YYYY-MM-DDThh:mm:ssZ . The default value is the current system date and time.
DispatchDelivery	Read/Write	Boolean	A flag indicating that all messages left for the call handler is for dispatch delivery. Possible values: false: specifies no dispatch delivery. true: specifies dispatch delivery. Default value: false
DisplayName	Read/Write	String	Name of the call handler.

DtmfAccessId	Read/Write	String	Extension of the call handler.
EditMsg	Read/Write	Boolean	A flag that determines whether the caller can edit messages. Possible values: false : Callers cannot edit messages true : Callers can edit messages Default value: true.
EnablePrependDigits	Read/Write	Boolean	Specifies if Prepend Digits to Dialed Extensions is enabled. Possible values: false:- System will not prepend digits when dialing the transfer extension true:- System will prepend digits when dialing the transfer extension Default value: false
InheritSearchSpaceFromCall	Read/Write	Boolean	Specifies if the search space is to be inherited from the call. Possible values: true – Inherit from call. false – Do not inherit from call Default value: true
IsPrimary	Read Only	Boolean	A flag indicating whether this is a "primary" call handler for a subscriber, or an "application" call handler. Note:- Each subscriber is associated with a call handler, which is referred to as the "primary call handler" for that subscriber. An "application call handler" is just a normal call handler. Possible values: false: Not a primary call handler true: Primary call handler Default value: false.

IsTemplate	Read Only	Boolean	<p>A flag indicating whether this CallHandler is a "template" for creating new call handlers. It is used to provide default values for selected columns when creating new call handlers.</p> <p>Possible values:</p> <p>false: Not a template</p> <p>true: Is a template</p> <p>Default value: false</p>
Language	Read/Write	Integer	The Windows Locale ID (LCID) which identifies the language that Cisco Unity Connection plays the handler system prompts.
LocationObjectId	Read Only	String	The unique identifier of the Location object to which this handler belongs
LocationURI	Read Only	String	<p>Specifies the URI of locations</p> <p>The maximum recording length (in seconds) for messages left by unidentified callers. This value is used when the call handler is set to an action of "Take Message" (either by an after greeting action in the messagingrule table or via a user input action in the menuentry table.</p> <p>This value only gets applied to unidentified callers leaving a message. This value is not used for subscriber-subscriber messaging. Instead the COS for the calling subscriber determines the maximum recorded message length. The range of this field can vary from 1-3600. Default value: 300</p>
MaxMsgLen	Read/Write	Integer	Specifies the object Id of the Phone System the call handler belongs to.
MediaSwitchObjectId	Read/Write	String	Specifies the URI of Phone Systems.
PhoneSystemURI	Read Only	String	Specifies an object ID of the call handler.
ObjectId	Read Only	String	The unique identifier of the tenant to which the call handler belongs. This field is reflected in the response only if the call handler belongs to a particular tenant.

TenantObjectId	Read Only	String	<p>The amount of time (in milliseconds) that Cisco Unity Connection waits for additional input after callers press a single key that is not locked. If there is no input within this time, Cisco Unity Connection performs the action assigned to the single key.</p> <p>When a caller interrupts a greeting with a digit, Cisco Unity Connection will wait this number of milliseconds to see if they are going to enter more digits. Once this timeout is reached (or the caller terminates the input with a #), Cisco Unity Connection will do a look-up of the resulting string of numbers for a match with a DTMFAccessID value in the dialing domain. If a match is found, the call is sent to the matching object. If no match is found, the "Error greeting" for the call handler is invoked. If a key is "locked" then this value does not apply. Instead action is taken immediately on that key instead of allowing more digits. A value of 0 disables one key input. The range of this field can vary from 1 to 10000. Default value: 1500</p>
OneKeyDelay	Read/Write	Integer	Specifies the object Id of the partition the Call Handler belongs to.
PartitionObjectId	Read/Write	String	Specifies the URI of partitions.
PartitionURI	Read Only	String	Specifies what should be played after the message. Refer to the section Enumeration Type.
PlayAfterMessage	Read/Write	Integer	Specifies an object ID of the recording.
PlayAfterMessageRecordingObjectId	Read/Write	String	<p>Indicates whether the recording referenced by PostGreetingRecordingObjectId should be played.</p> <p>Possible values:</p> <p>0 : No</p> <p>1 : Always</p> <p>2 : External</p> <p>Default value: 0</p>

PlayPostGreetingRecording	Read/Write	Integer	Specifies the object Id of the Post Greeting recording.
PostGreetingRecordingObjectId	Read/Write	String	URI of the Post Greeting Recording
PostGreetingURI	Read Only	String	Specifies the touchtone digits to be prepended to extension when dialing transfer number (#, 0,1...9,*). Digits, plus, hash and asterisk only are allowed
PrependDigits	Read/Write	String	Specifies an object ID of the distribution list that is the message recipient.
RecipientDistributionListObjectId	Read/Write	String	Object ID of a User with a mailbox that is the message recipient.
RecipientDistributaionListURI	Read Only	String	Object ID of the schedule set assigned to the Call Handler.
ScheduleSetObjectId	Read/Write	String	Specifies the URI of schedule sets.
ScheduleSetURI	Read/Write	String	Determines if an outside caller can mark their message as private. Possible values: 0 : Never 1 : Always 2 : Ask Default value: 0
SendPrivateMsg	Read/Write	Integer	A flag indicating whether an unidentified caller can mark a message as "secure." Default value: false
SendSecureMsg	Read/Write	Boolean	A flag indicating whether an unidentified caller can mark a message as "urgent." Possible values: 0 : Never 1 : Always 2 : Ask Default value: 0(Never)

SendUrgentMsg	Read/Write	Integer	Used when the UseDefaultTimezone is set to false. To know the Integer Time Zone codes for the Time Zones installed on the server following URI can be used: <a href="https://<connection-server>/vmrest/timezones">https://<connection-server>/vmrest/timezones . Example: 190 is the code for (GMT+05:30) Asia/Kolkata
TimeZone	Read/Write	Integer	A flag indicating whether Cisco Unity Connection will use the language assigned to the call. Possible Values: true false Default value: true
UseCallLanguage	Read/Write	Boolean	A flag that is dependent on the value of the Language field. If Language is set to Null, UseDefaultLanguage is set to true. If any language is specified, UseDefaultLanguage is set to false. Possible Values: true false
UseDefaultLanguage	Read/Write	Boolean	A flag indicating whether Cisco Unity Connection will use the system default Time Zone. Possible Values: true false Default value: false
UseDefaultTimeZone	Read/Write	Boolean	URI of the call handler owner API.
CallHandlerOwnerURI	Read Only	String	The name of the WAV file containing the recorded audio (voice name, greeting, etc.) for the parent object. It is displayed once a voice-name is recorded.
VoiceName	Read Only	String	It is displayed once a voice-name is recorded.
VoiceFileURI	Read Only	String	Specifies the URI of greetings

GreetingsURI	Read Only	String	Specifies the URI of transfer options.
TransferOptionsURI	Read Only	String	Specifies the URI of menu entries
MenuEntriesURI	Read Only	String	Specifies the URI of menu entries
VoiceNameURI	Read Only	String	URI for voice name once it is recorded.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Call Handler Owner APIs

Add a Call Handler Owner

The following is an example of the *POST* request that can be used to create a new call handler owner.

Note: The RoleObjectId is no longer required for assigning Call Handler owners.

1. To assign a user as call handler owner

```
POST
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/callhandlerowners
Request Body:
<CallhandlerOwner>
    <UserObjectId>c0430be2-52b8-46d7-8fad-c6aa13781469</UserObjectId>
</CallhandlerOwner>
```

Here, UserObjectId can be fetched from

```
GET https://<connection-server>/vmrest/users
```

2. To assign a distribution list as call handler owner

```
POST
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/callhandlerowners
Request Body:
<CallhandlerOwner>
    <DistributionListObjectId>b6616b6f-c0e0-4462-b64a-654b0f5baa65</DistributionListObjectId>
</CallhandlerOwner>
```

Here, DistributionListObjectId can be fetched from

```
GET https://<connection-server>/vmrest/distributionlists
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/handlers/callhandlers/c0430be2-52b8-46d7-8fad-c6aa13781469
```

JSON Example

1. To assign a user as a call handler owner, do the following:

```
POST
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/callhandlerowners
Accept: application/json
Content_type: application/json
Connection: keep_alive
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
{
  "UserObjectId": "5aeb75a4-14c2-474d-bec9-90aa731ee4cc",
}
```

```
Response Code: 201
/vmrest/handlers/callhandlers/c0430be2-52b8-46d7-8fad-c6aa13781469
```

2. To assign a distribution list as a call handler owner, do the following:

```
POST
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/callhandlerowners
Accept: application/json
Content_type: application/json
Connection: keep_alive
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
{
  "DistributionListObjectId": "5aeb75a4-14c2-474d-bec9-90aa731ee4cc",
}
```

```
Response Code: 201
/vmrest/handlers/callhandlers/c0430be2-52b8-46d7-8fad-c6aa13781469
```

View the Call Handler Owners

The following is an example of the Get request that can be used to fetch the call handler owners:

```
GET
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/callhandlerowners
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:


```

<CallhandlerOwners total="2">
  <CallhandlerOwner>

<URI>/vmrest/handlers/callhandlers/f3b4cc1f-c2d7-4c67-9f53-7095d4b2a928/callhandlerowners/3aee209f-948b-450a-9d0f-75e2c1d4992f</URI>

<DistributionListObjectId>b6616b6f-c0e0-4462-b64a-654b0f5baa65</DistributionListObjectId>

<DistributionListURI>/vmrest/distributionlists/b6616b6f-c0e0-4462-b64a-654b0f5baa65</DistributionListURI>

  <ObjectId>3aee209f-948b-450a-9d0f-75e2c1d4992f</ObjectId>
  <TargetHandlerObjectId>f3b4cc1f-c2d7-4c67-9f53-7095d4b2a928</TargetHandlerObjectId>
</CallhandlerOwner>
<CallhandlerOwner>

<URI>/vmrest/handlers/callhandlers/f3b4cc1f-c2d7-4c67-9f53-7095d4b2a928/callhandlerowners/75587df3-5be4-4e21-83b3-9ec7e4f60874</URI>

  <ObjectId>75587df3-5be4-4e21-83b3-9ec7e4f60874</ObjectId>
  <TargetHandlerObjectId>f3b4cc1f-c2d7-4c67-9f53-7095d4b2a928</TargetHandlerObjectId>
  <UserObjectId>ecdc6d2d-19e5-4adf-ac7d-6e351a5c95c4</UserObjectId>
  <UserURI>/vmrest/users/ecdc6d2d-19e5-4adf-ac7d-6e351a5c95c4</UserURI>
</CallhandlerOwner>
</CallhandlerOwners>

```

Response Code: 200

JSON Example

To view the list of call handler owners, do the following:

```

GET
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/callhandlerowners
Accept: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
  "@total": "2",
  "CallhandlerOwner": {
    "URI": "/vmrest/handlers/callhandlers/b2d3d56a-f0c2-4839-98c5-48770690244a/callhandlerowners/ac6dda36-798d-4eea-9055-db5a31eb5599",
    "ObjectId": "75587df3-5be4-4e21-83b3-9ec7e4f60874",
    "UserObjectId": "5aeb75a4-14c2-474d-bec9-90aa731ee4cc",
    "UserURI": "/vmrest/users/5aeb75a4-14c2-474d-bec9-90aa731ee4cc",
    "TargetHandlerObjectId": "b2d3d56a-f0c2-4839-98c5-48770690244a"
  }
  "CallhandlerOwner": {
    "URI": "/vmrest/handlers/callhandlers/b2d3d56a-f0c2-4839-98c5-48770690244a/callhandlerowners/ac6dda36-798d-4eea-9055-db5a31eb5599",
    "ObjectId": "3aee209f-948b-450a-9d0f-75e2c1d4992f",
    "DistributionListObjectId": "b6616b6f-c0e0-4462-b64a-654b0f5baa65",
    "DistributionListURI": "/vmrest/distributionlists/b6616b6f-c0e0-4462-b64a-654b0f5baa65",
    "TargetHandlerObjectId": "b2d3d56a-f0c2-4839-98c5-48770690244a"
  }
}

```

Response Code: 200

View the Details of Specific Call Handler Owner

The following is an example of the Get request that can be used to fetch the specific call handler owner details:

```
GET
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/callhandlerowners/<callHandlerowner-objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you

1. For a user as a call handler owner:

```
<CallhandlerOwner>
  <URI>/vmrest/handlers/callhandlers/4afc0de6-c52c-42e4-99bb-
    6359bd518f11/callhandlerowners/a6731eca-ba31-4cee-a367-0bd6f45c633f</URI>
  <ObjectId>a6731eca-ba31-4cee-a367-0bd6f45c633f</ObjectId>
  <UserObjectId>eaacd744-6fe1-4085-8b25-10c702fdfd20</UserObjectId>
  <UserURI>/vmrest/users/eaacd744-6fe1-4085-8b25-10c702fdfd20</UserURI>
  <TargetHandlerObjectId>4afc0de6-c52c-42e4-99bb-6359bd518f11</TargetHandlerObjectId>
</CallhandlerOwner>
```

```
Response Code:200
```

2. For a distribution list as a call handler owner:

```
<CallhandlerOwner>
  <URI>/vmrest/handlers/callhandlers/f3b4cc1f-c2d7-4c67-9f53-
    7095d4b2a928/callhandlerowners/4e35ed6c-6aed-42e4-9723-b859706ac749</URI>
  <DistributionListObjectId>988630fa-313a-4f0c-980f-f6dc78add3ca</DistributionListObjectId>

  <DistributionListURI>/vmrest/distributionlists/988630fa-313a-4f0c-980f-f6dc78add3ca</DistributionListURI>

  <ObjectId>4e35ed6c-6aed-42e4-9723-b859706ac749</ObjectId>
  <TargetHandlerObjectId>f3b4cc1f-c2d7-4c67-9f53-7095d4b2a928</TargetHandlerObjectId>
</CallhandlerOwner>
```

```
Response Code:200
```

JSON Example

To view a specific call handler owner, do the following:

```
GET
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/callhandlerowners/<callhandlerowner-objectid>
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

1. For a user as a call handler owner:

```
{
  "URI": "/vmrest/handlers/callhandlers/b2d3d56a-f0c2-4839-98c5-48770690244a/callhandlerowners/ac6dda36-798d-4eea-9055-db5a31eb5599",
  "ObjectId": "ac6dda36-798d-4eea-9055-db5a31eb5599",
  "UserObjectId": "5aeb75a4-14c2-474d-bec9-90aa731ee4cc",
  "UserURI": "/vmrest/users/5aeb75a4-14c2-474d-bec9-90aa731ee4cc",
  "TargetHandlerObjectId": "b2d3d56a-f0c2-4839-98c5-48770690244a"
}
```

Response Code:200

2. For a distribution list as a call handler owner:

```
{
  "URI": "/vmrest/handlers/callhandlers/b2d3d56a-f0c2-4839-98c5-48770690244a/callhandlerowners/ac6dda36-798d-4eea-9055-db5a31eb5599",
  "ObjectId": "4e35ed6c-6aed-42e4-9723-b859706ac749",
  "DistributionListObjectId": "988630fa-313a-4f0c-980f-f6dc78add3ca",
  "DistributionListURI": "/vmrest/users/988630fa-313a-4f0c-980f-f6dc78add3ca",
  "TargetHandlerObjectId": "b2d3d56a-f0c2-4839-98c5-48770690244a"
}
```

Response Code:200

Delete a Call Handler Owner

The following is an example of the DELETE request that can be used to delete a call handler owner:

```
DELETE
https://<connection-server>/vmrest/callhandlers/<callhandlerId>/callhandlerowners/<callhandlerowner-objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

To delete a call handler owner, do the following:

```
DELETE
https://<connection-server>/vmrest/callhandlers/<callhandler-objectid>/callhandlerowners/<callhandlerowner-objectid>
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

Parameter	Operation	Data Type	Comments
ObejectId	Read Only	String	Specifies an object ID to uniquely identify a call handler owner.
UserObjectId	Read/Write	String	Specifies an object ID of the user who owns the call handler.
VmsObjectId	Read Only	String	Specifies an unique identifier of the LocationVMS object.
DistributionListObjectId	Read Write	String	Specifies an object ID of the distribution list who owns the call handler.
TragetHandlerObjectId	Read Only	String	Specifies an object ID of the call handler to which the call handler owner object belongs.
UserURI	Read Only	String	Specifies URI to get details of the user who owns the Call Handler.
DistributionListURI	Read Only	String	Specifies URI to get details of the distribution list who owns the Call Handler Owner

Cisco Unity Connection Provisioning Interface (CUPI) API -- Call Handler Enumeration Types

Call Action

Name	Value	Description
Ignore	0	No action taken
Hangup	1	The call is immediately terminated.
Goto	2	Go to an object such as a call handler, directory handler or interview handler.
Error	3	Play the error greeting.
TakeMsg	4	Take a message.
SkipGreeting	5	Skip greeting.
RestartGreeting	6	Restart greeting on current handler
TransferAltContact	7	Transfer to alternate contact number.
RouteFromNextRule	8	Route from Next call routing rule.

Play After Message Recording

Name	Value	Description
No	0	Don't play the recording
Always	1	Play system default
External	2	Play recording

AfterMessageTargetConversation

Name	Description
AD	Directory conversation
PHTransfer	Transfer to a user or call handler
PHGreeting	Play greeting of a user or call handler
PHInterview	Interview Conversation
Attempt Forward	Forwards the call to the user's greeting if the forwarding number matches a user
Attempt SignIn	Sends the call to a user's sign-in if the calling number matches a user
BroadcastMessageAdministrator	Sends the call to a conversation for sending broadcast messages
SystemTransfer	Sends the call to a conversation allowing the caller to transfer to a number they specify (assuming the restriction table allows it).
CheckedOutGuest	Sends the call to a conversation for checked-out hotel guests.
GreetingsAdministrator	Sends the call to a conversation allowing changing greetings by phone.
ReverseTrapConv	Connects to Visual Voicemail.
SubSignIn	Sends the call to the sign-in conversation, which prompts the user to enter their ID.
ConvUtilsLiveRecord	Sends the call to the live-record pilot number configured on Call Manager.
SubSysTransfer	Sends the call to a conversation allowing the caller to transfer to a number they specify (assuming the restriction table allows it). However, requires user sign-in first, so unknown callers cannot use it.

Greeting Type

Greeting	Description
Alternate	Can be used for a variety of special situations, such as vacations, leave of absence, or a holiday. An alternate greeting overrides all other greetings.
Busy	Plays when the extension is busy. A busy greeting overrides the standard, off hours, and internal greetings.
Error	Plays when a caller attempts to dial an extension that does not exist on the system during a greeting.
Internal	Plays to internal callers only. An internal greeting overrides the standard and off hours greetings.

Greeting	Description
Off Hours	Plays during the closed (nonbusiness) hours defined for the active schedule. An off hours greeting overrides the standard greeting, and thus limits the standard greeting to the open hours defined for the active schedule.
Standard	Plays at all times unless overridden by another greeting. You cannot disable the standard greeting.
Holiday	Plays when holiday schedule is encountered unless overridden by an alternate greeting.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Call Handler Greetings APIs

Call Handler Greetings APIs

Administrator can use this API to fetch the greetings. It can be used to fetch the list of greetings and also a single instance of greetings.

Listing the Greetings

The following is an example of the GET request that fetch the list of greetings:

```
GET https://<connection-server>/vmrest/callhandlertemplates/<callhandler-objectid>/greetings
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<Greetings total="7"><Greeting>
<URI>/vmrest/handlers/callhandlers/fa468470-1031-4896-ab11-3736bdee3b00/greetings/Alternate</URI>
  <CallHandlerObjectId>fa468470-1031-4896-ab11-3736bdee3b00</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/fa468470-1031-4896-ab11-3736bdee3b00</CallhandlerURI>
  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>0</PlayWhat>
  <RepromptDelay>2</RepromptDelay>
  <Reprompts>0</Reprompts>
  <TimeExpires>1972-01-01 05:30:00.0</TimeExpires>
  <GreetingType>Alternate</GreetingType>
  <AfterGreetingAction>4</AfterGreetingAction>
  <PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
  <EnableTransfer>>false</EnableTransfer>
  <EnablePersonalVideoRecording>>false</EnablePersonalVideoRecording>
  <PlayRecordVideoMessagePrompt>>false</PlayRecordVideoMessagePrompt>
<GreetingStreamFilesURI>/vmrest/handlers/callhandlers/fa468470-1031-4896-ab11-3736bdee3b00/greetings/Alternate/greetingstreamfiles/<GreetingStreamFilesURI>
  <Enabled>>false</Enabled>
</Greeting>
```

```
Response Code: 200
```

JSON Example

To view the list of greetings, do the following:

```
GET https://<connection-server>/vmrest/callhandler/<callhandler-objectid>/greetings
Accept: appliaction/json
Conenction: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "7"
  "Greeting": [
    {
      "URI": "/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a/greetings/Alternate",
      "CallHandlerObjectId": "a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a",
      "CallhandlerURI": "/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a",
      "IgnoreDigits": "false",
      "PlayWhat": "0",
      "RepromptDelay": "2",
      "Reprompts": "0",
      "TimeExpires": "1972-01-01 00:00:00.0",
      "GreetingType": "Alternate",
      "AfterGreetingAction": "4",
      "PlayRecordMessagePrompt": "true",
      "EnableTransfer": "false",
      "EnablePersonalVideoRecording": "false",
      "PlayRecordVideoMessagePrompt": "false",
      "Enabled": "false"
    },
    {
      "URI": "/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a/greetings/Busy",
      "CallHandlerObjectId": "a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a",
      "CallhandlerURI": "/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a",
      "IgnoreDigits": "false",
      "PlayWhat": "0",
      "RepromptDelay": "2",
      "Reprompts": "0",
      "TimeExpires": "1972-01-01 00:00:00.0",
      "GreetingType": "Busy",
      "AfterGreetingAction": "4",
      "PlayRecordMessagePrompt": "true",
      "EnableTransfer": "false",
      "EnablePersonalVideoRecording": "false",
      "PlayRecordVideoMessagePrompt": "false",
      "Enabled": "false"
    }
  ]
}
```

```
Response Code: 200
```

Viewing the Details of Specific Greeting

The following is an example of the GET request that lists the details of specific greeting:

```
GET https://<connection-server>/vmrest/callhandler/<callhandler-
objectid>/greetings/<Greetingname>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<Greeting>
<URI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-836910ac1a4c/greetings/Alternate</URI>
  <CallHandlerObjectId>5f6e1043-5edf-4646-90ac-836910ac1a4c</CallHandlerObjectId>
<CallhandlerURI>/vmrest/handlers/callhandlers/5f6e1043-5edf-4646-90ac-836910ac1a4c</CallhandlerURI>
  <IgnoreDigits>>false</IgnoreDigits>
  <PlayWhat>0</PlayWhat>
  <RepromptDelay>2</RepromptDelay>
  <Reprompts>0</Reprompts>
  <TimeExpires>1972-01-01 00:00:00.0</TimeExpires>
  <GreetingType>Alternate</GreetingType>
  <AfterGreetingAction>4</AfterGreetingAction>
  <PlayRecordMessagePrompt>>true</PlayRecordMessagePrompt>
  <EnableTransfer>>false</EnableTransfer>
  <EnablePersonalVideoRecording>>false</EnablePersonalVideoRecording>
  <PlayRecordVideoMessagePrompt>>false</PlayRecordVideoMessagePrompt>
  <Enabled>>false</Enabled>
</Greeting>
```

```
Response Code: 200
```

JSON Example

To view a specific greeting, do the following:

```
GET https://<connection-server>/vmrest/callhandler/<Callhandler-
objectid>/greetings/<Greetingname>
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:


```
{
  "URI":"/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a/greetings/Alternate",
  "CallHandlerObjectId":"a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a",
  "CallhandlerURI":"/vmrest/handlers/callhandlers/a2f8fb8f-68ee-4a17-90a0-bff0308b5b1a",
  "IgnoreDigits":"false",
  "PlayWhat":"0",
  "RepromptDelay":"2",
  "Reprompts":"0",
  "TimeExpires":"1972-01-01 00:00:00.0",
  "GreetingType":"Alternate",
  "AfterGreetingAction":"4",
  "PlayRecordMessagePrompt":"true" ,
  "EnableTransfer":"false",
  "EnablePersonalVideoRecording":"false",
  "PlayRecordVideoMessagePrompt":"false",
  "Enabled":"false"
}
```

Response Code: 200

Updating a Greeting

The following is an example of the GET request that updates the details of specific greeting:

```
PUT
https://<connection-server>/vmrest/callhandler/<callhandler-objectid>/greetings/<Greetingname>
Request Body:
<Greeting>
  <PlayWhat>1</PlayWhat>
  <PlayRecordMessagePrompt>true</PlayRecordMessagePrompt>
</Greeting>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

To update a particular greeting, do the following:

```
PUT
https://<connection-server>/vmrest/callhandler/<Callhandler-objectid>/greetings/<Greetingname>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "PlayWhat":"1",
  "PlayRecordMessagePrompt":"true"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Using the CUTI to record greetings via the Phone

The following example demonstrates how to achieve this task.

1. Record the greeting using CUTI, the details are available at [Using CUTI for Basic Call Operations](#).
2. The record operation in Step-1 returns XML/JSON output containing the details of the recorded file.
Example output:

```
<CallControl>
  <op>RECORD</op>
  <resourceType>STREAM</resourceType>
  <resourceId>01a78559-07ec-4898-beb6-444a4ae9c569.wav</resourceId>
  <lastResult>0</lastResult>
  <speed>100</speed>
  <volume>100</volume>
  <startPosition>0</startPosition>
</CallControl>
```

3. Send the following PUT request with the body of request containing above XML/JSON output.

```
Request :
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-id>/greetings/Alternate/greetingstreamfiles/<language-code>/audio
Request Body :
<CallControl>
  <op>RECORD</op>
  <resourceType>STREAM</resourceType>
  <resourceId>01a78559-07ec-4898-beb6-444a4ae9c569.wav</resourceId>
  <lastResult>0</lastResult>
  <speed>100</speed>
  <volume>100</volume>
  <startPosition>0</startPosition>
</CallControl>
```

Response Code: 204 No Content

The Put request will update the Greetings. The update of a Greetings wave file is similar whether a audio wave file is being used or the audio is a CallControl XML/JSON schema.

Enabling or disabling the Greeting



Note Greetings are disabled or enabled using the combination of fields "Enabled" and "TimeExpires".

Cisco Unity Connection Provisioning Interface (CUPI) API -- Call Handler Greetings APIs

Disabling the Greeting

For this scenario the request body should contain the "Enabled" which should be set to false.

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/greetings/<Greetingname>
```

Request Body:

```
<Greeting>
  <Enabled>false</Enabled>
</Greeting>
```

Response Code : 204

JSON Example

```
{
  "Enabled":"false"
}
```

Response Code : 204

Save Video Greetings

Unity Connection allows you to save video greetings using both GET and PUT requests.

Example of GET Request

```
GET
http://<connection-server>/vrest/Callhandlers/primary/templates/<callhandlerobjectid>/usertemplates/Greetings/<GreetingType>/GreetingStreamFiles/<Language>/video
```

The following is the response of the above GET command and the output may vary depending on your inputs.

```
Response: 200
<CallControl>
  <resourceId>aad91d6d-aeca-4a72-8069-b656efb3041f.wav</resourceId>
  <sessionId>570146ed1504cb1</sessionId>
</CallControl>
```

JSON Example

```
Request
GET
vrest/handlers/callhandlers/30600b21-1a4c-47a3-a078-8078984e5376/greetings/Standard/greetingstreamfiles/1033/video
Accept: application/json
User-Agent: Java/1.6.0_17
Host: <connection-server>
Connection: keep-alive
authorization: Basic Y2NtYWRTaW5pc3RyYXRvcjplY3NidWxhYg=
```

```
Response
HTTP/1.1 200
Content-Type: application/json
Date: Fri, 15 Jan 2010 15:14:11 GMT
Server:
{ "resourceId" : " aad91d6d-aeca-4a72-8069-b656efb3041f.wav", "sessionId" : "570146ed1504cb1"}
```

Example of PUT Request

```
PUT
http://<connection-server>/vrest/Callhandlers/primary/templates/<callhandlerobjectid>/usertemplates/Greetings/<GreetingType>/GreetingStreamFiles/<Language>/video
```

```
<CallControl>
  <resourceId>aad91d6d-aeca-4a72-8069-b656efb3041f.wav</resourceId>
  <sessionId>570146ed1504cb1</sessionId>
</CallControl>
```

Response: 204 OK

JSON Example

```
Request
PUT
vmrest/handlers/callhandlers/30600b21-1a4c-47a3-a078-8078984e5376/greetings/Standard/greetingstreamfiles/1033/video
Content-Type: application/json
Accept: application/json
Host: <connection-server>
Connection: keep-alive
authorization: Basic Y2NtYWRTaW5pc3RyYXRvcjplY3NidWxhYg==

{ "resourceId" : " aad91d6d-aeca-4a72-8069-b656efb3041f.wav", "sessionId" : "570146ed1504cb1" }
```

```
Response :
HTTP/1.1 204
Content-Type: application/json
Date: Fri, 15 Jan 2010 15:14:11 GMT
Server:
```

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
URI	Read Only	String	URI of greetings
CallHandlerObjectId	Read Only	String (36)	The unique identifier of the call handler object to which this greeting rule belongs.
TemplateCallHandlerURI	Read/Write	String	URI of the call handler.
IgnoreDigits	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection takes action in response to touchtone keys pressed by callers during the greeting.</p> <p>This column overrides all the Menu Entry settings when this greeting is active. This has the same effect as setting all the menu entry keys for this handler to "locked". It is a shorthand way of locking callers into the greeting so they cannot get out until it completes. Values can be:</p> <ul style="list-style-type: none"> • false: Caller input enabled during greeting • true: Caller input ignored during greeting <p>Default Value: false</p>

Parameter	Operations	Data Type	Comments
PlayWhat	Read/Write	Integer	Specifies if the system default greeting, personal recording, or nothing should be played. Default Value: 0 For more information, refer to the Enumeration Type section.
RepromptDelay	Read/Write	Integer	The amount of time (in seconds) that Cisco Unity Connection waits without receiving any input from a caller before Cisco Unity Connection prompts the caller again. The range of this field can vary from 0 to 100. Values can be: <ul style="list-style-type: none"> • 0: Do not wait without receiving caller input and do not replay greeting. • 1 or greater: Wait this number of seconds without receiving any input from the caller before playing the greeting again. Default Value: 2
Reprompts	Read/Write	Integer	The number of times to reprompt a caller. After the number of times indicated here, Cisco Unity Connection performs the after-greeting action. This column is typically used when an audio text application is expecting input from a caller. The range of this field can vary from 0 to 100. Values can be: <ul style="list-style-type: none"> • 0: Do not re-prompt - Cisco Unity Connection will play the greeting once and then the after-greeting action is taken. • 1 or greater: Number of times to re-prompt. The "RepromptDelay" value determines how many seconds to wait in between replays. Default Value: 0
GreetingType	Read Only	String	Specifies the greeting type. There are 7 greeting types available.
AfterGreetingAction	Read/Write	Integer	The type of call action to take, e.g., hang-up, goto another object, etc. The values that are allowed are: <ul style="list-style-type: none"> • Hangup • Goto • Restart greeting • Route from next call routing rule • Take message • Custom Type: Call Action

Parameter	Operations	Data Type	Comments
AfterGreetingTargetConversation	Read/Write	String	Specifies the conversation to go to after the greeting is played. For more information, refer to the Enumeration Type section.
AfterGreetingTargetHandleObjectId	Read/Write	String (36)	The unique identifier of the call action object that Cisco Unity Connection performs after the greeting is played.
TimeExpires	Read/Write	Datetime	The date and time when the greeting rule expires. The greeting rule is considered not expired (enabled), if the value is NULL or a future date. The greeting rule is considered expired (disabled), the value is in the past. The "Enhanced Alternate Greeting" feature uses this column to specify how long the subscriber wants their alternate greeting enabled. The standard greeting rule should never be disabled. The field is not displayed when the Greeting field is enabled with no end date and end time.
PlayRecordMessagePrompt	Read/Write	Boolean	A flag indicating whether the "Record your message at the tone..." prompt prior to recording a message. Values: <ul style="list-style-type: none"> • true - Play Record Message prompt is enabled. • false - Play Record prompt is disabled. Default Value: true
EnableTransfer	Read/Write	Boolean	A flag indicating when an extension is dialed at the greeting and the extension is not available whether to transfer to another extension. Values: <ul style="list-style-type: none"> • true: Allows transfer • false: Does not allow Default Value: false
EnablePersonalVideoRecording	Read/Write	Boolean	A flag indicating whether the personal video recording of the user will be used. Values: <ul style="list-style-type: none"> • true : Personal Video Recording is enabled. • false : Personal Video Recording is not enabled. Default value : false

Parameter	Operations	Data Type	Comments
PlayRecordVideoMessagePrompt	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection will prompt callers to wait for a tone before recording their video message.</p> <p>Values:</p> <ul style="list-style-type: none"> • true : Callers will be prompted with a tone before recording their video message. • false : Callers will not be prompted with a tone before recording their video message. <p>Default value : false</p> <p>This flag is editable only when the flag EnablePersonalVideoRecording is set to True.</p>
Enabled	Read/Write	Boolean	A flag indicating that the Greeting is enabled or disabled

Cisco Unity Connection Provisioning Interface (CUPI) API -- TransferRulesAPIs

Listing the Transfer Rules

To enable a transfer type and update the rule to transfer call to another extension, set the transfer type to supervise transfer and if the extension is busy, ask callers to hold. In addition, you can also set some call screening options.

```
GET
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/transferoptions
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<TransferOptions total="2">
  <TransferOption>
    <URI>/vmrest/handlers/callhandlers/166da38f-951b-4c9a-92da-
87ed7993cfec/transferoptions/Standard</URI>
    <CallHandlerObjectId>166da38f-951b-4c9a-92da-
87ed7993cfec</CallHandlerObjectId>
    <CallhandlerURI>/vmrest/handlers/callhandlers/166da38f-951b-4c9a-92da-
87ed7993cfec</CallhandlerURI>
    <TransferOptionType>Standard</TransferOptionType>
    <Action>0</Action>
    <Extension>0</Extension>
    <RnaAction>1</RnaAction>
    <TransferAnnounce>>false</TransferAnnounce>
    <TransferConfirm>>false</TransferConfirm>
    <TransferDtDetect>>false</TransferDtDetect>
    <TransferHoldingMode>0</TransferHoldingMode>
    <TransferIntroduce>>false</TransferIntroduce>
    <TransferRings>4</TransferRings>
    <TransferScreening>>false</TransferScreening>
    <TransferType>0</TransferType>
    <MediaSwitchObjectId>cd10d831-28d3-40da-ab13-
a87431b38682</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/cd10d831-28d3-40da-ab13-
a87431b38682</PhoneSystemURI>
    <UsePrimaryExtension>>false</UsePrimaryExtension>
    <PlayTransferPrompt>>true</PlayTransferPrompt>
    <PersonalCallTransfer>>false</PersonalCallTransfer>
    <Enabled>>true</Enabled>
  </TransferOption>
</TransferOptions>

```

Response Code: 200

JSON Example

To enable transfer rule, do the following:

```

GET
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/transferoptions
Action: application/json
Connection: keep_alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:


```

{
  "@total": "2",
  "TransferOption": [
    {
      "URI": "/vmrest/handlers/callhandlers/166da38f-951b-4c9a-92da-87ed7993cfec/transferoptions/Alternate",
      "CallHandlerObjectId": "166da38f-951b-4c9a-92da-87ed7993cfec",
      "CallhandlerURI": "/vmrest/handlers/callhandlers/166da38f-951b-4c9a-92da-87ed7993cfec",
      "TransferOptionType": "Alternate",
      "Action": "0",
      "Extension": "0",
      "RnaAction": "1",
      "TimeExpires": "1972-01-01 00:00:00.0",
      "TransferAnnounce": "false",
      "TransferConfirm": "false",
      "TransferDtDetect": "false",
      "TransferHoldingMode": "0",
      "TransferIntroduce": "false",
      "TransferRings": "4",
      "TransferScreening": "false",
      "TransferType": "0",
      "MediaSwitchObjectId": "cd10d831-28d3-40da-ab13-a87431b38682",
      "PhoneSystemURI": "/vmrest/phonesystems/cd10d831-28d3-40da-ab13-a87431b38682",
      "UsePrimaryExtension": "true",
      "PlayTransferPrompt": "true",
      "PersonalCallTransfer": "false",
      "Enabled": "false"
    },
    {
      "URI": "/vmrest/callhandlerprimarytemplates/166da38f-951b-4c9a-92da-87ed7993cfec/transferoptions/Off%20Hours",
      "CallHandlerObjectId": "166da38f-951b-4c9a-92da-87ed7993cfec",
      "CallhandlerURI": "/vmrest/handlers/callhandlers/166da38f-951b-4c9a-92da-87ed7993cfec",
      "TransferOptionType": "Off Hours",
      "Action": "0",
      "Extension": "0",
      "RnaAction": "1",
      "TransferAnnounce": "false",
      "TransferConfirm": "false",
      "TransferDtDetect": "false",
      "TransferHoldingMode": "0",
      "TransferIntroduce": "false",
      "TransferRings": "4",
      "TransferScreening": "false",
      "TransferType": "0",
      "MediaSwitchObjectId": "cd10d831-28d3-40da-ab13-a87431b38682",
      "PhoneSystemURI": "/vmrest/phonesystems/cd10d831-28d3-40da-ab13-a87431b38682",
      "UsePrimaryExtension": "true",
      "PlayTransferPrompt": "true",
      "PersonalCallTransfer": "false",
      "Enabled": "true"
    }
  ]
}

```

Response Code: 200

Update a Transfer Rule

We can do a PUT Operation to update a transfer rule.

```
Request URI:
PUT https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-
objectid>/transferoptions/Alternate
Request Body:
<TransferOption>
  <Action>1</Action>
  <Extension>1000</Extension>
  <TimeExpires>2012-12-31 12:00:00.0</TimeExpires>
  <TransferAnnounce>true</TransferAnnounce>
  <TransferConfirm>true</TransferConfirm>
  <TransferIntroduce>true</TransferIntroduce>
  <TransferScreening>true</TransferScreening>
  <TransferType>1</TransferType>
  <Enabled>true</Enabled>
</TransferOption>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update transfer rule, do the following:

```
PUT
https://<connection-server>/vmrest/handlers/callhandlers/<callhandler-objectid>/transferoptions/Alternate
Action: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Action": "1",
  "TimeExpires": "2012-12-31 12:00:00.0",
  "TransferAnnounce": "true",
  "TransferConfirm": "true",
  "TransferIntroduce": "true",
  "TransferRings": "8",
  "TransferScreening": "true",
  "TransferType": "1",
  "Enabled": "true"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
URI	Read Only	String	Specifies URI of the call handler transfer options.
CallHandlerObjectId	Read Only	String (36)	Specifies the call handler object ID.
CallHandlerURI	Read Only	String	Specifies URI of the call handler being referenced.
TransferOptionType	Read Only	String	Specifies the transfer option type. There are 3 transfer option types available:- <ul style="list-style-type: none"> • Alternate - in effect at all times, overrides standard and off hours. • Off Hours - off or closed hours based on specified schedule. • Standard - standard hours based on specified schedule.
Action	Read/Write	Integer	Specifies the Transfer rule action. Refer to the section Enumeration Type Default value : 0
RnaAction	Read/Write	Integer	Action to take on Ring-No-Answer (RNA) condition. Refer to the section Enumeration Type. Default value: 1
TimeExpires	Read/Write	Date/Time	Rather than using a simple on and off scheme for enabling transfer options and greetings, Cisco Unity Connection employs a date scheme. If the value is NULL or a date in the future then the transfer option is considered enabled. If the date is sometime in the past, then the transfer option is considered disabled. The "Standard" transfer option should never be disabled. For primary call handlers associated with the subscribers, the "Alternate" transfer option should always be enabled since subscribers have only one transfer option used currently.
TransferAnnounce	Read/Write	Boolean	A flag indicating whether Cisco Unity Connection plays "transferring call" when the subscriber answers the phone. This requires a TransferType column value = "Supervised" (1) Possible Values: <ul style="list-style-type: none"> • false: Do not say "Transferring call" when the subscriber answers the phone • true: Say "Transferring call" when the subscriber answers the phone Default Value: false

Parameter	Operations	Data Type	Comments
TransferConfirm	Read/Write	Boolean	<p>The type of call transfer Unity Connection will perform - supervised or unsupervised (also referred to as "Release to Switch" transfer). This requires a "TransferType" of supervised (1).</p> <ul style="list-style-type: none"> • Unsupervised transfer (also referred to as "Release to Switch" transfer) - Cisco Unity Connection puts the caller on hold, dials the extension, and releases the call to the phone system. When the line is busy or is not answered, the phone system (not Cisco Unity Connection) forwards the call to the subscriber or handler greeting. To use "Unsupervised" transfer, call forwarding must be enabled on the phone system. • Supervised transfer - Cisco Unity Connection acts as a receptionist, handling the transfer. If the line is busy or the call is not answered, Cisco Unity Connection (not the phone system) forwards the call to the subscriber or handler greeting. Supervised transfer can be used regardless if the phone system forwards calls or not. <p>Typically, TransferConfirm is used in conjunction with the call screening option ("TransferScreening" column) enabled. This combination enables the subscriber to hear the name of the caller and then decide if they want to take the call or not. Possible values:</p> <ul style="list-style-type: none"> • false: Transfer confirm disabled • true: Transfer confirm enabled <p>Default Value: false</p>
TransferDtDetect	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection will check for dial tone before attempting to transfer the call. This requires a "TransferType" of supervised (1).</p> <p>This is usually used for phone systems that do not have "positive disconnect" capabilities to avoid sending terminated calls to the operator console. Possible Values:</p> <ul style="list-style-type: none"> • false: Do not check for dial tone prior to transferring a call • true: Check for dial tone prior to transferring a call <p>Default value: false.</p>
TransferHoldingMode	Read/Write	Integer	<p>The action Cisco Unity Connection will take when the extension is busy. This requires a TransferType column value = "Supervised" (1). Refer to the section Enumeration Type. Default Value is 0.</p>

Parameter	Operations	Data Type	Comments
TransferIntroduce	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection will say "call for <recorded name of the call handler>" when the subscriber answers the phone.</p> <p>Requires a "TransferType" of supervised (1). This functionality is normally used when a single extension number is being shared by multiple subscribers or a scenario where the subscriber who is the message recipient takes calls for more than one dialed extension. The introduction alerts the subscriber who answers that the call is for the call handler. Default value: false.</p>
TransferRings	Read/Write	Integer	<p>The number of times the extension rings before Cisco Unity Connection considers it a "ring no answer" and plays the subscriber or handler greeting.</p> <p>Requires a "TransferType" of supervised (1). The value of this column should never be less than 2 for a supervised transfer. Possible values: Range 2-20 Default Value: 4</p>
TransferScreening	Read/Write	Boolean	<p>A flag indicating whether Cisco Unity Connection will prompt callers to say their names. When the phone is answered, the subscriber hears "Call from..." before Cisco Unity Connection transfers the call. Requires a "TransferType" of supervised (1).</p> <p>Normally this column is used along with "TransferConfirm" to allow the subscriber to screen calls. Possible Values:</p> <ul style="list-style-type: none"> • false: Call screening disabled • true: Ask and record caller name <p>Default value: false.</p>
TransferType	Read Only	String	<p>The type of call transfer Cisco Unity Connection will perform - supervised or unsupervised (also referred to as "Release to Switch" transfer).</p> <ul style="list-style-type: none"> • Unsupervised transfer (also referred to as "Release to Switch" transfer) - Cisco Unity Connection puts the caller on hold, dials the extension, and releases the call to the phone system. When the line is busy or is not answered, the phone system (not Cisco Unity Connection) forwards the call to the subscriber or handler greeting. To use "Unsupervised" transfer, call forwarding must be enabled on the phone system. • Supervised transfer - Cisco Unity Connection acts as a receptionist, handling the transfer. If the line is busy or the call is not answered, Cisco Unity Connection (not the phone system) forwards the call to the subscriber or handler greeting. Supervised transfer can be used regardless if the phone system forwards calls or not. <p>Refer to the section Enumeration Type. Default value: 0</p>

Parameter	Operations	Data Type	Comments
MediaSwitchObjectId	Read Only	String (36)	The unique identifier of the MediaSwitch object that Cisco Unity Connection uses for transferring the call to the subscriber phone.
PhoneSystemURI	Read Only	String	Specifies the URI of the Phone Systems.
UsePrimaryExtension	Read/Write	Boolean	If extension is null this field will be set to true to indicate that we are using primary extension instead of DtmfAccessId for the owning handler or the subscriber. Possible value: <ul style="list-style-type: none"> • true • false Default value: true
Extension	Read/Write	String (40)	If an administrator using Cisco Unity Connection Administration chooses to transfer to the extension of a subscriber or call handler, Cisco Unity Connection will automatically enter the DtmfAccessId value pulled from the DtmfAccessId table for the call handler into this column. Can take values: Digits, hash, comma, asterisk, plus are allowed.
PlayTransferprompt	Read/Write	Boolean	A flag indicating whether the "Wait while I transfer your call" prompt should be played prior to transferring a call. Possible values: <ul style="list-style-type: none"> • true - Play Transfer prompt is enabled. • false - Play transfer prompt is disabled. Default Value: true.
PersonalCallTransfer	Read/Write	Boolean	A flag indicating whether or not Personal Call Transfer Rules are used for the specific Transfer Option. Possible Values:- <ul style="list-style-type: none"> • false: Personal Call Transfer Rules are not used. • true:- Personal Call Transfer Rules are used. Default value: false
Enabled	Read/Write	Boolean	Indicate whether the transfer option is enabled or not. To enable rule till particular end date, TimeExpires should also be specified. Whereas, to enable transfer rule with no end date, the TimeExpires field should be empty. Possible Values: <ul style="list-style-type: none"> • true: enabled • false: disabled Default Value: true



Note The transfer rules are enabled with no end date by default.



CHAPTER 38

Cisco Unity Connection Provisioning Interface (CUPI) API -- Call Handler Settings

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Assigning a Schedule to a Call Handler, on page 505](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Caller Input Keys , on page 509](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Greetings , on page 513](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Updating Caller Input Keys, on page 515](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Custom Recordings, on page 519](#)

Cisco Unity Connection Provisioning Interface (CUPI) API -- Assigning a Schedule to a Call Handler

Introduction

In order to assign a schedule to a call handler, such as the Opening Greeting Call Handler, an administrator should first create a ScheduleSet and its supporting objects, and then change the Call Handler to point to that new ScheduleSet.

Creating a Schedule

Schedules are relatively complicated objects in Cisco Unity Connection. They are comprised of 4 different types of objects, and the top level object is called a ScheduleSet. For a more detailed explanation of how the schedules work in Unity Connection, check Schedules Overview

When a schedule has been created, the administrator will need the ScheduleSet's ObjectId in order to associate it with a call handler.

Associating a ScheduleSet with a Call Handler

Retrieving the List of Call Handlers

In order to retrieve the list of call handlers, an administrator makes a GET request to the call handler resource:

Retrieving the List of Call Handlers

```
GET /vmrest/handlers/callhandlers
```

This will return a list of all call handlers on the system. A portion of that list is shown here:

```

200
OK

<?xml version="1.0" encoding="UTF-8"?>
<Callhandlers total="5">
  <Callhandler>
    <URI>/vmrest/handlers/callhandlers/03991ce8-0eaa-40cc-86a9-c0c88d9066ad</URI>
    <CreationTime>2010-05-25T18:38:51Z</CreationTime>
    <Language>1033</Language>
    <Undeletable>true</Undeletable>
    <VoiceName>0164efab-5c35-42bd-8284-018746edc64b.wav</VoiceName>
    <VoiceFileURI>/vmrest/voicefiles/0164efab-5c35-42bd-8284-018746edc64b.wav</VoiceFileURI>

    <LocationObjectId>6919b242-ed60-4f3a-95fa-40967171485e</LocationObjectId>

  <LocationURI>/vmrest/locations/connectionlocations/6919b242-ed60-4f3a-95fa-40967171485e</LocationURI>

    <EditMsg>true</EditMsg>
    <IsPrimary>false</IsPrimary>
    <OneKeyDelay>1500</OneKeyDelay>
    <ScheduleSetObjectId>a7e21c61-296d-46f1-9860-50966bbfbb8e</ScheduleSetObjectId>

  <ScheduleSetURI>/vmrest/schedulesets/a7e21c61-296d-46f1-9860-50966bbfbb8e</ScheduleSetURI>

    <SendUrgentMsg>0</SendUrgentMsg>
    <MaxMsgLen>300</MaxMsgLen>
    <IsTemplate>false</IsTemplate>
    <ObjectId>03991ce8-0eaa-40cc-86a9-c0c88d9066ad</ObjectId>

  <RecipientDistributionListObjectId>7082dace-606c-4f2c-8af1-764d149e4500</RecipientDistributionListObjectId>

  <RecipientDistributionListURI>/vmrest/distributionlists/7082dace-606c-4f2c-8af1-764d149e4500</RecipientDistributionListURI>

    <DisplayName>Opening Greeting</DisplayName>
    <AfterMessageAction>2</AfterMessageAction>
    <AfterMessageTargetConversation>PHGreeting</AfterMessageTargetConversation>

  <AfterMessageTargetHandlerObjectId>3910fd6b-8d56-4b83-89a6-d5c825d69916</AfterMessageTargetHandlerObjectId>

    <TimeZone>4</TimeZone>
    <UseDefaultLanguage>true</UseDefaultLanguage>
    <UseDefaultTimeZone>true</UseDefaultTimeZone>
    <MediaSwitchObjectId>2d4be643-a206-4705-92a9-261d191f2df4</MediaSwitchObjectId>

  <PhoneSystemURI>/vmrest/phonesystems/2d4be643-a206-4705-92a9-261d191f2df4</PhoneSystemURI>

    <UseCallLanguage>true</UseCallLanguage>
    <SendSecureMsg>false</SendSecureMsg>
    <EnablePrependDigits>false</EnablePrependDigits>
    <DispatchDelivery>false</DispatchDelivery>
    <CallSearchSpaceObjectId>44228e57-f458-4d56-809a-8d33fbdec56</CallSearchSpaceObjectId>

  <CallSearchSpaceURI>/vmrest/searchspaces/44228e57-f458-4d56-809a-8d33fbdec56</CallSearchSpaceURI>

    <InheritSearchSpaceFromCall>true</InheritSearchSpaceFromCall>
    <PartitionObjectId>5d61a103-87a8-41c6-ba0b-90e1c72eda7c</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/5d61a103-87a8-41c6-ba0b-90e1c72eda7c</PartitionURI>

  <GreetingsURI>/vmrest/handlers/callhandlers/03991ce8-0eaa-40cc-86a9-c0c88d9066ad/greetings</GreetingsURI>

  <TransferOptionsURI>/vmrest/handlers/callhandlers/03991ce8-0eaa-40cc-86a9-c0c88d9066ad/transferoptions</TransferOptionsURI>

```

```

<MenuEntriesURI>/vmrest/handlers/callhandlers/03991ce8-0eaa-40cc-86a9-c0c88d9066ad/menuentries</MenuEntriesURI>

  </Callhandler>
  <Callhandler>
    ...
  </Callhandler>
  ...
</Callhandlers>

```

Selecting the Call Handler

From the list of call handlers obtained by doing the previous step, the administrator should choose one, usually based on DisplayName. In program code, this can be done by loading the returned XML document into an XML parser, and then finding the node with the requested DisplayName.

In this example, let's choose the Opening Greeting Call Handler, meaning the call handler with the DisplayName "Opening Greeting." The URI field tells the administrator which URI to use in order to retrieve, modify, or delete the call handler. In this example, the URI is
/vmrest/handlers/callhandlers/03991ce8-0eaa-40cc-86a9-c0c88d9066ad.

Modifying the Call Handler

In order to change the schedule associated with a call handler, the administrator makes a PUT to the call handler resource, requesting a modification to the ScheduleSetObjectId field. Let's say that 9dd6c1d5-249e-4715-8953-396ce2f26314 is the ObjectId for the ScheduleSet that the administrator created earlier.

```

PUT /vmrest/handlers/callhandlers/03991ce8-0eaa-40cc-86a9-c0c88d9066ad

<Callhandler>
  <ScheduleSetObjectId>9dd6c1d5-249e-4715-8953-396ce2f26314</ScheduleSetObjectId>
</Callhandler>

```

At this point, the call handler will now be active during the time periods described by the ScheduleSet. About Caller Input Keys

Finding Which Schedule Is Assigned to a Call Handler

In order to find out which schedule is currently assigned to a call handler, an administrator makes a GET request to the call handler resource, as described earlier. After selecting a call handler from the list, the ScheduleSetURI field provides a link to the ScheduleSet that is associated with the call handler. The administrator can then make a GET request to that URI to retrieve the ScheduleSet:

```

GET /vmrest/schedulesets/9dd6c1d5-249e-4715-8953-396ce2f26314

```

That will return the ScheduleSet. From that ScheduleSet object, the administrator can retrieve the ScheduleSetMembers, Schedules, and ScheduleDetails that comprise the entire Schedule.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Caller Input Keys

About Caller Input Keys

(Note that this content is applicable to Cisco Unity Connection 7.1(3) and later)

In order to use the CUPI API to update caller input keys, you need to determine the object ID of the call handler whose caller input key you want to change.

To make an update to caller input keys for a user, you need to determine the object ID of the user's call handler. Every user who has caller input keys has a call handler. When looking at the user data returned from the following GET, the object ID is under the element <CallHandlerObjectId>:

```
GET https://<server>/vmrest/users/<userobjectid>
```

When you have determined the object ID of the call handler that you want to change, you can do any of the following operations.

Ignore

The default setting of most keys is "Ignore." To set a key to ignore, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>0</Action>
</MenuEntry>
```

The Action field is a custom type used to determine at a basic level what the caller input key is going to do. The 0 value denotes that this key should be ignored.

Hang Up

To set a key to hang up, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>1</Action>
</MenuEntry>
```

The Action field of 1 denotes that this key should terminate the call.

Restart Greeting

To set a key to restart the greeting, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>6</Action>
</MenuEntry>
```

The Action field of 6 denotes that this key should restart playback of the greeting from the beginning.

Route from Next Call Routing Rule

To set a key to route the call starting from the next call routing rule, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>8</Action>
</MenuEntry>
```

The Action field of 8 denotes that this key should route the call starting from the next call routing rule.

Skip Greeting

To set a key to skip the greeting, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>5</Action>
</MenuEntry>
```

The Action field of 5 denotes that this key should skip the remainder of the greeting and take the caller directly to the after greeting action.

Take a Message

To set a key to take a message, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>4</Action>
</MenuEntry>
```

The Action field of 4 denotes that this key should prompt the caller to record a message.

Transfer to an Alternate Contact Number

To transfer a caller to an alternate contact number, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>7</Action>
<TransferNumber>number to transfer to</TransferNumber>
</MenuEntry>
```

The Action field of 7 denotes that this key should transfer the caller to an alternate contact number. The TransferNumber is the number that the caller will be release-transferred to. Note that including a TransferNumber is optional; if you choose not to include a TransferNumber, users can configure their own alternate contact numbers by phone (by providing a number to transfers caller to).

Currently, the CUPI API does not allow you to set the TransferNumber to an empty string. Therefore, if you set the TransferNumber, you can change it later to a different number, but you cannot leave it empty. In addition, the CUPI API does not allow read or write access to which type of transfer the alternate contact number uses (release transfer vs. supervised transfer).

Transfer to a User or a Call Handler

To transfer a caller to a user or a call handler, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>2</Action>
<TargetConversation>PHTransfer</TargetConversation>
<TargetHandlerObjectId>05d9e169-5c87-4415-aaed-c58a14816c8d</TargetHandlerObjectId>
</MenuEntry>
```

The Action field of 2 denotes that this key should transfer the caller to another conversation. This is used to transfer callers to other objects, or to send callers to other conversations such as the system transfer conversation.

The TargetConversation should be set to PHTransfer if you want to transfer to the call handler in question. If you want to have the call go directly the call handler greeting, set it to PHGreeting instead.

The TargetHandlerObjectId is the object ID of the call handler that you want the key to transfer the caller to.

Transfer to an Interview Handler

To transfer a caller to an interview handler, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>2</Action>
<TargetConversation>PHInterview</TargetConversation>
<TargetHandlerObjectId>interview handler object id</TargetHandlerObjectId>
</MenuEntry>
```

The TargetConversation should be set to PHInterview. The TargetHandlerObjectId is the object ID of the interview handler that you want to the caller input key to go to.

Transfer to a Directory Handler

To transfer a caller to a directory handler, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>2</Action>
<TargetConversation>AD</TargetConversation>
<TargetHandlerObjectId>object id of directory handler</TargetHandlerObjectId>
</MenuEntry>
```

The TargetConversation should be set to AD. The TargetHandlerObjectId is the object ID of the directory handler that you want to the caller input key to go to.

Transfer to the Broadcast Message Administrator Conversation

To transfer a caller to the Broadcast Message Administrator conversation, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>2</Action>
<TargetConversation>BroadcastMessageAdministrator</TargetConversation>
</MenuEntry>
```

Transfer to the Caller System Transfer Conversation

To transfer a caller to the Caller System Transfer conversation, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>2</Action>
<TargetConversation>SystemTransfer</TargetConversation>
</MenuEntry>
```

Transfer to the Greetings Administrator Conversation

To transfer a caller to the Greetings Administrator conversation, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>2</Action>
<TargetConversation>GreetingsAdministrator</TargetConversation>
</MenuEntry>
```

Transfer to the Sign-In Conversation

To transfer a caller to the sign-in conversation, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>2</Action>
<TargetConversation>SubSignIn</TargetConversation>
</MenuEntry>
```


Transfer to the User System Transfer Conversation

To transfer a caller to the subscriber system transfer conversation, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>2</Action>
<TargetConversation>SubSysTransfer</TargetConversation>
</MenuEntry>
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Greetings

About Greetings

Modifying greetings involves a fairly long hierarchy in the URI, as follows:

```
/vmrest/handlers/callhandlers/<call handler object id>/greetings/<greeting type>/
greetingstreamfiles/<language id>
```

The greeting types are:

- Standard
- Alternate
- Busy
- Closed
- Holiday
- Error
- Internal

For Connection versions 7.x and 8.0.x the greetings are accessed by using the greeting stream file URI. Modifying the greeting requires a three step process as detailed below.

For Connection versions 8.5 and later the greeting audio access has been simplified so that it can be modified in a single step. This new URI is a standard sub-resource of the greeting stream file resource URI. The old greeting stream file modification still works in the later versions, but use of the new URI is easier.

Listing and Viewing

Greeting Audio GET for 8.5 and Later

Use the standard greeting audio URI to get the file:

```
GET http://<connection-server>/vmrest/handlers/callhandlers/<call handler object
id>/greetings
/<greeting type>/greetingstreamfiles/<language id>/audio
```

The response will return the audio/wav data for the greeting of the specified type and language.

Voice Name GET for 7.x and 8.0.x

First get the greeting stream file object for the greeting type and language, then use the voice files URI to get the greeting audio contents:

```
GET http://<connection-server>/vmrest/handlers/callhandlers/<call handler object
id>/greetings
/<greeting type>/greetingstreamfiles/<language id>
GET http://<connection-server>/vmrest/voicefiles/<stream file>
```

The response will return the audio/wav data for the greeting.

Setting Greetings

Setting a Greeting in 8.5 and Later

PUT the audio data directly to the standard greeting stream file URI:

```
PUT http://<connection-server>/vmrest/handlers/callhandlers/<call handler object
id>/greetings
/<greeting type>/greetingstreamfiles/<language id>/audio content is audio/wav data
```

The response is a 204 indicating that the content has been accepted and copied into the temporary file.

Setting a Greeting in 7.x and 8.0.x

To create a greeting for a resource is a three step process.

Step 1: A place-holder for the WAV file must be created with a POST. This is a temporary file place-holder that can be used for up to 30 minutes. If it is not used within 30 minutes (assigned to a resource), the file is assumed to be abandoned and gets automatically cleaned.

```
POST /vmrest/voicefiles
```

The response code is 201 and the content is the name of the newly created temporary file.

Step 2: Use the temporary file name to PUT the new audio data. The HTTP content type is "audio/wav" and the payload content is the audio data.

```
PUT /vmrest/voicefiles/<temporary file name>
```

The response is a 204 indicating that the content has been accepted and copied into the temporary file.

Step 3: Set the greeting stream file of the target resource to the temporary file name.

See the following example

```
PUT http://<connection-server>/vmrest/handlers/callhandlers/<call handler object
id>/greetings
/<greeting type>/greetingstreamfiles/<language id>
```

Only the stream file field needs to be filled out for PUT. All the other greeting stream file fields are derived from the URI:

```
<?xml version="1.0" encoding="UTF-8"?>
<GreetingStreamFile>
<StreamFile>temporary file name</StreamFile>
</GreetingStreamFile>
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Updating Caller Input Keys

Introduction

This document describes how to change the caller input key on a call handler to take different actions. This content is applicable to Cisco Unity Connection release 7.1(3) and later. These examples have not been verified with versions prior to 7.1(3).

In order to change a caller input key for a call handler, you need to know the object ID of the call handler.

In order to change a caller input key for a user, you need the object ID of that user's call handler. Every user who has caller input keys has a call handler, and if you are looking at the user data returned from a GET request like the following, the object ID is the element **CallHandlerObjectId**.

```
GET https://<server>/vmrest/users/<userobjectid>
```

When you have obtained the object ID of the call handler you want to change, you can do any of the following actions.

Examples

Ignore

The default setting of most keys is "Ignore." To set a key to ignore, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>0</Action>
</MenuEntry>
```

The Action field is a custom type used to determine at a basic level what the caller input key is going to do. The 0 value denotes that this key should be ignored.

Hang Up

To set a key to hang up, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>1</Action>
</MenuEntry>
```

The Action field of 1 denotes that this key should terminate the call.

Restart Greeting

To set a key to restart the greeting, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>6</Action>
</MenuEntry>
```

The Action field of 6 denotes that this key should restart playback of the greeting from the beginning.

Route from Next Call Routing Rule

To set a key to route the call starting from the next call routing rule, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>8</Action>
</MenuEntry>
```

The Action field of 8 denotes that this key should route the call starting from the next call routing rule.

Skip Greeting

To set a key to skip the greeting, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>5</Action>
</MenuEntry>
```

The Action field of 5 denotes that this key should skip the remainder of the greeting and take the caller directly to the after greeting action.

Take a Message

To set a key to take a message, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>4</Action>
</MenuEntry>
```

The Action field of 4 denotes that this key should prompt the caller to record a message.

Alternate Contact Number (ACN)

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
  <Action>7</Action>
  <TransferNumber>number to transfer to</TransferNumber>
</MenuEntry>
```

The Action field of 7 denotes that this key should transfer the caller to an alternate contact number. The TransferNumber is the number that the caller will be release-transferred to. Including a transfer number is optional; if you do not include a TransferNumber, and set a key to the Action of 7, users will have the option of configuring their own ACNs by phone, which provides a number to transfer callers to.

The API currently does not let you set the TransferNumber to an empty string. That means that when you have set the TransferNumber, you can only change it to a different number, but cannot empty it out. The API also currently does not give you read or write access to the type of transfer the ACN uses (release vs. supervised).

Transfer to a User or a Call Handler

To transfer a caller to a user or a call handler, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>PHTransfer</TargetConversation>
  <TargetHandlerObjectId>05d9e169-5c87-4415-aaed-c58a14816c8d</TargetHandlerObjectId>
</MenuEntry>
```

The Action field of 2 denotes that this key should transfer the caller to another conversation. This is used to transfer callers to other objects, or to send callers to other conversations such as the system transfer conversation.

The TargetConversation should be set to PHTransfer if you want to transfer to the call handler in question. If you want to have the call go directly the call handler greeting, set it to PHGreeting instead.

The TargetHandlerObjectId is the object ID of the call handler that you want the key to transfer the caller to.

Go to an Interview Handler

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
  <MenuEntry>
    <Action>2</Action>
    <TargetConversation>PHInterview</TargetConversation>
    <TargetHandlerObjectId>interview handler object id</TargetHandlerObjectId>
  </MenuEntry>
```

The TargetConversation should be set to PHInterview and the TargetHandlerObjectId is the object ID of the interview handler that you want to the caller input key to go to.

Go to a Directory Handler

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
  <MenuEntry>
    <Action>2</Action>
    <TargetConversation>AD</TargetConversation>
    <TargetHandlerObjectId>object id of directory handler</TargetHandlerObjectId>
  </MenuEntry>
```

The TargetConversation should be set to AD and the TargetHandlerObjectId is the object ID of the directory handler you want to the caller input key to go to.

Go to the Broadcast Message Administrator Conversation

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>BroadcastMessageAdministrator</TargetConversation>
</MenuEntry>
```

Go to the User System Transfer Conversation

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>SubSysTransfer</TargetConversation>
</MenuEntry>
```

Go to the Greetings Administrator Conversation

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>GreetingsAdministrator</TargetConversation>
</MenuEntry>
```

Go to the Sign-In Conversation

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>SubSignIn</TargetConversation>
</MenuEntry>
```

Go to the User System Transfer Conversation

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
  <Action>2</Action>
  <TargetConversation>SubSysTransfer</TargetConversation>
</MenuEntry>
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Custom Recordings

About Custom Recordings

Cisco Unity Connection allows you to play the customized recordings after a message is sent. You can also play the custom recordings after a greeting is played. A greeting is played before the callers are allowed to leave a message for a user or a call handler.



Note In Cisco Unity Connection 9.0, the **Post Greeting Recordings** option is changed to the **Custom Recordings** option.

Listing Custom Recording

Example 1

The following is an example of the GET request that lists all the custom recordings:

```
https://<connection_server>/vmrest/postgreetingrecordings
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<PostGreetingRecordings total="2">
  <PostGreetingRecording>
    <URI>/vmrest/postgreetingrecordings/b7cfa709-9f06-4cd2-94b3-8e5910d5b041</URI>
    <ObjectId>b7cfa709-9f06-4cd2-94b3-8e5910d5b041</ObjectId>
    <DisplayName>Rec-2</DisplayName>
    <PostGreetingRecordingStreamFilesURI>/vmrest/postgreetingrecordings/b7cfa709-9f06-4cd2-94b3-8e5910d5b041/postgreetingrecordingstreamfiles</PostGreetingRecordingStreamFilesURI>
  </PostGreetingRecording>
  <PostGreetingRecording>
    <URI>/vmrest/postgreetingrecordings/db44de42-7274-4d1c-8837-e710b0649c13</URI>
    <ObjectId>db44de42-7274-4d1c-8837-e710b0649c13</ObjectId>
    <DisplayName>Rec-3</DisplayName>
    <PostGreetingRecordingStreamFilesURI>/vmrest/postgreetingrecordings/db44de42-7274-4d1c-8837-e710b0649c13/postgreetingrecordingstreamfiles</PostGreetingRecordingStreamFilesURI>
  </PostGreetingRecording>
</PostGreetingRecordings>
```

```
RESPONSE Code: 200
```

Example 2

The following is an example of the GET request that lists the custom recording as represented by <objectId>:

```
https://<connection_server>/vmrest/postgreetingrecordings/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<PostGreetingRecording>
  <URI>/vmrest/postgreetingrecordings/b7cfa709-9f06-4cd2-94b3-8e5910d5b041</URI>
  <ObjectId>b7cfa709-9f06-4cd2-94b3-8e5910d5b041</ObjectId>
  <DisplayName>Rec-2</DisplayName>

  <PostGreetingRecordingStreamFilesRD>/rest/postgreetingrecordings/b7cfa709-9f06-4cd2-94b3-8e5910d5b041/postgreetingrecordingstreamfiles/PostGreetingRecordingStreamFilesRD</PostGreetingRecordingStreamFilesRD>
</PostGreetingRecording>
```

RESPONSE Code: 200

Listing Languages for a Custom Recording

Example 1

The following is an example of the GET request that lists all the languages/stream files for a custom recording:

```
https://<connection_server>/vmrest/postgreetingrecordings/<objectId>/postgreetingrecordingstreamfiles
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<PostGreetingRecordingStreamFiles>
  <PostGreetingRecordingStreamFile>

    <URI>/vmrest/postgreetingrecordings/b7cfa709-9f06-4cd2-94b3-8e5910d5b041/postgreetingrecordingstreamfiles/1033/audio</URI>

    <PostGreetingRecordingObjectId>b7cfa709-9f06-4cd2-94b3-8e5910d5b041</PostGreetingRecordingObjectId>

    <LanguageCode>1033</LanguageCode>
    <StreamFile>58b0c574-62e6-4276-8e25-cb1227570492.wav</StreamFile>

    <PostGreetingStreamFileLanguageRD>/rest/postgreetingrecordings/b7cfa709-9f06-4cd2-94b3-8e5910d5b041/postgreetingrecordingstreamfiles/1033/PostGreetingStreamFileLanguageRD</PostGreetingStreamFileLanguageRD>
  </PostGreetingRecordingStreamFile>
</PostGreetingRecordingStreamFiles>
```

RESPONSE Code: 200

Example 2

The following is an example of the GET request that lists a particular languages/stream files for a custom recording represented by <language-code>:

```
https://<connection_server>/vmrest/postgreetingrecordings/<objectId>/postgreetingrecordingstreamfiles/<language-code>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:


```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<PostGreetingRecordingStreamFile>

<PostGreetingRecordingObjectId>b7cfa709-9f06-4cd2-94b3-8e5910d5b041</PostGreetingRecordingObjectId>

  <LanguageCode>1033</LanguageCode>
  <StreamFile>58b0c574-62e6-4276-8e25-cb1227570492.wav</StreamFile>
</PostGreetingRecordingStreamFile>
```

RESPONSE Code: 200

Modifying Custom Recording

Example 1

The following is an example of the PUT request that modifies the custom recording as represented by <objectId>:

```
https://<connection_server>/vmrest/postgreetingrecordings/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<PostGreetingRecording>
  <DisplayName>custom-rec</DisplayName>
</PostGreetingRecording>
```

RESPONSE Code: 204

Example 2

The following is an example of the PUT request that modifies a stream file for a custom recording as represented by <language-code>:

```
https://<connection_server>/vmrest/postgreetingrecordings/<object-id>/postgreetingrecordingstreamfiles/<language-code>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<PostGreetingRecordingStreamFile>
  <StreamFile>82dd9884-5cee-42f0-8537-bdc5e622de1f.wav</StreamFile>
</PostGreetingRecordingStreamFile>
```

RESPONSE Code: 204

Deleting Custom Recording

The following is an example of the DELETE request that deletes a User Template as represented by <usertemplateid>:

```
https://<connection_server>/vmrest/postgreetingrecordings/<objectId>
```

The output for this request returns the successful response code.

RESPONSE Code: 204

Explanation of Data Fields

The following chart lists all of the data fields available on custom.

Field Name	Writable?	DB Value	Explanation/ Comments
ObjectId	Read-only	36 Characters	ObjectId of the Device
DisplayName	Read/Write	1-64 Characters	Friendly name for the Device like "Mobile Phone"
PostGreetingRecordingStreamFilesURI	Read-only		List all the languages of custom recordings.
PostGreetingRecordingObjectId	Read-only	36 Characters	List all the custom recordings
LanguageCode	Read-only	4 characters	List all the locales/languages
StreamFile	Read/Write	40 characters	Record Greetings



CHAPTER 39

Cisco Unity Connection Provisioning Interface (CUPI) API--Directory Handler APIs

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API--Directory Handler APIs, on page 523](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API--Directory Handler Greeting APIs, on page 545](#)

Cisco Unity Connection Provisioning Interface (CUPI) API--Directory Handler APIs

Directory Handler APIs

Directory handlers provide access to a corporate directory that callers can use to reach Cisco Unity Connection users with mailboxes. When a caller searches for a username or part of a name, a directory handler looks up the extension and routes the call to the appropriate user. Administrator can use this API to create/update/delete/fetch the directory handler. You can update various attributes of directory handler using this API.

Listing the Directory Handlers

The following is an example of the GET request that fetch the list of directory handlers:

```
GET https://<connection-server>/vmrest/handlers/directoryhandlers
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing the Directory Handlers

```

<DirectoryHandlers total="1">
<DirectoryHandler>
<URI>/vmrest/handlers/directoryhandlers/16090424-1c38-4901-a465-3b76ffaf437a</URI>
<CreationTime>2012-12-10T19:24:31Z</CreationTime>
<Language>1033</Language>
<DisplayName>System Directory Handler</DisplayName>
Cisco_Unity_Connection_Provisioning_Interface_(CUPI)_API_--_Directory_Handler_APIs
Contents 1
<Undeletable>>true</Undeletable>
<VoiceName>b09bd14d-15ef-4100-b0f7-4ba2f0c15343.wav</VoiceName>
<VoiceFileURI>/vmrest/voicefiles/b09bd14d-15ef-4100-b0f7-
4ba2f0c15343.wav</VoiceFileURI>
<VoiceNameURI>/vmrest/handlers/directoryhandlers/16090424-1c38-4901-a465-
3b76ffaf437a/voicename</VoiceNameURI>
<LocationObjectId>08b0402c-ba81-4f16-bcba-ca7883de0482</LocationObjectId>
<LocationURI>/vmrest/locations/connectionlocations/08b0402c-ba81-4f16-bcbaca7883de0482</
LocationURI>
<EndDialDelay>4</EndDialDelay>
<MaxMatches>8</MaxMatches>
<MenuStyle>>true</MenuStyle>
<SayExtension>>true</SayExtension>
<SearchByFirstName>>false</SearchByFirstName>
<StartDialDelay>5</StartDialDelay>
<Tries>1</Tries>
<UseStarToExit>>true</UseStarToExit>
<SearchScope>0</SearchScope>
<SearchScopeObjectId>08b0402c-ba81-4f16-bcba-ca7883de0482</SearchScopeObjectId>
<PlayAllNames>>false</PlayAllNames>
<ExitAction>2</ExitAction>
<ExitTargetConversation>PHTransfer</ExitTargetConversation>
<ExitTargetHandlerObjectId>04786933-dd71-45e1-b2fb-
1a5dd99503f6</ExitTargetHandlerObjectId>
<NoInputAction>2</NoInputAction>
<NoInputTargetConversation>PHTransfer</NoInputTargetConversation>
<NoInputTargetHandlerObjectId>f8bac9c4-62a2-4744-a9e6-74ac90fb87fd</NoInputTargetHandlerObjectId>
<NoSelectionAction>2</NoSelectionAction>
<NoSelectionTargetConversation>PHTransfer</NoSelectionTargetConversation>
<NoSelectionTargetHandlerObjectId>f8bac9c4-62a2-4744-a9e6-
74ac90fb87fd</NoSelectionTargetHandlerObjectId>
<ZeroAction>2</ZeroAction>
<ZeroTargetConversation>PHTransfer</ZeroTargetConversation>
<ZeroTargetHandlerObjectId>b6cd5cfd-312c-4eb0-96ea-
57531fa9058d</ZeroTargetHandlerObjectId>
<AutoRoute>>false</AutoRoute>
<ObjectId>16090424-1c38-4901-a465-3b76ffaf437a</ObjectId>
<TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
<DtmfAccessId>555</DtmfAccessId>
<ScopeObjectLocationObjectId>08b0402c-ba81-4f16-bcbaca7883de0482</
ScopeObjectLocationObjectId>
<ScopeObjectLocationURI>/vmrest/locations/connectionlocations/08b0402c-ba81-4f16-bcbaca7883de0482</
ScopeObjectLocationURI>
<VoiceEnabled>>false</VoiceEnabled>
<UseCallLanguage>>true</UseCallLanguage>
<UseDefaultLanguage>>true</UseDefaultLanguage>
<PartitionObjectId>ff1c9ff2-6fcc-47e9-a4e0-a220c6e3ae4e</PartitionObjectId>
<PartitionURI>/vmrest/partitions/ff1c9ff2-6fcc-47e9-a4e0-a220c6e3ae4e</PartitionURI>
<SpeechConfidenceThreshold>10</SpeechConfidenceThreshold>
<SayCity>>false</SayCity>
<SayDepartment>>false</SayDepartment>
</DirectoryHandler>
</DirectoryHandlers>

```

Response Code: 200

JSON Example

To list of directory handlers, do the following:

```
GET https://<connection-server>/vmrest/handlers/directoryhandlers
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing the Directory Handlers

```

"@total": "1",
"DirectoryHandler": [
{
"URI": "/vmrest/handlers/directoryhandlers/36408c02-4b25-4549-b3a4-deafa5945339",
"CreationTime": "2013-02-08T04:59:36Z",
"Language": "1033",
"DisplayName": "System Directory Handler",
"Undeletable": "true",
"VoiceName": "41a5ba0d-5267-40d8-aa2c-dd1f61046f7c.wav",
"VoiceFileURI": "/vmrest/voicefiles/41a5ba0d-5267-40d8-aa2c-dd1f61046f7c.wav",
"VoiceNameURI": "/vmrest/handlers/directoryhandlers/36408c02-4b25-4549-b3a4-deafa5945339/voicename",
"LocationObjectId": "df46033e-0058-4f7e-b5fc-8346df0ffeel",
"LocationURI": "/vmrest/locations/connectionlocations/df46033e-0058-4f7e-b5fc-8346df0ffeel",
"EndDialDelay": "4",
"MaxMatches": "8",
"MenuStyle": "true",
"SayExtension": "true",
"SearchByFirstName": "false",
"StartDialDelay": "5",
"Tries": "1",
"UseStarToExit": "true",
"SearchScope": "0",
"SearchScopeObjectId": "df46033e-0058-4f7e-b5fc-8346df0ffeel",
"PlayAllNames": "false",
"ExitAction": "2",
"ExitTargetConversation": "PHTransfer",
"ExitTargetHandlerObjectId": "e6fd6ae4-7bf5-4a46-b994-e9fd13d83c30",
"NoInputAction": "2",
"NoInputTargetConversation": "PHTransfer",
"NoInputTargetHandlerObjectId": "d4d920f6-d7d4-4a3e-8876-21917480867f",
"NoSelectionAction": "2",
"NoSelectionTargetConversation": "PHTransfer",
"NoSelectionTargetHandlerObjectId": "d4d920f6-d7d4-4a3e-8876-21917480867f",
"ZeroAction": "2",
"ZeroTargetConversation": "PHTransfer",
"ZeroTargetHandlerObjectId": "b45f1e23-ce6d-4406-a9b2-48c647094a77",
"AutoRoute": "false",
"ObjectId": "36408c02-4b25-4549-b3a4-deafa5945339",
"TenantObjectId": "fe6541fb-b42c-44f2-8404-ded14cbf7438",
"DtmfAccessId": "555",
"ScopeObjectLocationObjectId": "df46033e-0058-4f7e-b5fc-8346df0ffeel",
"ScopeObjectLocationURI": "/vmrest/locations/connectionlocations/df46033e-0058-4f7e-b5fc-8346df0ffeel",
"VoiceEnabled": "false",
"UseCallLanguage": "true",
"UseDefaultLanguage": "true",
"PartitionObjectId": "92ef3894-5bf0-430c-af1-4ef67925aecf",
"PartitionURI": "/vmrest/partitions/92ef3894-5bf0-430c-af1-4ef67925aecf",
"SpeechConfidenceThreshold": "10",
"SayCity": "false",
"SayDepartment": "false",
"UseCustomGreeting": "false",
"ExitConversationURI":
"/vmrest/conversations?query=(cnvdirectoryhandlerexit%20is%201)",
"NoInputConversationURI":
"/vmrest/conversations?query=(cnvdirectoryhandlernoinput%20is%201)",
"NoSelectionConversationURI":
"/vmrest/conversations?query=(cnvdirectoryhandlernoselection%20is%201)",
"ZeroExitConversationURI":
"/vmrest/conversations?query=(cnvdirectoryhandlerzeroexit%20is%201)",

```

```
"DirectoryHandlerStreamFileURI":  
"/vmrest/handlers/directoryhandlers/36408c02-4b25-4549-b3a4-deafa5945339/directoryhandlerstreamfiles"  
}  
]  
}
```

```
Response Code: 200
```

Listing Specific Tenant Related Directory Handlers by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectID to list the specific tenant related directory handlers using the following URI:

```
GET https://<connection-server>/vmrest/handlers/directoryhandlers?query=(TenantObjectId is  
<Tenant>
```

To get the TenantObjectID, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Viewing the Specific Directory Handler

The following is an example of the GET request that lists the details of specific directory handler represented by the provided value of directory handler ID:

```
GET https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<DirectoryHandler>
<URI>/vmrest/handlers/directoryhandlers/16090424-1c38-4901-a465-3b76ffaf437a</URI>
<CreationTime>2012-12-10T19:24:31Z</CreationTime>
<Language>1033</Language>
<DisplayName>System Directory Handler</DisplayName>
<Undeletable>true</Undeletable>
<VoiceName>b09bd14d-15ef-4100-b0f7-4ba2f0c15343.wav</VoiceName>
<VoiceFileURI>/vmrest/voicefiles/b09bd14d-15ef-4100-b0f7-4ba2f0c15343.wav</VoiceFileURI>
<VoiceNameURI>/vmrest/handlers/directoryhandlers/16090424-1c38-4901-a465-
3b76ffaf437a/voicename</VoiceNameURI>
<LocationObjectId>08b0402c-ba81-4f16-bcba-ca7883de0482</LocationObjectId>
<LocationURI>/vmrest/locations/connectionlocations/08b0402c-ba81-4f16-bcbaca7883de0482</
LocationURI>
<EndDialDelay>4</EndDialDelay>
<MaxMatches>8</MaxMatches>
<MenuStyle>true</MenuStyle>
<SayExtension>true</SayExtension>
<SearchByFirstName>>false</SearchByFirstName>
<StartDialDelay>5</StartDialDelay>
<Tries>1</Tries>
<UseStarToExit>true</UseStarToExit>
<SearchScope>0</SearchScope>
<SearchScopeObjectId>08b0402c-ba81-4f16-bcba-ca7883de0482</SearchScopeObjectId>
<PlayAllNames>>false</PlayAllNames>
<ExitAction>2</ExitAction>
<ExitTargetConversation>PHTransfer</ExitTargetConversation>
<ExitTargetHandlerObjectId>04786933-dd71-45e1-b2fb-
1a5dd99503f6</ExitTargetHandlerObjectId>
Cisco_Unity_Connection_Provisioning_Interface_(CUPI)_API_--_Directory_Handler_APIs
Listing Specific Tenant Related Directory Handlers by System Administrator 4
<NoInputAction>2</NoInputAction>
<NoInputTargetConversation>PHTransfer</NoInputTargetConversation>
<NoInputTargetHandlerObjectId>f8bac9c4-62a2-4744-a9e6-74ac90fb87fd</NoInputTargetHandlerObjectId>
<NoSelectionAction>2</NoSelectionAction>
<NoSelectionTargetConversation>PHTransfer</NoSelectionTargetConversation>
<NoSelectionTargetHandlerObjectId>f8bac9c4-62a2-4744-a9e6-
74ac90fb87fd</NoSelectionTargetHandlerObjectId>
<ZeroAction>2</ZeroAction>
<ZeroTargetConversation>PHTransfer</ZeroTargetConversation>
<ZeroTargetHandlerObjectId>b6cd5cfd-312c-4eb0-96ea-
57531fa9058d</ZeroTargetHandlerObjectId>
<AutoRoute>>false</AutoRoute>
<ObjectId>16090424-1c38-4901-a465-3b76ffaf437a</ObjectId>
<DtmfAccessId>555</DtmfAccessId>
<ScopeObjectLocationObjectId>08b0402c-ba81-4f16-bcba-ca7883de0482</ScopeObjectLocationObjectId>
<ScopeObjectLocationURI>/vmrest/locations/connectionlocations/08b0402c-ba81-4f16-bcbaca7883de0482</
ScopeObjectLocationURI>
<VoiceEnabled>>false</VoiceEnabled>
<UseCallLanguage>true</UseCallLanguage>
<UseDefaultLanguage>true</UseDefaultLanguage>
<PartitionObjectId>ff1c9ff2-6fcc-47e9-a4e0-a220c6e3ae4e</PartitionObjectId>
<PartitionURI>/vmrest/partitions/ff1c9ff2-6fcc-47e9-a4e0-a220c6e3ae4e</PartitionURI>
<SpeechConfidenceThreshold>10</SpeechConfidenceThreshold>
<SayCity>>false</SayCity>
<SayDepartment>>false</SayDepartment>
</DirectoryHandler>

```

Response Code: 200

JSON Example

To list details of a particular directory handler, do the following:


```
GET https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>  
Accept: application/json  
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Viewing the Specific Directory Handler

```

{
  "URI": "/vmrest/handlers/directoryhandlers/36408c02-4b25-4549-b3a4-deafa5945339",
  "CreationTime": "2013-02-08T04:59:36Z",
  "Language": "1033",
  "DisplayName": "System Directory Handler",
  "Undeletable": "true",
  "VoiceName": "41a5ba0d-5267-40d8-aa2c-dd1f61046f7c.wav",
  "VoiceFileURI": "/vmrest/voicefiles/41a5ba0d-5267-40d8-aa2c-dd1f61046f7c.wav",
  "VoiceNameURI": "/vmrest/handlers/directoryhandlers/36408c02-4b25-4549-b3a4-deafa5945339/voicename",
  "LocationObjectId": "df46033e-0058-4f7e-b5fc-8346df0fffe1",
  "LocationURI": "/vmrest/locations/connectionlocations/df46033e-0058-4f7e-b5fc-8346df0fffe1",
  "EndDialDelay": "4",
  "MaxMatches": "8",
  "MenuStyle": "true",
  "SayExtension": "true",
  "SearchByFirstName": "false",
  "StartDialDelay": "5",
  "Tries": "1",
  "UseStarToExit": "true",
  "SearchScope": "0",
  Cisco_Unity_Connection_Provisioning_Interface_(CUPI)_API_--_Directory_Handler_APIs
  Viewing the Specific Directory Handler 5
  "SearchScopeObjectId": "df46033e-0058-4f7e-b5fc-8346df0fffe1",
  "PlayAllNames": "false",
  "ExitAction": "2",
  "ExitTargetConversation": "PHTransfer",
  "ExitTargetHandlerObjectId": "e6fd6ae4-7bf5-4a46-b994-e9fd13d83c30",
  "NoInputAction": "2",
  "NoInputTargetConversation": "PHTransfer",
  "NoInputTargetHandlerObjectId": "d4d920f6-d7d4-4a3e-8876-21917480867f",
  "NoSelectionAction": "2",
  "NoSelectionTargetConversation": "PHTransfer",
  "NoSelectionTargetHandlerObjectId": "d4d920f6-d7d4-4a3e-8876-21917480867f",
  "ZeroAction": "2",
  "ZeroTargetConversation": "PHTransfer",
  "ZeroTargetHandlerObjectId": "b45f1e23-ce6d-4406-a9b2-48c647094a77",
  "AutoRoute": "false",
  "ObjectId": "36408c02-4b25-4549-b3a4-deafa5945339",
  "DtmfAccessId": "555",
  "ScopeObjectLocationObjectId": "df46033e-0058-4f7e-b5fc-8346df0fffe1",
  "ScopeObjectLocationURI": "/vmrest/locations/connectionlocations/df46033e-0058-4f7e-b5fc-8346df0fffe1",
  "VoiceEnabled": "false",
  "UseCallLanguage": "true",
  "UseDefaultLanguage": "true",
  "PartitionObjectId": "92ef3894-5bf0-430c-alf1-4ef67925aecf",
  "PartitionURI": "/vmrest/partitions/92ef3894-5bf0-430c-alf1-4ef67925aecf",
  "SpeechConfidenceThreshold": "10",
  "SayCity": "false",
  "SayDepartment": "false",
  "UseCustomGreeting": "false",
  "ExitConversationURI":
  "/vmrest/conversations?query=(cnvdirectoryhandlerexit%20is%201)",
  "NoInputConversationURI":
  "/vmrest/conversations?query=(cnvdirectoryhandlernoinput%20is%201)",
  "NoSelectionConversationURI":
  "/vmrest/conversations?query=(cnvdirectoryhandlernoselection%20is%201)",
  "ZeroExitConversationURI":
  "/vmrest/conversations?query=(cnvdirectoryhandlerzeroexit%20is%201)",
  "DirectoryHandlerStreamFileURI":
  "/vmrest/handlers/directoryhandlers/36408c02-4b25-4549-b3a4-deafa5945339/directoryhandlerstreamfiles"
}

```

Response Code: 200

Creating a Directory Handler

The following is an example of the POST request that creates a new directory handler:

POST https://<connection-server>/vmrest/handlers/directoryhandlers

Request Body:

```
<DirectoryHandler>
<DisplayName>Taxoma_Directory Handler</DisplayName>
</DirectoryHandler>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/handlers/directoryhandlers/16090424-1c38-4901-a465-3b76ffaf437a
```

JSON Example

To create a new directory handler, do the following:

```
POST https://<connection-server>/vmrest/handlers/directoryhandlers
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body:

```
{
  "DisplayName": "Texoma123_Directory Handler"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/handlers/directoryhandlers/16090424-1c38-4901-a465-3b76ffaf437a
```

Delete the Directory Handler

This request can be used to delete a directory handler.

```
DELETE https://<connection-server>/vmrest/directory handler/<directoryHandlerObjectId>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To delete the directory handler, do the following:

```
DELETE https://<connection-server>/vmrest/directory handler/<directoryHandlerObjectId>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Updating the Search Scope of the Directory Handler

The following is an example of the PUT request that can be used to modify the search scope of the directory handler. In the request body, the search scope value corresponds to the type of search scope and search scope object ID represents the objectid corresponding to the search scope value. For Example Value for COS as search scope is 5 and search scope object ID should be COS.

```
PUT https://<connection-server>/vmrest/directory_handler /<directoryHandlerObjectId>
```

Request Body:

```
<DirectoryHandler>
<SearchScope>5</SearchScope>
<SearchScopeObjectId>03815b4e-3b88-48b3-918d-91a9d1673880</SearchScopeObjectId>
</DirectoryHandler>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

The table given below lists the possible values of the search scope:

Name	Value	Description
VMS	0	VMS - directory handler search restricted to the local VMS.
DialingDomain	1	Dialing domain - directory handler search restricted to a dialing domain.
Global	2	Global - directory handler search expanded to the entire Unity organization (global).
Location	3	Location - directory handler search restricted to a Unity location.
DistributionList	4	Distribution list - directory handler search is restricted to a distribution list.
cos	5	COS - directory handler search restricted to a class of service.
SearchSpace	6	SearchSpace - directory handler search restricted to a search space.
Inherit	7	Inherit - directory handler search is restricted to the search space of the call.
Invalid	8	Invalid - directory handler search scope is no longer valid; used by the replicator.

You can set the search scope of a directory handler by defining only search scope and search scope object ID. The search scope object ID can have these references, COS object ID, location object ID, distribution list, and search space object ID.

Example 1: Update the Search Scope of a Directory Handler to a Class of Service

To update the search scope of a directory handler to a class of service, you must obtain the COS object ID.

```
GET https://<connection-server>/vmrest/coses
```

The following is an example of the PUT request to update the directory handler to COS object ID:

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body:

```
<DirectoryHandler>
<SearchScope>5</SearchScope>
<SearchScopeObjectId>03815b4e-3b88-48b3-918d-91a9d1673880</SearchScopeObjectId>
</DirectoryHandler>
```

```
Response Code: 204
```

Example 2: Update the Search Scope of a Directory Handler to Entire Server

To update the search scope of a directory handler to entire server, you must obtain the location of the object id of the connection server:

```
GET https://<connection-server>/vmrest/locations/connectionlocations
```

The following is an example of the PUT request to update the directory handler to entire server:

Request URI:

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body:

```
<DirectoryHandler>
<SearchScope>0</SearchScope>
<SearchScopeObjectId>08b0402c-ba81-4f16-bcba-ca7883de0482</SearchScopeObjectId>
</DirectoryHandler>
```

```
Response Code: 204
```

Example 3: Update the Search Scope of a Directory Handler to Inherit Search Scope from Call

The following is an example of the PUT request to update the search scope of directory handler to inherit search scope from call:

Request URI:

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body:

```
<DirectoryHandler>
<SearchScope>7</SearchScope>
</DirectoryHandler>
```

```
Response Code: 204
```

Example 3: Update the Search Scope of a Directory Handler to Inherit Search Scope from Call

The following is an example of the PUT request to update the search scope of directory handler to inherit search scope from call:

Request URI:

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body:

```
<DirectoryHandler>
<SearchScope>7</SearchScope>
</DirectoryHandler>
```

```
Response Code: 204
```

Example 4: Update the Search Scope of a Directory Handler to a Distribution List

The following is an example of the PUT request to update the search scope of directory handler to a distribution list:

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body:

```
<DirectoryHandler>
<SearchScope>4</SearchScope>
<SearchScopeObjectId>0995fc34-6791-4d9a-b20f-52c8dadd65b5</SearchScopeObjectId>
</DirectoryHandler>
```

```
Response Code: 204
```

Example 5: Update the Search Scope of a Directory Handler to a Search Space

To update the search scope of a directory handler to a search space, you must obtain the object ID of the search scope using the following URL:

```
GET https://<connection-server>/vmrest/searchspaces
```

The following is an example of the PUT request to update the search scope of directory handler to a search space:

Request URI:

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body:

```
<DirectoryHandler>
<SearchScope>6</SearchScope>
<SearchScopeObjectId>1cdaa964-0514-4364-ad74-e55364efb4b4</SearchScopeObjectId>
</DirectoryHandler>
```

```
Response Code: 204
```

JSON Example

To update the search scope of a directory handler to a search space, do the following:

Request URI:

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body:

```
{
  "SearchScope": "6",
  "SearchScopeObjectId": "1cdaa964-0514-4364-ad74-e55364efb4b4"
}
```

The following is an example of the PUT request to update the search scope of directory handler to a search space:

```
Response Code: 200
```

Updating the Exit Action on a directory handler

You can update the exit action, no input action, no selection action and action when caller presses zero on a directory handler. To specify the destination when a caller exits the directory handler using the * key/ or #key, the following fields are used to specify the destination:

- ExitAction
- ExitTargetConversation
- ExitTargetHandlerObjectId

In a scenario where caller does not respond to the name entry prompt, the following fields are used to specify the destination the fields:

- NoInputAction
- NoInputTargetConversation
- NoInputTargetHandlerObjectId

In another scenario where caller does not respond to the name entry prompt the fields, the following fields are used to specify the destination the fields:

- NoSelectionAction
- NoSelectionTargetConversation
- NoSelectionTargetHandlerObjectId

If callers press the zero key, the following fields are used to specify the destination the fields:

- ZeroAction
- ZeroTargetConversation

- ZeroTargetHandlerObjectId

The following are the URLs to fetch the call handlers, directory handlers, and interview handlers:

- Call Handlers: /vmrest/handlers/callhandlers
- Directory Handlers: /vmrest/handlers/directoryhandlers
- InterviewHandler : /vmrest/handlers/interviewhandlers

The following sections give some examples of how to specify different types of destinations by using these fields when caller exits the directory handler.

Example 1: Call should hang up on exit action.

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body

```
<DirectoryHandler>
<ExitAction>1</ExitAction>
</DirectoryHandler>
```

```
Response Code: 204
```

Example 2: Call should be sent to a call handler or a user greeting

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body

```
<DirectoryHandler>
<ExitAction>2</ExitAction>
<ExitTargetConversation>PHGreeting</ExitTargetConversation>
<ExitTargetHandlerObjectId>5f8b4a28-8042-4cce-a11c-
0222f106f79f</ExitTargetHandlerObjectId>
</DirectoryHandler>
```

```
Response Code: 204
```

JSON Example

To update the directory handler, do the following:

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body


```
{
  "ExitAction": "2",
  "ExitTargetConversation": "PHGreeting",
  "ExitTargetHandlerObjectId": "e6fd6ae4-7bf5-4a46-b994-e9fd13d83c30"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 3: Call should be transferred to a call handler or user

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body

```
<DirectoryHandler>
<ExitAction>2</ExitAction>
<ExitTargetConversation>SystemTransfer</ExitTargetConversation>
</DirectoryHandler>
```

```
Response Code: 204
```



Note The fields for that needs to be sent as input are Exit Action and ExitTargetConversation.

Example 5: Call should be sent to an Interview Handler

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body

```
<DirectoryHandler>
<ExitAction>2</ExitAction>
<ExitTargetConversation>PHInterview</ExitTargetConversation>
<ExitTargetHandlerObjectId>1ff9ef5e-1b97-4f3f-a30d-48aef7733d7f</ExitTargetHandlerObjectId>
</DirectoryHandler>
```

```
Response Code: 204
```

Example 6: Call should be sent to a Directory Handler.

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body

```
<DirectoryHandler>
<ExitAction>2</ExitAction>
<ExitTargetConversation>AD</ExitTargetConversation>
<ExitTargetHandlerObjectId>249056ed-5954-493d-9d87-
aec9cedafe25</ExitTargetHandlerObjectId>
</DirectoryHandler>
```

Response Code: 204

Setting Voice Enable to true for a Directory Handler

Voice enabled directory handlers cannot use a class of service or a distribution list as per their search scope.

Only entire server, a specific search space, or Inherit search space from call are allowed.

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
```

Request Body

```
<DirectoryHandler>
<VoiceEnabled>>true</VoiceEnabled>
</DirectoryHandler>
```

Response Code: 204

JSON Example

To update the voice enable, do the following:

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
{
  "VoiceEnabled": "true"
}
```

The following is an example of the PUT request to update the search scope of directory handler to a search space:

Response Code: 204



Note

- If a request is sent to enable the voiceenabled field and set the search scope to a COS or distribution list, the search scope is set to entire server.
- If the search scope of a directory handler is already a COS or a distribution list and request is sent to set the voiceenabled to true, the search scope is set to entire server.

Updating the Language of Directory Handler

This request can be used to update a language for a directory handler. It can be used to set a particular language for a directory handler, set the system default language as the language of directory handler or set the language of directory handler as inherit from call.

```
URI to get Language code: https://<connection-server>/vmrest/languagemap
URI to Get Language code for installed languages:
https://<connection-server>/vmrest/installedlang
```

The below table specify the details of value for each field:

UseCallLanguage	UseDefaultLanguage	Language	Description
false	true	Null/Language Code	This will select the default language.
true	true/false	Null/Language Code	This will inherit the language from user.
false	false	Language Code	This will select the particular language as per the code.

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectid>
```

Example 1: Updating the Inherit Language field and not the Language field

Request Body

```
<Directoryhandler>
<UseCallLanguage>true</UseCallLanguage>
<UseDefaultLanguage>>false</UseDefaultLanguage>
</Directoryhandler>
```

```
Response Code: 204
```

The Inherit Language field from the call is selected but the UseDefaultLanguage field will not get updated in the database as the Language field is missing. If the Language field is NULL, the UseDefaultLanguage field is by default set to TRUE.

Example 2: Updating the Inherit Language field and the Language field

Request Body

```
<Directoryhandler>
<UseCallLanguage>true</UseCallLanguage>
<UseDefaultLanguage>>false</UseDefaultLanguage>
<Language>1033</Language>
</Directoryhandler>
```

```
Response Code: 204
```

The Inherit Language field from the call is selected but the UseDefaultLanguage field is updated in the database as the Language field is specified.

JSON Example

To change language, do the following:

Request URI

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryHandlerObjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body

```
{
  "UseCallLanguage": "true",
  "UseDefaultLanguage": "false",
  "Language": "1033"
}
```

Response Code: 204

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
Language	Read/Write	Integer	Specifies the language code. All possible language code values can be fetched using <connection server>/vmrest/languagemap.
Display Name	Read/Write	String(64)	The display name of Directory Handler
Undeletable	Read/Write	Boolean	Shows whether the Directory Handler can be deleted or not. Values: <ul style="list-style-type: none"> • false: The handler can be deleted by an administrator. • true: The handler cannot be deleted by an administrator. Default value: false
VoiceName	Read/Write	String(40)	Specifies the .wav file which is the recorded name.
VoiceFileURI	Read Only	String	Specifies the URI of the voice file.
VoiceNameURI	Read Only	String	Specifies the URI of voice names.
LocationObjectId	Read Only	String(36)	The unique identifier of the location object to which this handler belongs. Location, e.g. "Seattle Office."
LocationURI	Read Only	String	Specifies the URI of location.

Parameter	Operations	Data Type	Comments
EndDialDelay	Read/Write	Integer	The amount of time (in seconds) that Cisco Unity Connection waits after caller input before performing the action indicated by the input. Value can be in the range 1-10. Default Value: 4.
MaxMatches	Read/Write	Integer	The number of matches that if exceeded, will result in Cisco Unity Connection prompting the caller to dial more letters. Value can be in the range 1-30. Default value: 8.
MenuStyle	Read/Write	Boolean	A flag indicating how Cisco Unity Connection presents directory matches to callers - either in "menu choice" or "extension list" format. Note: MenuStyle cannot be set to false for the System Default Directory Handler. Possible values can be: <ul style="list-style-type: none"> • true : menu choice • false : extension list. Default value: true.
SayExtension	Read/Write	Boolean	A flag indicating whether Cisco Unity Connection provides a menu of subscriber names including extensions, or just subscriber names. Possible values can be: <ul style="list-style-type: none"> • false: Play only subscriber names in menu list. • true: Play subscriber names and extensions in menu list. Default value : true
SearchByFirstName	Read/Write	Boolean	A flag indicating whether a directory handler searches for subscribers by using first name first, or last name first. Values: <ul style="list-style-type: none"> • false: Search by last name, then first name. • true: Search by first name, then last name. Default value: false.
StartDialDelay	Read/Write	Integer	The amount of time (in seconds) that Cisco Unity Connection waits for the caller to start dialing. Default value: 5. Value can be in the range 1-10.
Tries	Read/Write	Integer	The number of times Cisco Unity Connection will reprompt the caller for input, e.g. dial name. Default value : 1. Value can be in the range 0-10.

Parameter	Operations	Data Type	Comments
UseStarToExit	Read/Write	Boolean	A flag indicating the key on the phone to use for "exit the directory." Values: <ul style="list-style-type: none"> • true: Use star ("*") key to exit directory handler. • false: Use pound/hash ("#") key to exit directory handler. Default value: true.
SearchScope	Read/Write	Integer	The scope of the directory that Cisco Unity Connection will search. Default value: 0(search scope set as entire server). Possible values : Refer to the SearchScope section under the Enumeration Type as given at the end of the document
SearchScopeObjectId	Read/Write	String(36)	ObjectId of the Search Scope type set. For example : For Class of Service it will be Class Of Service Object ID.
ScopeObjectCosObjectId	Read Only	String(36)	Represents a Class of Service(COS) .Only users with this COS will be included in the directory handler.
ScopeObjectDistributionListObjectId	Read Only	String(36)	Represents a Distribution List. Only users who are members of this distribution list will be included in the directory handler.
ScopeObjectLocationObjectId	Read Only	String(36)	Represents a Cisco Unity Connection Location .Only those users assigned to this location will be included in the directory handler.
ScopeObjectSearchSpaceObjectId	Read Only	String(36)	Represents a Search Space .The unique identifier of the search space which can act as filter for the directory handler.
PlayAllNames	Read/Write	Boolean	A flag indicating whether Cisco Unity Connection plays the names of subscribers in the directory for caller selection, rather than requiring the caller to search by spelled name. Default value: false.
ExitAction	Read/Write	Integer	Specifies the exit action. Default Value is 2. Possible Values: Refer to the section Enumeration Type at the end of the document.
ExitTargetConversation	Read/Write	String(64)	Specifies the conversation to go to upon exit. Default value is "PHTransfer". Possible Values: Refer to the section Enumeration Type at the end of the document.
ExitTargetHandlerObjectId	Read/Write	String(36)	The Unique Identifier of the call action object that Cisco Unity Connection performs if the caller exits the directory handler.

Parameter	Operations	Data Type	Comments
NoInputAction	Read/Write	Integer	Specifies the action to be performed if there is no caller Input. Default Value: 2. Possible Values: Refer to the section Enumeration Type at the end of the document.
NoInputTargetConversation	Read/Write	String(64)	Specifies the conversation to go when caller gives no Input. Default value is "PHTransfer". Refer to the section Enumeration Type at the end of the document.
NoInputTargetHandlerObjectId	Read/Write	String(36)	The unique identifier of the CallAction object that Cisco Unity Connection performs (or the destination to which calls are sent) if the caller does not enter a name or by not responding to prompts.
NoSelectionAction	Read/Write	Integer	Specifies the action to be performed when caller does not select anything. Default Value: 2. Possible Values: Refer to the section Enumeration Type at the end of the document.
NoSelectionTargetConversation	Read/Write	String(64)	Specifies the conversation to go when caller does not select anything. Default value is "PHTransfer" . Refer to the section Enumeration Type at the end of the document.
NoSelectionTargetHandlerObjectId	Read/Write	String(36)	The unique identifier of the CallAction object that Cisco Unity Connection performs (or the destination to which the caller is sent to) if the caller makes no selection from a list of matches.
ZeroAction	Read/Write	Integer	Specifies the action to be performed for caller input '0'. Default Value: 2 Possible Values: Refer to the section Enumeration Type at the end of the document.
ZeroTargetConversation	Read/Write	String(64)	Specifies the conversation when caller presses 0. Default value is "PHTransfer". Refer to the section Enumeration Type at the end of the document.
ZeroTargetHandlerObjectId	Read/Write	String(36)	The unique identifier of the CallAction object that Cisco Unity Connection performs if caller presses zero ("0") key during menu style list of names.

Parameter	Operations	Data Type	Comments
AutoRoute	Read/Write	Boolean	Represents how the call should be routed once the matches are found in the Directory. Default value: false. Values: <ul style="list-style-type: none"> • false: Presents a list of matches, even if only one, and prompts the user to verify the match. • true: Automatically routes a call to the extension assigned to the subscriber on a unique match without prompting the caller to verify the match.
ObjectId	Read Only	String(36)	Object Id of the directory handler
TenantObjectId	Read Only	String(36)	The unique identifier of the tenant to which the directory handler belongs. This field is reflected in the response only if the directory handler belongs to a particular tenant.
DtmfAccessId	Read/Write	String(40)	Extension of the Directory handler
VoiceEnabled	Read/Write	Boolean	A flag indicating whether the directory handler will use voice based addressing rather than touchtones. Default value: false. Values: <ul style="list-style-type: none"> • false: Use touchtones • true: Use voice commands
UseCallLanguage	Read/Write	Boolean	Specifies if the language as inherited from the call is to be used. Default value is true.
UseDefaultLanguage	Read/Write	Boolean	Specifies if the system default language has to be used. Default value is true.
PartitionObjectId	Read/Write	String(36)	Object Id of the partition the directory handler belongs to
PartitionURI	Read Only	String	URI of partitions
SpeechConfidenceThreshold	Read/Write	Integer	When the engine matches a spoken phrase, it associates a confidence level with that conclusion. This parameter determines what confidence level should be considered a successful match. Default Value is 10. Range of Value is 0 -100
SayCity	Read/Write	Boolean	A flag indicating if the user's city is voiced when a match is voiced. Default value is false.
SayDepartment	Read/Write	Boolean	A flag indicating if the user's department is voiced when a match is voiced. Default value is false.

Parameter	Operations	Data Type	Comments
UseCustomGreeting	Read/Write	Boolean	Indicates whether to use the directory handler's custom greeting or the system prompt. Default value is false.
CreationTime	Read Only	DateTime	Specifies the creation time of the directory handlers.
ExitConversationURI	Read Only	String	Specifies the URI to fetch the conversation values which can be used as the ExitConversation
NoInputConversationURI	Read Only	String	Specifies the URI to fetch the conversation values which can be used as the NoInputConversation.
NoSelectionConversationURI	Read Only	String	Specifies the URI to fetch the conversation values which can be used as the NoSelectionConversation.
ZeroExitConversationURI	Read Only	String	Specifies the URI to fetch the conversation values which can be used as the ZeroExitConversation
DirectoryHandlerStreamFileURI	Read Only	String	Specifies the URI for the Directory Handler Stream files which are used as the greeting for the Directory Handler.

Cisco Unity Connection Provisioning Interface (CUPI) API--Directory Handler Greeting APIs

Directory Handler Greeting APIs

Administrator can use this API to create/update/fetch the Directory Handler Greeting.

There are three ways to upload the Custom Greeting for the Directory Handler :

- 1) Upload a .wav file from the desktop.
- 2) Record a recording using CUTI(Cisco Unity Telephony Interface) and upload to the Directory Handler.
- 3) Pass the .wav as an inputStream to the Directory Handler.Administrator can use this API to create/update/fetch the directory handler greeting. You can update various attributes of directory handler greeting using this API.

Enable Use of Custom Recordings on a Directory Handler

Custom Greetings can be enabled on a directory handler using the directory handler API. A PUT operation has to be performed to set the UseCustomGreetings field to True:

```
PUT https://<connection-server>/vmrest/directoryhandlers/<DirectoryhandlerObjectId>
```

```
<DirectoryHandler>
  <UseCustomGreeting>true<UseCustomGreeting>
</DirectoryHandler>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To enable use of custom recordings on a directory handler, do the following:

```
PUT https://<connection-server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>
Accept: application /json
Content-Type: application/json
Connection: keep-alive
```

```
{
  "UseCustomGreeting": "true"
}
```

The following is an example of the *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Listing Directory Handler Greeting

The following is an example of the GET request that lists all the custom recordings for a directory handler represented by the provided value of directory handler ID:

```
GET https://<connection-
server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>/directoryhandlerstreamfiles
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<DirectoryHandlerStreamFiles>
  <DirectoryHandlerStreamFile>
    <DirectoryHandlerObjectId>3a0043ab-933b-45f6-852d-e0a261554da2</DirectoryHandlerObjectId>

    <LanguageCode>1033</LanguageCode>
    <StreamFile>5a0c7347-4064-4e94-a9c8-b12426d38f8a.wav</StreamFile>
  </DirectoryHandlerStreamFile>
</DirectoryHandlerStreamFiles>
```

```
Response Code: 200
```

JSON Example

To list directory handler greeting, do the following:

```
Request URI:
GET https://<connection-
server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>/directoryhandlerstreamfiles
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "DirectoryHandlerStreamFile":
  {
    "DirectoryHandlerObjectId": "06628a5c-b755-466d-9e39-66e1956c2242",
    "LanguageCode": "1033",
    "StreamFile": "050590b8-fb8f-4e8d-ab17-4e29eab7d412.wav"
  }
}
```

Response Code: 200

Viewing Custom Recording for a Particular Language

The following is an example of the GET request that list the custom recording for a particular language from a directory handler:

```
GET https://<connection-
server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>/directoryhandlerstreamfiles
/1033
```

Playing an Existing Greeting

The following is an example that will play an existing greeting in the browser:

```
https://<connection-
server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>/directoryhandlerstreamfiles
/1033/audio
```

Add or Update Greeting by Uploading File from the Desktop

It is a 3 step process

Step 1: A place-holder for the WAV file must be created with a POST. This is a temporary file place-holder that can be used for up to 30 minutes. If it is not assigned to a resource within 30 minutes, the file is assumed to be abandoned and is automatically cleaned.

```
POST https://<connection-server>/vmrest/voicefiles
```

Response Code: 201

The content is the name of the newly created temporary .wav file.

JSON Example

To create a place-holder for the WAV file, do the following:

```
Request URI:
POST https://<connection-server>/vmrest/voicefiles
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

```
Response Code: 201
Sample Response: 6d9f3b85-c1df-4af8-89f3-6a975ebfb24c.wav
```

Step 2: Use the temporary file name to PUT the new audio data. The HTTP content type is "audio/wav" and the payload content is the audio data.

NOTE:*Rename the .wav file which is to be uploaded as the greeting to the temporary file name generated as part of the response from step1. For eg : If the file on desktop has name "greeting.wav" and the temporary file name is 6d9f3b85-c1df-4af8-89f3-6a975ebfb24c.wav(got as part of the response of step1), then the file should be renamed to 6d9f3b85-c1df-4af8-89f3-6a975ebfb24c.wav before step 2 is performed.

- The length of the greeting can be set under the System Settings > General Configuration settings. Here you can enter the maximum length for system call handler greetings. The range is 1 to 1,200 seconds.

Default setting: 90 seconds. PUT /vmrest/voicefiles/<temporary file name>< /pre>

```
Response Code: 204
```

The content gets accepted and copied into the temporary file.

JSON Example To use the temporary file name, do the following:

```
Request URI:
PUT https://<connection server>/vmrest/voicefiles/<temporary file name>
Content-Type: audio/wav
Connection: keep-alive
```

```
Response Code: 204
```

Step 3: Set the Greeting field of the target resource. Both POST/ PUT can be used for adding a greeting. The PUT request should be used for updating the greeting with a new stream file.

```
POST https://<connection-
server>/vmrest/handlers/directoryhandlers/<directoryhandlerObjectId>/directoryhandlerstreamfiles
/1033
Request Body:
<DirectoryHandlerStreamFile>
  <StreamFile>7acbfe8-25a3-4b02-bd23-2b61acc175c9.wav</StreamFile>
</DirectoryHandlerStreamFile >
```

```
Response Code: 201
```

JSON Example

To set the greeting field of the target resource, do the following:

```
Request URI:
POST
https://<connection-server>/vmrest/handlers/directoryhandlers/<directoryhandlerObjectId>/directoryhandlerstreamfiles/1033
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "StreamFile": "050590b8-fb8f-4e8d-ab17-4e29eab7d412.wav"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Use the following URL in a browser to play the stream file:

<https://<connection-server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>/directoryhandlerstreamfiles/1033/audio>

Add/Update Greeting Recording Used in Telephony Interface

It is a three step process to record a new file then modify the current stream with this new stream.

Step 1: Call Connection In the first step integration between Unity Connection and Call Manager must be setup so that a call can be setup. Refer to the document at the below link to check how to make the call.
[http://docwiki.cisco.com/wiki/Cisco_Unity_Connection_Telephony_Interface_\(CUTI\)_API_-_Using_CUTI_for_Basic_Call_Operations](http://docwiki.cisco.com/wiki/Cisco_Unity_Connection_Telephony_Interface_(CUTI)_API_-_Using_CUTI_for_Basic_Call_Operations)

In the first step integration between Unity Connection and Call Manager must be setup so that a call can be setup. Refer to the document at the below link to check how to make the call.

Step 2: Recording Once the phone is answered, the second step is to record the greeting. Refer to the document below to check how to record a greeting.

[http://docwiki.cisco.com/wiki/Cisco_Unity_Connection_Telephony_Interface_\(CUTI\)_API_-_Using_CUTI_for_Basic_Call_Operations](http://docwiki.cisco.com/wiki/Cisco_Unity_Connection_Telephony_Interface_(CUTI)_API_-_Using_CUTI_for_Basic_Call_Operations)

Step 3: Upload Greeting The response for the step 2 is a Call Control object xml. That xml is to be passed in as the request body for this request.

```
PUT https://<Connection
Server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>/directoryhandlerstreamfiles/1033/audio
Request Body:
<CallControl>
  <op>RECORD</op>
  <resourceType>STREAM</resourceType>
  <resourceId>67ed783c-203f-454b-a0e6-57b77820c831.wav</resourceId>
  <lastResult>0</lastResult>
  <speed>100</speed>
  <volume>100</volume>
  <startPosition>0</startPosition>
</CallControl>
```

```
Response Code: 204
```

JSON Example

To upload greeting, do the following:

```
PUT
https://<connection-server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>/directoryhandlerstreamfiles/1033/audio
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "op": "RECORD",
  "resourceType": "STREAM",
  "resourceId": "67ed783c-203f-454b-a0e6-57b77820c831.wav",
  "lastResult": "0",
  "speed": "100",
  "volume": "100",
  "startPosition": "0"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Use the following URL in browser to play the stream file:

Use the following URL in browser to play the stream file: `https://<connection-server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>/directoryhandlerstreamfiles/1033/audio` Update the Greeting using the Input Stream The Directory Handler greeting can also be updated using the Input Stream. An input stream can be created from the wav file and passed as the request body. The URL for this should be :

`<connection-server>/vmrest/handlers/directoryhandlers/<DirectoryHandlerObjectId>/directoryhandlerstreamfiles/1033/audio` Update the Greeting using the Input Stream The Directory Handler greeting can also be updated using the Input Stream. An input stream can be created from the wav file and passed as the request body. The URL for this should be :

```
RequestURI :
https://<connectionserver>/vmrest/handlers/directoryhandlers/<directoryhandlerobjectid>/directoryhandlerstreamfiles/1033/audio.
```

The request body should be like this: `put.setRequestBody(new FileInputStream(file3));` Here put is the PUT request created, file3 is the wav file which user want to upload. Also the content type for the request should be passed as "audio/wav". Following URL can be used to listen to the greeting associated with the directory handler. Paste the URL in the browser and listen to the uploaded greeting:

`https://<connectionserver>/vmrest/handlers/directoryhandlers/<directoryhandlerobjectid>/directoryhandlerstreamfiles/1033/audio`

Explanation of Data Fields

Parameter	Operations	Data Type	Comments
DirectoryHandlerObjectId	Read Only	String (36)	Object ID of the custom recording.
LanguageCode	Read/Write	Integer	Specifies the enumeration type.
StreamFile	Read/Write	String (40)	Contains the .wav file that has been sent.



Note To fetch the languages installed on a Unity Connection server, use the following URL:

```
GET https://<connection-server>/vmrest/installedlanguages
```

For more information on the Language Map API, please refer to the following document: http://docwiki.cisco.com/wiki/Cisco_Unity_Connection_Provisioning_Interface_%28CUPI%29_API_-_Language_Map



CHAPTER 40

Cisco Unity Connection Provisioning Interface (CUPI) API--Interview Handler APIs

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Interview Handler APIs, on page 551](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Interview Handler Questions APIs, on page 561](#)

Cisco Unity Connection Provisioning Interface (CUPI) API -- Interview Handler APIs

Interview Handler APIs

Interview Handler APIs

Interview Handler Questions APIs

Listing the Interview Handlers

The following is an example of the GET request that fetch the list of interview handlers:

```
GET https://<connection-server>/vmrest/handlers/interviewhandlers
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<InterviewHandlers total="1">
  <InterviewHandler>
    <URI>/vmrest/handlers/interviewhandlers/9153ef65-c38a-4588-b041-1cfac4ae0226</URI>
    <CreationTime>2013-01-10T12:02:20Z</CreationTime>
    <Language>1033</Language>
    <DisplayName>Texoma_IH2</DisplayName>
    <Undeletable>>false</Undeletable>
    <VoiceName>7b904f83-2b9c-4283-a22e-6e28028b2750.wav</VoiceName>
    <VoiceFileURI>/vmrest/voicefiles/ccb35746-d253-42ed-b481-4d906ae2e882</VoiceFileURI>
    <VoiceNameURI>/vmrest/handlers/interviewhandlers/9153ef65-c38a-4588-b041-1cfac4ae0226/voicename</VoiceNameURI>
    <LocationObjectId>312f6d60-f9e8-447a-b7d9-a25040fa0ca2</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/312f6d60-f9e8-447a-b7d9-a25040fa0ca2</LocationURI>
    <SendUrgentMsg>0</SendUrgentMsg>
    <ObjectId>9153ef65-c38a-4588-b041-1cfac4ae0226</ObjectId>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
    <RecipientDistributionListObjectId>80b13e8d-1dbe-4389-ba97-91aaa10512fe</RecipientDistributionListObjectId>
    <RecipientDistributionListURI>/vmrest/distributionlists/80b13e8d-1dbe-4389-ba97-91aaa10512fe</RecipientDistributionListURI>
    <AfterMessageAction>1</AfterMessageAction>
    <UseCallLanguage>>true</UseCallLanguage>
    <UseDefaultLanguage>true</UseDefaultLanguage>
    <DispatchDelivery>false</DispatchDelivery>
    <PartitionObjectId>d3c659f3-27f7-43c8-bb25-778cec9fba21</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/d3c659f3-27f7-43c8-bb25-778cec9fba21</PartitionURI>

    <InterviewQuestionsURI>/vmrest/handlers/interviewhandlers/9153ef65-c38a-4588-b041-1cfac4ae0226/interviewquestions</InterviewQuestionsURI>

  </InterviewHandler>
</InterviewHandlers>

```

Response Code: 200

JSON Example

To view the list of interview handlers, do the following:

```

Request URI:
GET https://<connection-server>/vmrest/handlers/interviewhandlers
Accept: application/json
Connection: Keep-alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:


```

{
  "@total": "1",
  "InterviewHandler": [
    {
      "URI": "/vmrest/handlers/interviewhandlers/f1d0640b-f268-4725-87bb-e1762314fee6",
      "CreationTime": "2013-02-13T10:10:43Z",
      "Language": "1033",
      "DisplayName": "Taxoma_Interviewer_1",
      "Undeletable": "false",
      "LocationObjectId": "df46033e-0058-4f7e-b5fc-8346df0ffeel",
      "LocationURI": "/vmrest/locations/connectionlocations/df46033e-0058-4f7e-b5fc-8346df0ffeel",
      "SendUrgentMsg": "0",
      "ObjectId": "f1d0640b-f268-4725-87bb-e1762314fee6",
      "TenantObjectId": "fe6541fb-b42c-44f2-8404-ded14cbf7438",
      "RecipientSubscriberObjectId": "47749981-5ceb-4674-a6b7-0b0afde4bfcc",
      "RecipientUserURI": "/vmrest/users/47749981-5ceb-4674-a6b7-0b0afde4bfcc",
      "AfterMessageAction": "4",
      "UseCallLanguage": "true",
      "UseDefaultLanguage": "true",
      "DispatchDelivery": "false",
      "PartitionObjectId": "30438c03-e8de-4584-bb5b-0dae05faf0af",
      "PartitionURI": "/vmrest/partitions/30438c03-e8de-4584-bb5b-0dae05faf0af",
      "InterviewQuestionsURI": "/vmrest/handlers/interviewhandlers/f1d0640b-f268-4725-87bb-e1762314fee6/interviewquestions"
    },
  ],
}

```

Response Code: 200

Listing Specific Tenant Related Interview Handlers by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectId to list the specific tenant related interview handlers using the following URI:

```
GET https://<connection-server>/vmrest/handlers/interviewhandlers?query=(TenantObjectId is <Tenant-ObjectId>)
```

To get the TenantObjectId, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Viewing the Details of Specific Interview Handler

The following is an example of the GET request that lists the details of interview handler represented by the provided value of interview handler ID:

```
GET https://<connection-server>/vmrest/handlers/interviewhandlers/<InterviewHandlerObject-Id>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<InterviewHandler>
  <URI>/vmrest/handlers/interviewhandlers/9153ef65-c38a-4588-b041-1cfac4ae0226</URI>
  <CreationTime>2013-01-10T12:02:20Z</CreationTime>
  <Language>1033</Language>
  <DisplayName>Texoma_IH2</DisplayName>
  <Undeletable>false</Undeletable>
  <VoiceName>7b904f83-2b9c-4283-a22e-6e28028b2750.wav</VoiceName>
  <VoiceFileURI>/vmrest/voicefiles/ccb35746-d253-42ed-b481-4d906ae2e882</VoiceFileURI>
  <VoiceNameURI>/vmrest/handlers/interviewhandlers/9153ef65-c38a-4588-b041-
1cfac4ae0226/voicename</VoiceNameURI>
  <LocationObjectId>312f6d60-f9e8-447a-b7d9-a25040fa0ca2</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/312f6d60-f9e8-447a-b7d9-
a25040fa0ca2</LocationURI>
  <SendUrgentMsg>0</SendUrgentMsg>
  <ObjectId>9153ef65-c38a-4588-b041-1cfac4ae0226</ObjectId>
  <RecipientDistributionListObjectId>80b13e8d-1dbe-4389-ba97-
91aaa10512fe</RecipientDistributionListObjectId>
  <RecipientDistributionListURI>/vmrest/distributionlists/80b13e8d-1dbe-4389-ba97-
91aaa10512fe</RecipientDistributionListURI>
  <AfterMessageAction>1</AfterMessageAction>
  <UseCallLanguage>true</UseCallLanguage>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <DispatchDelivery>false</DispatchDelivery>
  <PartitionObjectId>d3c659f3-27f7-43c8-bb25-778cec9fba21</PartitionObjectId>
  <PartitionURI>/vmrest/partitions/d3c659f3-27f7-43c8-bb25-778cec9fba21</PartitionURI>
  <InterviewQuestionsURI>/vmrest/handlers/interviewhandlers/9153ef65-c38a-4588-b041-
1cfac4ae0226/interviewquestions</InterviewQuestionsURI>
</InterviewHandler>

```

Response Code: 200

JSON Example

To view the list of interview handlers, do the following:

```

Request URI:
GET https://<
connection-server>/vmrest/handlers/interviewhandlers/<InterviewHandlerObject-Id>
Accept: application/json
Connection: Keep-alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/handlers/interviewhandlers/f1d0640b-f268-4725-87bb-e1762314fee6",
  "CreationTime": "2013-02-13T10:10:43Z",
  "Language": "1033",
  "DisplayName": "Texoma_IH2",
  "Undeletable": "false",
  "LocationObjectId": "df46033e-0058-4f7e-b5fc-8346df0ffeel",
  "LocationURI": "/vmrest/locations/connectionlocations/df46033e-0058-4f7e-b5fc-8346df0ffeel",
  "SendUrgentMsg": "0",
  "ObjectId": "f1d0640b-f268-4725-87bb-e1762314fee6",
  "RecipientSubscriberObjectId": "47749981-5ceb-4674-a6b7-0b0afde4bfcc",
  "RecipientUserURI": "/vmrest/users/47749981-5ceb-4674-a6b7-0b0afde4bfcc",
  "AfterMessageAction": "4",
  "UseCallLanguage": "true",
  "UseDefaultLanguage": "true",
  "DispatchDelivery": "false",
  "PartitionObjectId": "30438c03-e8de-4584-bb5b-0dae05faf0af",
  "PartitionURI": "/vmrest/partitions/30438c03-e8de-4584-bb5b-0dae05faf0af",
  "InterviewQuestionsURI": "/vmrest/handlers/interviewhandlers/f1d0640b-f268-4725-87bb-e1762314fee6/interviewquestions"
}
```

Response Code: 200

<pre>

=== Creating a New Interview Handler ===

The following is an example of the POST request that creates a new interview handler:

<pre>

POST https://<connection-server>/vmrest/handlers/interviewhandlers

Request Body:

<InterviewHandler>

<DisplayName>Texoma_IH2</DisplayName>

<RecipientDistributionListObjectId>80b13e8d-1dbe-4389-ba97-

91aaal0512fe</RecipientDistributionListObjectId>

</InterviewHandler>

Response Code: 200

<pre>

'''JSON Example'''

To create a new interview handler:

<pre>

POST https://<connection-server>/vmrest/handlers/interviewhandlers

Accept: application/json

Content-Type: application/json

Connection: Keep-alive

{

"DisplayName": "Taxoma Interviewer",

"RecipientDistributionListObjectId": "c596c45c-00a3-4714-a359-4ac45da38232"

}

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

Response Code: 201

Delete the Interview Handler

This request can be used to delete an interview handler specified by an object ID.

```
DELETE: https://<connection-server>/vmrest/
handlers/interviewhandlers/<interviewhandler-objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To delete interview handler, do the following:

```
Request URI:
DELETE
https://<connection-server>/vmrest/handlers/interviewhandlers/<interviewhandler-objectid>
Accept: application/json
Connection: Keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Updating the Interview Handler

Example 1: Modify the Interview Handler The following is an example of the PUT request that can be used to modify the interview handler.

```
PUT https://<connection-server>/vmrest/handlers/interviewhandlers/<interviewhandler-objectid>

Request Body:
<InterviewHandler>
  <UseCallLanguage>true</UseCallLanguage>
  <UseDefaultLanguage>>false</UseDefaultLanguage>
  <Language>1033</Language>
</InterviewHandler>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note The Inherit Language field from the call is selected and the UseDefaultLanguage field will get updated in the database as the Language field is specified.

JSON Example

To update the interview handler, do the following:

```

Request URI:
PUT https://<connection-server>/vmrest/handlers/interviewhandlers/<interviewhandler-objectid>
Accept: application/json
Content-Type: application/json
Connection: Keep-alive
Request Body:
{
  "Language": "1033",
  "UseCallLanguage": "true",
  "UseDefaultLanguage": "false"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: Recipient is switched from user with mailbox to Distribution List

```

Request Body:
<InterviewHandler>
  <RecipientDistributionListObjectId>68d149ff-59f6-4394-8103-
f3c2bf75d8bb</RecipientDistributionListObjectId>
</InterviewHandler>

```

```
Response Code: 204
```

RecipientSubscriberObjectId and RecipientUserURI fields are replaced with RecipientDistributionListObjectId and RecipientDistributionListURI. The table given below lists the possible values of the After Interview Action:

| AfterInterviewAction | AfterMessageAction | AfterMessageTargetConversation | AfterMessageTargetHandlerObjectId |
|---|--------------------|---|---|
| CallAction (Refer to the table given below) | 1-8 | NA | NA |
| CallHandler | 2 | PHTransfer/PHGreeting | <object-id> of call handler having IsPrimary parameter as true. URI to get object id of call handlers:
<a href="https://<connection-server>/vmrest/handlers/callhandlers?IsPrimary=true/200">https://<connection-server>/vmrest/handlers/callhandlers?IsPrimary=true/200 |
| Interview Handler | 2 | PHInterview | <object-id> of interview handler. URI to get object id of Interview handlers:
<a href="https://<connection-server>/vmrest/handlers/interviewhandlers">https://<connection-server>/vmrest/handlers/interviewhandlers |
| Directory Handler | 2 | AD | <object-id> of directory handler. URI to get object id of directory handlers:
<a href="https://<connection-server>/vmrest/handlers/directoryhandlers">https://<connection-server>/vmrest/handlers/directoryhandlers |
| Conversation | 2 | BroadcastMessageAdministrator <ul style="list-style-type: none"> • SystemTransfer • GreetingsAdministrator • SubSignIn • SubSysTransfer | NA |

| AfterInterviewAction | AfterMessageAction | AfterMessageTargetConversation | AfterMessageTargetHandlerObjectId |
|----------------------|--------------------|--------------------------------|---|
| User with Mailbox | 2 | PHTransfer/PHGreeting | <object-id> which can be captured from /vmrest/users. |

| Name | Call Action Value | Description |
|--------------------|-------------------|--|
| Ignore | 0 | Ignore - no action taken. |
| Hangup | 1 | Hangup - the call is immediately terminated. |
| Goto | 2 | Goto - go to an object such as a call handler, directory handler or interview handler. |
| Error | 3 | Error - play the error greeting. |
| TakeMsg | 4 | Take a message. |
| SkipGreeting | 5 | Skip greeting. |
| RestartGreeting | 6 | RestartGreeting - restart greeting on current handler |
| TransferAltContact | 7 | Transfer to Alternate Contact Number |
| RouteFromNextRule | 8 | Route From Next Call Routing Rule |

Explanation of Data Fields

| Parameter | Operations | Data Type | Comments |
|---------------|------------|-------------|--|
| URI | Read Only | String | Interview Handler URI |
| Creation Time | Read Only | Datetime | Stores the time of creation of Interview Handler |
| Language | Read/Write | Integer | Stores code for language where valid values range from 1024 to 58378 and 0 is not allowed. All possible language code values can be fetched using

<code>https://<connection-server>/vmrest/languagemap</code> |
| DisplayName | Read/Write | String (64) | Name of an interview handler |

| Parameter | Operations | Data Type | Comments |
|------------------|------------|-------------|--|
| Undeletable | Read/Write | Boolean | <p>A flag indicating whether this handler can be deleted via an administrative application such as Cisco Unity Connection Administration. It is used to prevent the deletion of factory defaults such as the "Opening Greeting" call handler.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false: The handler can be deleted by an administrator (with the required privilege) via an administrative application such as Cisco Unity Connection Administration or Cisco Unity Connection Bulk Administration Manager. • true: The handler cannot be deleted by an administrator via Cisco Unity Connection Administration or Cisco Unity Connection Bulk Administration Manager. |
| VoiceName | Read/Write | String (40) | The name of the .wav file containing the recorded audio of the name of an interview handler. |
| VoiceFileURI | Read Only | String | Specifies the URI of voice file. |
| VoiceNameURI | Read Only | String | Specifies the URI of voice name. |
| LocationObjectID | Read Only | String (36) | The unique identifier of the Location object to which this handler belongs. |
| LocationURI | Read Only | String | Specifies the URI of locations |
| SendUrgentMsg | Read/Write | Integer | <p>A flag indicating whether an unidentified caller is given a choice to mark a message as Urgent or Normal, or if not given the choice, whether the message is always marked Normal (default value) or Urgent.</p> <p>Possible values :-</p> <ul style="list-style-type: none"> • 2 Ask - Cisco Unity Connection asks unidentified callers whether to mark their interview messages normal or urgent. • 0 Normal - interview messages left by unidentified calls are always marked normal. • 1 Urgent - all interview messages left by unidentified calls are always marked urgent. |
| ObjectId | Read Only | String (36) | Object ID of interview handler. |
| TenantObjectId | Read Only | String (36) | The unique identifier of the tenant to which the interview handler belongs. This field is reflected in the response only if the interview handler belongs to a particular tenant. |

| Parameter | Operations | Data Type | Comments |
|-----------------------------------|------------|-------------|--|
| RecipientDistributionListObjectId | Read/Write | String (36) | Object ID of distribution list if the recipient of interview handler is set to distribution list. |
| RecipientDistributionListURI | Read Only | String | URI of the distribution list. |
| RecipientSubscriberObjectId | Read/Write | String (36) | Object ID of the subscriber if the recipient of interview handler is set to a user. |
| RecipientSubscriberURI | Read/Write | String | URI of the subscriber. |
| AfterMessageAction | Read/Write | Integer | <p>Possible types of call action to take, e.g., hang-up, go to another object, etc.</p> <ul style="list-style-type: none"> • 0 Ignore - no action taken. • 1 Hangup - the call is immediately terminated. • 2 Goto - go to an object such as a call handler, directory handler or interview handler. • 3 Error - play the error greeting. • 4 Take a message. • 5 Skip greeting. • 6 RestartGreeting • 7 Transfer to Alternate Contact Number • 8 Route From Next Call Routing Rule <p>Default value: 4</p> |
| AfterMessageTargetConversation | Read/Write | String (64) | The name of the conversation used to set up, send, and retrieve messages. |
| AfterMessageTargetHandlerObjectId | Read/Write | String (36) | Specifies the URI of the target specified. |
| UseCallLanguage | Read/Write | Boolean | <p>A flag indicating whether Cisco Unity Connection will use the language assigned to the call.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • true: Use the language specified by the system call routing rule to play prompts for users. • false: Do not use the language specified by the system call routing rule to play prompts for users. <p>Default value: true</p> |
| UseDefaultLanguage | Read/Write | Boolean | <p>A flag that is dependent on the value of Language Field. If Language is set to Null, UseDefaultLanguage is set to true(1). If any language is specified, UseDefaultLanguage is set to false(0).</p> <p>Default value: true.</p> |

| Parameter | Operations | Data Type | Comments |
|-----------------------|------------|-------------|--|
| DispatchDelivery | Read/Write | Boolean | A flag indicating that all messages left for the interview handler is for dispatch delivery.

Possible values:-
<ul style="list-style-type: none"> • true: Messages left for interview handler is for dispatch delivery. • false: Messages left for interview handler is not for dispatch delivery Default value: false |
| PartitionObjectId | Read/Write | String (36) | The unique identifier of the Partition to which the InterviewHandler is assigned. |
| PartitionURI | Read Only | String | Specifies the partition URI. |
| InterviewQuestionsURI | Read Only | String | Specifies the URI of interview questions of an interview handler |
| DtmfAccessId | Read/Write | Integer | Specifies an extension number where minimum length can be 1 and maximum length can be 40. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Interview Handler Questions APIs

Interview Handler Questions APIs

Administrator can use this API to fetch/update the interview questions of a particular interview handler. You can update various attributes of interview handler questions as well using this API.

Listing the Interview Handler Questions

The following is an example of the GET request that fetch the list of interview handler questions:

```
GET https://<connection-server>/vmrest/handlers/interviewhandlers/<interviewhandler-objectid>/interviewquestions
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<InterviewQuestions total="1">
  <InterviewQuestion>
    <InterviewHandlerObjectId>9fa58ed4-af0b-4de5-977c-
8c080b0727c1</InterviewHandlerObjectId>
    <InterviewHandlerURI>vmrest/handlers/interviewhandlers/9fa58ed4-af0b-4de5-977c-
8c080b0727c1</InterviewHandlerURI>
    <QuestionNumber>1</QuestionNumber>
    <MaxMsgLength>30</MaxMsgLength>
    <StreamText>1</StreamText>
    <IsActive>true</IsActive>
  </InterviewQuestion>
</InterviewQuestions>
```

Response Code: 200

JSON Example

To update the interview handler, do the following:

```
Request URI:
GET
https://<connection-server>/vmrest/handlers/interviewhandlers/<interviewhandler-objectid>/interviewquestions
Accept: application/json
Connection: Keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  },{
  "@total": "2",
  "InterviewQuestion": [
    {
      "InterviewHandlerObjectId": "99800fcc-e8df-42d3-ac3f-5117483b293e",
      "InterviewHandlerURI": "/vmrest/handlers/interviewhandlers/99800fcc-e8df-42d3-ac3f-
5117483b293e",
      "QuestionNumber": "1",
      "MaxMsgLength": "30",
      "StreamText": "1",
      "IsActive": "true"
    },
    {
      "InterviewHandlerObjectId": "99800fcc-e8df-42d3-ac3f-5117483b293e",
      "InterviewHandlerURI": "/vmrest/handlers/interviewhandlers/99800fcc-e8df-42d3-ac3f-
5117483b293e",
      "QuestionNumber": "2",
      "MaxMsgLength": "30",
      "StreamText": "2",
      "IsActive": "true"
    }
  ]
}
```

Response Code: 200

Viewing the Specific Interview Handler Question

The following is an example of the GET request that lists the details of interview handler question represented by the provided value of interview handler ID:

```
GET https://<connection-server>/vmrest/handlers/interviewhandlers/<Interviewhandler-objectid>/interviewquestions/<questionnumber>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<InterviewQuestion>
  <InterviewHandlerObjectId>9fa58ed4-af0b-4de5-977c-
8c080b0727c1</InterviewHandlerObjectId>
  <InterviewHandlerURI>/vmrest/handlers/interviewhandlers/9fa58ed4-af0b-4de5-977c-
8c080b0727c1</InterviewHandlerURI>
  <QuestionNumber>2</QuestionNumber>
  <MaxMsgLength>30</MaxMsgLength>
  <StreamText>2</StreamText>
  <IsActive>true</IsActive>
</InterviewQuestion>
```

```
Response Code: 200
```

Updating the Interview Handler Questions

The following is an example of the PUT request that can be used to modify an interview handler questions.

```
PUT
https://<connection-server>/vmrest/handlers/interviewhandlers/<interviewhandler-objectid>/interviewquestions/<questionnumber>
Request Body:
<InterviewQuestion>
  <IsActive>>false</IsActive>
</InterviewQuestion>
```

```
Response Code: 204
```

JSON Example

To update the interview handler, do the following:

```
Request URI:
PUT
https://<connection-server>/vmrest/handlers/interviewhandlers/<interviewhandler-objectid>/interviewquestions/<questionnumber>
Accept: application/json
Content-Type: application/json
Connection: Keep-alive
Request Body:
{
  "IsActive": "false"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

| Parameter | Operations | Data Type | Comments |
|--------------------------|------------|-----------|--|
| InterviewHandlerObjectid | Read Only | String | Object id of the parent interview handler. |
| InterviewHandlerURI | Read Only | String | URI of the parent interview handler. |
| QuestionNumber | Read Only | Integer | Specifies the question number. Questions are numbered from 1 to 20. |
| MaxMsgLength | Read/Write | Integer | The maximum recording length (in seconds) allowed for caller responses to the question.
Value can range from 1 to 1200. Default value: 30 seconds |
| StreamText | Read/Write | String | Specifies the question text. Defaults to the index "1", "2", etc. |
| IsActive | Read/Write | Boolean | Specifies whether question is active or not
Possible values:
<ul style="list-style-type: none"> • true: activate question • false: Inactivate question Default Value: true |
| VoiceFile | Read/Write | NA | Specifies the name of the .wav file. |

Update the Interview question using the Input Stream

The Interview question can also be updated using the Input Stream. An input stream can be created from the wav file and passed as the request body. The URL for this should be :

```
PUT
https://<connectionserver>/vmrest/handlers/interviewhandlers/<interviewhandlerobjectid>/interviewquestions/
<QuestionNumber>/audio.
```

The request body will contain an attachment with media type audio/wav. Attachment can be uploaded via application to upload the wave file over HTTPS. Also add the header "content-type" for the request which value will be passed as "audio/wav".

Following URL can be used to listen/get to the question associated with the interview handler: Paste the URL in the browser and listen to the uploaded question.

```
https://<connectionserver>/vmrest/handlers/interviewhandlers/<interviewhandlerobjectid>/interviewquestions/<QuestionNumber>/audio.
```



CHAPTER 41

Cisco Unity Connection Provisioning Interface (CUPI) API--Call Routing

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API-- Routing Rules, on page 565](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Routing Rule Conditions, on page 580](#)

Cisco Unity Connection Provisioning Interface (CUPI) API--Routing Rules

About Routing Rules and Routing Rule Conditions

This page contains information on how to use the API to create, list, update, and delete Routing Rules and their support objects, Routing Rule Conditions. Please note that the syntax for Routing Rules and Routing Rule Conditions is relatively complicated. Retrieving existing rules and conditions is not too difficult, but creating and modifying them via CUPI should only be done with great care. If the Routing Rules or Routing Rule Conditions are misconfigured, they might not display correctly in Cisco Unity Connection Administration (CUCA), and calls into Cisco Unity Connection might not get answered or might route to the wrong Conversation. Routing Rules and Routing Rule Conditions both include some fields that are enumeration types (meaning numeric constants), which makes understanding these fields more complicated. Some examples can be found near the end of this document.

Each Routing Rule has a Type (Direct, Forwarded, or Both) and a RuleIndex (starting at index 0 and increasing by 1 for each additional rule). When Cisco Unity Connection answers a call of the specified type, it attempts to match the Routing Rules in order starting at RuleIndex 0 and continuing with each successive index until a rule matches. The factory default rules (which are built in and cannot be deleted) should match any call that doesn't match a custom rule. An individual Routing Rule also specifies the destination for the call in the event the rule matches, such as a user, call handler, interview handler, directory handler, or conversation.

In addition, each Routing Rule can have 0 or more Routing Rule Conditions, and a call must match all of these conditions before it is considered a match. If a Routing Rule does not have any Routing Rule Conditions, then all calls match it. The default Routing Rule, which transfers to the Opening Greeting, does not have any Routing Rule Conditions and is usually at the highest RuleIndex, so if a call does not match any other Routing Rules it ends up at the Opening Greeting. An individual Routing Rule Condition can specify any of the following conditions: call information such as Calling Number, Called Number, or Redirecting Number (Forwarded Routing Rules only); port or phone system; or schedule.

Routing Rules

Listing and Viewing

The following is an example of a GET that lists all Routing Rules:

```
GET https://<connection-server>/vmrest/routingrules
```

The following is the response from the above GET request:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<RoutingRules total="3">
  <RoutingRule>
    <URI>/vmrest/routingrules/a2f64719-c82f-491c-996f-ee543e6d7e38</URI>
    <ObjectId>a2f64719-c82f-491c-996f-ee543e6d7e38</ObjectId>
    <DisplayName>Opening Greeting</DisplayName>
    <State>0</State>
    <RuleIndex>2</RuleIndex>
    <Type>3</Type>
    <Flags>3</Flags>
    <RouteTargetConversation>PHTransfer</RouteTargetConversation>
    <RouteTargetHandlerObjectId>198ff222-1129-486c-9bef-c05057dae950</RouteTargetHandlerObjectId>
    Cisco_Unity_Connection_Provisioning_Interface_(CUPI)_API_--_Routing_Rules
    About Routing Rules and Routing Rule Conditions 2
    <RouteTargetHandlerDisplayName>Opening Greeting</RouteTargetHandlerDisplayName>
    <RouteTargetHandlerObjectType>3</RouteTargetHandlerObjectType>
    <RouteAction>2</RouteAction>
    <LanguageCode>0</LanguageCode>
    <UseDefaultLanguage>true</UseDefaultLanguage>
    <UseCallLanguage>true</UseCallLanguage>
    <CallType>2</CallType>
    <SearchSpaceObjectId>02cb3fba-1525-4768-89f6-64f4712ea177</SearchSpaceObjectId>
    <SearchSpaceURI>/vmrest/searchspaces/02cb3fba-1525-4768-89f6-64f4712ea177</SearchSpaceURI>
    <Undeletable>true</Undeletable>
    <RoutingRuleConditionsURI>/vmrest/routingrules/a2f64719-c82f-491c-996f-ee543e6d7e38/routingruleconditions</RoutingRule>
  </RoutingRule>
  <URI>/vmrest/routingrules/857c5cd6-0153-4673-a917-27c59bf5ce37</URI>
  <ObjectId>857c5cd6-0153-4673-a917-27c59bf5ce37</ObjectId>
  <DisplayName>Attempt Sign In</DisplayName>
  <State>0</State>
  <RuleIndex>1</RuleIndex>
  <Type>1</Type>
  <Flags>3</Flags>
  <RouteTargetConversation>AttemptSignIn</RouteTargetConversation>
  <RouteTargetHandlerObjectType>0</RouteTargetHandlerObjectType>
  <RouteAction>2</RouteAction>
  <LanguageCode>0</LanguageCode>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <UseCallLanguage>true</UseCallLanguage>
  <CallType>2</CallType>
  <SearchSpaceObjectId>02cb3fba-1525-4768-89f6-64f4712ea177</SearchSpaceObjectId>
  <SearchSpaceURI>/vmrest/searchspaces/02cb3fba-1525-4768-89f6-64f4712ea177</SearchSpaceURI>
  <Undeletable>true</Undeletable>
  <RoutingRuleConditionsURI>/vmrest/routingrules/857c5cd6-0153-4673-a917-27c59bf5ce37/routingruleconditions</RoutingRule>
  </RoutingRule>
  <URI>/vmrest/routingrules/8b7ea5be-48c5-4e7b-bc9d-c06f052074a4</URI>
  <ObjectId>8b7ea5be-48c5-4e7b-bc9d-c06f052074a4</ObjectId>
  <DisplayName>Attempt Forward</DisplayName>
  <State>0</State>
  <RuleIndex>0</RuleIndex>
  <Type>2</Type>
  <Flags>3</Flags>
  <RouteTargetConversation>AttemptForward</RouteTargetConversation>
  <RouteTargetHandlerObjectType>0</RouteTargetHandlerObjectType>
  <RouteAction>2</RouteAction>
  <LanguageCode>0</LanguageCode>
  <UseDefaultLanguage>true</UseDefaultLanguage>
  <UseCallLanguage>true</UseCallLanguage>
  <CallType>2</CallType>
  <SearchSpaceObjectId>02cb3fba-1525-4768-89f6-64f4712ea177</SearchSpaceObjectId>
  <SearchSpaceURI>/vmrest/searchspaces/02cb3fba-1525-4768-89f6-64f4712ea177</SearchSpaceURI>
  <Undeletable>true</Undeletable>

```

```
<RoutingRuleConditionsURI>/vmrest/routingrules/8b7ea5be-48c5-4e7b-bc9d-c06f052074a4/routingruleconditions</RoutingRule>
</RoutingRules>
```

To retrieve a sorted list of all Routing Rules, add the following query parameter to the GET: sort=(column[asc | desc])

For example, to retrieve a list of all Routing Rules sorted by RuleIndex in ascending order:

```
GET https://<connection-server>/vmrest/routingrules?sort=(RuleIndex%20asc)
```

To retrieve a specific Routing Rule by its ObjectID:

```
GET https://<connection-server>/vmrest/routingrules/<objectid>
```

JSON Example

To list all the routing rules, use the following command:

Request URI:

```
GET https://<connection-server>/vmrest/routingrules
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
"@total": "1",
"RoutingRule": [
{
"URI": "/vmrest/routingrules/6ba11848-3eb2-47b9-ab2b-b1464165a1bf",
"ObjectId": "6ba11848-3eb2-47b9-ab2b-b1464165a1bf",
"DisplayName": "Opening Greeting",
"State": "1",
"RuleIndex": "20",
"Type": "3",
"Flags": "3",
"RouteTargetConversation": "PHTransfer",
"RouteTargetHandlerObjectId": "e6fd6ae4-7bf5-4a46-b994-e9fd13d83c30",
"RouteTargetHandlerDisplayName": "Opening Greeting",
"RouteTargetHandlerObjectType": "3",
"RouteAction": "2",
"LanguageCode": "0",
"UseDefaultLanguage": "true",
"UseCallLanguage": "true",
"CallType": "2",
"SearchSpaceObjectId": "f8a97bde-8f75-4c84-b2e6-aa6e54cc26c2",
"SearchSpaceURI": "/vmrest/searchspaces/f8a97bde-8f75-4c84-b2e6-aa6e54cc26c2",
"Undeletable": "true",
"RoutingRuleConditionsURI":
"/vmrest/routingrules/6ba11848-3eb2-47b9-ab2bb1464165a1bf/routingruleconditions",
"CallHandlerURI": "/vmrest/handlers/callhandlers",
"DirectoryHandlerURI": "/vmrest/handlers/directoryhandlers",
"InterviewHandlerURI": "/vmrest/handlers/interviewhandlers",
"ConversationURI": "/vmrest/conversations?query=(CnvRoutingRuleForwardedCall%20is%201)",
"SearchSpaceFetchURI": "/vmrest/searchspaces"
},
]
}
```



```
Response Code: 200
```

Searching

To retrieve a list of Routing Rules that meet a specified search criteria, add the following query parameter to a GET: query=(column [is | startswith] value)

For example, to find the Routing Rule at RuleIndex 1:

```
GET https://<connection-server>/vmrest/routingrules?query=(RuleIndex%20is%201)
```

Creating

The only required field for creating a Routing Rule is DisplayName. All other Routing Rule fields are optional. A Routing Rule that is created with default fields has Type=1 (Direct) and routes to the System Directory Handler. Some examples of other types of Routing Rules can be found at the end of this document.

Note that RuleIndex cannot be specified when creating a new Routing Rule; all new Routing Rules are created at RuleIndex 0, and the RuleIndex of all other Routing Rules is incremented by 1 when the new Routing Rule is created.

The following is an example of a POST that creates a Routing Rule with the name "My Routing Rule" of Type 1 (Direct):

```
POST https://<connection-server>/vmrest/routingrules
```

```
<RoutingRule>
<DisplayName>My Routing Rule</DisplayName>
<Type>1</Type>
</RoutingRule>
```

The following is the response from the above POST request:

```
201
Created
/vmrest/routingrules/bd73528d-e810-4533-8aab-89de32013885
```

JSON Example

To create new routing rule, do the following:

Request URI:

```
POST https://<connection-server>/vmrest/routingrules
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body:

```
{
  "DisplayName": "Texoma Routing Rule",
  "Type": "1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Updating

The following is an example of a PUT request that modifies the DisplayName of an existing Routing Rule:

```
PUT https://<connection-server>/vmrest/routingrules/<objectId>
```

```
<RoutingRule>
<DisplayName>Changed Display Name</DisplayName>
</RoutingRule>
```

The following is the response from the above PUT request:

```
204
No Content
```

Note that the RuleIndex of a Routing Rule cannot be modified with this method. Rather, the ordering of the entire Routing Rules collection can be modified, as described later in this document.

JSON Example

To update display name of routing rule, do the following:

```
PUT https://<connection-server>/vmrest/routingrules/<routingrulesobjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body

```
{
  "DisplayName": "Texoma_1 Routing Rule"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Deleting

The following is an example of a DELETE request that deletes a Routing Rule:

```
DELETE https://<connection-server>/vmrest/routingrules/<objectId>
```

The following is the response from the above DELETE request:

```
204
No Content
```

JSON Example

```
DELETE https://<connection-server>/vmrest/routingrules/<routingrulesobjectId>
Accept: application/json
Connection: keep-alive
```

```
Response Code: 204
```

Changing Routing Rule Indices

As noted in previous sections, a Routing Rule's RuleIndex field cannot be modified when creating or updating a Routing Rule. Instead, you can change a Routing Rule's RuleIndex only in the context of ordering all of the Routing Rules in a collection.

The following is an example of a PUT request that modifies the RuleIndices of a collection of Routing Rules:

```
PUT https://<connection-server>/vmrest/routingrules
```

```
<RoutingRules>
<RoutingRule>
<ObjectId>aabbccdd-1111-2222-3333-1234567890ab</ObjectId>
</RoutingRule>
<RoutingRule>
<ObjectId>12345678-abcd-abcd-abcd-123412341234</ObjectId>
</RoutingRule>
<RoutingRule>
<ObjectId>99990000-1234-1234-1234-abcdef012345</ObjectId>
</RoutingRule>
</RoutingRules>
```

The following is a response from the above PUT request:

```
204
No Content
```

After this PUT request is processed, the Routing Rule with ObjectId aabbccdd-1111-2222-3333-1234567890ab would have RuleIndex 0, the Routing Rule with ObjectId 12345678-abcd-abcd-abcd-123412341234 would have RuleIndex 1, and the Routing Rule with ObjectId 99990000-1234-1234-1234-abcdef012345 would have RuleIndex 2.

JSON Example

To update the order of routing rule, do the following:

Request URI:

```
PUT https://<connection-server>/vmrest/routingrules
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body:

```
{
  "RoutingRule": [
    {
      "ObjectId": "d083fa0b-76ec-4bec-add3-c54aae6033df"
    },
    {
      "ObjectId": "983efa07-ccb2-4b61-a1e5-083e16ca7513"
    },
    {
      "ObjectId": "bd8b8092-1c08-4d25-8d35-116d7a677bf4"
    },
    {
      "ObjectId": "7ee01b59-a619-42f9-9311-5df0f27763ac"
    }
  ]
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Routing Rule Conditions

Each Routing Rule can have a collection of Routing Rule Conditions. The Routing Rule Conditions that belong to a specified Routing Rule can be accessed at `/vmrest/routingrules/<routingruleobjectid>/routingruleconditions`. When first created, a Routing Rule does not have any Routing Rule Conditions, which means that every call matches it and is routed to its destination.

Listing and Viewing

The following is an example of a GET that lists all Routing Rule Conditions that belong to a specified Routing Rule:

```
GET
https://<connection-server>/vmrest/routingrules/<routingruleobjectid>/routingruleconditions
```

The following is the response from the above GET request:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<RoutingRuleConditions total="2">
<RoutingRuleCondition>
<URI>/vmrest/routingrules/d2f86bc0-4cab-4c29-9321-d756fe3add6a/routingruleconditions/2a52637-ObjectId2a52637-696-47ff-adc-749e0459e28</ObjectId>
<RoutingRuleObjectId>d2f86bc0-4cab-4c29-9321-d756fe3add6a</RoutingRuleObjectId>
<RoutingRuleURI>/vmrest/routingrules/d2f86bc0-4cab-4c29-9321-d756fe3add6a</RoutingRuleURI>
<Parameter>1</Parameter>
<Operator>2</Operator>
<OperandValue>12345</OperandValue>
</RoutingRuleCondition>
<RoutingRuleCondition>
<URI>/vmrest/routingrules/d2f86bc0-4cab-4c29-9321-d756fe3add6a/routingruleconditions/863572-ObjectId863572-fee-4459-a2d4-53f85cd224</ObjectId>
<RoutingRuleObjectId>d2f86bc0-4cab-4c29-9321-d756fe3add6a</RoutingRuleObjectId>
<RoutingRuleURI>/vmrest/routingrules/d2f86bc0-4cab-4c29-9321-d756fe3add6a</RoutingRuleURI>
<Parameter>7</Parameter>
<Operator>2</Operator>
<OperandValue>4cc6clbe-elba-4fcf-be81-95bce20acbec</OperandValue>
</RoutingRuleCondition>
</RoutingRuleConditions>

```

To retrieve a specific Routing Rule Condition by its ObjectId:

```

GET
https://<connection-server>/vmrest/routingrules/<routingruleobjectid>/routingruleconditions/<objectid>

```

Creating

The required fields for creating a Routing Rule Condition are Parameter, Operator, and OperandValue. All other Routing Rule Condition fields are optional.

The following is an example of a POST that creates a Routing Rule Condition with Parameter=2 (Dialed Number), Operator=2 (Equals), and OperandValue=8675309:

```

<RoutingRuleCondition>
<Parameter>2</Parameter>
<Operator>2</Operator>
<OperandValue>8675309</OperandValue>
</RoutingRuleCondition>

```

The following is the response from the above POST request:

```

201
Created
/vmrest/routingrules/d2f86bc0-4cab-4c29-9321-d756fe3add6a/routingruleconditions/74b50eeb-8c06-4e86

```

Updating

The following is an example of a PUT request that modifies the OperandValue of an existing Routing Rule Condition to 5551212:

```

PUT
https://<connection-server>/vmrest/routingrules/d2f86bc0-4cab-4c29-9321-d756fe3add6a/routingruleconditions

<RoutingRuleCondition>
<OperandValue>5551212</OperandValue>
</RoutingRuleCondition>

```

The following is the response from the above PUT request:

```
204
No Content
```

Deleting

The following is an example of a DELETE request that deletes a Routing Rule Condition:

```
DELETE
https://<connection-server>/vmrest/routingrules/d2f86bc0-4cab-4c29-9321-d756fe3add6a/routingruleconditions/
```

The following is the response from the above DELETE request:

```
204
No Content
```

Routing Rule Examples

It can be relatively complicated to specify the destination for a Routing Rule. The fields `RouteAction`, `RouteTargetConversation`, and `RouteTargetHandlerObjectId` are used together to specify the destination. The fields `RouteTargetHandler`, `DisplayName` and `RouteTargetHandlerObjectType` should not be specified when creating or updating a Routing Rule; rather they are set automatically based on the other specified values.

The following sections give some examples of how to specify different types of route destinations by using these fields. Note that all other fields in the Routing Rule objects have been omitted for brevity.

This list of examples covers all of the Routing Rules that can be configured by using Cisco Unity Connection Administration (CUCA). Creating a different type of Routing Rule by using CUPI is likely to yield a Routing Rule that will not display properly in CUCA, and it also may not operate as expected when Connection tries to route a call.

Transfer to a User or a Call Handler

To transfer a caller to a user or a call handler, do the following PUT request:

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MenuEntry>
<Action>2</Action>
<TargetConversation>PHTransfer</TargetConversation>
<TargetHandlerObjectId>05d9e169-5c87-4415-aaed-c58a14816c8d</TargetHandlerObjectId>
</MenuEntry>
```

The Action field of 2 denotes that this key should transfer the caller to another conversation. This is used to transfer callers to other objects, or to send callers to other conversations such as the system transfer conversation.

The TargetConversation should be set to PHTransfer if you want to transfer to the call handler in question. If you want to have the call go directly the call handler greeting, set it to PHGreeting instead.

The TargetHandlerObjectId is the object ID of the call handler that you want the key to transfer the caller to.

Go to a User or Call Handler's Greeting

The following Routing Rule will go to (Action=2) the call handler aab5eab2-38f7-4231-a3be-bf2a8fde820c (which happens to be a user's primary call handler) by using the PHGreeting Conversation (meaning it will

go directly to the call handler's greeting, bypassing transfer). If you want to go to a different call handler's greeting, set RouteTargetCallHandlerObjectId to it.

```
<RoutingRule>
<RouteAction>2</RouteAction>
<RouteTargetConversation>PHGreeting</RouteTargetConversation>
<RouteTargetHandlerObjectId>aab5eab2-38f7-4231-a3be-bf2a8fde820c</RouteTargetHandlerObjectId>
</RoutingRule>
```

Go to an Interview Handler

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
  <MenuEntry>
    <Action>2</Action>
    <TargetConversation>PHInterview</TargetConversation>
    <TargetHandlerObjectId>interview handler object id</TargetHandlerObjectId>
  </MenuEntry>
```

The TargetConversation should be set to PHInterview and the TargetHandlerObjectId is the object ID of the interview handler that you want to the caller input key to go to.

Go to a Directory Handler

```
PUT https://<server>/vmrest/handlers/callhandlers/<callhandlerobjectid>/menuentries/<key>
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
  <MenuEntry>
    <Action>2</Action>
    <TargetConversation>AD</TargetConversation>
    <TargetHandlerObjectId>object id of directory handler</TargetHandlerObjectId>
  </MenuEntry>
```

The TargetConversation should be set to AD and the TargetHandlerObjectId is the object ID of the directory handler you want to the caller input key to go to.

Go to a Specific Conversation

The following Routing Rule will go to (Action=2) the BroadcastMessageAdministrator Conversation. Note that RouteTargetHandlerObjectId is ignored if the RouteTargetConversation is anything other than PHTransfer, PHGreeting, PHInterview, or AD.

```
<RoutingRule>
<RouteAction>2</RouteAction>
<RouteTargetConversation>BroadcastMessageAdministrator</RouteTargetConversation>
</RoutingRule>
```

Routing Rule Condition Examples

Routing Rule Conditions are not as complicated as Routing Rules, but care should still be taken when creating or modifying them. The fields Parameter, Operator, and OperandValue are used to specify the conditions.

This list of examples covers all of the Routing Rule Conditions that can be configured by using Cisco Unity Connection Administration (CUCA). Creating a different type of Routing Rule Condition by using CUPI is likely to yield a Routing Rule Condition that will not display properly in CUCA, and it also may not operate as expected when Connection tries to match a call.

Condition Based on a Phone Number

The following Routing Rule Condition specifies a match of Calling Number (Parameter=1) Equals (Operator=2) 1234 (OperandValue). A Routing Rule Condition to match on Called Number would use Parameter=2, and a Routing Rule Condition to match on Forwarded Number (valid only on Forwarded Routing Rules) would use Parameter=3. Other Operators are allowed when matching Phone Numbers, such as In and Less Than. With the Equals Operator, the OperandValue can include the wildcards * and ?, and with the In Operator, the OperandValue can include comma-separated ranges of numbers like 2000-2199,3001-3199, 4001.

```
<RoutingRuleCondition>
<Parameter>1</Parameter>
<Operator>2</Operator>
<OperandValue>1234</OperandValue>
</RoutingRuleCondition>
```

Condition Based on a Port

The following Routing Rule Condition specifies a match of a Port (Parameter=5) Equals (Operator=2) ObjectID b79765f1-e14f-47b6-b8e1-00479909f710 (OperandValue). Creating a Routing Rule Condition to match based on a Port has the side effect of setting MediaPortObjectId to the same value as OperandValue. When matching Ports, only the Equals Operator is allowed, and the OperandValue must be a single ObjectID.

```
<RoutingRuleCondition>
<Parameter>5</Parameter>
<Operator>2</Operator>
<OperandValue>b79765f1-e14f-47b6-b8e1-00479909f710</OperandValue>
</RoutingRuleCondition>
```

Condition Based on a Phone System

The following Routing Rule Condition specifies a match of a Phone System (Parameter=9) Equals (Operator=2) ObjectID 2eb79e66-1e53-415c-9222-36665e0e76ae (OperandValue). Creating a Routing Rule Condition to match based on a Port has the side effect of setting MediaSwitchObjectId to the same value as OperandValue. When matching Phone Systems, only the Equals Operator is allowed, and the OperandValue must be a single ObjectID.

```
<RoutingRuleCondition>
<Parameter>9</Parameter>
<Operator>2</Operator>
<OperandValue>2eb79e66-1e53-415c-9222-36665e0e76ae</OperandValue>
</RoutingRuleCondition>
```

Condition Based on a Schedule Set

The following Routing Rule Condition specifies a match of a Schedule Set (Parameter=7) Equals (Operator=2) ObjectID 4cc6c1be-e1ba-4fcf-be81-95bce20acbec (OperandValue). Note that you must specify the ObjectID of a Schedule Set, not a Schedule. When matching Schedule Sets, only the Equals Operator is allowed, and the OperandValue must be a single ObjectID.

```
<RoutingRuleCondition>
<Parameter>7</Parameter>
<Operator>2</Operator>
<OperandValue>4cc6c1be-e1ba-4fcf-be81-95bce20acbec</OperandValue>
</RoutingRuleCondition>
```


Enumeration Type

Routing Rule RouteAction

The RouteAction field in a Routing Rule is read/write, and can take the following values. It defaults to 2, and should be set to that value in most cases (it is set to 2 in all of the examples above).

| Value | Description |
|-------|--------------------------------------|
| 0 | Ignore (take no action) |
| 1 | Hang up call |
| 2 | Go to specified object |
| 3 | Error (play error message) |
| 4 | Take a message |
| 5 | Skip greeting |
| 6 | Restart greeting |
| 7 | Transfer to Alternate Contact Number |
| 8 | Route from Next Call Routing Rule |

Routing Rule RouteTargetHandlerObjectType

The RouteTargetHandlerObjectType field in a Routing Rule is read-only and can take various values. The relevant values are listed here. As noted previously, it will automatically be set to the type of object specified by the RouteTargetHandlerObjectId field.

| Value | Description |
|-------|-------------------|
| 3 | Call Handler |
| 5 | Interview Handler |
| 6 | Directory Handler |

Routing Rule State

The State field in a Routing Rule is read/write, and can take the following values. It defaults to 0.

| Value | Description |
|-------|-------------|
| 0 | Active |
| 1 | Inactive |
| 2 | Invalid |

Routing Rule Type

The Type field in a Routing Rule is read/write, and can take the following values. It defaults to 1.

| Value | Description |
|-------|---|
| 1 | Direct |
| 2 | Forwarded |
| 3 | Both (normally only used by Opening Greeting) |

Routing Rule Condition Operator

The Operator field in a Routing Rule Condition is read/write, and can take the following values. It does not have a default value.

| Value | Description |
|-------|--------------------------|
| 1 | In |
| 2 | Equals |
| 3 | Greater than |
| 4 | Less than |
| 5 | Less than or equal to |
| 6 | Greater than or equal to |
| 7 | Schedule Set |
| 9 | Phone System |

Routing Rule Condition Parameter

The Parameter field in a Routing Rule Condition is read/write, and can take the following values. It does not have a default value. Several values are legacy and should not be used.

| Value | Description |
|-------|-------------------|
| 1 | Calling Number |
| 2 | Dialed Number |
| 3 | Forwarding Number |
| 5 | PortID |

Routing Rule RouteTargetConversation

The RouteTargetConversation field in a Routing Rule is read/write, and can take the following values. It defaults to AD. Although it is not an enumeration type, only certain string values are valid Conversation

names. For some Conversations, it is required to specify a Route_TargetHandlerObjectId as well. Examples of how to use several of these Conversations can be found earlier in this document.

| Value | Description | TargetHandler |
|-------------------------------|--|----------------------|
| AD | Directory Conversation | Directory Handler |
| PHTransfer | Transfer to User or Call Handler | User or Call Handler |
| PHGreeting | Play Greeting of User or Call Handler | User or Call Handler |
| PHInterview | Interview Conversation | Interview Handler |
| AttemptForward | Forwards the call to the User's Greeting if the Forwarding Number matches a User | n/a |
| AttemptSignIn | Sends the call to a User's Sign-in if the Calling Number matches a User | n/a |
| BroadcastMessageAdministrator | Sends the call to a Conversation for Sending Broadcast Messages | n/a |
| SystemTransfer | Sends the call to a Conversation allowing the caller to transfer to a number they specify (assuming the restriction table allows it) | n/a |
| CheckedOutGuest | Sends the call to a Conversation for checked-out hotel guests | n/a |
| GreetingsAdministrator | Sends the call to a Conversation allowing changing greetings by phone | n/a |
| ReverseTrapConv | Connects to Visual Voicemail | n/a |
| SubSignIn | Sends the call to the Sign-In Conversation, which prompts the user to enter their ID | n/a |
| ConvUtilsLiveRecord | Sends the call to the Live-Record pilot number configured on CUCM | n/a |
| SubSysTransfer | Similar to SystemTransfer, but requires users sign-in first (so unknown callers cannot use it) | n/a |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Routing Rule Conditions

Routing Rule Condition API

Administrator can use this API to create/update/delete/fetch the routing rule condition. Various attributes of routing rule condition can also be updated using this API.

Listing the Routing Rule Conditions

JSON Example

To list all the routing rule conditions use the following command:

Request URI:

```
GET
https://<connection-server>/vmrest/routingrules/<routingrulesobjectId>/routingruleconditions
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2",
  "RoutingRuleCondition": [
    {
      "URI":
"/vmrest/routingrules/bd8b8092-1c08-4d25-8d35-116d7a677bf4/routingruleconditions/06d1d4e2-45f7-4f9d-b083-ac19bfc9347f",
      "ObjectId": "06d1d4e2-45f7-4f9d-b083-ac19bfc9347f",
      "RoutingRuleObjectId": "bd8b8092-1c08-4d25-8d35-116d7a677bf4",
      "RoutingRuleURI": "/vmrest/routingrules/bd8b8092-1c08-4d25-8d35-116d7a677bf4",
      "Parameter": "1",
      "Operator": "1",
      "OperandValue": "1000-2000"
    },
    {
      "URI":
"/vmrest/routingrules/bd8b8092-1c08-4d25-8d35-116d7a677bf4/routingruleconditions/08019fb3-265b-48fb-a973-d5128b62572e",
      "ObjectId": "08019fb3-265b-48fb-a973-d5128b62572e",
      "RoutingRuleObjectId": "bd8b8092-1c08-4d25-8d35-116d7a677bf4",
      "RoutingRuleURI": "/vmrest/routingrules/bd8b8092-1c08-4d25-8d35-116d7a677bf4",
      "Parameter": "2",
      "Operator": "2",
      "OperandValue": "4242"
    }
  ]
}
```

Response Code: 200

Creating a Routing Rule Condition

JSON Example

To create new routing rule condition, do the following:

Request URI:

```
POST
https://<connection-server>/vmrest/routingrules/<routingrulesobjectId>/routingruleconditions
Accept: application/json
Content-Type: application/json
Connection: keep-alive

Request Body:
{
  "Parameter": "2",
  "Operator": "3",
  "OperandValue": "3000"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Updating a Routing Rule Condition

JSON Example

To update display name of routing rule condition, do the following:

Request URI:

```
PUT
https://<connectionserver>/vmrest/routingrules/<routingrulesobjectId>/routingruleconditions/<routingruleconditionobjectId>
Accept: application/json
Content-Type: application/json
Connection: keep-alive

Request Body:
{
  "OperandValue": "5011"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Deleting a Routing Rule Condition

JSON Example

To delete routing rule condition, do the following:

```
DELETE
https://<connectionserver>/vmrest/routingrules/<routingrulesobjectId>/routingruleconditions/<routingruleconditionobjectId>
Accept: application/json
Connection: keep-alive
```

Response Code: 204

Explanation of Data Fields

| Parameter | Operations | Data Type | Comments |
|---------------------|------------|-------------|---|
| URI | Read Only | String | URI of the routing rule condition |
| ObjectId | Read Only | String (36) | Unique identifier for Routing rule condition |
| RoutingRuleObjectId | Read Only | String (36) | Object Id of the routing rule to which this routing rule condition belongs. |
| RoutingRuleURI | Read Only | String | URI of the routing rule which is associated with the routing rule condition Parameter Read/Write Integer Type of parameter in a routing rule, such as "dialed number" or "port id".

Possible values: <ul style="list-style-type: none"> • 1 :CallingNumber • 2 : DialedNumber • 3 : ForwardingStation • 4 :Origin • 5 :PhoneSystem • 6 : PortID • 7 : Reason • 8 : Schedule • 9 : TrunkID |
| Operator | Read/Write | Integer | Type of operator in this condition - equals, greater than, etc.

Possible value: <ul style="list-style-type: none"> • 1 : IN • 2 : EQ • 3 : GT • 4 : LT • 5 : LTE • 6 : GTE |
| OperandValue | Read/Write | String (64) | Value of operand in condition. This could be a port number, a phone number, etc. depending on parameter value. <ul style="list-style-type: none"> • Minimum Length: 0 • Maximum Length: 64 |
| MediaSwitchObjectId | Read/Write | String (36) | The unique identifier of the phone system that can be used as a condition for a routing rule. |

| Parameter | Operations | Data Type | Comments |
|-------------------|-------------------|------------------|--|
| MediaPortObjectId | Read/Write | String (36) | The unique identifier of the media port that can be used as a condition for a routing rule. Value displayed when Routing Rule Condition based on Phone System/Port is created. |
| PhoneSystemURI | Read Only | String | Value displayed when Routing Rule Condition based on Phone System is created. |
| PortURI | Read Only | String | Value displayed when Routing Rule Condition based on Port is created. |



CHAPTER 42

Cisco Unity Connection Provisioning Interface (CUPI) API--Message Aging Policy APIs

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- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Message Aging Policy](#), on page 595
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Cisco Unity Connection Provisioning Interface (CUPI) API -- Mailbox Store API

Mailbox Stores Configuration

Administrator can use this APIs for creating, reading, modifying and deleting mailbox stores for listing, viewing, creation, selection, and deletion. During installation, Cisco Unity Connection automatically creates:

- A mailbox store database for information on voice messages (who each message was sent to, when it was sent, the location of the WAV file on the hard disk, and so on).
- An operating-system directory for voice message WAV files.
- An administrator with the required permissions can create up to four additional mailbox stores. Each additional mailbox store includes:
 - Another mailbox-store database for information on voice messages that are saved in that mailbox store. The database is pre-sized for an average of approximately 40 messages each for 10,000 users, or about 1.25 GB. (The database application currently being used for Connection cannot dynamically resize a database after it is created.)
 - Another operating-system directory for the voice message WAV files and other message attachments.

Listing the Mailbox Stores

The following is an example of the GET request that lists all the mailbox stores:

```
GET https://<connection-server>/vmrest/mailboxstores
```

The following is the response from the above *GET* request.

```
<MailboxStores total="1">
  <MailboxStore>
    <URI>/vmrest/mailboxstores/fd3ad7cd-805d-4727-82dd-c05dae4261c0</URI>
    <MailDatabase>UnityMbxDb1</MailDatabase>
    <Server>ucbu-aricent-vm256.cisco.com</Server>
    <ObjectId>fd3ad7cd-805d-4727-82dd-c05dae4261c0</ObjectId>
    <Mounted>true</Mounted>
    <RequiredSecurity>0</RequiredSecurity>
    <MailboxStoreType>0</MailboxStoreType>
    <DisplayName>Unity Messaging Database -1</DisplayName>
    <DbInstance>ciscounity</DbInstance>
    <Status>0</Status>
    <Undeletable>true</Undeletable>
    <LastError>0</LastError>
    <MaxSizeMB>15000</MaxSizeMB>
    <TotalSizeOfMailbox>0.0 Kilobytes</TotalSizeOfMailbox>
    <TimeAtWhichSizeCalculated>2013-04-10 22:59:23.323</TimeAtWhichSizeCalculated>
    <MailboxURI>/vmrest/mailboxstores/fd3ad7cd-805d-4727-82ddc05dae4261c0/
      mailboxes</MailboxURI>
    </MailboxStore>
  </MailboxStores>
```

Response Code: 200

JSON Example

To list all mailboxstores(GET), do the following:

```
Request URI:
GET https://<connection-server>/vmrest/mailboxstores
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1",
  "MailboxStore": {
    "URI": "/vmrest/mailboxstores/2668cf73-c234-4fb4-82e1-8b7299485b3c",
    "MailDatabase": "UnityMbxDb1",
    "Server": "ucbu-aricent-vm506.cisco.com",
    "ObjectId": "2668cf73-c234-4fb4-82e1-8b7299485b3c",
    "Mounted": "true",
    "RequiredSecurity": "0",
    "MailboxStoreType": "0",
    "DisplayName": "Unity Messaging Database -1",
    "DbInstance": "ciscounity",
    "Status": "0",
    "Undeletable": "true",
    "LastError": "0",
    "MaxSizeMB": "15000",
    "TotalSizeOfMailbox": "0.0 Kilobytes",
    "TimeAtWhichSizeCalculated": "2013-04-10 22:59:23.323",
    "MailboxURI": "/vmrest/mailboxstores/2668cf73-c234-4fb4-82e1-8b7299485b3c/mailboxes"
  }
}
```

Response Code: 200

Viewing the Specific Mailbox Stores

The following is an example of the GET request that lists the details of specific mailbox stores represented by the provided value of mailbox store object ID:

```
GET https://<connection-server>/vmrest/mailboxstores /<mailboxstore-objectid>
```

The following is the response from the above *GET* request:

```
<MailboxStore>
  <URI>/vmrest/mailboxstores/fd3ad7cd-805d-4727-82dd-c05dae4261c0</URI>
  <MailDatabase>UnityMbxDb1</MailDatabase>
  <Server>ucbu-aricent-vm256.cisco.com</Server>
  <ObjectId>fd3ad7cd-805d-4727-82dd-c05dae4261c0</ObjectId>
  <Mounted>true</Mounted>
  <RequiredSecurity>0</RequiredSecurity>
  <MailboxStoreType>0</MailboxStoreType>
  <DisplayName>Unity Messaging Database -1</DisplayName>
  <DbInstance>ciscounity</DbInstance>
  <Status>0</Status>
  <Undeletable>true</Undeletable>
  <LastError>0</LastError>
  <MaxSizeMB>15000</MaxSizeMB>
  <TotalSizeOfMailbox>0.0 Kilobytes</TotalSizeOfMailbox>
  <TimeAtWhichSizeCalculated>2013-04-10 22:59:23.323</TimeAtWhichSizeCalculated>
  <MailboxURI>/vmrest/mailboxstores/fd3ad7cd-805d-4727-82ddc05dae4261c0/
  mailboxes</MailboxURI>
</MailboxStore>
```

```
Response Code: 200
```

JSON Example

To view individual mailbox store (GET), do the following:

```
Request URI:
GET https://<connection-server>/vmrest/mailboxstores/<mailboxstore-objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/mailboxstores/2668cf73-c234-4fb4-82e1-8b7299485b3c",
  "MailDatabase": "UnityMbxDb1",
  "Server": "ucbu-aricent-vm506.cisco.com",
  "ObjectId": "2668cf73-c234-4fb4-82e1-8b7299485b3c",
  "Mounted": "true",
  "RequiredSecurity": "0",
  "MailboxStoreType": "0",
  "DisplayName": "Unity Messaging Database -1",
  "DbInstance": "ciscounity",
  "Status": "0",
  "Undeletable": "true",
  "LastError": "0",
  "MaxSizeMB": "15000",
  "TotalSizeOfMailbox": "0.0 Kilobytes",
  "TimeAtWhichSizeCalculated": "2013-04-10 22:59:23.323",
  "MailboxURI": "/vmrest/mailboxstores/2668cf73-c234-4fb4-82e1-8b7299485b3c/mailboxes"
}
```

```
Response Code: 200
```

Viewing the Number of Mailboxes in a Mailbox Store

The following is an example of the GET request that lists the number of mailboxes in a mailbox store represented by the provided value of mailbox store object ID:

```
GET https://<connection-server>/vmrest/mailboxstores/<mailboxstore-objectid>/mailboxes
```

The following is the response from the above *GET* request:

```
Response Code: 200
<Mailboxes total="3"/>
```

JSON Example

To view the number of mailboxes in a mailbox store, do the following:

```
Request URI
GET https://<connection-server>/vmrest/mailboxstores/<mailboxstore-objectid>/mailboxes
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "3"
}
```

```
Response Code: 200
```

Creating the Mailbox Store

The parameters that can be given as part of the POST Request Body are : DisplayName, MaxSizeMB, Mounted, Undeletable. Even If the other values such as "server" are mentioned as part of the request body , the values will not be used while creation and default values will be used. The following is an example of the POST request that creates a mailbox store:

```
POST https://<connection-server>/vmrest/mailboxstores
Request Body:
<MailboxStore>
  <DisplayName>Unity Messaging Database</DisplayName>
  <MaxSizeMB>15000</MaxSizeMB>
</MailboxStore>
```

The following is the example of the response from the above *POST* request:

```
Response Code: 201
/vmrest/voicemailboxstores /2668cf73-c234-4fb4-82e1-8b7299485b3ce
```

JSON Example

To create a new mailbox store, do the following:

```
Request URI:
POST https://<connection-server>/vmrest/mailboxstores
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "DisplayName":"Unity Messaging Database",
  "MaxSizeMB":"15000"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/voicemailboxstores /2668cf73-c234-4fb4-82e1-8b7299485b3ce
```

Updating the Mailbox Stores

The following is an example of the PUT request that allows you to update the content of the mailbox store:

```
PUT https://<connection-server>/vmrest/mailboxstores/<mailboxstore-objectid>
Request Body:
  <MailboxStore>
    <Mounted>false</Mounted>
  </MailboxStore>
</pre>
<pre>
Response Body: 204
```

The output for this request returns the successful response code.

JSON Example

To update mounted field of mailbox store, do the following:

```
Request URI:
PUT https://<connection-server>/vmrest/mailboxstores/<mailboxstore-objectid>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "Mounted":"false"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Deleting the Mailbox Store

The following is an example of the DELETE request that deletes a specific mailbox store where you need to mention the mailbox store object ID:

```
DELETE https://<connection-server>/vmrest/mailboxstores/<mailboxstore-objectid>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

The output for this request returns the successful response code.

JSON Example

To delete mailbox store, do the following:

```
DELETE https://<connection-server>/vmrest/mailboxstores/<mailboxstore-objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

The following chart lists all of the data fields:

| Parameter | Data Type | Operations | Description |
|------------------|--------------|------------|--|
| URI | String | Read Only | The URI of the mailbox store. |
| MailDatabase | String (512) | Read Only | The name of the mailbox database, such as "UnityMbxDb1". For external IMAP mailstores this value will be NULL. |
| Server | String (256) | Read Only | The name of the server on which the mailbox store resides. |
| ObjectId | String (36) | Read Only | A globally unique, system-generated identifier for a MailboxStore object. |
| Mounted | Boolean | Read/Write | A flag indicating whether the mailbox store is mounted. You should check this setting before accessing the mailbox store database. Tools can set it to denote that a mailbox store is offline when offline database maintenance needs to be performed.

Default Value: true |
| RequiredSecurity | String | Read Only | The method of encryption that Cisco Unity Connection will use on a mailbox store connection. Possible values are: <ul style="list-style-type: none"> • 0: No encryption. • 1: TLS level encryption. • 2: SSL encryption. • 3: IPSec encryption. Default Value: 0 |

| Parameter | Data Type | Operations | Description |
|------------------|--------------|------------|--|
| MailboxStoreType | String | Read Only | The type of mailbox store (e.g.,UMSS). Possible values are: <ul style="list-style-type: none"> • 0: UMSS - Cisco Unity Connection message store solution. • 1: IMAP • 2: POP3 • 3: WebDAV • 4: MPE_WS Used by the Common Calendaring Library to retrieve calendaring and meeting information from the Meeting Place Express web service. Default Value: 0 |
| DisplayName | String (64) | Read/Write | A descriptive name for the message Store. |
| DbInstance | String (256) | Read Only | The name of the dbinstance on which the mailbox store resides.
Default Value: ciscounity Status Read Only String Current status of the mailbox store. Possible values are: <ul style="list-style-type: none"> • 0: OK • 1: Moving • 2: MoveFailed • 3: MoveRequested |
| Undeletable | Boolean | Read/Write | A flag indicating whether this mailbox store can be deleted. It is used to prevent deletion of factory defaults.
Default Value: true |

| Parameter | Data Type | Operations | Description |
|---------------------------|-----------|------------|---|
| LastError | String | Read Only | <p>Last error result from a mailbox store maintenance action, that is create or delete. Possible values are:</p> <ul style="list-style-type: none"> • 0: OK • 1: UnknownError • 2: DuplicateDisplayName • 3: InternalNameError • 4: DatabaseError • 5: InsufficientDiskSpace • 6: MailstoreNotEmpty • 7: MailstoreStillReferenced: This error is returned when deleting an mbx database is still referenced by another object (user template, etc). • 8: MailstoreOverMaxSize • 9: MailstoreNotFound • 10: MailstoreUndeletable • 11: RemoteServerOffline • 12: MailstoreNotMounted • 13: InvalidRequest • 14: MailboxNotMounted • 15: MustRunOnPublisher <p>Default Value: 0</p> |
| MaxSizeMB | Integer | Read/Write | <p>This is the max size in MB for the mailbox store. The range can vary from 1 to 2147483647.</p> <p>Default Value: 15000</p> |
| TotalSizeOfMailbox | String | Read Only | Total Size of the voicemail messages and the mailbox attachments in the mailbox store. |
| TimeAtWhichSizeCalculated | String | Read Only | Time at which the total size of mailbox store was calculated. |
| MailboxesURI | String | Read Only | The URI of the mailboxes. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Mailbox Quota alert

Mailbox Quota Alert

These APIs are capable of retrieving and updating the email notification Mailbox Quota Alert text from CUC.

Acceptance criteria :

- GET API to view the "header" and body of the quota alert text in specified language.
- API to set the "header" and body of the quota alert text for specified language.

GET : https:// <connection-server>/vmrest/mailboxquotatexts

This API can be used by Administrator to fetch the list of Mailbox Quota alerts that will be used as email notification alert texts for end user. Currently, there is only one Mailbox Quota Alert which is Warning Quota, that can be configured in different languages. Output of this API will be:

```
<MailboxQuotaTexts total="1">
  <MailboxQuotaText>
    <URI>/vmrest/mailboxquotatexts/da9d6130-baf7-4b8b-8aa5-1d973567d0b6</URI>
    <ObjectId>da9d6130-baf7-4b8b-8aa5-d973567d0b6</ObjectId>
    <Body/>
    <DefaultBody>Your mailbox has exceeded the quota warning threshold
specified by your administrator.
\n\nCurrent Usage: %CURRENTUSAGE%\nQuota Warning Threshold: %THRESHOLD%\nQuota Size Limit:
%LIMIT%\n
nPlease reduce your mailbox size by deleting few items from your mailbox.</DefaultBody>
    <DefaultSubject>Voicemail Mailbox Quota Warning</DefaultSubject>
    <LanguageCode>1033</LanguageCode>
    <Subject/>
    <UseDefault>>true</UseDefault>
    <RuleDescription>Text for Mailbox Warning Quota</RuleDescription>
  </MailboxQuotaText>
</MailboxQuotaTexts>
```

GET :https:// <connection-server>/vmrest/mailboxquotatexts/<mailboxQuotaTextObjectId>

This API can be used by Administrator to fetch the details of a particular Mailbox Quota Alert.

Output of this API will be:

PUT : [https:// <connection-server>/vmrest/mailboxquotatexts/<mailboxQuotaTextObjectId>](https://<connection-server>/vmrest/mailboxquotatexts/<mailboxQuotaTextObjectId>)

```
<MailboxQuotaText>

  <URI>/vmrest/mailboxquotatexts/da9d6130-baf7-4b8b-8aa5-1d973567d0b6</URI>

  <ObjectId>da9d6130-baf7-4b8b-8aa5-1d973567d0b6</ObjectId>

  <Body/>

  <DefaultBody>Your mailbox has exceeded the quota warning threshold specified by
  your administrator.\n\nCurrent Usage: %CURRENTUSAGE%\nQuota
  Warning Threshold: %THRESHOLD%\nQuota Size Limit: %LIMIT%\n\nPlease reduce your mailbox
  size by deleting few items
  from your mailbox.</DefaultBody>

  <DefaultSubject>Voicemail Mailbox Quota Warning</DefaultSubject>

  <LanguageCode>1033</LanguageCode>

  <Subject/>

  <UseDefault>>true</UseDefault>

  <RuleDescription>Text for Mailbox Warning Quota</RuleDescription>

</MailboxQuotaText>
```

PUT : [https:// <connection-server>/vmrest/mailboxquotatexts/<mailboxQuotaTextObjectId>](https://<connection-server>/vmrest/mailboxquotatexts/<mailboxQuotaTextObjectId>)

This API can be used by an administrator to modify the subject line, body and Use Default flag for the email notification alert for the end users. If an administrator updates "UseDefault" option to false and if "Subject" and "Body" (customized subject and body texts) of the Alert are null in the database or in input XML, then it is mandatory to provide both of them. Input will be an XML with following data :

```
<MailboxQuotaText>

  <Body>changed body content</Body>

  <Subject>Changed subject line</Subject>

  <UseDefault>>false</UseDefault>

</MailboxQuotaText>
```

Output: HTTP response code : 204

Explanation of Data Fields

The following chart lists all of the data fields:

| Parameter | Data Type | Operations | Description |
|-----------|-----------|------------|---|
| URI | String | Read Only | URI of Mailbox Quota alert |
| ObjectId | Char (36) | Read Only | Acts as a primary key for the API. The ObjectID is a unique system-generated identifier for a Mailbox Quota Alert object. |
| Body | String | Read/Write | Customized body text for Mailbox Quota Alert. |

| Parameter | Data Type | Operations | Description |
|-----------------|-----------|------------|---|
| DefaultBody | String | Read Only | Default body text for the Mailbox Quota Alert |
| DefaultSubject | String | Read Only | Default subject line for Mailbox Quota Alert |
| LanguageCode | Integer | Read/Write | Specified the language code in which the alert will be displayed |
| Subject | String | Read/Write | Customized subject line for Mailbox Quota Alert |
| UseDefault | Boolean | Read/Write | Specify that whether DefaultSubject and DefaultBody is used or not.
Values can be: <ul style="list-style-type: none"> • false -0 • true -1 |
| RuleDescription | String | Read Only | Specified the type of Mailbox Quota Alert |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Message Aging Policy

Message Aging Policy

In Cisco Unity Connection, the Message Aging Policies ensures that the hard disk where voice messages are stored does not get filled up. Each policy allows you to specify message aging rules to automatically:

- Move new messages to the Saved Items folder after a specified number of days.
- Move read messages to the Deleted Items folder after a specified number of days.
- Permanently delete messages in the Deleted Items folder after a specified number of days. In the Default System Policy message aging policy, this is the only rule that is enabled.
- Based on the age of the messages, permanently delete secure messages that have been touched in any way (for example by saving, deleting, or opening but then saving messages as new).
- Based on the age of the messages, permanently delete all secure messages regardless of whether users have listened to or touched the messages in any way.



Note There are total numbers of 2 Default Message Aging Policies:

- Default System Policy
- Do Not Age Messages

Administrator can use this API to create/update/delete/fetch the message aging policy. Various attributes of message aging policy can also be updated using this API.

Listing the Message Aging Policies

The following is an example of the GET request that lists all the message aging policies:

```
GET https://<connection-server>/vmrest/messageagingpolicies
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<MessageAgingPolicies total="2">
  <MessageAgingPolicy>
    <URI>/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-ce14ede90ac0</URI>
    <ObjectId>0f02be4e-5d70-4a1d-b182-ce14ede90ac0</ObjectId>
    <Enabled>>true</Enabled>
    <DisplayName>Default System Policy</DisplayName>
    <MessageAgingRuleURI>/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-
      ce14ede90ac0/messageagingrules</MessageAgingRuleURI>
  </MessageAgingPolicy>
  <MessageAgingPolicy>
    <URI>/vmrest/messageagingpolicies/7f762fe2-ef33-4664-afb9-bd47c2ef7e41</URI>
    <ObjectId>7f762fe2-ef33-4664-afb9-bd47c2ef7e41</ObjectId>
    <Enabled>>false</Enabled>
    <DisplayName>Do Not Age Messages</DisplayName>
    <MessageAgingRuleURI>/vmrest/messageagingpolicies/7f762fe2-ef33-4664-afb9-
      bd47c2ef7e41/messageagingrules</MessageAgingRuleURI>
  </MessageAgingPolicy>
</MessageAgingPolicies>
```

```
Response Code: 200
```

JSON Example

To list all the message aging policies, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/messageagingpolicies
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2"
  "MessageAgingPolicy": [
    {
      "URI": "/vmrest/messageagingpolicies/adac77f4-8a77-430d-8836-0fc9aef3fef5"
      "ObjectId": "adac77f4-8a77-430d-8836-0fc9aef3fef5"
      "Enabled": "true"
      "DisplayName": "Default System Policy"
      "MessageAgingRuleURI": "/vmrest/messageagingpolicies/adac77f4-8a77-430d-8836-0fc9aef3fef5/messageagingrules"
    }
    {
      "URI": "/vmrest/messageagingpolicies/2e02eca6-270b-4b7f-a153-f03ea74d403d"
      "ObjectId": "2e02eca6-270b-4b7f-a153-f03ea74d403d"
      "Enabled": "false"
      "DisplayName": "Do Not Age Messages"
      "MessageAgingRuleURI": "/vmrest/messageagingpolicies/2e02eca6-270b-4b7f-a153-f03ea74d403d/messageagingrules"
    }
  ]
}
```

Response Code: 200

Viewing the Specific Message Aging Policy

The following is an example of the GET request that lists the details of specific message aging policy represented by the provided value of object ID:

```
GET https://<connection-server>/vmrest/messageagingpolicies/<messageagingpolicyobject-id>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<MessageAgingPolicy>
  <URI>/vmrest/messageagingpolicies/3f3f9297-e1eb-46a5-bbdf-d86298e2531c</URI>
  <ObjectId>3f3f9297-e1eb-46a5-bbdf-d86298e2531c</ObjectId>
  <Enabled>>true</Enabled>
  <DisplayName>Texoma_Message_Policy</DisplayName>
  <MessageAgingRuleURI>/vmrest/messageagingpolicies/3f3f9297-e1eb-46a5-bbdf-d86298e2531c/messageagingrules</MessageAgingRuleURI>
</MessageAgingPolicy>
```

Response Code: 200

JSON Example

To list details of an individual message aging policy, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/messageagingpolicies/<messageagingpolicyobject-id>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":"/vmrest/messageagingpolicies/3f3f9297-e1eb-46a5-bbdf-d86298e2531c"
  "ObjectId":"3f3f9297-e1eb-46a5-bbdf-d86298e2531c"
  "Enabled":"true"
  "DisplayName":"Default System Policy"
  "MessageAgingRuleURI":"/vmrest/messageagingpolicies/3f3f9297-e1eb-46a5-bbdf-
d86298e2531c/messageagingrules"
}
```

```
Response Code: 200
```

Creating a Message Aging Policy

Example 1: The following is an example of the POST request that creates a message aging policy:

```
*POST https://<connection-server>/vmrest/messageagingpolicies
Request Body:
<MessageAgingPolicy>
  <DisplayName>Texoma_Message_Policy</DisplayName>
</MessageAgingPolicy>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/messageagingpolicies/3f3f9297-e1eb-46a5-bbdf-d86298e2531c
```

JSON Example

To create new message aging policy, do the following:

```
Request URI:
POST https://<connection-server>/vmrest/messageagingpolicies
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "DisplayName":"Texoma_Message_Policy"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/messageagingpolicies/3f3f9297-e1eb-46a5-bbdf-d86298e2531c
```

Example 2: The following is the example of the create a new message aging policy with some more parameter

```
*POST https://<connection-server>/vmrest/messageagingpolicies
Request Body:
<MessageAgingPolicy>
  <DisplayName>Texoma_New_Message_Policy</DisplayName>
  <Enabled>>false</Enabled>
</MessageAgingPolicy>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/messageagingpolicies/3f3f9297-e1eb-46a5-bbdf-d86298e2531c
```

Updating a Message Aging Policy Parameters

The following is an example of the PUT request that allows you to update the display name of message aging policy:

```
*PUT https://<connection-server>/vmrest/messageagingpolicies/<messageagingpolicyobject-id>
Request Body:
<MessageAgingPolicy>
  <DisplayName>Texoma_Message_Policy_2</DisplayName>
</MessageAgingPolicy>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update the display name of message aging policy, do the following:

```
Request URI:
PUT https://<connection-server>/vmrest/messageagingpolicies/<messageagingpolicyobject-id>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "DisplayName": "Texoma_Message_Policy_2"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Deleting a Message Aging Policy

The following is an example of the DELETE request that deletes a message aging policy with a valid object ID:

```
DELETE https://<connection-server>/vmrest/messageagingpolicies<messageagingpolicyobject-id>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To delete a message aging policy with a valid object ID, do the following:

```
DELETE https://<connection-server>/vmrest/messageagingpolicies<messageagingpolicyobject-id>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

The following chart lists all of the data fields:

| Parameters | Operations | Data Type | Comments |
|---------------------|------------|-----------|--|
| DisplayName | Read/Write | String | Name of the Message Aging Policy
Maximum length: 64 |
| Enabled | Read/Write | Boolean | Specifies if message aging rules to be applied or not.
Possible values: <ul style="list-style-type: none"> • true: If message aging rules to be enforced. • false: If message aging rules to be ignored. Default value is true. |
| MessageAgingRuleURI | Read Only | String | Specifies the URI of message aging rules. |
| ObjectId | Read Only | String | Object Id of the message aging policy.
Maximum length : 36 |
| URI | Read Only | String | Specifies the message aging policy URI. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Message Aging Rules

Message Aging Rules

Administrator can use this API to update/ fetch the message aging rules. Various attributes of message aging rules can also be updated using this API.

Listing the Message Aging Rules

The following is an example of the GET request that lists all the message aging rules:

```
GET
https://<connection-server>/vmrest/messageagingpolicies/<messageagingpolicyobject-Id>/messageagingrules
```


The following is the response from the above *GET* request:

```
<MessageAgingRules total="2">
  <MessageAgingRule>
    <URI>/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-
ce14ede90ac0/messageagingrules/6951ad4c-a16c-4bf2-b61a-300bbf24519d</URI>
    <MessageAgingPolicyObjectId>0f02be4e-5d70-4a1d-b182-
ce14ede90ac0</MessageAgingPolicyObjectId>
    <MessageAgingPolicyURI>/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-
ce14ede90ac0</MessageAgingPolicyURI>
    <ObjectId>6951ad4c-a16c-4bf2-b61a-300bbf24519d</ObjectId>
    <Days>7</Days>
    <Enabled>true</Enabled>
    <Secure>>false</Secure>
    <SendNotification>>true</SendNotification>
    <NotificationDays>3</NotificationDays>
    <RuleDescription>Move Saved Messages to the Deleted Items</RuleDescription>
  </MessageAgingRule>
  <MessageAgingRule>
    <URI>/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-
ce14ede90ac0/messageagingrules/8792058b-cf27-4c10-8ac1-e903b8d18065</URI>
    <MessageAgingPolicyObjectId>0f02be4e-5d70-4a1d-b182-ce14ede90ac0</MessageAgingPolicyObjectId>
    <MessageAgingPolicyURI>/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-
ce14ede90ac0</MessageAgingPolicyURI>
    <ObjectId>8792058b-cf27-4c10-8ac1-e903b8d18065</ObjectId>
    <Days>15</Days>
    <Enabled>true</Enabled>
    <Secure>>false</Secure>
    <SendNotification>>false</SendNotification>
    <NotificationDays>3</NotificationDays>
    <RuleDescription>Permanently Delete Messages in the Deleted Items </RuleDescription>
  </MessageAgingRule>
</MessageAgingRules>
```

Response Code: 200

JSON Example

To list all message aging rules, do the following:

```
Request URI:
GET
https://<connection-server>/vmrest/messageagingpolicies/<messageagingpolicyobject-Id>/messageagingrules
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Viewing the Specific Message Aging Rule

```
{
  "@total": "2"
  "MessageAgingRule":
  [
    {
      "URI": "/vmrest/messageagingpolicies/2fcb9e34-bb41-41e3-b212-1bffa3e1d93ed/messageagingrules/230f8ab1-1dba-45db-8e2c-dbd22cad718a"
      "MessageAgingPolicyObjectId": "2fcb9e34-bb41-41e3-b212-1bffa3e1d93ed"
      "MessageAgingPolicyURI": "/vmrest/messageagingpolicies/2fcb9e34-bb41-41e3-b212-1bffa3e1d93ed"
      "ObjectId": "230f8ab1-1dba-45db-8e2c-dbd22cad718a"
      "Days": "30"
      "Enabled": "true"
      "Secure": "true"
      "SendNotification": "false"
      "NotificationDays": "3"
      "RuleDescription": "Permanently Delete Secure Touched Messages "
    }
    {
      "URI": "/vmrest/messageagingpolicies/2fcb9e34-bb41-41e3-b212-1bffa3e1d93ed/messageagingrules/b0bc585c-7704-4f36-b7f6-8e8319d89da3"
      "MessageAgingPolicyObjectId": "2fcb9e34-bb41-41e3-b212-1bffa3e1d93ed"
      "MessageAgingPolicyURI": "/vmrest/messageagingpolicies/2fcb9e34-bb41-41e3-b212-1bffa3e1d93ed"
      "ObjectId": "b0bc585c-7704-4f36-b7f6-8e8319d89da3"
      "Days": "60"
      "Enabled": "false"
      "Secure": "true"
      "SendNotification": "false"
      "NotificationDays": "3"
      "RuleDescription": "Permanently Delete All Secure Messages "
    }
  ]
}
```

Response Code: 200

Viewing the Specific Message Aging Rule

The following is an example of the GET request that lists the details of specific message aging rule represented by the provided value of object ID:

```
GET https://<connection-server>/vmrest/messageagingpolicies/<messageagingpolicyobject-Id>/messageagingrules/<messageagingruleobject-Id>
```

The following is the response from the above *GET* request:

```
<MessageAgingRule>
  <URI>/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-
  ce14ede90ac0/messageagingrules/c160becb-0042-441e-a021-4bb4aeb05da4</URI>
  <MessageAgingPolicyObjectId>0f02be4e-5d70-4a1d-b182-
  ce14ede90ac0</MessageAgingPolicyObjectId>
  <MessageAgingPolicyURI>/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-
  ce14ede90ac0</MessageAgingPolicyURI>
  <ObjectId>c160becb-0042-441e-a021-4bb4aeb05da4</ObjectId>
  <Days>30</Days>
  <Enabled>>false</Enabled>
  <Secure>>true</Secure>
  <SendNotification>>false</SendNotification>
  <NotificationDays>3</NotificationDays>
  <RuleDescription>Permanently Delete Secure Touched Messages </RuleDescription>
</MessageAgingRule>
```

Response Code: 200

JSON Example

To list details of an individual message aging rule, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/messageagingpolicies/<messageagingpolicyobject-
Id>/messageagingrules/<messageagingruleobject-Id>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-
  ce14ede90ac0/messageagingrules/c160becb-0042-441e-a021-4bb4aeb05da4"
  "MessageAgingPolicyObjectId": "0f02be4e-5d70-4a1d-b182-ce14ede90ac0"
  "MessageAgingPolicyURI": "/vmrest/messageagingpolicies/0f02be4e-5d70-4a1d-b182-
  ce14ede90ac0"
  "ObjectId": "c160becb-0042-441e-a021-4bb4aeb05da4"
  "Days": "60"
  "Enabled": "false"
  "Secure": "true"
  "SendNotification": "false"
  "NotificationDays": "3"
  "RuleDescription": "Permanently Delete Secure Touched Messages"
}
```

Response Code: 200

Updating a Message Aging Rule

The following is an example of the PUT request that allows you to update the days parameter of enabled message aging rule:

```
PUT
https://<connection-server>/vmrest/messageagingpolicies/<messageagingpolicyobject-Id>/messageagingrules/<messageagingruleobject-Id>
Request Body:
<MessageAgingRule>
  <Days>25</Days>
</MessageAgingRule>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update the days parameter of enabled message aging rule, do the following:

```
PUT
https://<connection-server>/v1/rest/messageagingpolicies/<messageagingpolicyobject-Id>/messageagingrules/<messageagingruleobject-Id>
Accept : application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "Days": "25"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```



Note You can't update the days as well as the NotificationDays parameter if message aging rule is disabled.

Explanation of Data Fields

The following chart lists all of the data fields:

| Parameter | Operation | Data Type | Comments |
|----------------------------|------------|-------------|--|
| Days | Read/Write | Integer | Age message older than this number of days. Range: 1 to 365. |
| Action | Read/Write | Integer | Describes the action to take when the rule is applied.
Default Value: 0 Values:
<ul style="list-style-type: none"> • 0: Soft Delete • 1: Hard Delete • 2: ToSaved |
| Enabled | Read/Write | Boolean | It specifies whether the particular rule is enabled or not.
Values : true or false Default Value: true. |
| MessageAgingPolicyObjectID | Read Only | String (36) | It specifies the object id of respective Message Aging Policy |
| MessageAgingPolicyURI | Read/Write | String | URI of Message Aging Policy. |

| Parameter | Operation | Data Type | Comments |
|---------------------------|------------|-------------|--|
| AgingRuleType | Read/Write | Integer | Contains the type or purpose of the aging rule.
Default Value: 10 Values:
<ul style="list-style-type: none"> • 10: MoveSeenToDeleted • 11: HardDeleteDeleted • 12: HardDeleteSecureTouched • 13: HardDeleteAllSecure • 14: MoveNewToSaved |
| AgingTimeType | Read/Write | Integer | This defines what column to use (modificationtime or arrivaltime) when calculating messages to age.
Default Value: 0 Value:
<ul style="list-style-type: none"> • 0: ModificationTime • 1: ArrivalTime |
| LastMessageNotifiedMarker | Read/Write | datetime | A marker used by the sysagent task so we don't send more than one notification per message. |
| NotificationDays | Read/Write | Integer | If SendNotification is True, send the notification this many days before the rule takes place. It is always less than equal to Days parameter.
Range: 0 to 365. Default Value: 3. |
| ObjectId | Read Only | String (36) | Object id of Message Aging Rule |
| RuleDescription | Read Only | String | It describes the action taken by rule. |
| Secure | Read Only | Boolean | It specifies whether the message is secured type or not. |
| SendNotification | Read/Write | Boolean | It specifies whether notification is sent prior to taking action.
Values: true or false. Default Value: false. |
| Seen | Read/Write | Integer | Apply this rule to messages where tbl_FolderItem. Seen is equal to this value. Default Value: NULL |
| Recent | Read/Write | Integer | If SendNotification is True, send the notification this many days before the rule takes place.
Default Value: 3 |
| URI | Read Only | string | URI of Message Aging Rule. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Message Aging Text

Message Aging Text

Administrator can use this API to create/update/delete/fetch the message aging text. Various attributes of message aging text can also be updated using this API.

Listing the Message Aging Texts

The following is an example of the GET request that lists all the message aging texts:

```
GET https://<connection-server>/vmrest/messageagingtexts
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<MessageAgingTexts total="1">
  <MessageAgingText>
    <URI>/vmrest/messageagingtexts/0220cac9-6df0-48c2-929f-e38d7ff88e3d</URI>
    <ObjectId>0220cac9-6df0-48c2-929f-e38d7ff88e3d</ObjectId>
    <LanguageCode>1033</LanguageCode>
    <DefaultSubject>Your message from %SENDER% will be moved to the Saved Messages
    folder in %DAYSUNTIL% day(s).</DefaultSubject>
    <Subject/>
    <DefaultBody>Your message from %SENDER%, which was received on
    %MODIFICATIONTIME%, will be moved to the Saved Messages folder in %DAYSUNTIL%
    day(s).</DefaultBody>
    <Body/>
    <UseDefault>>false</UseDefault>
    <RuleDescription>Text for Move New Messages to the Saved Messages Folder
    Rule</RuleDescription>
  </MessageAgingText>
</MessageAgingTexts>
```

```
Response Code: 200
```

JSON Example

To list all the message aging texts, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/messageagingtexts
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1"
  "MessageAgingText": [
  {
    "URI": "/vmrest/messageagingtexts/0220cac9-6df0-48c2-929f-e38d7ff88e3d",
    "ObjectId": "0220cac9-6df0-48c2-929f-e38d7ff88e3d",
    "LanguageCode": "1033",
    "DefaultSubject": "Your message from %SENDER% will be moved to the Saved Messages
folder in %DAYSUNTIL% day(s).",
    "Subject": [],
    "DefaultBody": "Your message from %SENDER%, which was received on
%MODIFICATIONTIME%, will be moved to the Saved Messages folder in %DAYSUNTIL% day(s).",
    "Body": [],
    "UseDefault": "false",
    "RuleDescription": "Text for Move New Messages to the Saved Messages Folder Rule"
  }
  ]
}
```

Response Code: 200

JSON Example

To list all the message aging texts, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/messageagingtexts
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1"
  "MessageAgingText": [
  {
    "URI": "/vmrest/messageagingtexts/0220cac9-6df0-48c2-929f-e38d7ff88e3d",
    "ObjectId": "0220cac9-6df0-48c2-929f-e38d7ff88e3d",
    "LanguageCode": "1033",
    "DefaultSubject": "Your message from %SENDER% will be moved to the Saved Messages
folder in %DAYSUNTIL% day(s).",
    "Subject": [],
    "DefaultBody": "Your message from %SENDER%, which was received on
%MODIFICATIONTIME%, will be moved to the Saved Messages folder in %DAYSUNTIL% day(s).",
    "Body": [],
    "UseDefault": "false",
    "RuleDescription": "Text for Move New Messages to the Saved Messages Folder Rule"
  }
  ]
}
```

Response Code: 200

Viewing the Specific Message Aging Text

The following is an example of the GET request that lists the details of specific message aging policy represented by the provided value of object ID:

```
GET https://<connection-server>/vmrest/messageagingtexts/<messageagingtextobject-id>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<MessageAgingText>
  <URI>/vmrest/messageagingtexts/0220cac9-6df0-48c2-929f-e38d7ff88e3d</URI>
  <ObjectId>0220cac9-6df0-48c2-929f-e38d7ff88e3d</ObjectId>
  <LanguageCode>1034</LanguageCode>
  <DefaultSubject>Your message from %SENDER% will be moved to the Saved Messages folder
in
  %DAYSUNTIL% day(s).</DefaultSubject>
  <Subject/>
  <DefaultBody>Your message from %SENDER%, which was received on %MODIFICATIONTIME%,
will be moved to the Saved Messages folder in %DAYSUNTIL% day(s).</DefaultBody>
  <Body/>
  <UseDefault>>true</UseDefault>
  <RuleDescription>Text for Move New Messages to the Saved Messages Folder
Rule</RuleDescription>
</MessageAgingText>
```

```
Response Code: 200
```

JSON Example

To list details of an individual message aging text, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/messageagingtexts/<messageagingtextobject-id>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/messageagingtexts/0220cac9-6df0-48c2-929f-e38d7ff88e3d",
  "ObjectId": "0220cac9-6df0-48c2-929f-e38d7ff88e3d",
  "LanguageCode": "1034",
  "DefaultSubject": "Your message from %SENDER% will be moved to the Saved Messages
folder in
  %DAYSUNTIL% day(s).",
  "Subject": [],
  "DefaultBody": "Your message from %SENDER%, which was received on %MODIFICATIONTIME%,
will be moved to the Saved Messages folder in %DAYSUNTIL% day(s).",
  "Body": [],
  "UseDefault": "true",
  "RuleDescription": "Text for Move New Messages to the Saved Messages Folder Rule"
}
```

```
Response Code: 200
```

Updating a Message Aging Text

Example 1: Update UseDefault Parameter

The following is an example of the PUT request that allows you to update the parameters of message aging text:


```
PUT https://<connection-server>/vmrest/messageagingtexts/<messageagingtextobjectid>
Request Body:
<MessageAgingText>
  <UseDefault>Message Aging Text</UseDefault>
</MessageAgingText>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update the parameter of message aging text, do the following:

```
Request URI:
PUT https://<connection-server>/vmrest/messageagingtexts/<messageagingtextobjectid>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "UseDefault":"Message Aging Text"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: Update Subject and Body of Message Aging Text

The following is an example of the PUT request that allows you to update the parameters of message aging text:

```
PUT https://<connection-server>/vmrest/messageagingtexts/<messageagingtextobjectid>
Request Body:
<MessageAgingText>
  <UseDefault>>false</UseDefault>
  <Subject>Message aging text</Subject>
  <Body>Message aging Text</Body>
</MessageAgingText>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To update the subject and body of message aging text, do the following:

```

Request URI:
PUT https://<connection-server>/vmrest/messageagingtexts/<messageagingtextobjectid>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "UseDefault": "False",
  "Subject": "Message Aging test",
  "Body": "Message Aging Text"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```

<pre>
Response Code: 204

```

Explanation of Data Fields

| Parameter | Operations | Data Type | Comments |
|----------------|------------|---------------|---|
| ObjectId | Read Only | String (36) | Object id of message aging text |
| LanguageCode | Read/Write | Integer | the language identifier for this row |
| DefaultSubject | Read Only | String (84) | Default data supplied subject |
| Subject | Read/Write | String (84) | Admin supplied subject. Can be modified or updated only if UseDefault parameter is false. |
| DefaultBody | Read Only | String (2048) | Default data supplied default body. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Message Expiration

Message Expiration

Administrator can use this API to set number of days after which message will be expired and hard deleted from the system. Message Expiration value is applicable for both audio as well as video messages.

Fetching Message Expiration field value

The following is an example of the GET request to fetch Message Expiration field value of audio and video messages:

```
GET https://<connection-server>/vmrest/messageexpirations
```

The following is the response from the above *GET* request:

```
<MessageExpirations total="1">
<MessageExpiration>
<URI>/vmrest/messageexpirations/72269af8-7376-48d2-bf23-9abf6e98b303</URI>
<ObjectId>72269af8-7376-48d2-bf23-9abf6e98b303</ObjectId>
<Enabled>>false</Enabled>
<MaximumAgeDays>180</MaximumAgeDays>
<MaxVideoMsgAgeDays>30</MaxVideoMsgAgeDays>
</MessageExpiration>
</MessageExpirations>
```

Response Code: 200

JSON Example

```
GET https://<connection-server>/vmrest/messageexpirations
Accept: application/json
Content_type: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request:

```
{
  "@total": "1",
  "MessageExpiration": {
    "URI": "/vmrest/messageexpirations/72269af8-7376-48d2-bf23-9abf6e98b303",
    "ObjectId": "72269af8-7376-48d2-bf23-9abf6e98b303",
    "Enabled": "true",
    "MaximumAgeDays": "180",
    "MaxVideoMsgAgeDays": "30"
  }
}
```

Response Code: 200

Enabling and Updating Message Expiration field value

The following is an example of the PUT request that allows you to enable message expiration and update the number of days for Message Expiration of audio and video messages:

```
PUT https://<connection-server>/vmrest/messageexpirations/<messageexpirationobjectid>
Request Body:
<MessageExpiration>
<Enabled>>true</Enabled>
<MaximumAgeDays>23</MaximumAgeDays>
<MaxVideoMsgAgeDays>11</MaxVideoMsgAgeDays>
</MessageExpiration>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

```

PUT https://<connection-server>/vmrest/messageexpirations/<messageexpirationobjectid>
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Enabled": "true",
  "MaximumAgeDays": "55",
  "MaxVideoMsgAgeDays": "44"
}

```

The following is the response from the above *PUT* request:

```
Response Code: 204
```

Explanation of Data Fields

The following chart lists all of the data fields:

| Parameter | Operations | Data Type | Comments |
|--------------------|------------|-------------|---|
| ObjectId | Read Only | String (36) | A globally unique, system-generated identifier for Message Expiration Policy. |
| Enabled | Read/Write | Boolean | A flag indicating whether the Message Expiration is applicable or not.

Values can be: <ul style="list-style-type: none"> • false - Message Expiration is not applicable. • true - Message Expiration is applicable. Default Value - false |
| MaximumAgeDays | Read/Write | Integer | The number of days after which the audio/video message will be marked as expired from the Cisco Unity Connection. <ul style="list-style-type: none"> • Range - 1-999 Days Default Value - 180 |
| MaxVideoMsgAgeDays | Read/Write | Integer | The number of days after which the video part of a video message will be deleted and only audio part will be retained.

Note: It is recommended that the number of days entered in MaxVideoMsgAgeDays should be less than the number of days entered in MaximumAgeDays field. <ul style="list-style-type: none"> • Range - 1-999 Days Default Value - 30 |



CHAPTER 43

Cisco Unity Connection Provisioning Interface (CUPI) API for Unified Messaging

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- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- User Template External Services](#), on page 616
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Cisco Unity Connection Provisioning Interface (CUPI) API -- User Unified Messaging Account

Create a Unified Messaging Account

To add a new unified messaging account to user, server must have Unified Messaging Services Configured. The following URI can be used to view the user object ID:

```
GET https://<connection-server>/vmrest/users/<user-objectid>
```

From the above URI, get the unified messaging account:

```
GET https://<connection-server>/vmrest/users/<user-objectid>/externalserviceaccounts
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<ExternalServiceAccount>
  <URI>/vmrest/users/9375d893-c8eb-437b-90bf-
7de4b1d0c3e8/externalserviceaccounts/39871e30-849a-4dcf-b868-2faf360d503a</URI>
  <ObjectId>39871e30-849a-4dcf-b868-2faf360d503a</ObjectId>
  <ExternalServiceObjectId>1cd78b6c-1e6e-4542-a6e7-14f431d6569c</ExternalServiceObjectId>

  <SubscriberObjectId>9375d893-c8eb-437b-90bf-7de4b1d0c3e8</SubscriberObjectId>
  <UserURI>/vmrest/users/9375d893-c8eb-437b-90bf-7de4b1d0c3e8</UserURI>
  <EnableCalendarCapability>true</EnableCalendarCapability>
  <EnableMeetingCapability>>false</EnableMeetingCapability>
  <EnableTtsOfEmailCapability>true</EnableTtsOfEmailCapability>
  <IsPrimaryMeetingService>>false</IsPrimaryMeetingService>
  <LoginType>0</LoginType>
  <UserPassword/>
  <EmailAddress>chhavi@com</EmailAddress>
  <EnableMailboxSynchCapability>true</EnableMailboxSynchCapability>
  <EmailAddressUseCorp>>false</EmailAddressUseCorp>
</ExternalServiceAccount>

```

Response Code: 200

JSON Example

```

GET
https://<connection-server>/vmrest/users/<user-objectid>/externalserviceaccounts/<objectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Response Code: 200

Updating the Unified Messaging Account

JSON Example

To view the unified messaging account, do the following:

```

Request URI:
PUT https://<connection-server>/vmrest/users/<userobjectid>/
externalserviceaccounts/<externalserviceaccountsobjectId>
Accept: application/json
Content-type: application/json
Connection: keep-alive
{
  "EmailAddressUseCorp":"true"
  "EnableCalendarCapability":"true"
  "EnableMailboxSynchCapability":"true"
  "EnablTtsOfEmailCapability":"true"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

| Device Name | Data Type | Operation | Comments |
|------------------------------|-----------|------------|--|
| EmailAddressUseCorp | Boolean | Read/Write | Use Corporate Email Address
Default value: False |
| EnableTtsOfEmailCapability | Boolean | Read/Write | Access Exchange Email by Using Text to Speech (TTS)
Default value: False |
| EnableCalendarCapability | Boolean | Read/Write | Access Exchange Calendar and Contacts
Default value: False |
| EnableMailboxSynchCapability | Boolean | Read/Write | Synchronize Connection and Exchange Mailboxes (Single Inbox)
Default value: False |

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template Unified Messaging Account

Unified Messaging Account API

The following URI can be used to view the user template object ID:

```
GET https://<connection-server>/vmrestvmrest/usertemplates/<usertemplateobjectid>
```

From the above URI, get the unified messaging account:

```
GET https://<connection-server>/vmrestvmrest/usertemplates/<usertemplateobjectid>/templateexternalserviceaccounts
```

Updating the Unified Messaging Account

```
Request Body:
<TemplateExternalServiceAccount>
  <EmailAddressUseCorp>true</EmailAddressUseCorp>
  <EnableCalendarCapability>true</EnableCalendarCapability>
  <EnableMailboxSynchCapability>true</EnableMailboxSynchCapability>
  <EnableTtsOfEmailCapability>true</EnableTtsOfEmailCapability>
</TemplateExternalServiceAccount>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

JSON Example

To view the unified messaging account, do the following:

```
Request URI:
GET
https://<connection-server>/vrest/usertemplates/<user-template-object-id>/templateexternalserviceaccounts/<templateexternalserviceaccounts-object-id>

Accept: application/json
Content-type: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "EmailAddressUseCorp": "true"
  "EnableCalendarCapability": "true"
  "EnableMailboxSynchCapability": "true"
  "EnableTtsOfEmailCapability": "true"
}
```

Response Code: 200

Explanation of Data Fields

| Device Name | Data Type | Operation | Comments |
|------------------------------|-----------|------------|--|
| EmailAddressUseCorp | Boolean | Read/Write | Use Corporate Email Address
Default value: False |
| EnableTtsOfEmailCapability | Boolean | Read/Write | Access Exchange Email by Using Text to Speech (TTS)
Default value: False |
| EnableCalendarCapability | Boolean | Read/Write | Access Exchange Calendar and Contacts
Default value: False |
| EnableMailboxSynchCapability | Boolean | Read/Write | Synchronize Connection and Exchange Mailboxes (Single Inbox)
Default value: False |

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template External Services

About External Services

This page contains information on how to use the API to create, list, modify, and delete Unified Messaging Services (also known as external services). When you create Unified Messaging Service Accounts, you base

each account on a Unified Messaging Service. Creating a new Unified Messaging service is based on any one of the following:

- Exchange/BPOS-D
- MeetingPlace
- Office 365
- Google Workspace (*applicable with Unity Connection 14 and later*)

Unity Connection 14 and later provides a new way to users for accessing the voice messages on their Gmail account. For this, you need to configure unified messaging with Google Worspace to synchronize the voice messages between Unity Connection and Gmail server.

Listing External Services

Example 1

The following is an example of the GET request that lists the Unified Messaging Services:

```
https://<connection_server>/vmrest/externalservices
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<ExternalServices total="3">
  <ExternalService>
    <URI>/vmrest/externalservices/53a7675f-94c2-4596-ae3a-69b9287d119d</URI>
    <ObjectId>53a7675f-94c2-4596-ae3a-69b9287d119d</ObjectId>
    <AuthenticationMode>3</AuthenticationMode>
    <DisplayName>exchange_1</DisplayName>
    <IsEnabled>true</IsEnabled>
    <SecurityTransportType>1</SecurityTransportType>
    <Server>10.78.171.187</Server>
    <ServiceAlias>admin</ServiceAlias>
    <ServicePassword/>
    <ServerType>4</ServerType>
    <SupportsCalendarCapability>true</SupportsCalendarCapability>
    <SupportsTtsOfEmailCapability>true</SupportsTtsOfEmailCapability>
    <ValidateServerCertificate>false</ValidateServerCertificate>
    <UseServiceCredentials>true</UseServiceCredentials>
    <SupportsMailboxSynchCapability>true</SupportsMailboxSynchCapability>
    <ExchDoAutodiscover>false</ExchDoAutodiscover>
    <MailboxSynchFaxAction>1</MailboxSynchFaxAction>
    <MailboxSynchEmailAction>2</MailboxSynchEmailAction>

    <ExternalServiceResetURI>/vmrest/externalservices/53a7675f-94c2-4596-ae3a-69b9287d119d/reset</ExternalServiceResetURI>

  </ExternalService>
  <ExternalService>
    <URI>/vmrest/externalservices/bc1dbc08-bfdb-46e8-acb4-12cb511ebb01</URI>
    <ObjectId>bc1dbc08-bfdb-46e8-acb4-12cb511ebb01</ObjectId>
    <AuthenticationMode>1</AuthenticationMode>
    <DisplayName>ofc_365</DisplayName>
    <IsEnabled>true</IsEnabled>
    <ServiceAlias>admin</ServiceAlias>
    <ServicePassword/>
    <ServerType>5</ServerType>
    <SupportsCalendarCapability>true</SupportsCalendarCapability>
    <SupportsTtsOfEmailCapability>true</SupportsTtsOfEmailCapability>
    <ValidateServerCertificate>false</ValidateServerCertificate>
    <UseServiceCredentials>true</UseServiceCredentials>
    <SupportsMailboxSynchCapability>true</SupportsMailboxSynchCapability>
    <ExchDoAutodiscover>true</ExchDoAutodiscover>
    <ExchOrgDomain>10.78.171.70</ExchOrgDomain>
    <ExchSite/>
    <MailboxSynchFaxAction>1</MailboxSynchFaxAction>
    <MailboxSynchEmailAction>2</MailboxSynchEmailAction>
    <ProxyServer/>

    <ExternalServiceResetURI>/vmrest/externalservices/bc1dbc08-bfdb-46e8-acb4-12cb511ebb01/reset</ExternalServiceResetURI>

  </ExternalService>
  <ExternalService>
    <URI>/vmrest/externalservices/9d7f6b48-19fc-446a-8afe-6d454a0b3de1</URI>
    <ObjectId>9d7f6b48-19fc-446a-8afe-6d454a0b3de1</ObjectId>
    <DisplayName>meeting_place</DisplayName>
    <IsEnabled>true</IsEnabled>
    <Server>10.78.171.87</Server>
    <ServiceAlias>admin</ServiceAlias>
    <ServicePassword/>
    <ServerType>1</ServerType>
    <SupportsCalendarCapability>true</SupportsCalendarCapability>
    <SupportsMeetingCapability>true</SupportsMeetingCapability>
    <TransferExtensionDialString>12112</TransferExtensionDialString>
  </ExternalService>
</ExternalServices>

```

Example 2

The following is an example of another GET request that lists the Unified Messaging Service based on <externalservice-id>:

```
https://<connection_server>/vmrest/externalservices/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<ExternalService>
<URI>/vmrest/externalservices/6f4f7023-e9e5-4cd0-bf55-e20a0be6fd78</URI>
<ObjectId>6f4f7023-e9e5-4cd0-bf55-e20a0be6fd78</ObjectId>
<TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
<AuthenticationMode>1</AuthenticationMode>
<DisplayName>UMS_API</DisplayName>
<IsEnabled>true</IsEnabled>
<SecurityTransportType>1</SecurityTransportType>
<Server>10.65.156.190</Server>
<ServiceAlias>clientteam\administrator</ServiceAlias>
<ServicePassword/>
<ServerType>4</ServerType>
<SupportsCalendarCapability>true</SupportsCalendarCapability>
<SupportsTtsOfEmailCapability>true</SupportsTtsOfEmailCapability>
<ValidateServerCertificate>false</ValidateServerCertificate>
<UseServiceCredentials>true</UseServiceCredentials>
<SupportsMailboxSynchCapability>true</SupportsMailboxSynchCapability>
<ExchDoAutodiscover>false</ExchDoAutodiscover>
<MailboxSynchFaxAction>1</MailboxSynchFaxAction>
<MailboxSynchEmailAction>2</MailboxSynchEmailAction>
</ExternalService>
```

```
Response Code: 200
```

Listing Specific Tenant Related User Template External Services by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectId to list the specific tenant related user template external services using the following URI:

```
GET https://<connection-server>/vmrest/externalservices?query=(TenantObjectId is
<Tenant-ObjectId>)
```

To get the TenantObjectId, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Adding Unified Messaging Service

This section contains information on how to create External Services:

- Adding Exchange/BPOS-D External Service
- Adding Meeting Place External Service
- Adding Office 365 External Service

Adding Exchange/BPOS-D External Service

The following is an example of the POST request that adds the Exchange/BPOS-D Unified Messaging Service:

```
https://<connection_server>/vmrest/externalservices
```

The request parameters will depend upon the information given by you.

```
<ExternalService>
  <DisplayName>UMS_API</DisplayName>
  <ServiceAlias> client-team\administrator</ServiceAlias>
  <ServicePassword>Ecsbulab12</ServicePassword>
  <ServerType>4</ServerType>
  <Server>10.65.156.190</Server>
  <AuthenticationMode>1</AuthenticationMode>
  <SecurityTransportType>1</SecurityTransportType>
</ExternalService>
```

```
Response Code: 201
```

The following are the list of mandatory parameters required to create a Unified Messaging Service:

- Display Name: The display name of the unified messaging service
- Service Alias: The alias of the unified messaging service
- Service Password: The password of the unified messaging service
- Server Type: The type of unified messaging service account (Exchange/BPOS-D: 4)
- Server: The IP address of the Exchange server
- Authentication Mode: The web-based Authentication Mode of the Unified Messaging Service: Basic (1), Digest (2), and NTLM (3)
- Exchange Server Type: The Exchange Server Type of the Unified Messaging Account: Exchange 2003 (0) and Exchange 2007/2010/2013 (1)
- Security Transport Type: The web-based protocol of the Unified Messaging Account: HTTP (0) and HTTPS (1)

Adding Meeting Place External Service

The following is an example of the POST request that adds the Meeting Place Unified Messaging Service:

```
https://<connection_server>/vmrest/externalservices
```

The request parameters will depend upon the information given by you.

```
<ExternalService>
  <DisplayName>MeetingPlace</DisplayName>
  <ServiceAlias> admin</ServiceAlias>
  <ServicePassword>ecsbulab</ServicePassword>
  <ServerType>1</ServerType>
  <Server>10.76.175.167</Server>
  <TransferExtensionDialString>111111</TransferExtensionDialString>
</ExternalService>
```

```
Response Code: 201
```

Adding Office 365 External Service

Unity Connection 12.5(1) SU2 and later supports **OAuth2** web authentication mode for configuring Unified Messaging with Office 365 service. For using OAuth2 web authentication mode for configuring Unified Messaging, you must create and register an application on Microsoft Azure portal corresponding to the Unified Messaging Service. After registering the application, you will get the values of **Application (Client) ID**, **Directory ID** and **Client Secret** on Azure portal.

With Unity Connection 11.5(1) SU9 and later, two new fields, **AdAuthenticationEndpoint** and **ResourceURI** are introduced in this API. These fields are auto populated with default values which can be modified according to required Active Directory.

For more information on configuring Unified Messaging with OAuth2 authentication mode, see [Task List for Configuring Unified Messaging](#) section of "Configuring Unified Messaging" chapter in *Unified Messaging Guide for Cisco Unity Connection Release 12.x* guide available at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/12x/unified_messaging/b_12xcucumgx.html.

The following is an example of the POST request that adds the Office 365 Unified Messaging Service:

```
https://<connection_server>/vmrest/externalservices
```

The request parameters will depend upon the information given by you.

```
<ExternalService>
  <DisplayName>OFC_Service</DisplayName>
  <IsEnabled>true</IsEnabled>
  <ExchDoAutodiscover>true</ExchDoAutodiscover>
  <ExchOrgDomain>domain.com</ExchOrgDomain>
  <SupportsCalendarCapability>true</SupportsCalendarCapability>
  <ServiceAlias>admin</ServiceAlias>
  <SupportsCalendarCapability>true</SupportsCalendarCapability>
  <SupportsTtsOfEmailCapability>true</SupportsTtsOfEmailCapability>
  <SupportsMeetingCapability>false</SupportsMeetingCapability>
  <ValidateServerCertificate>false</ValidateServerCertificate>
  <UseServiceCredentials>true</UseServiceCredentials>
  <AuthenticationMode>4</AuthenticationMode>
  <ServicePassword>password123</ServicePassword>
  <ServerType>5</ServerType>
  <ClientId>d64ea56b-1d60-47c7-a26d-7bcbee3a09c3</ClientId>
  <ClientSecret> </ClientSecret>
  <DirectoryID>cafae64a-ffb2-4585-8c11-2d86aa8b3bf5</DirectoryID>
  <AdAuthenticationEndpoint>https://login.microsoftonline.com</AdAuthenticationEndpoint>

  <ResourceURI>https://outlook.office365.com</ResourceURI></ExternalService>
```

```
Response Code: 201
```

The following are the list of mandatory parameters required to create a Unified Messaging Service:

- Display Name: The display name of the unified messaging service
- Service Alias: The administrator account name of active directory
- Service Password: The administrator account password of active directory
- Server Type: The type of unified messaging service account. The value of Server Type for Office 365 is 5
- ExchOrgDomain: The domain name of hosted exchange server
- ExchDoAutodiscover: The Auto Discovery flag that should always be true for Office 365



Note AuthenticationMode: The web authentication mode for Unified Messaging. The possible authentication mode can be Basic (1), NTLM (3) and OAuth2 (4) for Office 365 service. By default, the Authentication Mode is set to Basic (1).



Note If you select OAuth2 authentication mode for Office 365 service, you must provide the values of DirectoryID, ClientId and ClientSecret from Azure portal.



Note (*Applicable to 12.5SU7 and later releases*) If you select OAuth2 authentication mode for Office 365 service, **Service Alias** and **Service Password** fields are not required in API request body for adding Unified Messaging Service.

Modifying Unified Messaging Service

The following is an example of the PUT request that modifies the Unified Messaging Service represented by <externalserviceObject-id>:

```
https://<connection_server>/vmrest/externalservices/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<ExternalService>
  <ServiceAlias> client-team\administrator</ServiceAlias>
  <ServicePassword>Ecsbulab13</ServicePassword>
  <ServerType>4</ServerType>
  <Server>10.65.156.190</Server>
  <AuthenticationMode>1</AuthenticationMode>
  <SecurityTransportType>1</SecurityTransportType>
</ExternalService>
```

```
<ExternalService>
  <ServiceAlias> client-team\administrator</ServiceAlias>
  <ServicePassword></ServicePassword>
  <ServerType>4</ServerType>
  <Server>10.65.156.190</Server>
  <AuthenticationMode>4</AuthenticationMode>
  <SecurityTransportType>1</SecurityTransportType>
  <ClientId>d64ea56b-1d60-47c7-a26d-7bcbee3a09c3</ClientId>
  <ClientSecret></ClientSecret>
  <DirectoryID>cafae64a-ffb2-4585-8c11-2d86aa8b3bf5</DirectoryID>
</ExternalService>
```

```
Successful Response Code: 204
```



Note (Applicable to 12.5SU7 and later releases) If you select OAuth2 authentication mode for Office 365 service, **Service Alias** and **Service Password** fields are not relevant in modification of Unified Messaging Service.

Deleting Unified Messaging Service

The following is an example of the DELETE request that deletes a Unified Messaging Service as represented by < externalserviceobject-id >:

```
https://<connection_server>/vmrest/usertemplates/externalservices/<objectId >
```

The output for this request returns the successful response code.

```
Response Code: 204
```

Explanation of Data Fields

| Field | Description |
|---------------------|--|
| Display Name | The display name of the unified messaging service |
| Service Alias | The administrator account name of active directory |
| Service Password | The administrator account password of active directory |
| Server Type | The type of unified messaging service account. Possible values are: <ul style="list-style-type: none"> • 1: For Meeting Place • 4: For Exchange /BPOS-D • 5: For Office 365 |
| Server | The IP address of the Exchange server |
| Authentication Mode | The web-based Authentication Mode of the Unified Messaging Service. Possible value are: <ul style="list-style-type: none"> • 1: For Basic • 2: For Digest • 3: For NTLM • 4: OAuth2 <p>By default, the Authentication Mode is set to Basic (1)</p> |

| Field | Description |
|-----------------------------|--|
| Exchange Server Type | The Exchange Server Type of the Unified Messaging Account. Possible values are: <ul style="list-style-type: none"> • 0: Exchange 2003 • 1: Exchange 2007/2010/2013 and above |
| Security Transport Type | The web-based protocol of the Unified Messaging Account. Possible values are: <ul style="list-style-type: none"> • 0: For HTTP • 1: For HTTPS |
| TransferExtensionDialString | The digits that Cisco Unity Connection must dial to transfer users on the phone to the opening of the Cisco Unified Meeting Place Server |
| ExchOrgDomain | The domain name of hosted exchange server |
| ExchDoAutodiscover | The Auto Discovery flag that should always be true for Office 365 |
| DirectoryID | <i>(Applicable only when OAuth2 authentication mode is selected)</i> Directory id of the application registered on Microsoft Azure portal |
| ClientID | <i>(Applicable only when OAuth2 authentication mode is selected)</i> Client id of the application registered on the Microsoft Azure portal |
| ClientSecret | <i>(Applicable only when OAuth2 authentication mode is selected)</i> The value of Client Secret of the application registered on the Microsoft Azure portal. |
| AD Authentication Endpoint | <i>(Applicable only when OAuth2 authentication mode is selected)</i> This field is optional . Its value depend on Active Directory chosen on Microsoft Azure Portal. For different values of AD Authentication Endpoint, refer Endpoints of the registered application at Azure portal. Default value of AD Authentication Endpoint field is https://login.microsoftonline.com |
| Resource URI | <i>(Applicable only when OAuth2 authentication mode is selected)</i> This field is optional . Its value depend on Active Directory chosen on Microsoft Azure Portal. Default value of Resource URI field is https://outlook.office365.com |

Cisco Unity Connection Provisioning Interface (CUPI) API -- User Template External Service Accounts

About External Service Accounts

A user template may have zero or more unified messaging service accounts (also known as external service accounts). Examples of these services include Cisco Unified MeetingPlace 8.0, Exchange 2003, Exchange 2007, and Exchange 2010. Using CUPI for user templates, an administrator can:

- Retrieve a list of its unified messaging service accounts,
- Retrieve one of its unified messaging service accounts, and
- Change the password for one of its unified messaging service accounts

Listing External Service Accounts

To retrieve a list of unified messaging service accounts, use the GET method with URI:

```
https://<connection_server>/vmrest/usertemplates/usertemplateobject-id/templateexternalserviceaccounts
```

In the following example, the user has two unified messaging service accounts, Exchange2K3 and Exchange2K7:

```
GET
https://<connection-server>/vmrest/usertemplates/<usertemplateobject-id>/externalserviceaccounts
```

```
<TemplateExternalServiceAccounts total="1">
<TemplateExternalServiceAccount>

<URI>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/templateexternalserviceaccounts/c4e7b01f-8b6e-4a08-9d57-856e81919c66</URI>

<EmailAddressUseCorp>false</EmailAddressUseCorp>
<EnableCalendarCapability>true</EnableCalendarCapability>
<EnableMailboxSynchCapability>true</EnableMailboxSynchCapability>
<EnableMeetingCapability>false</EnableMeetingCapability>
<EnableTtsOfEmailCapability>true</EnableTtsOfEmailCapability>
<ExternalServiceObjectId>26f20913-af8d-465a-8437-707028d376bd</ExternalServiceObjectId>
<IsPrimaryMeetingService>false</IsPrimaryMeetingService>
<LoginType>0</LoginType>
<ObjectId>c4e7b01f-8b6e-4a08-9d57-856e81919c66</ObjectId>
<UserTemplateObjectId>85a845d3-063d-4641-aa70-8b536282bffb</UserTemplateObjectId>

<UserTemplateURI>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb</UserTemplateURI>

<DisplayName>UMS_API1111I</DisplayName>
<ServerType>4</ServerType>
<UserTemplateDisplayName>Template</UserTemplateDisplayName>
</TemplateExternalServiceAccount>
</TemplateExternalServiceAccounts>
```

```
Response Code: 200
```

For each unified messaging service account, CUPI returns the following information:

- URI - The URI for retrieving the unified messaging service account
- IsEnabled - A flag to indicate whether the unified messaging service account is enabled
- UseServiceCredentials - A flag to indicate whether service credentials or user credentials are used to sign in the unified messaging service account
- LoginType - A flag to indicate whether the user alias (0), a guest account (1), or a specified user ID (2) is used to sign in the account
- UserId - The user ID to sign in to the unified messaging service account, if one is used
- ObjectId - The unique ID of the unified messaging service account
- Display Name - The display name of the unified messaging service account

To retrieve a specific unified messaging service account, use the GET method with the URI field from above as follows:

```
GET
http://<connection_server>/vmrest/usertemplates/<objectId>/templateexternalserviceaccounts/<objectId>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<TemplateExternalServiceAccount>

<URI>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb/templateexternalserviceaccounts/c4e7b01f-8b6e-4a08-9d57-856e81919c66</URI>

<EmailAddressUseCorp>>false</EmailAddressUseCorp>
<EnableCalendarCapability>>true</EnableCalendarCapability>
<EnableMailboxSynchCapability>>true</EnableMailboxSynchCapability>
<EnableMeetingCapability>>false</EnableMeetingCapability>
<EnableTtsOfEmailCapability>>true</EnableTtsOfEmailCapability>
<ExternalServiceObjectId>26f20913-af8d-465a-8437-707028d376bd</ExternalServiceObjectId>
<IsPrimaryMeetingService>>false</IsPrimaryMeetingService>
<LoginType>0</LoginType>
<ObjectId>c4e7b01f-8b6e-4a08-9d57-856e81919c66</ObjectId>
<UserTemplateObjectId>85a845d3-063d-4641-aa70-8b536282bffb</UserTemplateObjectId>

<UserTemplateURI>/vmrest/usertemplates/85a845d3-063d-4641-aa70-8b536282bffb</UserTemplateURI>

<DisplayName>UMS_AP1111I</DisplayName>
<ServerType>4</ServerType>
<UserTemplateDisplayName>Template</UserTemplateDisplayName>
</TemplateExternalServiceAccount>
```

```
Response Code: 200
```

Adding New External Service Account

The following is an example of the POST request that adds a Unified Messaging Account:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/templateexternalserviceaccounts/<objectId>
```

The actual response will depend upon the information given by you. The following are the mandatory parameters that you need to enter to create a Unified Messaging Account:

```
<TemplateExternalServiceAccount>
<ExternalServiceObjectId>NewUnfiedServiceAccount </ExternalServiceObjectId>
<EnableCalendarCapability>true</EnableCalendarCapability>
<EnableTtsOfEmailCapability>true</EnableTtsOfEmailCapability>
<EnableMailboxSynchCapability>true</EnableMailboxSynchCapability>
</TemplateExternalServiceAccount>
```

Response Code: 201

Modifying External Service Account

The following is an example of the PUT request that modifies a Unified Messaging Account as represented by <unifiedmessagingaccountid>:

```
https://<connection_server>/vmrest/usertemplates/<objectId>/ templateexternalserviceaccounts
/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<TemplateExternalServiceAccount>
<EnableCalendarCapability>true</EnableCalendarCapability>
<EnableTtsOfEmailCapability>true</EnableTtsOfEmailCapability>
<EnableMailboxSynchCapability>true</EnableMailboxSynchCapability>
</TemplateExternalServiceAccount>
```

Response Code: 204

Deleting External Service Account

The following is an example of the DELETE request that deletes a Unified Messaging Account as represented by <externalserviceaccount-id >:

```
https://<connection_server>/vmrest/usertemplates/<template-object-id>/
templateexternalserviceaccounts /< objectId>
```

The output for this request returns the successful response code.

Response Code: 204

Explanation of Data Fields

The following chart lists all of the data fields available on External Service Accounts.

| Field Name | Writable? | Available Value | Explanation/Comments |
|--------------------------|------------|-----------------|---|
| EmailAddressUseCorp | Read/Write | True/False | Use Corporate Email Address |
| EnableCalendarCapability | Read/Write | True/False | Enables users to hear notification of upcoming meetings on the phone. |

| Field Name | Writable? | Available Value | Explanation/Comments |
|-----------------------------|------------|---|--|
| EnableMailboxSyncCapability | Read/Write | True/False | Synchronizes voice messages in Connection and Exchange. |
| EnableMeetingCapability | Read Only | True/False | Enables Meeting Capability |
| EnableTextOfEmailCapability | Read/Write | True/False | Enables users to access Exchange email messages by using text to speech. |
| ExternalServiceObjectId | Read Only | 36 characters | Displays External Service ObjectId |
| IsPrimaryMeetingService | Read Only | True/False | Displays Primary Meeting Service |
| LoginType | Read/Write | 0-Login using user's Connection alias used for login
1- Login as guest 2-Login as UserId Base, Phone, Pager | Displays the type of login done by the |
| ObjectId | All | Read Only | ObjectId of the Device |
| UserTemplateURI | Read Only | | Displays user template URI |
| UserTemplateObjectId | Read Only | 36 characters | Displays user template ObjectId |
| DisplayName | All | Read/Write | Friendly name for the Device like "Mobile Phone" |
| ServerType | Read Only | 1-MeetingPlace
8.x,4-Exchange/BPOS-D,5-Office 365 | Displays the name of the external service account |
| UserTemplateDisplayName | Read Only | 1-64 characters | Display Name for User Template. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- End User Unified Messaging Accounts

Unified Messaging Account API

Updating the Unified Messaging Account

JSON Example

To view the unified messaging account, do the following:

```

Request URI:
PUT https://<connection-server>/vmrest/users/<userobjectid>/
externalserviceaccounts/<externalserviceaccountsobjectid>
Accept: application/json
Content-type: application/json
Connection: keep-alive
{
  "EmailAddressUseCorp": "true"
  "EnableCalendarCapability": "true"
  "EnableMailboxSynchCapability": "true"
  "EnableTtsOfEmailCapability": "true"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Explanation of Data Fields

| Parameters | Operation | Data Type | Comments |
|-----------------------|------------|-------------|--|
| URI | Read Only | String | URI of the Unified Messaging Account. |
| ObjectId | Read Only | String (36) | Unique Identifier of the Unified Messaging Account. |
| IsEnabled | Read Only | Boolean | A flag indicating whether the external service is enabled. <ul style="list-style-type: none"> • false: The external service is disabled. • true: The external service is enabled. Default value: false. |
| UseServiceCredentials | Read Only | Boolean | A flag indicating whether to use service credentials rather than user credentials to logon to the external service. <ul style="list-style-type: none"> • false: Use user credentials. • true: Use service credentials. |
| Login Type | Read Only | Integer | A flag to indicate whether the user alias (0), a guest account (1), or a specified user ID (2) is used to sign in the account . |
| Display Name | Read/Write | String (64) | The display name of the unified messaging service account. |
| UserId | Read Only | String | The user ID to sign in to the unified messaging service account, if one is used |



CHAPTER 44

Cisco Unity Connection Provisioning Interface (CUPI) API for Dial Plan

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Partition API](#) , on page 631
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Search Space API](#), on page 636
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Search Space Member API](#), on page 644

Cisco Unity Connection Provisioning Interface (CUPI) API -- Partition API

Partition API

Administrator can use this API to create, update, delete, or fetch the partition. In Cisco Unity Connection, you create partitions as a way to group together objects to which callers and users can address messages or place calls while interacting with Connection. One or more partitions can be grouped together as members of a search space, and a partition can be a member of more than one search space. The following types of objects belong to a partition:

- User Templates
- Call Handler Templates
- Contact Templates
- Users with mailboxes (primary extension)
- User alternate extensions
- Contacts (including VPIM contacts)
- System distribution lists
- System call handlers
- Directory handlers
- Interview handlers
- VPIM locations

Extensions must be unique within a partition, although partitions can contain objects that do not have an associated extension (for example, some contacts and system distribution lists). The names of objects do not have to be unique within a partition. Administrator-defined contact phone numbers also do not need to be unique within a partition.

Listing the Partitions

The following is an example of the GET request that lists all the existing partitions:

```
GET https://<connection-server>/vmrest/partitions
```

The following is the response from the above *GET* request:

```
<Partitions total="2">
  <Partition>
    <URI>/vmrest/partitions/53e16c90-1cc6-4bde-b6c8-77daf1d31d02</URI>
    <ObjectId>53e16c90-1cc6-4bde-b6c8-77daf1d31d02</ObjectId>
    <Name>ucbu-aricent-vm256 Partition</Name>
    <Description>Default Partition</Description>
    <LocationObjectId>6e81cad2-9c0b-42c1-bb6f-4edb38a70cbd</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/6e81cad2-9c0b-42c1-bb6f-4edb38a70cbd</LocationURI>
  </Partition>
  <Partition>
    <URI>/vmrest/partitions/924ee2d5-758b-4ded-8db7-ae7bc11b59b2</URI>
    <ObjectId>924ee2d5-758b-4ded-8db7-ae7bc11b59b2</ObjectId>
    <Name>Taxoma_DefaultPartition</Name>
    <Description>Default Partition for Taxoma</Description>
    <LocationObjectId>6e81cad2-9c0b-42c1-bb6f-4edb38a70cbd</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/6e81cad2-9c0b-42c1-bb6f-4edb38a70cbd</LocationURI>
  </Partition>
</Partitions>
```

```
Response Code: 200
```

JSON Example

The following is an example of the GET command that will list all the partitions:

```
Request URI:
GET https://<connection-server>/vmrest/partitions
Accept: applciation/json
Connection: keep_alive
```

The following is the example of the response from the above *GET* request:


```
{
  "@total": "2",
  "Partition": [
    {
      "URI": "/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
      "ObjectId": "d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
      "Name": "ucbu-aricent-vm259 Partition",
      "Description": "Default Partition",
      "LocationObjectId": "bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
      "LocationURI": "/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f"
    },
    {
      "URI": "/vmrest/partitions/5c28f078-8142-4844-b3c0-8fddf33639c4",
      "ObjectId": "5c28f078-8142-4844-b3c0-8fddf33639c4",
      "Name": "Taxoma21_Partition_1",
      "LocationObjectId": "bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
      "LocationURI": "/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f"
    }
  ]
}
```

Response Code: 200

Viewing a Specific Partition

The following is an example of the GET request that list the detail of a particular partition:

```
GET https://<connection-server>/vmrest/partitions/<PartitionObjectId>
```

The following is the response from the above *GET* request:

```
<Partition>
  <LocationObjectId>bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationObjectId>
  <URI>/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</URI>
  <ObjectId>d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b</ObjectId>
  <Name>ucbu-aricent-vm259 Partition</Name>
  <Description>Default Partition</Description>
  <LocationObjectId>bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f</LocationURI>
</Partition>
```

Response Code: 200

JSON Example

The following is an example of the GET command that will get the detail of a particular partition:

```
Request URI:
GET https://<connection-server>/vmrest/partitions/<PartitionObjectId>
Accept: applciation/json
Connection: keep_alive
```

The following is the example of the response from the above *GET* request:

```
{
  "URI": "/vmrest/partitions/d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
  "ObjectId": "d50e9d0b-656e-416d-b5b7-43c4d2e2fd0b",
  "Name": "ucbu-aricent-vm259 Partition",
  "Description": "Default Partition",
  "LocationObjectId": "bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
  "LocationURI": "/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f"
}
```

Response Code: 200

Creating a Partition

The following is an example of the POST request that creates a partition:

```
POST https://<connection-server>/vmrest/partitions
Request Body:
<Partition>
  <Name>Taxoma_DefaultPartition</Name>
  <Description>Default Partition for Taxoma</Description>
</Partition>
```

The following is the example of the response from the above *Post* request:

Response Code: 201

JSON Example

The following is an example of the POST command that will create a new partition:

```
Request URI:
POST https://<connection-server>/vmrest/partitions
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Name": "Test",
  "Description": "Test_partition"
}
```

The following is the example of the response from the above *GET* request:

Response Code: 201

Updating a Partition

The following is an example of the PUT request that allows you to update a partition:

```
PUT https://<connection-server>/vmrest/partitions/<PartitionObjectId>
Request Body:
<Partition>
  <Name>Test123</Name>
  <Description>Taxoma Default Partition</Description>
</Partition>
```

Response Code: 204

The output for this request returns the successful response code.

JSON Example

The following is an example of the PUT command that will update a partition:

```
PUT https://<connection-server>/vmrest/partitions/<PartitionObjectId>
Accept: applciation/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Name": "Test123",
  "Description": "Hello"
}
```

The following is the example of the response from the above *PUT * request:

```
Response Code: 204
```

Deleting a Partition

The following is an example of the DELETE request that deletes a specific partition where you need to mention the partition object ID:



Note You are not allowed to delete a default search space if a partition is referred in a search space, or referred by a user.

```
Response Code: 204
```

The output for this request returns the successful response code.

JSON Example

The following is an example of the DELETE command that will delete a partition:

```
DELETE https://<connection-server>/vmrest/partitions/<PartitionObjectId>
Accept: applciation/json
Connection: keep_alive
```

```
Response Code: 204
```

Deleting a Partition Included in Search Scope

Make sure to add the partition to a search space. The following is an example of the DELETE request that deletes a specific partition which is included in a search scope:

```
Delete https://<connection-server>/vmrest/partitions/<PartitionObjectId>
```

```
Response Code: 204
```

JSON Example

The following is an example to delete a partition included in a search scope:

```
Delete https://<connection-server>/vmrest/partitions/<PartitionObjectId>
Accept: application/json
Connection: keep_alive
```

```
Response Code: 204
```

Explanation of Data Fields

| Parameter | Operations | Data Type | Comments |
|------------------|------------|-------------|--|
| ObjectId | Read Only | String (36) | The primary key for this table. A systemgenerated, globally unique object identifier. |
| Name | Read/Write | String (50) | The unique text name of this partition. This name is used when displaying entries in the administrative interface. The name can be upto 50 characters long. |
| Description | Read/Write | String (50) | The description of the partition. If a description is not entered, the partition name is entered. |
| LocationObjectId | Read Only | String (36) | The unique identifier of the LocationVms on which this partition was created. It is used by networking to determine on which LocationVms the properties of the partition are administered. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Search Space API

Search Space API

Search spaces are used to define the search scope of objects (users, distribution lists, and so on) that a user or outside caller can reach while interacting with Connection. For example, the search scope that is applied to a user identifies which users, distribution lists, or VPIM contacts the user can address messages to. It also identifies which users and contacts the user can dial by name when using the voicerecognition conversation. A search space is comprised of one or more ordered partitions. When Connection searches for an object on behalf of a caller, it searches the partitions in the order in which they are arranged in the search space. While extensions must be unique within a partition, they do not need to be unique within a search space, so you can use search spaces to handle dial plans that have overlapping extensions. Operation Supported: Create, Read, Update and Delete.

Listing the Search Spaces

The following is an example of the GET request that lists all the search spaces:

```
GET https://<connection-server>/vmrest/searchspaces
```

The following is the response from the above *GET* request.

```
<SearchSpaces total="1">
  <SearchSpace>
    <URI>/vmrest/searchspaces/7479b688-9c97-4a4b-ab69-ea786f6024be</URI>
    <ObjectId>7479b688-9c97-4a4b-ab69-ea786f6024be</ObjectId>
    <Name>Search Space</Name>
    <Description>Default Search Space</Description>
    <LocationObjectId>08b0402c-ba81-4f16-bcba-ca7883de0482</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/08b0402c-ba81-4f16-bcba-ca7883de0482</LocationURI>
    <TimeOwnershipChanged>2012-12-10T19:23:29Z</TimeOwnershipChanged>
    <SearchSpaceMembersURI>/vmrest/searchspaces/7479b688-9c97-4a4b-ab69-ea786f6024be/searchspacemembers</SearchSpaceMembersURI>
  </SearchSpace>
</SearchSpaces>
```

Response Code: 200

JSON Example

To list all the search spaces use the following command, do the following: Request URI: GET https://<connection-server>/vmrest/searchspaces Accept: application/json Connection: keep_alive The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
"@total": "2",
"SearchSpace": [
  {
    "URI": "/vmrest/searchspaces/2e836e16-f715-4a18-bb7c-ee5e33281706"
    "ObjectId": "2e836e16-f715-4a18-bb7c-ee5e33281706"
    "Name": "ucbu-aricent-vm463 Search Space"
    "Description": "Default Search Space"
    "LocationObjectId": "cff1347e-87af-4409-bead-d1970625f82e"
    "LocationURI": "/vmrest/locations/connectionlocations/cff1347e-87af-4409-bead-d1970625f82e"
    "TimeOwnershipChanged": "2013-02-25 09:37:36.99"
    "SearchSpaceMembersURI": "/vmrest/searchspaces/2e836e16-f715-4a18-bb7c-ee5e33281706/searchspacemembers"
  },
  {
    "URI": "/vmrest/searchspaces/97efa220-31a7-4409-a0cd-2cdfc669182f"
    "ObjectId": "97efa220-31a7-4409-a0cd-2cdfc669182f"
    "Name": "hello_SearchSpace_1"
    "LocationObjectId": "cff1347e-87af-4409-bead-d1970625f82e"
    "LocationURI": "/vmrest/locations/connectionlocations/cff1347e-87af-4409-beadd1970625f82e"

    "TimeOwnershipChanged": "2013-02-26T05:05:10Z"
    "SearchSpaceMembersURI": "/vmrest/searchspaces/97efa220-31a7-4409-a0cd-2cdfc669182f/searchspacemembers"
  }
]
```

Response Code: 200

Viewing the Specific Search Space Details

The following is an example of the GET request that lists the details of specific search space represented by the provided value of search space object ID:

```
GET https://<connection-server>/vmrest/searchspaces/<searchspaceobjectId>
```

The following is the response from the above *GET* request:

```
<SearchSpaceMembers total="1">
  <SearchSpaceMember>
    <URI>/vmrest/searchspaces/7479b688-9c97-4a4b-ab69-
    ea786f6024be/searchspacemembers/8433db04-60e0-414d-99bc-c48dcf8254cb</URI>
    <ObjectId>8433db04-60e0-414d-99bc-c48dcf8254cb</ObjectId>
    <PartitionObjectId>ff1c9ff2-6fcc-47e9-a4e0-a220c6e3ae4e</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/ff1c9ff2-6fcc-47e9-a4e0-a220c6e3ae4e</PartitionURI>
    <SearchSpaceObjectId>7479b688-9c97-4a4b-ab69-ea786f6024be</SearchSpaceObjectId>
    <SearchSpaceURI>/vmrest/searchspaces/7479b688-9c97-4a4b-ab69-
    ea786f6024be</SearchSpaceURI>
    <SortOrder>1</SortOrder>
  </SearchSpaceMember>
</SearchSpaceMembers>
```

Response Code: 200

JSON Example

To view the specific search space, use the following command:

```
GET https://<connection-server>/vmrest/searchspaces/<searchspaceobjectid>
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/searchspaces/2e836e16-f715-4a18-bb7c-ee5e33281706"
  "ObjectId": "2e836e16-f715-4a18-bb7c-ee5e33281706"
  "Name": "ucbu-aricent-vm463 Search Space"
  "Description": "Default Search Space"
  "LocationObjectId": "cff1347e-87af-4409-bead-d1970625f82e"
  "LocationURI": "/vmrest/locations/connectionlocations/cff1347e-87af-4409-bead-
d1970625f82e"
  "TimeOwnershipChanged": "2013-02-25 09:37:36.99"
  "SearchSpaceMembersURI": "/vmrest/searchspaces/2e836e16-f715-4a18-bb7c-
ee5e33281706/searchspacemembers"
}
```

Response Code: 200

Creating a Search Space

The following is an example of the POST request that creates a search space:

```
POST https://<connection-server>/vmrest/searchspaces
Request URI:
<SearchSpace>
  <Name>Taxoma_SearchSpace</Name>
</SearchSpace>
```

The following is the example of the response from the above *Post* request:

```
Response Code: 201
/vmrest/searchspaces/4fc208e7-cb84-4e3f-bcf0-11f69c212b1d
```

JSON Example

To create a search space, use the following command:

```
Request URI:
POST https://<connection-server>/vmrest/searchspaces
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
    "Name": "Taxoma_SearchSpace1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/searchspaces/4fc208e7-cb84-4e3f-bcf0-11f69c212b1d
```

Creating a Search Space

The following is an example of the POST request that creates a search space:

```
POST https://<connection-server>/vmrest/searchspaces
Request URI:
<SearchSpace>
    <Name>Taxoma_SearchSpace</Name>
</SearchSpace>
```

The following is the example of the response from the above *Post* request:

```
Response Code: 201
/vmrest/searchspaces/4fc208e7-cb84-4e3f-bcf0-11f69c212b1d
```

JSON Example

To create a search space, use the following command:

```
Request URI:
POST https://<connection-server>/vmrest/searchspaces
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
    "Name": "Taxoma_SearchSpace1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/searchspaces/4fc208e7-cb84-4e3f-bcf0-11f69c212b1d
```

Adding a Member in a Search Space

The following conditions should be checked before you add a member in a search space:

List all the Search Space Members Associated with a Specific Search Space

- Identify the search space to which you want to add partitions.
- Obtain the object ID of the partition that has to be added using the following URI

```
GET https://<connection-server>/vmrest/partitions
```

The following is an example of the POST request that allows you to add a member in a search space:

```
POST https://<connection-server>/vmrest/searchspaces/<ObjectId>/searchspacemembers
Request Body:
<SearchSpaceMember>
  <PartitionObjectId>2be94430-a2b4-4a0c-b53c-a0290810d0ef</PartitionObjectId>
  <SortOrder>1</SortOrder>
</SearchSpaceMember>
```

The output for this request returns the following response:

```
Response Code: 201
/vmrest/searchspaces/4fc208e7-cb84-4e3f-bcf0-11f69c212b1d/searchspacemembers/f93deeb3-71b2-4198-bd55-53dc4a11f37c
```

JSON Example

To add a member in a search space, use the following command:

```
Request URI:
POST https://<connection-server>/vmrest/searchspaces/searcrchspaceobjectid/searchspacemembers
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "PartitionObjectId": "97bf6afe-346e-4275-967e-43c50be79d32",
  "SortOrder": "1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/searchspaces/72bf712e-ebad-4398-997c-5c21fb1c18c4/searchspacemembers/0453712e-ebadeadc-997c-5c21fb1c18c4
```

List all the Search Space Members Associated with a Specific Search Space

The following is an example of the GET request that lists all the search space members associated with a specific search space:


```
GET https://<connection-server>/vmrest/searchspaces/searcrhspaceobjectid/searchspacemembers
<SearchSpaceMembers total="1">
  <SearchSpaceMember>
    <URI>/vmrest/searchspaces/7479b688-9c97-4a4b-ab69-
    ea786f6024be/searchspacemembers/8433db04-60e0-414d-99bc-c48dcf8254cb</URI>
    <ObjectId>8433db04-60e0-414d-99bc-c48dcf8254cb</ObjectId>
    <PartitionObjectId>ff1c9ff2-6fcc-47e9-a4e0-a220c6e3ae4e</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/ff1c9ff2-6fcc-47e9-a4e0-
    a220c6e3ae4e</PartitionURI>
    <SearchSpaceObjectId>7479b688-9c97-4a4b-ab69-
    ea786f6024be</SearchSpaceObjectId>
    <SearchSpaceURI>/vmrest/searchspaces/7479b688-9c97-4a4b-ab69-
    ea786f6024be</SearchSpaceURI>
    <SortOrder>1</SortOrder>
  </SearchSpaceMember>
</SearchSpaceMembers>
```

Response Code: 200

JSON Example

To add a member in a search space, use the following command: GET https://<connection-server>/vmrest/searchspaces/searcrhspaceobjectid/searchspacemembers Accept: application/json Content_type: application/json Connection: keep_alive The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
"@total": "1"
"SearchSpaceMember":
{
  "URI": "/vmrest/searchspaces/8190d682-9775-4622-9609-
  a113e594b84a/searchspacemembers/540fc81a-d391-4760-9c5f-3d5eac6b8568"
  "ObjectId": "540fc81a-d391-4760-9c5f-3d5eac6b8568"
  "PartitionObjectId": "97bf6afe-346e-4275-967e-43c50be79d32"
  "PartitionURI": "/vmrest/partitions/97bf6afe-346e-4275-967e-43c50be79d32"
  "SearchSpaceObjectId": "8190d682-9775-4622-9609-a113e594b84a"
  "SearchSpaceURI": "/vmrest/searchspaces/8190d682-9775-4622-9609-a113e594b84a"
  "SortOrder": "1"
}
```

Response Code: 200

```
<pre>
```

=== Updating a Search Space ===

The following is an example of the PUT request that allows you to update a search space:

```
<pre>
```

```
PUT https://<connection-server>/vmrest/searchspaces/<searchspaceobjectid>
```

Request Body:

```
<SearchSpace>
```

```
  <Name>Taxoma_SearchSpace</Name>
```

```
  <Description>Default search space for taxoma</Description>
```

```
</SearchSpace>
```

Response Code: 204

The output for this request returns the successful response code.

JSON Example

To update a search space, use the following command:

```
Request URI:
PUT https://<connection-server>/vmrest/searchspaces/seacrchspaceobjectid/
Accept: application/json
Content_type: application/json
Connection: keep_alive
Request Body:
{
  "Name": "Taxoma_SearchSpace",
  "Description": "Default search space for taxoma"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Deleting the Search Space

The following is an example of the DELETE request that deletes a specific search space where you need to mention the search space object ID:

```
DELETE https://<connection-server>/vmrest/searchspaces/<seacrchspaceobjectid>
```

```
Response Code: 204
```



Note You are not allowed to delete a default search space or if a search space that has been assigned to any user, call handler or a routing rule. The output for this request returns the successful response code.

JSON Example

To delete a search space, use the following command:

```
DELETE: https://<connection-server>/vmrest/searchspaces/<seacrchspaceobjectid >
Accept: application/json
Connection: keep_alive
```

```
Response Code: 204
```

Deleting the Search Space Members

The following is an example of the DELETE request that deletes a specific search space member where you need to mention the search space members object ID:

```
DELETE https://<connection-server>/vmrest/searchspaces/<seacrchspaceobjectid>
/searchspacemembers/<searchspacememberobjectid>
```

```
Response Code: 204
```

JSON Example

To delete a search space member, use the following command:

```
DELETE: https://<connectionserver>/
vmrest/searchspaces/seacrchspaceobjectid/searchspacemembers/<searchspacememberobjectid>
Accept: application/json
Connection: keep_alive
```

Response Code: 204

Explanation of Data Fields

Search Space

The following chart lists all of the data fields for search space:

| Parameter | Operations | Data Type | Comments |
|----------------------|------------|-------------|---|
| URI | Read Only | String | The search space URL. |
| ObjectId | Read Only | String (36) | The primary key for this table. A systemgenerated, globally unique object identifier. |
| Name | Read/Write | String (50) | The unique text name of this search space. |
| Description | Read/Write | String (50) | The description of the search space. |
| LocationObjectId | Read Only | String (36) | The unique identifier on which this search space was created. |
| LocationURI | Read Only | String | The location of the URL. |
| TimeOwnershipChanged | | Date/Time | The time when the ownership of this search space changed. If ownership has never changed, this value will show the creation time. |
| SearchSpaceMemberURI | Read Only | String | URI of the search space member |

Search Space Members

| Parameter | Operations | Data Type | Comments |
|-------------------|------------|-------------|--|
| URI | Read Only | String | URI of Search Space's member |
| ObjectId | Read Only | String (36) | Object Id of the search space's member |
| PartitionObjectId | Read Only | String (36) | Object Id of the partition |
| PartitionURI | Read Only | String | URI of the partition. |

| Parameter | Operations | Data Type | Comments |
|---------------------|------------|-------------|---|
| SearchSpaceObjectid | Read Only | String (36) | Object Id of the search space |
| SearchSpaceURI | Read Only | String | URI of the search space |
| SortOrder | Read Only | Integer | Order preference of the member Partition. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Search Space Member API

Search Space API

In Cisco Unity Connection, you create partitions as a way to group together objects to which callers and users can address messages or place calls while interacting with Connection. One or more partitions can be grouped together as members of a search space, and a partition can be a member of more than one search space. Search Space's Members provide the list of partitions and their respective search spaces so that search spaces can be queried on the basis of the partitions that it contains.

Listing the Search Spaces Members Based on Partition Object ID

The following is an example of the GET request that lists all the search space members:

```

GET:
https://<connectionserver>/vmrest/searchspacesmembers?query=(PartitionObjectId%20is%20partiti
onobjectid)
The following is the response from the above *GET* request and the actual response will
depend
upon the information given by you:
<SearchSpacesMembers total="2">
  <SearchSpacesMember>
    <URI>/vmrest/searchspacesmembers/ef101893-8687-49f6-b658-b05e110690d5</URI>
    <ObjectId> ef101893-8687-49f6-b658-b05e110690d5</ObjectId>
    <PartitionObjectId>a7108db5-c354-4b71-a72f-2c945291bda2</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/a7108db5-c354-4b71-a72f-
2c945291bda2</PartitionURI>
    <SearchSpaceObjectId>d4885446-a1f9-4e4c-810f-168bcc8489af</SearchSpaceObjectId>
    <SearchSpaceURI>/vmrest/searchspaces/d4885446-a1f9-4e4c-810f-
168bcc8489af</SearchSpaceURI>
    <SortOrder>1</SortOrder>
  </SearchSpacesMember>
  <SearchSpacesMember>
    <URI>/vmrest/searchspacesmembers/b3431606-ccd2-4c06-9a12-9c336c78968c</URI>
    <ObjectId>b3431606-ccd2-4c06-9a12-9c336c78968c</ObjectId>
    <PartitionObjectId>a7108db5-c354-4b71-a72f-2c945291bda2</PartitionObjectId>
    <PartitionURI>/vmrest/partitions/a7108db5-c354-4b71-a72f-
2c945291bda2</PartitionURI>
    <SearchSpaceObjectId>9b3eb53b-445f-416e-b5f3-
15c64428d190</SearchSpaceObjectId>
    <SearchSpaceURI>/vmrest/searchspaces/9b3eb53b-445f-416e-b5f3-
15c64428d190</SearchSpaceURI>
    <SortOrder>1</SortOrder>
  </SearchSpacesMember>
</SearchSpacesMembers>

```

Response Code: 200

JSON Example

To list all the search space members use the following command, do the following:

```

GET:
https://<connectionserver>/vmrest/searchspacesmembers?query=(PartitionObjectId%20is%20partiti
onobjectid)
Accept: application/json
Connection: keep-alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

{
  "@total": "2"
  "SearchSpacesMember": [
    {
      "URI": "/vmrest/searchspacesmembers/063ac262-41a9-41a2-810a-5380ffec322d"
      "ObjectId": "063ac262-41a9-41a2-810a-5380ffec322d"
      "PartitionObjectId": "97bf6afe-346e-4275-967e-43c50be79d32"
      "PartitionURI": "/vmrest/partitions/97bf6afe-346e-4275-967e-43c50be79d32"
      "SearchSpaceObjectId": "2e836e16-f715-4a18-bb7c-ee5e33281706"
      "SearchSpaceURI": "/vmrest/searchspaces/2e836e16-f715-4a18-bb7c-ee5e33281706"
      "SortOrder": "1"
    },
    {
      "URI": "/vmrest/searchspacesmembers/62a37620-50b0-4992-8c39-242cea8c7da9"
      "ObjectId": "62a37620-50b0-4992-8c39-242cea8c7da9"
      "PartitionObjectId": "44bdcf73-d5c1-4866-957d-fb35686cbe76"
      "PartitionURI": "/vmrest/partitions/44bdcf73-d5c1-4866-957d-fb35686cbe76"
      "SearchSpaceObjectId": "97efa220-31a7-4409-a0cd-2cdfc669182f"
      "SearchSpaceURI": "/vmrest/searchspaces/97efa220-31a7-4409-a0cd-2cdfc669182f"
      "SortOrder": "1"
    }
  ]
}

```

Response Code: 200

Explanation of Data Fields

| Parameter | Operations | Data Type | Comments |
|---------------------|------------|-------------|--|
| URI | Read Only | String | URI of Search Space's member |
| ObjectId | Read Only | String (36) | Object Id of the search space's member |
| PartitionObjectId | Read Only | String (36) | Object Id of the partition. |
| PartitionURI | Read Only | String | URI of the partition. |
| SearchSpaceObjectId | Read Only | String (36) | Object Id of the search space |



CHAPTER 45

Cisco Unity Connection Provisioning Interface (CUPI) API for System Settings

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Cisco Unity Connection Provisioning Interface (CUPI) API -- General Configuration

Default Unity Connection Sender Name

This section contains information on how to use the API to change the display name of Unity Connection Default User. Display name of default user is used as the sender name for System Generated Notifications from Connection and Outside Caller Messages. This API updates the "Unity Connection Default Sender Name" field under General Configuration.

Viewing the sender name for System Generated Notifications

The following is an example of the GET request that lists the details of sender name for System Generated Notifications:

```
GET https://<connection-server>/vmrest/setDefaultSenderName
```

The following is response for the above GET request:

```
<User>
  <ObjectId>b296be34-0f21-449a-acce-23b8eadf1af9</ObjectId>
  <DisplayName>Cisco Unity Connection Messaging System</DisplayName>
</User>
```

```
Response Code: 200
```

JSON Example

The following is an example to GET the display name and object id of "Unity Connection" users.

```
Request URI:
GET https://<connection-server>/vmrest/setDefaultSenderName
Accept : application/json
Connection : keep-alive
```

The following is response from the above GET request and the actual response will depend upon the information given by you:

```
{
  "ObjectId": "b296be34-0f21-449a-acce-23b8eadf1af9",
  "DisplayName": "NewUser"
}
```

```
Response Code: 200
```

Updating the Sender Name for System Generated Notification

The following is an example of the PUT request that allows you to update the system generated notification:

Example : Update the system generated notification

```
PUT https://<connection-server>/vmrest/setDefaultSenderName
```

The following is response for the above PUT request.

```
Request Body:
<User>
<DisplayName>NewUser</DisplayName>
</User>
```

```
Response Code: 204
```

JSON Example

Following is an example to update the display name.


```
Request URI:
  PUT https://<connection-server>/vmrest/setDefaultSenderId
```

```
Accept : application/json
Content-Type : application/json
Connection : keep-alive
{
  "DisplayName": "NewUser"
}
```

The following is response for the above PUT request:

```
Request URI: 204
```

Ciphers

This section contains information on how to use the API to change the value of ciphers supported with Unity Connection. Using this API, you can change the value of following ciphers:

- TLS ciphers over SIP interface
- SRTP ciphers over RTP interface
- HTTPS Ciphers over HTTPS interface

This API updates the "TLS Ciphers", "SRTP Ciphers", and "HTTPS Ciphers" field under General Configuration.

Viewing the Selected Option of TLS, SRTP, and HTTPS Cipher values

The following is an example of GET request to get the details of TLS, SRTP, and HTTPS ciphers.

```
GET https://<connection-server>/vmrest/generalconfigurations/
```

The following is response for the above GET request:

```
<GeneralConfigurations total="1">
  <GeneralConfiguration>
    <URI>/vmrest/generalconfigurations/b572544f-49ce-4ec4-874e-41e414597c14</URI>
    <ObjectId>b572544f-49ce-4ec4-874e-41e414597c14</ObjectId>
    <TlsCiphers>0</TlsCiphers>
    <SrtpCiphers>0</SrtpCiphers>
    <HttpsCiphers>0</HttpsCiphers>
  </GeneralConfiguration>
</GeneralConfigurations>
```

```
Response Code: 200
```

JSON Example

The following is an example to GET the values for TLS and SRTP Ciphers.

```
Request URI:
  GET https://<connection-server>/vmrest/generalconfigurations/
Accept : application/json
Connection : keep-alive
```

```
{
  {
    "GeneralConfigurations": {
      "-total": "1",
      "GeneralConfiguration": {
        "URI": "/vmrest/generalconfigurations/b572544f-49ce-4ec4-874e-41e414597c14",
        "ObjectId": "b572544f-49ce-4ec4-874e-41e414597c14",
        "TlsCiphers": "0",
        "SrtpCiphers": "0"
        "HttpsCiphers": "0"
      }
    }
  }
}
```

Response Code: 200

Updating the Values For TLS, SRTP, HTTPS Ciphers and TLS Version

The following is an example of the PUT request that allows you to update the value of TLS, SRTP, HTTPS Ciphers and TLS Version.

Example : Update the TLS, SRTP, HTTPS Ciphers and TLS Version.

```
PUT https://<connection-server>/vmrest/generalconfigurations/<objectid>
```

The following is the response of above PUT request.

```
<GeneralConfiguration>
  <TlsCiphers>1</TlsCiphers>
  <SrtpCiphers>1</SrtpCiphers>
  <HttpsCiphers>1</HttpsCiphers>
</GeneralConfiguration>
```

Response Code: 204



Note

- Make sure to restart the Connection Conversation Manager service in Cisco Unity Connection Serviceability for TLS, SRTP ciphers and TLS Version changes to take effect.
- Make sure to restart the tomcat service for HTTPS cipher changes to take effect.
- Make sure to restart the Tomcat service using CLI 'utils service restart Cisco Tomcat' for TLS Version changes to take effect.

JSON Example

The following is an example to update the TLS and SRTP Ciphers values.

```
Request URI:
PUT https://<connection-server>/vmrest/generalconfigurations/<objectid>
```

```

Accept : application/json
Content-Type : application/json
Connection : keep-alive
{
  "GeneralConfiguration": {
    "TlsCiphers": "1",
    "SrtpCiphers": "1"
    "HttpsCiphers": "1"
  }
}

```

The following is the response of the above PUT request :

```
Response Code: 204
```

Corresponding Enum values for TLS, SRTP and HTTPS Ciphers

The following table describes the associated Enum values of the TLS and SRTP ciphers with Unity Connection 11.5(1).

| Enum Value | Drop-Down Menu option for TLS Cipher | Drop-Down Menu option for SRTP Cipher | Drop-Down Menu option for HTTPS Cipher |
|------------|--|--|--|
| 0 | Strongest- AES-256 SHA-384 Only: RSA Preferred | All supported AES-256, AES-128 ciphers | All Supported EC and RSA ciphers |
| 1 | Strongest- AES-256 SHA-384 Only: ECDSA Preferred | AEAD AES256 GCM based ciphers only | RSA ciphers Only |
| 2 | Medium- AES-256 AES-128 Only: RSA Preferred | AEAD AES-256, AES-128 GCM-based ciphers: | - |
| 3 | Medium- AES-256 AES-128 Only: ECDSA Preferred | - | - |
| 4 | All Ciphers RSA Preferred | - | - |
| 5 | All Ciphers ECDSA Preferred | - | - |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Cluster

About Clusters

Administrator can use this API to fetch the details of a Unity Connection cluster. This page contains information on how to use the CUPI API to view cluster information.

Listing Cisco Unity Connection Cluster locations

The following is an example of a GET that displays cluster information:

```
GET http://<connection-server>/vmrest/cluster
```

The following is the response from the above GET request:

```
200
OK
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<VmsServers total="2">
  <VmsServer>
    <URI>/vmrest/vmsservers/3ee10726-9634-4066-bfcb-c936bc074be6</URI>
    <ObjectId>3ee10726-9634-4066-bfcb-c936bc074be6</ObjectId>
    <ServerName> qa-ks-vm-279</ServerName>
    <IpAddress>10.65.156.193</IpAddress>
    <VmsServerObjectId>3ee10726-9634-4066-bfcb-c936bc074be6</VmsServerObjectId>
    <ClusterMemberId>0</ClusterMemberId>
    <ServerState>1</ServerState>
    <HostName> qa-ks-vm-279.cisco.com</HostName>
    <ServerDisplayState>3</ServerDisplayState>
    <IpAddressV6>fe80::250:56ff:feab:1c6</IpAddressV6>
    <SubToPerformReplicationRole>>false</SubToPerformReplicationRole>
  </VmsServer>
  <VmsServer>
    <URI>/vmrest/vmsservers/a57a68c6-782f-4757-945c-270e0fba2734</URI>
    <ObjectId>a57a68c6-782f-4757-945c-270e0fba2734</ObjectId>
    <ServerName> qa-ks-vm-279.cisco.com </ServerName>
    <IpAddress>10.65.156.252</IpAddress>
    <VmsServerObjectId>a57a68c6-782f-4757-945c-270e0fba2734</VmsServerObjectId>
    <ClusterMemberId>1</ClusterMemberId>
    <ServerState>8</ServerState>
    <HostName> qa-ks-vm-279.cisco.com </HostName>
    <ServerDisplayState>4</ServerDisplayState>
    <IpAddressV6>fe85::450:56ff:feab:1c6</IpAddressV6>
    <SubToPerformReplicationRole>>false</SubToPerformReplicationRole>
  </VmsServer>
</VmsServers>
```

In case of a standalone location, only the data related to that location gets displayed.

JSON Example

The following is an example of a GET that displays the list of servers in the cluster:

```
GET http://<connection-server>/vmrest/vmsservers
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

200
OK
{
  "@total": "2",
  "VmsServer": [
    {
      "URI": "/vmrest/vmsservers/ef03ca05-3c05-4465-9985-9de371e2e94e",
      "ObjectId": "ef03ca05-3c05-4465-9985-9de371e2e94e",
      "ServerName": "qa-ks-vm-19",
      "IpAddress": "10.78.171.134",
      "VmsServerObjectId": "ef03ca05-3c05-4465-9985-9de371e2e94e",
      "ClusterMemberId": "0",
      "ServerState": "20",
      "HostName": "qa-ks-vm-19.cisco.com",
      "ServerDisplayState": "3",
      "IpAddressV6": "fe80::250:56ff:feab:1c6"
      "SubToPerformReplicationRole": "false"
    },
    {
      "URI": "/vmrest/vmsservers/a57a68c6-782f-4757-945c-270e0fba2734",
      "ObjectId": "a57a68c6-782f-4757-945c-270e0fba2734",
      "ServerName": "qa-ks-vm-279.cisco.com",
      "IpAddress": "10.65.156.25",
      "VmsServerObjectId": "a57a68c6-782f-4757-945c-270e0fba2734",
      "ClusterMemberId": "1",
      "ServerState": "8",
      "HostName": "qa-ks-vm-279.cisco.com",
      "ServerDisplayState": "4",
      "IpAddressV6": "fe85::450:56ff:feab:1c6"
      "SubToPerformReplicationRole": "false"
    }
  ]
}

```

Viewing a specific location in Cisco Unity Connection Cluster

Administrator can use this API to fetch details of a particular server in a Unity Connection cluster. The following is an example of the GET request :

```
GET https://<connection-server>/vmrest/vmsservers/<vmsServerObjectId>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

200
ok
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<VmsServer>
  <URI>/vmrest/vmsservers/3ee10726-9634-4066-bfcb-c936bc074be6</URI>
  <ObjectId>3ee10726-9634-4066-bfcb-c936bc074be6</ObjectId>
  <ServerName> qa-ks-vm-279</ServerName>
  <IpAddress>10.65.156.193</IpAddress>
  <VmsServerObjectId>3ee10726-9634-4066-bfcb-c936bc074be6</VmsServerObjectId>
  <ClusterMemberId>0</ClusterMemberId>
  <ServerState>1</ServerState>
  <HostName> qa-ks-vm-279.cisco.com</HostName>
  <ServerDisplayState>3</ServerDisplayState>
  <IpAddressV6>fe85::450:56ff:feab:1c6</IpAddressV6>
  <SubToPerformReplicationRole>>false</SubToPerformReplicationRole>
</VmsServer>

```

JSON Example

The following is an example of the GET command to view the details of particular server in the cluster.

```
GET https://< connection-server >/vmrest/vmsservers/<vmsServerObjectId>
Accept: application/json
Content-type: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
200
Ok
{
  {
    "URI": "/vmrest/vmsservers/ef03ca05-3c05-4465-9985-9de371e2e94e",
    "ObjectId": "ef03ca05-3c05-4465-9985-9de371e2e94e",
    "ServerName": " qa-ks-vm-19",
    "IpAddress": "10.78.171.134",
    "VmsServerObjectId": "ef03ca05-3c05-4465-9985-9de371e2e94e",
    "ClusterMemberId": "0",
    "ServerState": "20",
    "HostName": " qa-ks-vm-19.cisco.com",
    "ServerDisplayState": "3",
    "IpAddressV6": "fe80::250:56ff:feab:1c6"

    "SubToPerformReplicationRole": "false"
  }
}
```

Explanation of Data Fields

| Parameter | Data Type | Operations | Comments |
|-------------------|-----------|------------|--|
| Object id | char | Read Only | Acts as a primary key for the API. The ObjectId is a unique system-generated identifier for a VMSServer object. |
| ServerName | nvarchar | Read Only | Specifies the name of the server. |
| IpAddress | varchar | Read Only | Specifies the IP address of the server. |
| VmsServerObjectId | char | Read Only | Acts as a primary key for the API. The VmsServerObjectId is a unique system-generated identifier for a VMSServer object. |
| ClusterMemberId | smallint | Read Only | Specifies a unique number assigned to each server in the cluster as per their failover order.

Values can be: <ul style="list-style-type: none"> • 0-Primary • 1-Secondary |

| Parameter | Data Type | Operations | Comments |
|--------------------|-----------|------------|--|
| ServerState | int | Read Only | <p>Specifies the current state of the server.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0-Pri_Init • 1-Pri_Active • 2-Pri_Act_Secondary • 3-Pri_Idle • 4-Pri_Failover • 5-Pri_Takeover • 6-Pri_SBR • 7-Sec_Init • 8-Sec_Active • 9-Sec_Act_Primary • 10-Sec_Idle • 11-Sec_Takeover • 12-Sec_Failover • 13-Sec_SBR • 14-Db_Sync • 15-Set_Peer_Idle • 16-Undefined • 17-Pri_Active_Disconnected • 18-Pri_Connecting • 19-Pri_Choose_Role • 20-Pri_Single_Server • 21-Sec_Act_Primary_Disconnected • 22-Sec_Connecting • 23-Sec_Choose_Role • 24-Shutdown |
| HostName | varchar | Read Only | Indicates the hostname of the VMS server |
| ServerDisplayState | int | Read Only | <p>Specifies the values for the admin to display current server status.</p> <p>Values can be:</p> <ul style="list-style-type: none"> • 0 - UNKNOWN • 1 - DOWN • 2 - INITIALIZING • 3 - PRIMARY • 4 - SECONDARY • 5 - IDLE • 6 - IN_DB_SYNC • 7 - IN_SBR |

| Parameter | Data Type | Operations | Comments |
|---------------------------|-----------|------------|---|
| IpAddressV6 | varchar | Read Only | Specifies the IPV6 address of the server. |
| SubscriberReplicationRole | boolean | Read Only | Note - Defined for future purpose.
Indicates whether the subscriber machine is enabled for directory replication; On Publisher machine its value is always false. Values can be: <ul style="list-style-type: none"> • 0- false • 1- true |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Configuration Values

About Configuration Values

This page contains information on how to use the API to read configuration values which are also referred to system settings. You cannot create or delete configuration values.

Most configuration values are read-only in the API. Beginning with Unity Connection 8.5, following are the configuration values that can be updated:

- System.API.CumiAccessSecureMessageAttachments
- System.API.CumiAllowSecureMessageHeaders
- System.Conversations.UserMaxConcurrentSessionsTUI (Unity Connection 11.5(1) and later only)
- System.SA.UserInactivityTimeout (Unity Connection 11.5(1) and later only)

Listing and Viewing

The following is an example of **GET** that lists all system configuration values:

```
GET https://<server>/vmrest/configurationvalues
```

Beginning with Connection 8.5, you can perform **GET** on individual settings using their full name in the URI (instead of getting the whole collection):

```
GET https://<server>/vmrest/configurationvalues/<full name>
```

You can access the configuration values as part of a list using the regular configuration value query. For example, to find all configuration values with a fullname that starts with "System.API.Cumi":

```
GET https://<server>/vmrest/configurationvalues?query=(fullname startswith System.API.Cumi)
```


Updating

Only following configuration values have write access:

- System.API.CumiAccessSecureMessageAttachments
- System.API.CumiAllowSecureMessageHeaders
- System.Conversations.UserMaxConcurrentSessionsTUI (Unity Connection 11.5(1) and later only)
- System.SA.UserInactivityTimeout (Unity Connection 11.5(1) and later only)



Note For System.Conversations.UserMaxConcurrentSessionsTUI, the minimum configuration value is 0 and maximum configuration value is 99. Whereas for System.SA.UserInactivityTimeout, the minimum configuration value is 0 and maximum configuration value is 9999 (value 0 auto disables the feature).

Attempting **PUT** on any other configuration values will result in a 403 (access denied) error.

When modifying a configuration value, only the value field is used (see PUT examples below). All other fields cannot be modified and will be ignored.

HTTP Examples

GET Examples

Example of **GET** for a list:

```

GET /vmrest/configurationvalues?query=(fullname%20startswith%20System.API.Cumi) HTTP/1.1
Accept: application/json
User-Agent: Java/1.6.0_20
Host: cuc-install-69.cisco.com
Connection: keep-alive

HTTP/1.1 200 OK
Pragma: No-cache
Cache-Control: no-cache
Expires: Wed, 31 Dec 1969 16:00:00 PST
Set-Cookie: JSESSIONIDSSO=658B27F18EF8424C11D261FEC776285D; Path=/
Set-Cookie: JSESSIONID=DE6BE806075303C8A73E666E0B478725; Path=/vmrest
Content-Type: application/json
Transfer-Encoding: chunked
Date: Thu, 20 May 2010 10:26:42 GMT
Server:

[REDACTED]

XML

<ConfigurationValues total="2">
  <ConfigurationValue>
    <Type>11</Type>
    <LastModifiedTime>2010-05-21T17:29:52Z</LastModifiedTime>
    <LastModifiedByComponent>VMREST</LastModifiedByComponent>
    <FullName>System.API.CumiAccessSecureMessageAttachments</FullName>
    <Value>1</Value>
    <UserSetting>true</UserSetting>
    <MinVal>0</MinVal>
    <MaxVal>0</MaxVal>
    <RequiresRestart>false</RequiresRestart>
  </ConfigurationValue>
  <ConfigurationValue>
    <Type>11</Type>
    <FullName>System.API.CumiAllowSecureMessageHeaders</FullName>
    <Value>1</Value>
    <UserSetting>true</UserSetting>
    <MinVal>0</MinVal>
    <MaxVal>0</MaxVal>
    <RequiresRestart>false</RequiresRestart>
  </ConfigurationValue>
</ConfigurationValues>

```

Example of **GET** for individual setting:

```

GET /vmrest/configurationvalues/System.Messaging.RelaySecureMessage HTTP/1.1
Accept: application/json
User-Agent: Java/1.6.0_20
Host: cuc-install-69.cisco.com
Connection: keep-alive
Authorization: Basic Y2NtYWRtaW5pc3RyYXRvcjplY3NidWxhYg==

HTTP/1.1 200 OK
Pragma: No-cache
Cache-Control: no-cache
Expires: Wed, 31 Dec 1969 16:00:00 PST
Set-Cookie: JSESSIONIDSSO=B7839B7E290A9763ABD7751A6FBCAA5C; Path=/
Set-Cookie: JSESSIONID=E01E5B7E9F57692810ECF8AEAEDBD2B0; Path=/vmrest
Content-Type: application/json
Transfer-Encoding: chunked
Date: Thu, 20 May 2010 10:39:48 GMT
Server:

{"Type":11,"LastModifiedTime":"2005-2010-11-02","LastModifiedByComponent":"CAMN","FullName":"System.Messaging.RelaySecureMessage","Value":"0","UserSetting":true,"RequiresRestart":false"}

XML

<ConfigurationValue>
  <Type>11</Type>
  <FullName>System.Messaging.RelaySecureMessage</FullName>
  <Value>0</Value>
  <UserSetting>true</UserSetting>
  <RequiresRestart>>false</RequiresRestart>
</ConfigurationValue>

```

Example of GET for User Inactivity Timeout:

```

GET /vmrest/configurationvalues/System.SA.UserInactivityTimeout
HTTP/1.1 200 OK
Cache-Control: private
Expires: Thu, 01 Jan 1970 05:30:00 IST
Set-Cookie: JSESSIONIDSSO=F41326B2A9A8472368FE580917E944B7; Path=/; Secure; HttpOnly
Set-Cookie: JSESSIONID=CEADA77CB21BD27EE1C3386B3CFED149; Path=/vmrest/; Secure; HttpOnly
Set-Cookie: REQUEST_TOKEN_KEY=-1968493036399359092; Path=/; Secure; HttpOnly
X-Frame-Options: SAMEORIGIN
Content-Type: application/xml
Content-Length: 400
Date: Thu, 10 Dec 2015 06:38:42 GMT
Server:

<?xml version="1.0" encoding="UTF-8"
xmlns:cm="http://schemas.cisco.com/2004/01/unity-api" xmlns:vm="http://schemas.cisco.com/2004/01/unity-api" xmlns:sa="http://schemas.cisco.com/2004/01/unity-api" >
  <cm:ConfigurationValue>
    <vm:Type>3</vm:Type>
    <vm>LastModifiedTime</vm>2015-12-10T06:23:26Z</vm>LastModifiedTime>
    <vm>LastModifiedByComponent</vm>VMREST</vm>LastModifiedByComponent>
    <vm:FullName>System.SA.TUIInterfaceDisable</vm:FullName>
    <vm:Value>55</vm:Value>
    <vm>UserSetting</vm>true</vm>UserSetting>
    <vm:MinVal>1</vm:MinVal>
    <vm:MaxVal>500</vm:MaxVal>
    <vm:RequiresRestart</vm>false</vm:RequiresRestart>
  </cm:ConfigurationValue>

```

PUT Examples

An example of **PUT** for configuration value:

```
PUT /vmrest/configurationvalues/System.API.CumiAccessSecureMessageAttachments HTTP/1.1
Content-Type: application/json
User-Agent: Java/1.6.0_20
Host: cuc-install-69.cisco.com
Accept: text/html, image/gif, image/jpeg, *; q=.2, */*; q=.2
Connection: keep-alive
Authorization: Basic Y2NtYWRTaW5pc3RyYXRvcjplY3NidWxhYg==
Content-Length: 13

{"Value":"1"}

XML

<ConfigurationValue>
  <Value>0</Value>
</ConfigurationValue>

HTTP/1.1 204 No Content
Pragma: No-cache
Cache-Control: no-cache
Expires: Wed, 31 Dec 1969 16:00:00 PST
Set-Cookie: JSESSIONIDSSO=E3EB2F2AB5593902F00ECE80298ED82B; Path=/
Set-Cookie: JSESSIONID=4B3EA5586E13B955D2CC9A8C46EE12FE; Path=/vmrest
Date: Thu, 20 May 2010 10:58:05 GMT
Server:
```

An example of **PUT** for configuration values that does not support PUT:

```
PUT /vmrest/configurationvalues/System.Messaging.RelaySecureMessage HTTP/1.1
Content-Type: application/json
User-Agent: Java/1.6.0_20
Host: cuc-install-69.cisco.com
Accept: text/html, image/gif, image/jpeg, \*; q=.2, \*/*; q=.2
Connection: keep-alive
Authorization: Basic Y2NtYWRTaW5pc3RyYXRvcjplY3NidWxhYg==
Content-Length: 240

HTTP/1.1 403 Forbidden
Pragma: No-cache
Cache-Control: no-cache
Expires: Wed, 31 Dec 1969 16:00:00 PST
Set-Cookie: JSESSIONIDSSO=6BE354F4A2C20A2190C9DF78D91D7AB; Path=/
Set-Cookie: JSESSIONID=32DF55D02DA33C43938F43C2FC7A13FF; Path=/vmrest
Content-Type: application/xml
Transfer-Encoding: chunked
Date: Thu, 20 May 2010 10:26:43 GMT
Server:
```

An example of **PUT** for User Inactivity Timeout:

```
PUT /vmrest/configurationvalues/System.SA.UserInactivityTimeout

HTTP/1.1 204 No Content
Cache-Control: private
Expires: Thu, 01 Jan 1970 05:30:00 IST
Set-Cookie: JSESSIONIDSSO=2F68733BA443959388E841535A717DCC; Path=/; Secure; HttpOnly
Set-Cookie: JSESSIONID=A982BB1A93DAB2C294A64BD5D7DD03D0; Path=/vmrest/; Secure; HttpOnly
Set-Cookie: REQUEST_TOKEN_KEY=138477933938641394; Path=/; Secure; HttpOnly
X-Frame-Options: SAMEORIGIN
Content-Type: application/xml
Date: Thu, 10 Dec 2015 06:55:12 GMT
Server:

XML

<ConfigurationValue>
  <Value>36</Value>
</ConfigurationValue>
```

An example of **PUT** for TUI/VUI Logon Session Limit:

```
PUT /vmrest/configurationvalues/System.Conversations.UserMaxConcurrentSessionsTUI

XML

<ConfigurationValue>
  <Value>3</Value>
</ConfigurationValue>
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Authentication Rules

About Authentication Rules

This section contains information on how to create, list, modify, and delete Authentication Rules. In Cisco Unity Connection, authentication rules govern user passwords, PINs, and account lockouts for all user accounts. You use authentication rules to secure how users access Connection by phone, and how users access Cisco Unity Connection Administration and the Cisco Personal Communications Assistant (PCA).

For example, an authentication rule determines:

- The number of failed sign-in attempts that are allowed before an account is locked
- The number of minutes an account remains locked before it is reset
- Whether a locked account must be unlocked manually by an administrator
- The minimum length allowed for passwords and PINs
- The number of days before a password or PIN expires

Listing Authentication Rules

Example 1

The following is an example of the GET request that lists the Authentication Rules:

```
https://<connection_server>/vmrest/authenticationrules
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<AuthenticationRules total="2">
  <AuthenticationRule>
    <URI>/vmrest/authenticationrules/db3999dc-7afc-4a1e-be64-c5647c7f2226</URI>
    <ObjectId>db3999dc-7afc-4a1e-be64-c5647c7f2226</ObjectId>
    <HackResetTime>30</HackResetTime>
    <LocationObjectId>be27976c-6e6e-419f-853d-b3764881dfb0</LocationObjectId>

  <LocationURI>/vmrest/locations/connectionlocations/be27976c-6e6e-419f-853d-b3764881dfb0</LocationURI>

    <LockoutDuration>30</LockoutDuration>
    <MaxDays>120</MaxDays>
    <MaxHacks>7</MaxHacks>
    <MinLength>8</MinLength>
    <PrevCredCount>5</PrevCredCount>
    <TrivialCredChecking>true</TrivialCredChecking>
    <DisplayName>Papa Recommended Web Application Authentication Rule</DisplayName>
    <MinDuration>1440</MinDuration>
    <ExpiryWarningDays>15</ExpiryWarningDays>
    <MinCharsToChange>1</MinCharsToChange>
  </AuthenticationRule>
  <AuthenticationRule>
    <URI>/vmrest/authenticationrules/df3611a3-d372-4a38-a7a4-7d4aba4febd2</URI>
    <ObjectId>df3611a3-d372-4a38-a7a4-7d4aba4febd2</ObjectId>
    <HackResetTime>30</HackResetTime>
    <LocationObjectId>be27976c-6e6e-419f-853d-b3764881dfb0</LocationObjectId>

  <LocationURI>/vmrest/locations/connectionlocations/be27976c-6e6e-419f-853d-b3764881dfb0</LocationURI>

    <LockoutDuration>30</LockoutDuration>
    <MaxDays>180</MaxDays>
    <MaxHacks>3</MaxHacks>
    <MinLength>6</MinLength>
    <PrevCredCount>5</PrevCredCount>
    <TrivialCredChecking>true</TrivialCredChecking>
    <DisplayName>Recommended Voice Mail Authentication Rule</DisplayName>
    <MinDuration>1440</MinDuration>
    <ExpiryWarningDays>15</ExpiryWarningDays>
    <MinCharsToChange>1</MinCharsToChange>
  </AuthenticationRule>
  <AuthenticationRule>
    <URI>/vmrest/authenticationrules/5780fb3f-8f70-4d3d-9c18-2832f9d11642</URI>
    <ObjectId>5780fb3f-8f70-4d3d-9c18-2832f9d11642</ObjectId>
    <HackResetTime>30</HackResetTime>
    <LocationObjectId>be27976c-6e6e-419f-853d-b3764881dfb0</LocationObjectId>

  <LocationURI>/vmrest/locations/connectionlocations/be27976c-6e6e-419f-853d-b3764881dfb0</LocationURI>

    <LockoutDuration>30</LockoutDuration>
    <MaxDays>180</MaxDays>
    <MaxHacks>3</MaxHacks>
    <MinLength>8</MinLength>
    <PrevCredCount>12</PrevCredCount>
    <TrivialCredChecking>true</TrivialCredChecking>
    <DisplayName>test</DisplayName>
    <MinDuration>0</MinDuration>
    <ExpiryWarningDays>15</ExpiryWarningDays>
    <MinCharsToChange>1</MinCharsToChange>
  </AuthenticationRule>
  <AuthenticationRule>
    <URI>/vmrest/authenticationrules/ac80ee1d-0f09-42d0-ae7c-adb56a82b340</URI>
    <ObjectId>ac80ee1d-0f09-42d0-ae7c-adb56a82b340</ObjectId>
    <HackResetTime>30</HackResetTime>
    <LocationObjectId>be27976c-6e6e-419f-853d-b3764881dfb0</LocationObjectId>

```

```
<LocationURI>/vmrest/locations/connectionlocations/be27976c-6e6e-419f-853d-b3764881dfb0</LocationURI>

  <LockoutDuration>30</LockoutDuration>
  <MaxDays>180</MaxDays>
  <MaxHacks>3</MaxHacks>
  <MinLength>8</MinLength>
  <PrevCredCount>12</PrevCredCount>
  <TrivialCredChecking>true</TrivialCredChecking>
  <DisplayName>Papa Recommended Web Application Authentication Rule Paapas</DisplayName>
  <MinDuration>1440</MinDuration>
  <ExpiryWarningDays>15</ExpiryWarningDays>
  <MinCharsToChange>1</MinCharsToChange>
</AuthenticationRule>
</AuthenticationRules>
```

Response code: 200

Example 2

The following is an example of the GET request that lists a specified Authentication Rule as represented by <objectId>:

```
https://<connection_server>/vmrest/authenticationrules/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<AuthenticationRule>
  <URI>/vmrest/authenticationrules/db3999dc-7afc-4a1e-be64-c5647c7f2226</URI>
  <ObjectId>db3999dc-7afc-4a1e-be64-c5647c7f2226</ObjectId>
  <HackResetTime>30</HackResetTime>
  <LocationObjectId>be27976c-6e6e-419f-853d-b3764881dfb0</LocationObjectId>

  <LocationURI>/vmrest/locations/connectionlocations/be27976c-6e6e-419f-853d-b3764881dfb0</LocationURI>

  <LockoutDuration>30</LockoutDuration>
  <MaxDays>120</MaxDays>
  <MaxHacks>7</MaxHacks>
  <MinLength>8</MinLength>
  <PrevCredCount>5</PrevCredCount>
  <TrivialCredChecking>true</TrivialCredChecking>
  <DisplayName>Papa Recommended Web Application Authentication Rule</DisplayName>
  <MinDuration>1440</MinDuration>
  <ExpiryWarningDays>15</ExpiryWarningDays>
  <MinCharsToChange>1</MinCharsToChange>
</AuthenticationRule>
```

Response code: 200

Adding a new Authentication Rule

The following is an example of the POST request that lists the Authentication Rules:

```
https://<connection_server>/vmrest/authenticationrules
```

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:


```

<AuthenticationRule>
<DisplayName>New Authentication Rule</DisplayName>
<HackResetTime>30</HackResetTime>
  <LockoutDuration>30</LockoutDuration>
  <MaxDays>120</MaxDays>
  <MaxHacks>7</MaxHacks>
  <MinLength>8</MinLength>
  <PrevCredCount>5</PrevCredCount>
  <TrivialCredChecking>true</TrivialCredChecking>
  <MinDuration>1440</MinDuration>
  <ExpiryWarningDays>15</ExpiryWarningDays>
  <MinCharsToChange>1</MinCharsToChange>
</AuthenticationRule>

```

Response code: 201

Modifying Authentication Rules

The following is an example of the PUT request that modifies the Authentication Rule:

```
https://<connection_server>/vmrest/ authenticationrules/<objectId>
```

The actual response will depend upon the information given by you.

```

<AuthenticationRule> <AuthenticationRule>
<HackResetTime>60</HackResetTime>
  <LockoutDuration>60</LockoutDuration>
  <MaxDays>120</MaxDays>
  <MaxHacks>7</MaxHacks>
  <MinLength>8</MinLength>
  <PrevCredCount>5</PrevCredCount>
  <TrivialCredChecking>true</TrivialCredChecking>
  <MinDuration>1440</MinDuration>
  <ExpiryWarningDays>15</ExpiryWarningDays>
  <MinCharsToChange>1</MinCharsToChange>
</AuthenticationRule>
<HackResetTime>60</HackResetTime>
  <LockoutDuration>60</LockoutDuration>
  <MaxDays>120</MaxDays>
  <MaxHacks>7</MaxHacks>
  <MinLength>8</MinLength>
  <PrevCredCount>5</PrevCredCount>
  <TrivialCredChecking>true</TrivialCredChecking>
  <MinDuration>1440</MinDuration>
  <ExpiryWarningDays>15</ExpiryWarningDays>
  <MinCharsToChange>1</MinCharsToChange>
</AuthenticationRule>

```

Response code: 204

Deleting Authentication Rules

The following is an example of the DELETE request that deletes a Authentication Rule as represented by <objectId>:

```
https://<connection_server>/vmrest/authenticationrules/<objectId>
```

The output for this request returns the successful response code.

```
Response Code: 204
```

Explanation of Data Fields

The following chart lists all of the data fields available on Authentication Rules.

| Field Name | Operation | Values | Comments |
|---------------------|------------|------------|--|
| HackResetTime | Read/Write | 1-120 | Reset Every Failed Sign-in Attempts. Default: 30 |
| LockoutDuration | Read/Write | 0-1440 | LockoutDuration. Default: 30 |
| MaxDays | Read/Write | 0-3653 | Credential Expires After. Default=180 |
| MaxHacks | Read/Write | 0-100 | Failed Sign-In. Default=3 |
| MinLength | Read/Write | 1-64 | Minimum credential length. Default: 8 |
| PrevCredCount | Read/Write | 0-25 | Stored Number of Previous Credentials. Default=12 |
| TrivialCredChecking | Read/Write | true/false | Check for Trivial Passwords. Default=false |
| DisplayName | Read/Write | 1-64 | Friendly name for the Authentication Rule. |
| MinDuration | Read/Write | 0-129600 | Minimum Duration between Credential Changes |
| ExpiryWarningDays | Read/Write | | Expiration Warning Days. Default=15 |
| MinCharsToChange | Read/Write | 1-64 | Minimum Number of Character Changes between Successive Credentials. Default: 1 |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Roles

Roles

A role comprises of set of privileges that define the access level to the system. System Administrator can configure multiple roles based on the administrative needs. The role assignment for a user account can be done based on the set of operations required. Unity Connection offers two types of roles:

- **System Roles:** System roles are predefined roles that come installed with Unity Connection. You cannot create, modify or delete these roles. System roles can only be assigned or unassigned to users by System Administrator.
- **Custom Roles:** Custom roles are the roles that you create with a list of privileges based on your organizational requirements. Custom roles can be assigned or unassigned to users by System Administrator or a custom role user with role assignment privilege



Note Only a user with System Administrator role can create, update or delete custom roles.

Listing Privileges

The following is an example of the GET request that lists all the privileges:

```
GET https://<connection-server>/vmrest/privileges
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<Privileges total="46">

  <Privilege>
    <ObjectId>56ea5443-4832-40b9-88b7-879068465bc9</ObjectId>
    <DisplayName>Manage Users - Full Access</DisplayName>
  </Privilege>
  <Privilege>
    <ObjectId>37ae97bf-a0ca-4adf-a498-alaf3f4d4acd</ObjectId>
    <DisplayName>Manage Users: Assign/Unassign Roles</DisplayName>
  </Privilege>

  .....
  .....
  .....

  <Privilege>
    <ObjectId>140a9af7-b76a-49de-9ed3-a020bcd2c1bb</ObjectId>
    <DisplayName>Reset User Passwords</DisplayName>
  </Privilege>
  <Privilege>
    <ObjectId>7c0326f7-e7e6-4853-8e4e-b93dd1c13ce6</ObjectId>
    <DisplayName>Run Serviceability Page</DisplayName>
  </Privilege>
</Privileges>
```

```
Response Code: 200
```

Listing Roles

This API list all the System roles as well as Custom roles. The following is an example of the GET request that lists all the Roles:

```
GET https://<connection-server>/vmrest/roles
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing System Roles

```

<Roles total="19">
<Role>
<URI>/vmrest/roles/0d44b89f-6b93-4f16-a8cb-cd07c01e524d</URI>
<ObjectId>0d44b89f-6b93-4f16-a8cb-cd07c01e524d</ObjectId>
<RoleName>Audio Text Administrator</RoleName>
<RoleDescription>Administers call handlers, directory handlers and interview
handlers</RoleDescription>
<IsEnabled>>true</IsEnabled>
<ReadOnly>>false</ReadOnly>
</Role>
.....
.....
.....
.....

<Role>
<URI>/vmrest/roles/58f51c8a-74e4-4db9-babc-8e7e9aad4385</URI>
<ObjectId>58f51c8a-74e4-4db9-babc-8e7e9aad4385</ObjectId>
<RoleName>New Custom Role</RoleName>
<RoleDescription>New custom role for users</RoleDescription>
<IsEnabled>>true</IsEnabled>
<ReadOnly>>false</ReadOnly>
<InheritedObjectId>dc32b8c1-bc71-4a81-9538-72ebb88a3f31</InheritedObjectId>
</Role>
</Roles>

```

Response Code: 200

Listing System Roles

The following is an example of the GET request that lists all the system roles:

```
GET https://<connection-server>/vmrest/systemroles
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<Roles total="11">
  <Role>
    <ObjectId>7c99cd0b-c480-483d-a7d1-44824d50903d</ObjectId>
    <RoleName>Audio Text Administrator</RoleName>
    <RoleDescription>Administers call handlers, directory handlers and interview
handlers</RoleDescription>
    <IsEnabled>>true</IsEnabled>
    <ReadOnly>>false</ReadOnly>
  </Role>
  <Role>
    <ObjectId>4f077e4e-61c7-4ce8-a58a-2c4bc6089319</ObjectId>
    <RoleName>Greeting Administrator</RoleName>
    <RoleDescription>Manages call handler recorded greetings via TUI</RoleDescription>
    <IsEnabled>>true</IsEnabled>
    <ReadOnly>>false</ReadOnly>
  </Role>
  .....
  .....
  .....
  <Role>
    <ObjectId>15930390-7ef1-4389-abc0-020962e32cc5</ObjectId>
    <RoleName>Read Only Administrator</RoleName>
    <RoleDescription>Read only access to view all Connection administrative
functions</RoleDescription>
    <IsEnabled>>true</IsEnabled>
    <ReadOnly>>false</ReadOnly>
  </Role>

```

Response Code: 200

Listing Custom Roles

The following is an example of the GET request that lists all the custom roles:

```
GET https://<connection-server>/vmrest/customroles
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<Roles total="4">
  <Role>
    <ObjectId>5c5abfb9-eec9-4df5-877d-972f65b73df6</ObjectId>
    <RoleName>Custom Role 1</RoleName>
    <RoleDescription>New custom role for user 1</RoleDescription>
    <IsEnabled>true</IsEnabled>
    <ReadOnly>false</ReadOnly>
    <InheritedObjectId>5976fb56-e398-4659-841a-5519c97a036f</InheritedObjectId>
  </Role>
  .....
  .....
  .....

  <Role>
    <ObjectId>c616cc89-16f0-4fe5-9213-c5ce4ea5e81e</ObjectId>
    <RoleName>Custom role 4</RoleName>
    <RoleDescription>New custom role for user 4</RoleDescription>
    <IsEnabled>true</IsEnabled>
    <ReadOnly>false</ReadOnly>
    <InheritedObjectId>dc32b8c1-bc71-4a81-9538-72ebb88a3f31</InheritedObjectId>
  </Role>
</Roles>

```

Response Code: 200

Creating a New Custom Role

The following is an example of POST request that creates a new Custom Role.

```

POST
https://<connection-server>/vmrest/customroles?systemRoleToInherit=<systemRoleToInherit_objId>

```



Note In **systemRoleToInherit** field, provide the object id of the System Role that you want to inherit while creating a Custom Role. The privileges of inherited system role are assigned to the custom role. Below are the system roles that can be inherited:

- Audio Text Administrator
- Greeting Administrator
- Help Desk Administrator
- Technician
- User Administrator
- Tenant Administrator

Request Body

```
<Role>
<RoleName>Custom Role New</RoleName>
<RoleDescription>Administers call handlers, directory handlers and interview
handlers</RoleDescription>
<AssignPrivileges>
  <PrivilegeObjectId>0db37044-b459-4784-a82c-fea1ddb35b73</PrivilegeObjectId>
  <PrivilegeObjectId>0d20ccc4-2694-4762-bfaa-649871fd0e99</PrivilegeObjectId>
</AssignPrivileges>
</Role>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/customroles/9166f041-aec4-4e5a-9600-6cc27ef99ec7
```

Modifying Custom Role

The following is an example of the PUT request that modifies the Custom Roles.

```
https://<connection_server>/vmrest/customroles/<objectId>
```

Request body

- *When Inherit System Role is Modified*

```
<Role>
<AssignPrivileges>
  <PrivilegeObjectId>0db37044-b459-4784-a82c-fea1ddb35b73</PrivilegeObjectId>
  <PrivilegeObjectId>0d20ccc4-2694-4762-bfaa-649871fd0e99</PrivilegeObjectId>
</AssignPrivileges>
<InheritedObjectId>61a3d5bd-74a0-40e4-a770-f927faa52bb3</InheritedObjectId>
</Role>
```

- *When Privileges are Modified (Assigned or Removed)*

```
<Role>
<AssignPrivileges>
  <PrivilegeObjectId>0db37044-b459-4784-a82c-fea1ddb35b73</PrivilegeObjectId>
  <PrivilegeObjectId>0d20ccc4-2694-4762-bfaa-649871fd0e99</PrivilegeObjectId>
</AssignPrivileges>
<RemovePrivileges>
  <PrivilegeObjectId>93c8c92f-a6c7-4458-bbde-1b28dcc5adc6</PrivilegeObjectId>
</RemovePrivileges>
</Role>
```

```
Response code: 201
```

Listing Privileges for Roles

Using this API you can get all the privileges of System and Custom roles.

The following is an example of the GET request that lists all the privileges of roles:

```
https://<connection-server>/vmrest/roles/<object_id>/privileges
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<Privileges total="7">
  <Privilege>
    <ObjectId>f34d7ee3-43a0-411a-8de9-724937ea8fc8</ObjectId>
    <DisplayName>Manage Call Handler Templates And System Call Handlers - View, Create,
Update</DisplayName>
  </Privilege>
  <Privilege>
    <ObjectId>7ea8e97a-f620-4fdf-b70f-7eaff092647f</ObjectId>
    <DisplayName>Call Management: Directory Handlers - View, Create, Update</DisplayName>
  </Privilege>
  <Privilege>
    <ObjectId>62778f0d-cdc5-495c-9602-1e95b1c5e641</ObjectId>
    <DisplayName>Call Management: Interview Handlers - View, Create, Update</DisplayName>
  </Privilege>
  <Privilege>
    <ObjectId>fef92b42-77c1-40aa-99df-fafdf793e763</ObjectId>
    <DisplayName>Call Management: Call Routing Rules - Full Access</DisplayName>
  </Privilege>
  <Privilege>
    <ObjectId>8979151b-8554-4483-b75b-d46d56e1fb98</ObjectId>
    <DisplayName>Networking: VPIM - Full Access</DisplayName>
  </Privilege>
  <Privilege>
    <ObjectId>2431bc0b-1251-4c95-aaf9-2a82a893a60d</ObjectId>
    <DisplayName>Distribution Lists - Full Access</DisplayName>
  </Privilege>
  <Privilege>
    <ObjectId>2c2ef5b5-b15c-42b3-9cc3-f7d4de137825</ObjectId>
    <DisplayName>System Settings: Advanced - Full Access</DisplayName>
  </Privilege>
</Privileges>
```

Response Code: 200

Deleting a Custom Role

The following is an example of the DELETE request that deletes a Custom Roles:

```
DELETE https://<connection-server>/vmrest/customroles/<objectId>
```

The following is the response from the above *DELETE* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

The following chart lists all of the data fields:

| Parameter | Data Type | Operations | Description |
|-----------------|-----------|------------|--|
| RoleName | String | Read/Write | Specifies the name of the Role. |
| RoleDescription | String | Read/Write | Specifies the description of the Role. |

| Parameter | Data Type | Operations | Description |
|-------------------|-----------|------------|---|
| InheritedObjectId | String | Read/Write | Specifies the object id of the System Role that is inherited while creating or modifying a Custom Role. |
| AssignPrivileges | String | Read/Write | Specifies the object id of the privileges that are assigned to the Custom Role. |
| RemovePrivileges | String | Write only | Specifies the object id of the privileges that will be removed from a custom role.

Note You can not remove the privileges of inherited System Role. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Restriction Patterns

Restriction Patterns

Administrator can use this API to create/update/delete/fetch the restriction pattern. Various attributes of restriction pattern can also be updated using this API.

Listing the Restriction Pattern for a Particular Restriction Table

The following is an example of the GET request that lists all the restriction tables:

```
GET https://<connection-server>/vmrest/restrictiontables
/<restrictiontableobjectid>/restrictionpatterns
```

The following is the response from the above *GET* request:

```
<RestrictionPatterns total="2">
  <RestrictionPattern>
    <URI>/vmrest/restrictiontables/38de2a1f-ca74-4be3-bb7cd315df4c0fc5/
restrictionpatterns/6564adb9-9090-42e0-81e6-04e132c4382c</URI>
    <Blocked>>true</Blocked>
    <NumberPattern>*</NumberPattern>
    <RestrictionTableObjectId>38de2a1f-ca74-4be3-bb7cd315df4c0fc5</
RestrictionTableObjectId>
    <SequenceNumber>1</SequenceNumber>
    <ObjectId>6564adb9-9090-42e0-81e6-04e132c4382c</ObjectId>
  </RestrictionPattern>
  <RestrictionPattern>
    <URI>/vmrest/restrictiontables/38de2a1f-ca74-4be3-bb7cd315df4c0fc5/
restrictionpatterns/15a68e67-16b9-4847-8230-29be9baa88cf</URI>
    <Blocked>>true</Blocked>
    <NumberPattern>*</NumberPattern>
    <RestrictionTableObjectId>38de2a1f-ca74-4be3-bb7cd315df4c0fc5</
RestrictionTableObjectId>
    <SequenceNumber>0</SequenceNumber>
    <ObjectId>15a68e67-16b9-4847-8230-29be9baa88cf</ObjectId>
  </RestrictionPattern>
</RestrictionPatterns>
```

Viewing the Specific Restriction Pattern for a Particular Restriction Table

```
Response Code: 200
```

Viewing the Specific Restriction Pattern for a Particular Restriction Table

The following is an example of the GET request that lists the details of specific restriction pattern represented by the provided value of object ID:

```
GET https://<connection-server>/vmrest/restrictiontables/
  <restrictiontableobjectid>/restrictionpatterns/<restrictiontableobjectid>
The following is the response from the above *GET* request:
<RestrictionPattern>
  <URI>/vmrest/restrictiontables/2c2c9504-8fb4-44e3-983c-
  93eb4e20325c/restrictionpatterns/2c2c9504-8fb4-44e3-983c-93eb4e20325c/</URI>
  <Blocked>false</Blocked>
  <NumberPattern>*</NumberPattern>
  <RestrictionTableObjectId>255bfdd2-5686-47f2-b40a-
  320c194521ba</RestrictionTableObjectId>
  <RestrictionTableURI>/vmrest/restrictiontables/255bfdd2-5686-47f2-b40a-
  320c194521ba</RestrictionTableURI>
  <SequenceNumber>1</SequenceNumber>
  <ObjectId>2c2c9504-8fb4-44e3-983c-93eb4e20325c</ObjectId>
</RestrictionPattern>
```

```
Response Code: 200
```

Creating a Restriction Pattern

The following is an example of the POST request that creates a restriction pattern:

```
POST https://<connectionserver>/
vmrest/restrictiontables/<restrictiontableobjectid>/restrictionpatterns
```

Example 1: The following is the example of the create request from the above *POST* request.

```
Request Body:
<RestrictionPattern>
  <NumberPattern>*</NumberPattern>
</RestrictionPattern>
```

```
Response Code: 201
```

JSON Example

To create new restriction pattern, do the following:

```
Request URI:
POST https://<connectionserver>/
vmrest/restrictiontables/<restrictiontableobjectid>/restrictionpatterns
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "NumberPattern": "*"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Example 2: The following is the example of the create request with specific restriction table Object ID

```
Request Body:
<RestrictionPattern>
  <NumberPattern>*#??</NumberPattern>

<RestrictionTableObjectId>38de2a1f-ca74-4be3-bb7c-d315df4c0fc5</RestrictionTableObjectId>
</RestrictionPattern>
```

```
Response Code: 201
```

Updating a Restriction Pattern

The following is an example of the PUT request that allows you to update the restriction pattern:

Example 1: Change number pattern of restriction pattern

```
PUT https://<connection-
server>/vmrest/restrictiontables/<restrictiontableobjectid>/restrictionpatterns/<restrictionpatternob
jectid>
Request Body:
<RestrictionPattern>
  <NumberPattern>??999#</NumberPattern>
</RestrictionPattern>
```

```
Response Code: 204
```

JSON Example

To change number pattern of restriction pattern, do the following:

```
Request URI:
PUT https://<connection-
server>/vmrest/restrictiontables/<restrictiontableobjectid>/restrictionpatterns/<restrictionpatternobject
id>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
{
  "NumberPattern": "99??"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Request URI: 204
```

Example 2: Change sequence of restriction pattern



- Note**
- To change the sequence of restriction patterns GET the object id of restriction patterns and arrange them in the required sequence.
 - To change the sequence of restriction patterns through API, you must provide all the restriction pattern object Id present in that restriction table

```
PUT https://<connectionserver>/
vmrest/restrictiontables/<restrictiontableobjectid>/restrictionpatterns
Request Body:
<RestrictionPatterns>
  <RestrictionPattern>
    <ObjectId>6564adb9-9090-42e0-81e6-04e132c4382c</ObjectId>
  </RestrictionPattern>
  <RestrictionPattern>
    <ObjectId>d9cd1525-462b-4eef-8629-0be9d0db2d18</ObjectId>
  </RestrictionPattern>
  <RestrictionPattern>
    <ObjectId>db0aed70-316b-47cb-8335-52fe34d3ca94</ObjectId>
  </RestrictionPattern>
  <RestrictionPattern>
    <ObjectId>46485dc6-bf31-4b31-be58-9eacbe718d02</ObjectId>
  </RestrictionPattern>
  <RestrictionPattern>
    <ObjectId>b7d51bb8-0059-4b56-aadd-6f9e2eaea624</ObjectId>
  </RestrictionPattern>
</RestrictionPatterns>
```

Request URI: 204



- Note** Default restriction pattern can neither be edited nor be deleted.



- Note** The entire restriction pattern Object Id is given including default restriction pattern. But sequence of default restriction pattern cannot be changed because default restriction pattern cannot be edited nor be deleted.

Deleting a Restriction Pattern

Example 1: Delete particular restriction pattern The following is an example of the DELETE request that deletes a specific restriction table where you need to mention the restriction pattern object ID

```
DELETE https://<connection-
server>/vmrest/restrictiontables/<restrictiontableobjectid>/restrictionpatterns/<restrictionpatterno
bjectid>
```

Response Code: 204

JSON Example

To delete particular restriction pattern, do the following:

```
DELETE https://<connectionserver>/
vmrest/restrictiontables/<restrictiontableobjectid>/restrictionpatterns/<restrictionpatternobject
id>
Accept: application/json
Connection: keep-alive
```

Response Code: 204



- Note**
- Default restriction pattern cannot be edited or deleted.
 - When restriction pattern is blocked then then calls matching to dial string will not be allowed.

Explanation of Data Fields

The following chart lists all of the data fields:

| Device Name | Data Type | Operation | Comments |
|--------------------------|------------|------------|--|
| Number Pattern | Varchar | Read/Write | The specific numbers or patterns of numbers (including external and long-distance access codes) that can be permitted or restricted. It uses digits 0 through 9 plus the following special characters: <ul style="list-style-type: none"> • *Match zero or more digits • ? Match exactly one digit. Each '?' serves as a placeholder for one digit. • # Corresponds to the # key on the phone • + to call from one country to other country For example, to screen out all phone numbers that start with 206 but are longer than 7 digits, enter 9206?????* for the pattern (and set "Blocked" == true). Maximum length can be 40. |
| Blocked | Boolean | Read/Write | A flag indicating whether Cisco Unity Connection permits the use of dial strings matching the pattern. <p>Values:</p> <ul style="list-style-type: none"> • false: Permit use of dial strings matching the pattern • true: Do not permit use of dial strings matching the pattern Default Value - true |
| ObjectId | String(36) | Read Only | Specifies the object ID of restriction patterns. |
| RestrictionTableObjectId | String(36) | Read Only | Specifies the restriction table object id to which restriction pattern belongs. |
| SequenceNumber | Integer(2) | Read Only | A sequential index for this restriction pattern within the parent restriction table, which specifies the order in which Cisco Unity Connection will apply each call pattern. |

Cisco Unity Connection Provisioning Interface (CUPI) API -- Restriction Tables

Restriction Tables

Administrator can use this API to create/update/delete/fetch the restriction table. Various attributes of restriction table can also be updated using this API.

Listing the Restriction Tables

The following is an example of the GET request that lists all the restriction tables:

```
GET https://<connection-server>/vmrest/restrictiontables
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<RestrictionTables total="2">
  <RestrictionTable>
    <URI>/vmrest/restrictiontables/71be3f47-fcf4-463d-8e8a-1710a2180de6</URI>
    <ObjectId>71be3f47-fcf4-463d-8e8a-1710a2180de6</ObjectId>
    <CreationTime>2013-01-29T09:46:52Z</CreationTime>
    <DefaultBlocked>false</DefaultBlocked>
    <LocationObjectId>9f59d35f-104b-4875-9995-39925dd024c0</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/9f59d35f-104b-4875-9995-39925dd024c0</LocationURI>
    <MaxDigits>40</MaxDigits>
    <MinDigits>1</MinDigits>
    <DisplayName>Default Transfer</DisplayName>
    <Undeletable>true</Undeletable>
    <RestrictionPatternsURI>/vmrest/restrictiontables/71be3f47-fcf4-463d-8e8a-1710a2180de6/restrictionpatterns</RestrictionPatternsURI>
  </RestrictionTable>
  <RestrictionTable>
    <URI>/vmrest/restrictiontables/a056f147-6469-4bb3-8314-5d0ff8011bad</URI>
    <ObjectId>a056f147-6469-4bb3-8314-5d0ff8011bad</ObjectId>
    <CreationTime>2013-01-29T09:46:52Z</CreationTime>
    <DefaultBlocked>false</DefaultBlocked>
    <LocationObjectId>9f59d35f-104b-4875-9995-39925dd024c0</LocationObjectId>
    <LocationURI>/vmrest/locations/connectionlocations/9f59d35f-104b-4875-9995-39925dd024c0</LocationURI>
    <MaxDigits>40</MaxDigits>
    <MinDigits>1</MinDigits>
    <DisplayName>Default Outdial</DisplayName>
    <Undeletable>true</Undeletable>
    <RestrictionPatternsURI>/vmrest/restrictiontables/a056f147-6469-4bb3-8314-5d0ff8011bad/restrictionpatterns</RestrictionPatternsURI>
  </RestrictionTable>
</RestrictionTables>
```

```
Response Code: 200
```

JSON Example

To list all the restriction tables use the following command, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/restrictiontables
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2",
  "RestrictionTable": [
    {
      "URI": "/vmrest/restrictiontables/4f01e5b1-b649-4f94-b55e-0c53d0e29c38",
      "ObjectId": "4f01e5b1-b649-4f94-b55e-0c53d0e29c38",
      "CreationTime": "2013-02-14T05:05:09Z",
      "DefaultBlocked": "false",
      "LocationObjectId": "bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
      "LocationURI": "/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
      "MaxDigits": "40",
      "MinDigits": "1",
      "DisplayName": "Default Transfer",
      "Undeletable": "true",
      "RestrictionPatternsURI": "/vmrest/restrictiontables/4f01e5b1-b649-4f94-b55e-0c53d0e29c38/restrictionpatterns"
    },
    {
      "URI": "/vmrest/restrictiontables/d66b1140-986a-40f1-a7d0-09714652d53f",
      "ObjectId": "d66b1140-986a-40f1-a7d0-09714652d53f",
      "CreationTime": "2013-02-14T05:05:09Z",
      "DefaultBlocked": "false",
      "LocationObjectId": "bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
      "LocationURI": "/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
      "MaxDigits": "40",
      "MinDigits": "1",
      "DisplayName": "Default Outdial",
      "Undeletable": "true",
      "RestrictionPatternsURI": "/vmrest/restrictiontables/d66b1140-986a-40f1-a7d0-09714652d53f/restrictionpatterns"
    }
  ]
}
```

```
Response Code: 200
```

Viewing the Specific Restriction Table

Example 1: With valid object ID The following is an example of the GET request that lists the details of specific restriction table represented by the provided value of object ID:

```
GET https://<connection-server>/vmrest/restrictiontables/<restrictiontableobjectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<RestrictionTable>
  <URI>/vmrest/restrictiontables/71be3f47-fcf4-463d-8e8a-1710a2180de6</URI>
  <ObjectId>71be3f47-fcf4-463d-8e8a-1710a2180de6</ObjectId>
  <CreationTime>2013-01-29T09:46:52Z</CreationTime>
  <DefaultBlocked>>false</DefaultBlocked>
  <LocationObjectId>9f59d35f-104b-4875-9995-39925dd024c0</LocationObjectId>
  <LocationURI>/vmrest/locations/connectionlocations/9f59d35f-104b-4875-9995-
39925dd024c0</LocationURI>
  <MaxDigits>40</MaxDigits>
  <MinDigits>1</MinDigits>
  <DisplayName>Default Transfer</DisplayName>
  <Undeletable>>true</Undeletable>
  <RestrictionPatternsURI>/vmrest/restrictiontables/71be3f47-fcf4-463d-8e8a-
1710a2180de6/restrictionpatterns</RestrictionPatternsURI>
</RestrictionTable>
```

Response Code: 200

JSON Example

To view specific restriction table, do the following:

```
Request URI:
GET https://<connection-server>/vmrest/restrictiontables/<restrictiontableobjectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/restrictiontables/d66b1140-986a-40f1-a7d0-09714652d53f",
  "ObjectId": "d66b1140-986a-40f1-a7d0-09714652d53f",
  "CreationTime": "2013-02-14T05:05:09Z",
  "DefaultBlocked": "false",
  "LocationObjectId": "bbf3e6ed-0278-479c-9a6e-2da8756eeb6f",
  "LocationURI": "/vmrest/locations/connectionlocations/bbf3e6ed-0278-479c-9a6e-
2da8756eeb6f",
  "MaxDigits": "40",
  "MinDigits": "1",
  "DisplayName": "Default Outdial",
  "Undeletable": "true",
  "RestrictionPatternsURI": "/vmrest/restrictiontables/d66b1140-986a-40f1-a7d0-
09714652d53f/restrictionpatterns"
}
```

Response Code: 200

Creating a Restriction Table

The following is an example of the POST request that creates a restriction table:

```
POST https://<connection-server>/vmrest/restrictiontables
```

Example 1: The following is the example of the create request from the above *POST* request.


```
Request Body:
<RestrictionTable>
  <DisplayName>Texoma 1</DisplayName>
</RestrictionTable>
```

```
Response Code: 201
```

JSON Example

To create new restriction table, do the following:

```
POST https://<connection-server>/vmrest/restrictiontables
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "DisplayName": "Texoma 1"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Example 2: The following is the example of the create request with maximum and minimum length

```
Request Body:
<RestrictionTable>
  <DisplayName>Texoma Restriction Table_7</DisplayName>
  <MinDigits>50</MinDigits>
  <MaxDigits>60</MaxDigits>
</RestrictionTable>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

JSON Example

To create restriction table with maximum and minimum length, do the following:

```
Request URI:
POST https://<connection-server>/vmrest/restrictiontables
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "MaxDigits": "60",
  "MinDigits": "50",
  "DisplayName": "Texoma Restriction Table_7"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
```

Updating a Restriction Table Parameters

The following is an example of the PUT request that allows you to update the parameters of the restriction tables:

```
PUT https://<connection-server>/vmrest/restrictiontables/<restrictiontableobjectid>
```

Example 1: Update display name of restriction table

```
Request Body:
<RestrictionTable>
  <DisplayName>Texoma_123</DisplayName>
</RestrictionTable>
```

```
Response Code: 204
```

JSON Example

To update display name of restriction table, do the following:

```
Request URI:
PUT https://<connection-server>/vmrest/restrictiontables/<restrictiontableobjectid>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
Request Body:
{
  "DisplayName": "Texoma_123"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Example 2: Update maximum and minimum digits of restriction table

```
Request Body:
<RestrictionTable>
  <DisplayName>Texoma Restriction Table_7</DisplayName>
  <MinDigits>241</MinDigits> //Minimum digit range is 1-300, it should not exceed above
  300
  <MaxDigits>256</MaxDigits> //Maximum digit range is 1-300, it should not exceed above
  300
</RestrictionTable>
```

```
Response Code: 204
```

Example 3: Update default blocked parameter

```
Request Body:
<RestrictionTable>
  <DefaultBlocked>true</DefaultBlocked>
</RestrictionTable>
```

```
Response Code: 204
```

Deleting a Restriction Table

Example 1: Deleting a restriction table with a valid object id

The following is an example of the DELETE request that deletes a specific restriction table where you need to mention the object ID:

```
DELETE https://<connection-server>/vmrest/restrictiontables/<restrictiontableobjectid>
```

```
Response Code: 204
```

JSON Example

To delete restriction table with a valid object id, do the following:

```
DELETE https://<connection-server>/vmrest/restrictiontables/<restrictiontableobjectid>
Accept: application/json
Connection: keep-alive
```

```
Response Code: 204
```



Note Default restriction table cannot be edited or deleted.

Explanation of Data Fields

The following chart lists all of the data fields:

| Device Name | Data Type | Operation | Comments |
|-------------|-------------|------------|---|
| ObjectId | String (36) | Read only | Specifies an unique and system generated ID of a particular restriction table object. |
| DisplayName | String (64) | Read/Write | Specifies unique display name of restriction table in order to display entries in the administrative console. |
| MaxDigits | Integer | Read/Write | Specifies the maximum number of digits in a dial string (including access codes) allowed by Cisco Unity Connection. Only dial strings that contain a number of digits fewer than or equal to the number of digits specified in this column are checked against the restriction table. Dial strings that contain more than the numbers of digits specified in this column are not permitted. For example, if the local calls in your area are seven digits long, and you want to prevent subscribers from using long distance phone numbers, enter 8 in this column.(Range 1-300). |

| Device Name | Data Type | Operation | Comments |
|----------------|-----------|------------|--|
| MinDigits | Integer | Read/Write | Specifies the minimum number of digits in a dial string (including access codes) allowed by Cisco Unity Connection. Only dial strings that contain a number of digits greater than or equal to the number of digits specified in this column are checked against the restriction table. Dial strings that contain fewer than the number of digits specified in this column are not permitted. For example, to prohibit subscribers from using four-digit numbers, enter a value of 5 in this column. (Range 1-300) |
| DefaultBlocked | Boolean | Read/Write | A flag indicating whether Cisco Unity Connection permits the phone number in the case where a phone number does not match any call patterns in this restriction table. This condition should never occur. By default, all restriction tables should have * as the call pattern in the last dial string of the table and an administrator should not be allowed to modify this call pattern setting.

Possible values: <ul style="list-style-type: none"> • false: Blocked • true: Not Blocked Default value: false |
| CreationTime | DateTime | Read only | Creation date and time of restriction table. |
| Undeletable | Boolean | Read/Write | A flag indicating whether this restriction table can be deleted via an administrative application such as Cisco Unity Connection Administration. It is used to prevent deletion of factory defaults.

Default Value - false |

Cisco Unity Connection Provisioning Interface (CUPI) API -- License Dump APIs

License Dump APIs

Administrator can use this API to fetch license usage information for 6 licensing parameters/features. These 6 license parameters are:

| License Parameter | License Tag | Feature | Description |
|-----------------------|-------------------------|---|--|
| CUC_BasicMessaging | LicSubscribersMax | Total number of voicemail users | <p>Specifies the maximum number of voice mail users configured in Cisco Unity Connection.</p> <p>Note All the users which are the time of installation, example, "operator" and "undeliverablemessage" are removed from this. Also all the tenant oper count is not included in for this tag.</p> |
| CUC_SpeechView | LicSTTSubscribersMax | Total number of speech view users using the standard transcription services | Specifies the maximum number of speech view users using the standard transcription services configured in Cisco Unity Connection. |
| CUC_SpeechViewPro | LicSTTProSubscribersMax | Total number of speech view users using the professional transcription services | Specifies the maximum number of Speech view users using the professional transcription services configured in Cisco Unity Connection |
| CUC_SpeechConnectPort | LicRealspeakSessionsMax | Total number of speech connect ports | Specifies the maximum number of Speech Connect calls configured in Cisco Unity Connection |
| CUC_EnhancedMessaging | LicSrvCueSubscribersMax | Total number of enhanced messaging users | Specifies the maximum number of Connection SRSV users configured on Cisco Unity Connection. The Connection SRSV users are reflected under this tag only when the branch is active. This feature is not applicable for Tenant Partitioning system. |
| CUC_SpeechConnectUser | LicContactsMax | Total number of Contacts. | Specifies the maximum number of local contacts, along with VPIM contacts created from Non Unity Connection End Point. |

Listing the License Status Count

The following is an example of the GET request that lists all the license status count:

```
GET https://<connection-server>/vmrest/licensestatuscounts
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<LicenseStatusCounts total="6">
  <LicenseStatusCount>
    <URI>/vmrest/licensestatuscounts/LicSubscribersMax</URI>
    <TagName>LicSubscribersMax</TagName>
    <ObjectId>bc1f1f5d-f628-4bca-b0c9-f225d07d677f</ObjectId>
    <Count>3</Count>
    <featureName>CUC_BasicMessaging</featureName>
    <description>Total Number of Voicemail users</description>
  </LicenseStatusCount>
  <LicenseStatusCount>
    <URI>/vmrest/licensestatuscounts/LicSrsvCuceSubscribersMax</URI>
    <TagName>LicSrsvCuceSubscribersMax</TagName>
    <ObjectId>99541ef5-4602-424c-84e6-6c9fe8b4044b</ObjectId>
    <Count>0</Count>
    <featureName>CUC_EnhancedMessaging</featureName>
    <description>Total Number of Enhanced Messaging Users</description>
  </LicenseStatusCount>
  <LicenseStatusCount>
    <URI>/vmrest/licensestatuscounts/LicSTTSubscribersMax</URI>
    <TagName>LicSTTSubscribersMax</TagName>
    <ObjectId>dfbaf0f8-38b0-4e14-9f62-9b1e59cc2426</ObjectId>
    <Count>0</Count>
    <featureName>CUC_SpeechView</featureName>
    <description>Speechview Standard users</description>
  </LicenseStatusCount>
  <LicenseStatusCount>
    <URI>/vmrest/licensestatuscounts/LicSTTProSubscribersMax</URI>
    <TagName>LicSTTProSubscribersMax</TagName>
    <ObjectId>d1f15aa9-2482-4a80-93e8-58fb402e31dd</ObjectId>
    <Count>3</Count>
    <featureName>CUC_SpeechViewPro</featureName>
    <description>Speechview Professional Users</description>
  </LicenseStatusCount>
  <LicenseStatusCount>
    <URI>/vmrest/licensestatuscounts/LicRealspeakSessionsMax</URI>
    <TagName>LicRealspeakSessionsMax</TagName>
    <ObjectId>2b1a7da9-6b13-4302-8efd-91db94b2c241</ObjectId>
    <Count>3</Count>
    <featureName>CUC_SpeechConnectPort</featureName>
    <description>Total Number of speech connect sessions</description>
  </LicenseStatusCount>
  <LicenseStatusCount>
    <URI>/vmrest/licensestatuscounts/LicContactsMax</URI>
    <TagName>LicContactsMax</TagName>
    <ObjectId>417f531f-077b-4d64-8f5b-749a56623f400</ObjectId>
    <Count>1</Count>
    <featureName>CUC_SpeechConnectGuestUser</featureName>
    <description>Total Number of Contacts</description>
  </LicenseStatusCount></LicenseStatusCounts>
</pre>


Response Code: 200


```

JSON Example

To list all the license status count use the following command:

```
Request URI:
GET https://<connection-server>/vmrest/licensestatuscounts
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2"
  "LicenseStatusCount": [
    {
      "URI": "/vmrest/licensestatuscounts/LicSubscribersMax"
      "TagName": "LicSubscribersMax"
      "ObjectId": "bc1f1f5d-f628-4bca-b0c9-f225d07d677f"
      "Count": "3"
      "featureName": "CUC_BasicMessaging"
      "description": "Total Number of Voicemail users"
    }
    {
      "URI": "/vmrest/licensestatuscounts/LicSrsvCuceSubscribersMax"
      "TagName": "LicSrsvCuceSubscribersMax"
      "ObjectId": "99541ef5-4602-424c-84e6-6c9fe8b4044b"
      "Count": "0"
      "featureName": "CUC_EnhancedMessaging"
      "description": "Total Number of Enhanced Messaging Users"
    }
  ]
}
```

Response Code: 200

Viewing the Specific License Status Count

```
Request URI:
GET https://<connection-server>/vmrest/licensestatuscounts/<TagName>
```

Tag names can be:

- LicSubscribersMax
- LicSrsvCuceSubscribersMax
- LicSTTSubscribersMax
- LicSTTProSubscribersMax
- LicRealspeakSessionsMaxSample Request

The following is an example of the GET request that lists the details of specific license status count represented by the provided value of object ID:

```
GET https://<connection-server>/vmrest/licensestatuscounts/LicSubscribersMax
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<LicenseStatusCount>
  <URI>/vmrest/licensestatuscounts/LicSubscribersMax</URI>
  <TagName>LicSubscribersMax</TagName>
  <ObjectId>bc1f1f5d-f628-4bca-b0c9-f225d07d677f</ObjectId>
  <Count>3</Count>
  <featureName>CUC_BasicMessaging</featureName>
  <description>Total Number of Voicemail users</description>
</LicenseStatusCount>
```

Response Code: 200

JSON Example

To view specific license status count, do the following:

```
GET https://<connection-server>/vmrest/licensestatuscounts/<TagName>
Request URI:
GET https://<connection-server>/vmrest/licensestatuscounts/LicSubscribersMax
Accept: application /json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/licensestatuscounts/LicSubscribersMax"
  "TagName": "LicSubscribersMax"
  "ObjectId": "bc1f1f5d-f628-4bca-b0c9-f225d07d677f"
  "Count": "3"
  "featureName": "CUC_BasicMessaging"
  "description": "Total Number of Voicemail users"
}
```

Response Code: 200

Explanation of Data Fields

The following chart lists all of the data fields:

Parameter	Operation	Data Type	Comment
URI	Read Only	String	Specifies the URI of the API.
TagName	Read Only	String	Specifies the license tag of the feature. Tag names can be: <ul style="list-style-type: none"> • LicSubscribersMax • LicSrsvCuceSubscribersMax • LicSTTSubscribersMax • LicSTTProSubscribersMax • LicRealspeakSessionsMax
ObjectId	Read Only	String (36)	Identifier for a LicenseStatus object.

Parameter	Operation	Data Type	Comment
Count	Read Only	String	The current usage of the feature in the system. It is a number specifying the current usage count or if the feature is in use.
FeatureName	Read Only	String	The name of the feature.
Description	Read Only	String	The description of the feature

Cisco Unity Connection Provisioning Interface (CUPI) API -- Smart Licensing

Overview

With Unity Connection 12.0(1) and later, a new simple and enhanced way of licensing, Cisco Smart Software Licensing is introduced to use various licensed feature of Unity Connection. Using Cisco Smart Software Licensing, you can manage all the licenses associated with an organization through a single interface, which is Cisco Smart Software Manager (CSSM) or Cisco Smart Software Manager satellite. Cisco Smart Software Licensing provides the visibility of your licenses ownership and consumption. Unity Connection must be registered with the Cisco Smart Software Manager (CSSM) or Cisco Smart Software Manager satellite to use various licensed feature.

Unity Connection remains in the Evaluation Mode until it registers with the Cisco Smart Software Manager (CSSM) or Cisco Smart Software Manager satellite.

For information on Unity Connection licenses, see the "[Managing Licenses](#)" chapter of the Install, Upgrade, and Maintenance Guide for Cisco Unity Connection, Release 12.x, available at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/12x/install_upgrade/guide/b_12xcuciumg.html.

With release 12.5(1) and later, Unity Connection provides the APIs to perform the various operations of Cisco Smart Software Licensing.

Transport Settings

To view and manage the licenses, Unity Connection must communicate with the Cisco Smart Software Manager (CSSM) or Cisco Smart Software Manager satellite.

Following are the options to deploy the Cisco Smart Software Licensing in Unity Connection,

- **Direct Cloud Access:** In this option, Unity Connection can directly communicate with CSSM and transfer the usage information over internet. No additional components are required.
- **Mediated Access through an On-Premises Collector:** In this option, Unity Connection communicates with on-prem version of CSSM called Cisco Smart Software Manager satellite. Periodically satellite communicates with CSSM using Cisco network and exchange of license information will be performed.
- **Direct Cloud Access through an HTTPs Proxy:** In this option, Unity Connection directly transfers the usage information to CSSM over internet through proxy server.



Note Cisco Unity Connection Release 12.5(1) Service Update 4 and later, allows you to authenticate the proxy server for more secure communication with CSSM. To authenticate the proxy server below fields are introduced in Transport Settings API.

- isProxyAuthReq
- httpProxyUser
- httpProxyPasswd

For more information on transport settings, see [Deployment Options](#) section of the Managing Licenses chapter of the *Install, Upgrade, and Maintenance Guide for Cisco Unity Connection Release 12.x* available at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/12x/install_upgrade/guide/b_12xcuciumg.html

Listing Transport Settings

The following is an example of the GET request that displays the configured transport setting:

```
GET https://<connection-server>/vmrest/smartlicense/transportsettings
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<TransportSetting>
<transportMode>2</transportMode>
<transportUrl>https://tools.cisco.com/its/service/odce/services/DDCEService</transportUrl>
<httpHost></httpHost>
<httpPort>0</httpPort>
<isPrivacyEnabled>>false</isPrivacyEnabled>
<isProxyAuthReq>>true</isProxyAuthReq>
<httpProxyUser>James</httpProxyUser></TransportSetting>
```

```
Response Code: 200
```

JSON Example

```
{
  "transportMode": "2",
  "transportUrl":
"https://tools.cisco.com/its/service/odce/services/DDCEService</transportUrl",
  "httpHost": "",
  "httpPort": "0"
  "isPrivacyEnabled": "false"
  "isProxyAuthReq": "true"
  "httpProxyUser" : "James" }
```

```
Response Code: 200
```

Modifying Transport Settings

The following is an example of the PUT request that modifies the Transport Settings:

```
PUT https://<connection-server>/vmrest/smartlicense/transportsettings
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<TransportSetting>
<transportMode>0</transportMode>
<transportUrl>https://tools.cisco.com/its/service/odce/services/DDCEService</transportUrl>
<httpHost></httpHost>
<httpPort>0</httpPort>
<isPrivacyEnabled>>false</isPrivacyEnabled>
<isProxyAuthReq>1</isProxyAuthReq>
<httpProxyUser>James</httpProxyUser>
<httpProxyPasswd>****</httpProxyPasswd></TransportSetting>
```

Response Code: 200

JSON Example

```
{
  "transportMode": "0"
  "transportUrl": "https://tools.cisco.com/its/service/odce/services/DDCEService"
  "httpHost": ""
  "httpPort": "0"
  "isPrivacyEnabled" : "false"
  "isProxyAuthReq" : "true"
  "httpProxyUser" : "James"
  "httpProxyPasswd" : "****"}

```

Response Code: 200



Note If the product is registered with CSSM or satellite, you must deregister the product before changing the transport settings.

Registering the Unity Connection

Using this API, you can register the product with CSSM or satellite. For registration, you need a registration token from CSSM or satellite.

For information on how to create a token on CSSM or satellite, see "[Configuring Cisco Smart Software Licensing in Unity Connection](#)" section of "[Managing Licenses](#)" chapter of the Install, Upgrade, and Maintenance Guide for Cisco Unity Connection, Release 12.x, available at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/12x/install_upgrade/guide/b_12xcuciumg.html.

Following is the PUT request to register the product with CSSM or satellite :

```
PUT https://<connection-server>/vmrest/smartlicense/register
```

```
<RegisterDetails>
<token>NDJiMjI0YTAtMjc0MC00...1JakvZMU5JWghLOXlP%0AMmVxMD0%3D%0A</token>
<force>>false</force>
</RegisterDetails>
```

```
Response Code: 200
```

JSON Example

```
{
  "token" : "NDJiMjI0YTAtMjc0MC00.....s1RVdnR2c2VEExDRXEvGtUWWVh%0ASTRNdz0%3D%0B"
  "force" : "false"
}
```

```
Response Code: 200
```

Reregistering the Unity Connection

Using this API, you can reregister the product with CSSM or satellite. For reregistration, you need a registration token from CSSM or satellite.

Following is the PUT request to reregister the product with CSSM or satellite:

```
PUT https://<connection-server>/vmrest/smartlicense/register
```

```
<RegisterDetails>
<token>NDJiMjI0YTAtMjc0MC00.....1JakVZMU5JWGHLOX1P%0AMmVxMD0%3D%0A</token>
<force>true</force>
</RegisterDetails>
```

```
Response Code: 200
```

JSON Example

```
{
  "token" : "NDJiMjI0YTAtMjc0MC00.....1JakVZMU5JWGHLOX1P%0AMmVxMD0%3D%0A"
  "force" : "true"
}
```

```
Response Code: 200
```

Deregistering the Unity Connection

Using this API, you can deregister the product from CSSM or satellite. All license entitlements used for the product are released back to its virtual account.

The following is an example of the PUT request that deregisters the product from CSSM:

```
PUT https://<connection-server>/vmrest/smartlicense/deregister
```

```
Response Code: 200
```

Renew Authorization of the Unity Connection

Using this API, you can renew the license authorization for the product with CSSM or satellite. However, the licenses are automatically authorized in every 30 days.

Following is the PUT request to renew the license authorization for the product:

```
PUT https://<connection-server>/vmrest/smartlicense/renewAuth
```

```
Response Code: 200
```

Renew Registration of the Unity Connection

Using this API, you can renew the registration of the product with CSSM or satellite. However, the registration of the product is automatically renewed in every six month.

Following is the PUT request to renew the registration of the product:

```
PUT https://<connection-server>/vmrest/smartlicense/renewID
```

```
Response Code: 200
```

Listing Licensing Details

This API is used for listing all the licensing information of the product.

Following is the GET request to listing all the licensing details:

```
GET https://<connection-server>/vmrest/smartlicense/licensedetails
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing Licensing Details

```

<LicenseDetails>
<SmartLicensing>Enabled</SmartLicensing>
<Register>
<Status>Registered</Status>
<SmartAccount>BU Production Test</SmartAccount>
<VirtualAccount>Cisco_VA</VirtualAccount>
<LastRenewalAttempt>SUCCEDED 2017-11-22 13:17:19.0</LastRenewalAttempt>
<NextRenewalAttempt>2018-05-23 13:17:19.0</NextRenewalAttempt>
<LastRegistrationSuccessTime>2017-11-24 13:17:19.0</LastRegistrationSuccessTime>
<ProductUDI>pid=Cisco Unity Connection sn=cbd7561030494c60af97aabbcbca</ProductUDI>
<ExportControlFunctionality>Allowed</ExportControlFunctionality>
</Register>
<Authorization>
<Status>Authorized</Status>
<LastCommunicationAttempt>SUCCEDED 2017-11-27 13:17:19.0</LastCommunicationAttempt>
<NextCommunicationAttempt>2017-12-27 13:17:19.0</NextCommunicationAttempt>
<EvaluationPeriodRemaining>87:0:36</EvaluationPeriodRemaining>
</Authorization>
<LicenseUsage>
<EntitlementTag>
<Id>regid.2020-06.com.cisco.CUC_BasicMessaging,14_74b6bdc1-b3e1-45dc-9468-6412b12dfef2</Id>
<Count>1</Count>
<Status>Evals</Status>
</EntitlementTag>
<EntitlementTag>
<Id>regid.2020-06.com.cisco.CUC_EnhancedMessaging,14_5e05b515-5be5-429e-b301-5de5de8d2c09</Id>
<Count>0</Count>
<Status>Init</Status>
</EntitlementTag>
<EntitlementTag>
<Id>regid.2020-11.com.cisco.CUC_SpeechViewPro,14_9de30ccc-1671-4c32-9f57-f63c3f66af84</Id>
<Count>0</Count>
<Status>Init</Status>
</EntitlementTag>
<EntitlementTag>
<Id>regid.2020-11.com.cisco.CUC_SpeechView,14_5a0e3202-2743-4401-a117-1e9c239acbbf</Id>
<Count>10</Count>
<Status>InCompliance</Status>
</EntitlementTag>
<EntitlementTag>
<Id>regid.2020-06.com.cisco.CUC_SpeechConnectPort,14_d0201ba3-0b71-403d-9b74-5cd643dd662b</Id>
<Count>0</Count>
<Status>Init</Status>
</EntitlementTag>
<EntitlementTag>
<Id>regid.2020-06.com.cisco.CUC_SpeechConnectGuestUser,14_d49c924c-e587-4a02-8376-7c48bc7ac3ba</Id>
<Count>0</Count>
<Status>Init</Status>
</EntitlementTag>
</LicenseUsage>
</LicenseDetails>

```

Response Code: 200

JSON Example

```

{
  "SmartLicensing": "Enabled",
  "Register": {
    "Status": "Reservation In Progress",
    "SmartAccount": "BU Production Test",
    "VirtualAccount": "Cisco_VA",
    "LastRenewalAttempt": "SUCCEEDED 2017-11-22 13:17:19.0",
    "NextRenewalAttempt": " 2018-05-23 13:17:19.0",
    "LastRegistrationSuccessTime": "2017-11-24 13:17:19.0",
    "ProductUDI": "pid=Cisco Unity Connection sn=cbd7561030494c60af97aabbcb",
    "ExportControlFunctionality": "Allowed"
  },
  "Authorization": {
    "Status": "Evaluation",
    "LastCommunicationAttempt": "SUCCEEDED 2017-11-27 13:17:19.0",
    "NextCommunicationAttempt": " 2017-12-27 13:17:19.0",
    "EvaluationPeriodRemaining": "87:0:36"
  },
  "LicenseUsage": {
    "EntitlementTag": [
      {
        "Id": "regid.2020-06.com.cisco.CUC_BasicMessaging,14_74b6bdc1-b3e1-45dc-9468-6412b12fdef2",
        "Count": "1",
        "Status": "Eval"
      },
      {
        "Id":
        "regid.2020-06.com.cisco.CUC_EnhancedMessaging,14_5e05b515-5be5-429e-b301-5de5de8d2c09",
        "Count": "0",
        "Status": "Init"
      },
      {
        "Id":
        "regid.2020-11.com.cisco.CUC_SpeechViewPro,14_9de30ccc-1671-4c32-9f57-f63c3f66af840Init",
        "Count": "0",
        "Status": "Init"
      },
      {
        "Id": "regid.2020-11.com.cisco.CUC_SpeechView,14_5a0e3202-2743-4401-a117-1e9c239acbbf",
        "Count": "0",
        "Status": "Init"
      },
      {
        "Id":
        "regid.2020-06.com.cisco.CUC_SpeechConnectPort,14_d0201ba3-0b71-403d-9b74-5cd643dd662b",
        "Count": "0",
        "Status": "Init"
      }
    ]
  }
}

```

Response Code: 200

Cisco Unity Connection provides different Entitlement Tag based on the supported deployment modes of Unity Connection.

Cisco Unity Connection Release 12.5(1) Service Update 4 and later, administrator provide Speech View functionality with **Hosted Collaboration Services** (HCS) deployment mode. To use SpeechView feature in HCS mode, you must have **HCS SpeechView Standard User Licenses** with the users. **HCUC_SpeechView** entitlement tag is added to support the functionality.



Note In HCS mode, only Standard SpeechView Transcription Service is supported.

For SpeechView configuration refer chapter "[SpeechView](#)" of *System Administration Guide Cisco Unity Connection Release 12* available at link https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/12x/administration/guide/b_12xcucsag.html.

Following table describes the deployment modes with corresponding Entitlement Tags:

Deployment Mode	Description	Entitlement Tag
Enterprise	This is the default mode of Unity Connection	<ul style="list-style-type: none"> • CUC_BasicMessaging • CUC_EnhancedMessaging • CUC_SpeechView • CUC_SpeechViewPro • CUC_SpeechConnectPort • CUC_SpeechConnectGuestUser
HCS	This mode comprises Hosted Collaboration Services	<ul style="list-style-type: none"> • HCUC_BasicMessaging • HCUC_EnhancedMessaging • HCUC_StandardMessaging • HCUC_SpeechConnectPort • HCUC_SpeechView
HCS-LE	This mode comprises Hosted Collaboration Services -Large Enterprise	<ul style="list-style-type: none"> • HLECUC_BasicMessaging • HLECUC_EnhancedMessaging • HLECUC_StandardMessaging • HLECUC_SpeechConnectPort



Note To get the latest licensing details of a product, you must renew the authorization of the product. For more information, see "[Renew Authorization of the Unity Connection](#)" section.

Getting License Data for STT

Using this API, you can acquire the SpeechView license data (Certificates and Voucher code) locally to the connection server from CSSM or satellite.

The following is an example of the PUT request that acquires the Speech View license data from CSSM or satellite:

```
PUT https://<connection-server>/vmrest/smartlicense/configurenuancecerts
```

```
Response Code: 200
```

Explanation of Data Fields

The following chart lists all of the data fields:

Parameter	Data Type	Operations	Descriptions
transportMode	Integer	Read\Write	Specifies the different transport settings option through which Unity Connection communicates with CSSM. Possible values are: <ul style="list-style-type: none"> • 0-Direct option. • 1-Mediated Access through an On-Premises Collector or satellite • 2-HTTP/HTTPS Proxy Default-0
transportUrl	String	Read\Write	Specifies the URL through which Unity Connection communicates with CSSM. Default URL: https://tools.cisco.com/its/service/oddce/services/DDCEService Note This field is applicable when transportMode is set to Direct or satellite .
httpHost	String	Read\Write	Specifies the IP address or Hostname of the proxy server. Note This field is applicable when transportMode is set to HTTP/HTTPS Proxy.
httpPort	Integer	Read\Write	Specifies the port through which Unity Connection connects to the proxy server. <ul style="list-style-type: none"> • Range-1 to 65535 Default-0 Note This field is applicable when transportMode is set to HTTP/HTTPS Proxy.

Parameter	Data Type	Operations	Descriptions
isProxyAuthReq <i>(Applicable from Unity Connection 12.5SU4 and later releases)</i>	Boolean	Read\Write	Specifies option to enter the details of password protected proxy server for more secure communication. Possible values are: <ul style="list-style-type: none"> • 0- false. • 1- true. It is mandatory to provide username and password details of proxy server. Default -0
httpProxyUser <i>(Applicable from Unity Connection 12.5SU4 and later releases)</i>	String	Read\Write	Specifies the proxy server username that is required to connect to Unity Connection through more secure channel.
httpProxyPasswd <i>(Applicable from Unity Connection 12.5SU4 and later releases)</i>	String	Read\Write	Specifies the proxy server password that is required to connect to Unity Connection through more secure channel.
SmartAccount	String	Read Only	Smart Account is a simple and organized way to manage the product licenses and entitlements. Using this account, you can register, view, and manage your Cisco Software Licenses across your organization.
VirtualAccount	String	Read Only	Virtual Accounts are the sub accounts within the Smart Accounts. Licenses and Product instances can be distributed across virtual accounts.
token	String	Read\Write	Token is required for registering the product with CSSM or satellite.
force	String	Read\Write	This flag is enable when you reregister the product with CSSM or satellite. The possible values are: <ul style="list-style-type: none"> • False-For registering the product. • True-For reregistering the product.
LastRenewalAttempt	String	Read Only	Specifies the status, date and time on which, the product is last renewed the registration with CSSM or satellite. Possible values are: <ul style="list-style-type: none"> • SUCCEEDED-When the product successfully renews the registration with CSSM. • FAILED-When renew registration of the product with CSSM is failed. • Not Applicable-When the product is not registered once with CSSM or satellite.

Parameter	Data Type	Operations	Descriptions
NextRenewalAttempt	Date\Time	Read Only	Specifies the date and time on which, the product is required to renew the registration with CSSM.
LastRegistrationSuccessTime	Date\Time	Read Only	Specifies the date and time on which, the product is successfully registered with CSSM or satellite.
LastCommunicationAttempt	String	Read Only	Specifies the status, date and time on which, the product last communicated with CSSM or satellite. Possible values are: <ul style="list-style-type: none"> • SUCCEEDED-When the product is successfully communicated with CSSM or satellite. • FAILED-When the product is failed to communicate with CSSM or satellite. • Not Applicable-When the product is not registered once with CSSM or satellite.
NextCommunicationAttempt	Date\Time	Read Only	Specifies the date and time on which, the product is required to communicate with CSSM or satellite.
ExportControlFunctionality	String	Read Only	Specifies the Export Controlled Functionality is enabled for the product or not at the time of token creation on the CSSM or satellite. Possible values are: <ul style="list-style-type: none"> • Allowed-When Export Controlled Functionality is enabled for the product. • Not Allowed-When the Product is in Evaluation Mode or Export Controlled Functionality is not enabled for the product..
Id	String	Read Only	Specifies the License Parameters.
Count	Integer	Read Only	Specifies the number of licenses that are used

Cisco Unity Connection Provisioning Interface (CUPI) API -- Custom Subject Line

Listing Subject Line Formats

This page contains information on how to use the API to list and update subject line formats and it's parameters. Subject line format enables the user to configure the subject lines of the notification emails for Message Notifications, Missed Call Notifications, and Scheduled Summary Notifications.



Note POST and DELETE APIs are not supported.

The following is an example of the GET request that lists all subject line formats:

```
GET https://<connection_server>/vmrest/subjectlineformats
```

The following is an example of the GET request to list the subject line for a specific message type:

```
https://<connection_server>/vmrest/subjectlineformats?query=(MessageType is 2)
```



Note Message type is 1 for voice messages and 2 for notifications.

The following is an example of the response from the above GET requests and the actual response will depend upon the information given by you:

```
<SubjectLineFormats total="7">
  <SubjectLineFormat>
    <URI>/vmrest/subjectlineformats/7048d455-374b-4b81-bf0b-ebb70239b441</URI>
    <ObjectId>7048d455-374b-4b81-bf0b-ebb70239b441</ObjectId>
    <LanguageCode>1033</LanguageCode>
    <FactoryDefaultSubject>Message notification</FactoryDefaultSubject>
    <Subject>Message notification</Subject>
    <SubjectType>7</SubjectType>
    <MessageType>2</MessageType>

    <CustomSubjectParameterURI>/vmrest/subjectlineparameters?query=(MessageType%20is%202)</CustomSubjectParameterURI>

  </SubjectLineFormat>
  ...
</SubjectLineFormats>
```

```
Response code: 200 OK
```

Listing a particular subject line format

The following is an example of the GET request that lists a particular subject line format:

```
GET https://<connection_server>/vmrest/subjectlineformats/<objectID>
```

The following is an example of the response from the above GET request and the actual response will depend upon the information given by you:

```
<SubjectLineFormat>
  <URI>/vmrest/subjectlineformats/75b13d88-7313-491a-b239-dff1f1372379</URI>
  <ObjectId>75b13d88-7313-491a-b239-dff1f1372379</ObjectId>
  <LanguageCode>1033</LanguageCode>
  <FactoryDefaultSubject>%D% %U% %P% Message from %NAME%
(%CALLERID%)</FactoryDefaultSubject>
  <Subject>%D% %U% %P% Message from %NAME% (%CALLERID%)</Subject>
  <SubjectType>1</SubjectType>
  <MessageType>1</MessageType>
  <CustomSubjectParameterURI>/vmrest/subjectlineparameters</CustomSubjectParameterURI>
</SubjectLineFormat>
```

Response code: 200 OK

Modifying Subject Line Formats

The following is an example of the PUT request that modifies subject field in the subject line formats:

```
PUT https://<connection_server>/vmrest/subjectlineformats/<objectID>
```

The following is the input for above PUT request.

```
<SubjectLineFormat>
  <Subject>%D% %U% %P% Message from %NAME% 123(%CALLERID%)</Subject>
</SubjectLineFormat>
```

The following is the response of above PUT request.

Response code: 204 OK

Listing Subject Line Parameters

The following is an example of the GET request that lists all subject line parameters:

```
GET https://<connection_server>/vmrest/subject-line-parameters
```

The following is an example of the response from the above GET request.

```
<SubjectLineParameters total="11">
  <SubjectLineParameter>
    <URI>/vmrest/subject-line-parameters/462d2eaa-8109-470e-982e-00c2c99e8770</URI>
    <ObjectId>462d2eaa-8109-470e-982e-00c2c99e8770</ObjectId>
    <LanguageCode>1033</LanguageCode>
    <Parameter>Unknown caller ID1</Parameter>
    <FactoryDefaultParameter>Unknown caller ID</FactoryDefaultParameter>
    <ParameterType>1</ParameterType>
    <MessageType>1</MessageType>
  </SubjectLineParameter>
  ....
</SubjectLineParameters>
```

Response code: 200 OK

Listing a particular Subject Line Parameter

The following is an example of the GET request that list a particular subject line parameter:

```
GET https://<connection_server>/vmrest/subject-line-parameters/<objectID>
```

The following is an example of the GET request to list a particular subject line parameter for a specific message type:

```
https://<connection_server>/vmrest/subject-line-parameters?query=(MessageType is 2)
```



Note The Message Type is 1 for voice messages and 2 for notifications.

The following is an example of the response from the above GET request.

```
<SubjectLineParameter>
  <URI>/vmrest/subject-line-parameters/462d2eaa-8109-470e-982e-00c2c99e8770</URI>
  <ObjectId>462d2eaa-8109-470e-982e-00c2c99e8770</ObjectId>
  <LanguageCode>1033</LanguageCode>
  <Parameter>Unknown caller ID1</Parameter>
  <FactoryDefaultParameter>Unknown caller ID</FactoryDefaultParameter>
  <ParameterType>1</ParameterType>
  <MessageType>1</MessageType>
</SubjectLineParameter>
```

```
Response code: 200 OK
```

Modifying Subject Line Parameter

The following is an example of the PUT request that modifies the subject line parameters:

```
PUT https://<connection_server>/vmrest/subject-line-parameters/<objectID>
```

The following is the response of above PUT request.

```
<SubjectLineParameter>
  <Parameter>Unknown caller ID1</Parameter>
</SubjectLineParameter>
```

```
Response code: 204 OK
```

Explanation of Data Fields

For Subject Type, Message Type and Parameter Type

Field Name	Read/Write	Type	Explanation/Comments
ObjectId	Read	String	Object ID of the entity
LanguageCode	Read	Integer	Indicates the language code

Field Name	Read/Write	Type	Explanation/Comments
ParameterType	Read	Integer	1-%CALLERID% of the message sender 2-%CALLEDID% for the number dialed 3-%NAME%, display name of the sender 4-%EXTENSION%, the extension of the sender 5-%U%, defined value for urgent messages 6-%P%, defined value for private messages 7-%S%, defined value for secure messages 8-%D%, defined value for dispatch messages 9- %TIMESTAMP%, time at which the voice message is received
MessageType	Read	Integer	1- for Voice Messages 2-For Notifications
SubjectType	Read	Integer	0-Ignore, this is for invalid entry 1-Outside Caller Messages, to format string of subject line for Outside Caller Messages 2-User to User Messages, to format string of subject line for User to User Messages 3-Interview Handler Messages, to format string of subject line for Interview Handler Messages 4-Live Record Messages, to format string of subject line for Live Record Messages 5-Message Notification, to format string of subject line for Message Notification 6-Missed Call Notification, to format string of subject line for Missed Call Notification 7-Scheduled Summary Notification, to format string of subject line for Scheduled Notification
Parameter	Write	String	Customizes the Parameter Text
Subject	Write	String	Customizes the SubjectLine text
FactoryDefaultParameter	Read	String	System default value for subject line parameter
CustomSubjectParameterURI	Read	String	URI to get the custom subject parameters details
FactoryDefaultSubject	Read	String	System default value for Subject

Cisco Unity Connection Provisioning Interface (CUPI) API -- Language Map

About Language Map

This page contains information on how to use the API to display the language map, which contains mappings between language codes and languages. This is a list of languages available for install on a Cisco Unity Connection server; to view the list of languages actually installed on a server, use this GET method instead:

```
GET http://<connection-server>/vmrest/installedlanguages
```

Note that currently, the API to retrieve the language map and the API to retrieve the installed languages on a server both require System Administrator access.

Listing and Viewing

The following is an example of a GET that lists all language mappings in the language map:

```
GET http://<connection-server>/vmrest/languagemap
```

The following is an excerpt of the response from the above GET request:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<LanguageMappings total="149">
  <LanguageMapping>
    <LanguageCode>1025</LanguageCode>
    <LanguageAbbreviation>ARA</LanguageAbbreviation>
    <LanguageTag>ar-SA</LanguageTag>
  </LanguageMapping>
  <LanguageMapping>
    <LanguageCode>1026</LanguageCode>
    <LanguageAbbreviation>BGR</LanguageAbbreviation>
    <LanguageTag>bg-BG</LanguageTag>
  </LanguageMapping>
  <LanguageMapping>
    <LanguageCode>1027</LanguageCode>
    <LanguageAbbreviation>CAT</LanguageAbbreviation>
    <LanguageTag>ca-ES</LanguageTag>
  </LanguageMapping>
  .
  .
  .
</LanguageMappings>
```

You can also use the query parameters `rowsPerPage` and `pageNumber` to limit the number of returned results. For example:

```
GET http://<connection-server>/vmrest/languagemap?rowsPerPage=2&pageNumber=3
```

This request returns the two languages on the third page, as follows:


```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<LanguageMappings total="149">
  <LanguageMapping>
    <LanguageCode>1029</LanguageCode>
    <LanguageAbbreviation>CSY</LanguageAbbreviation>
    <LanguageTag>cs-CZ</LanguageTag>
  </LanguageMapping>
  <LanguageMapping>
    <LanguageCode>1030</LanguageCode>
    <LanguageAbbreviation>DAN</LanguageAbbreviation>
    <LanguageTag>da-DK</LanguageTag>
  </LanguageMapping>
</LanguageMappings>

```

To view the language mapping for a specific language, you can use either the language code or the language abbreviation. For example, to find out what language the language code 1041 corresponds to, use:

```
GET http://<connection-server>/vmrest/languagemap/1041
```

The following is the response from the above GET request:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<LanguageMapping>
  <LanguageCode>1041</LanguageCode>
  <LanguageAbbreviation>JPN</LanguageAbbreviation>
  <LanguageTag>ja-JP</LanguageTag>
</LanguageMapping>

```

Similarly, you can use the language abbreviation to find the corresponding language code. For example, to find the language code for US English (abbreviated ENU), use:

```
GET http://<connection-server>/vmrest/languagemap/ENU
```

This GET request yields the following response, which indicates that 1033 is the language code for US English:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<LanguageMapping>
  <LanguageCode>1033</LanguageCode>
  <LanguageAbbreviation>ENU</LanguageAbbreviation>
  <LanguageTag>en-US</LanguageTag>
</LanguageMapping>

```

Miscellaneous

For a list of supported languages and the corresponding language codes/abbreviations, see the section "Numeric and Alphabetic Codes for Supported Languages in Cisco Unity Connection" in the *System Requirements for Cisco Unity Connection Release 8.x* available at http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/8x/requirements/8xcucsysreqs.html

Cisco Unity Connection Provisioning Interface (CUPI) API -- LDAP Phone Number Transform

About LDAP Phone Number Transform

This page contains information on how to use the API to create, list, update, and delete LDAP phone number transforms.

Beginning with Cisco Unity Connection 8.5, we support up to one LDAP phone number transform, which consists of a regular expression and a replacement pattern.

Listing and Viewing

The following is an example of a GET request that lists all LDAP phone number transforms:

```
GET http://<connection-server>/vmrest/ldapphonenumberttransforms
```

The following is the response from the above GET request:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<LdapPhoneNumberTransforms total="1">
  <LdapPhoneNumberTransform>
    <URI>/vmrest/ldapphonenumberttransforms/0d49a281-cc35-4b8b-bccc-f94f8b8903bd</URI>
    <ObjectId>0d49a281-cc35-4b8b-bccc-f94f8b8903bd</ObjectId>
    <Regex>.*([0-9][0-9][0-9][0-9])</Regex>
    <Replacement>9$1</Replacement>
  </LdapPhoneNumberTransform>
</LdapPhoneNumberTransforms>
```

Creating

The required fields for creating an LDAP phone number transform are Regex and Replacement.

The following is an example of a POST request that creates an LDAP phone number transform with the Regex field set to ".*([0-9][0-9][0-9][0-9])", and the Replacement field set to "9\$1":

```
POST https://<connection-server>/vmrest/ldapphonenumberttransforms/

<LdapPhoneNumberTransform>
  <Regex>.*([0-9][0-9][0-9][0-9])</Regex>
  <Replacement>9$1</Replacement>
</LdapPhoneNumberTransform>
```

The following is the response from the above POST request:

```
201
Created
/vmrest/ldapphonenumberttransforms/0d49a281-cc35-4b8b-bccc-f94f8b8903bd
```

Updating

The Regex and Replacement fields of an LDAP Phone Number Transform can be updated via a PUT request.

The following is an example of a PUT request that modifies the Regex and Replacement fields of an existing LDAP phone number transform:

```
https://<connection-server>/vmrest/ldaphonenumbertransforms/  
0d49a281-cc35-4b8b-bccc-f94f8b8903bd  
<LdapPhoneNumberTransform>  
  <Regex>.* ([0-9] [0-9] [0-9] [0-9] [0-9]) </Regex>  
  <Replacement>8$1</Replacement>  
</LdapPhoneNumberTransform>
```

The following is the response from the above PUT request:

```
204  
No Content  
null
```

Deleting

The following is an example of a DELETE request that deletes an LDAP phone number transform:

```
DELETE https://<connection-server>/vmrest/ldaphonenumbertransforms/  
0d49a281-cc35-4b8b-bccc-f94f8b8903bd
```

The following is the response from the above DELETE request:

```
204  
No Content  
null
```

Possible Errors

As of Connection 8.5, we support one LDAP phone number transform only, so if you attempt to create a new LDAP phone number transform (via the POST request) when there is already an existing LDAP phone number transform, the following error will be returned:

```
405  
Method Not Allowed  
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>  
<ErrorDetails>  
  <errors>  
    <code>METHOD_NOT_ALLOWED</code>  
    <message>Unable to perform requested method because an LDAP phone number transform  
already exists. (This version of Cisco Unity Connection supports up to one LDAP phone number  
transform only.)</message>  
  </errors>  
</ErrorDetails>
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Authorization Server

Links to Other API pages: [Cisco_Unity_Connection_APIS](#)

About Authorization Server (Authz Server)

Unity Connection 11.5(1) SU3 and later allows the use of **OAuth 2.0 Authorization Code Grant Flow** to authenticate the Jabber users. This requires an Authorization Server (Authz Server) that provides the authorization keys to Unity Connection for validating the Jabber user. In Unity Connection, the publisher server of Cisco Unified CM associated with a phone system is configured as an Authz server.

For more information on Authorization Code Grant Flow, see "TBD".

This page contains information on how to use the API to create, list, modify, and delete an Authz server.

Listing Authz Servers

The following is an example of the GET request that lists the Authz servers:

```
GET https://<connection-server>/vmrest/authz/server/
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<AuthzServers total="2">
<AuthzServer>
  <ObjectId>f976720d-ed5b-4cbc-95b2-e47e1e2663af</ObjectId>
  <DisplayName>AuthzServer1</DisplayName>
  <IgnoreCertificateError>true</IgnoreCertificateError>
  <ServerUsername>admin</ServerUsername>
  <ServerPassword />
  <ServerNodeAddress>10.76.215.238</ServerNodeAddress>
  <Port>8443</Port>
  <LastSyncStatus>Passed - May 12,2017 07:00:53 AM GMT</LastSyncStatus>
</AuthzServer>
<AuthzServer>
  <ObjectId>69b82e6a-a77d-499e-a953-cb7f589254aa</ObjectId>
  <DisplayName>AuthzServer2</DisplayName>
  <IgnoreCertificateError>>false</IgnoreCertificateError>
  <ServerUsername>admin</ServerUsername>
  <ServerPassword />
  <ServerNodeAddress>10.76.215.239</ServerNodeAddress>
  <Port>8443</Port>
  <LastSyncStatus>Passed - May 12,2017 07:00:53 AM GMT</LastSyncStatus>
</AuthzServer>
</AuthzServers>
```

```
Response Code: 200
```

Viewing an Authz Server

The following is an example of the GET request that lists a particular Authz server represented by <ObjectId>:

```
GET https://<connection-server>/vmrest/authz/server/<ObjectId>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<AuthzServer>
  <ObjectId>0fa45cde-c289-415a-853f-3d706b3952d5</ObjectId>
  <DisplayName>AuthzServer1</DisplayName>
  <IgnoreCertificateError>true</IgnoreCertificateError>
  <ServerUsername>admin</ServerUsername>
  <ServerPassword />
  <ServerNodeAddress>10.76.215.238</ServerNodeAddress>
  <Port>8443</Port>
</AuthzServer>
```

```
Response Code: 200
```

Adding New Authz Server

The following is an example of the POST request that adds the Authz servers:

```
POST https://<connection_server>/vmrest/authz/server/
```

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
<AuthzServer>
  <DisplayName>AuthzServer1</DisplayName>
  <IgnoreCertificateError>true</IgnoreCertificateError>
  <ServerUsername>admin</ServerUsername>
  <ServerPassword>*****</ServerPassword>
  <ServerNodeAddress>10.76.215.238</ServerNodeAddress>
  <Port>8443</Port>
</AuthzServer>
```

```
Response Code: 201
```

Modifying Authz Server

The following is an example of the PUT request that modifies the Authz Server as represented by <ObjectId>:

```
PUT https://<connection_server>/vmrest/authz/server/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
<AuthzServer>
  <ServerNodeAddress>ucbu-aricent-vm475</ServerNodeAddress>
  <Port>8443</Port>
</AuthzServer>
```

```
Response Code: 204
```

Deleting an Authz Server

The following is an example of the DELETE request that deletes an Authz Server as represented by <ObjectId>:

```
DELETE https://<connection_server>/vmrest/authz/server/<objectId>
```

The input for the PUT request will be. The output for this request returns the successful response code.

```
Response Code: 204
```

Synchronization of Authorization Keys

The following is an example of the PUT request that synchronize the authorization keys between Authz server and Unity Connection:

```
PUT https://<connection_server>/vmrest/authz/sync/<objectId>
```

The output for this request returns the successful response code.

```
Response Code: 204
```

Explanation of Data Fields

The following chart lists all of the data fields:

Parameter	Operations	Data Type	Comments
ObjectId	Read Only	String (36)	Unique identifier for Authz server
DisplayName	Read/Write	String (64)	Descriptive name of an Authz server
IgnoreCertificateError	Read/Write	Boolean	<p>A flag that validates the certificates for the Authz server. Possible values are:</p> <ul style="list-style-type: none"> • false: Validates the certificates for the Authz server. • true: Ignore the certificate validation errors for the Authz server. <p>For more information on certificates, see "Security" chapter of <i>Cisco Unified Communications Operating System Administration Guide for Cisco Unity Connection Release 12.x</i> at https://www.cisco.com/c/en/us/products/collateral/voice_ip_communication/12x_administration_12x_wsg.pdf</p>
ServerUsername	Read/Write	String (64)	User name that Unity Connection uses to sign in to the Authz server.
ServerPassword	Write Only	String (64)	Password that Unity Connection uses to sign in to the Authz server.

Parameter	Operations	Data Type	Comments
ServerNodeAddress	Read/Write	String (64)	Hostname, IP address or Fully-Qualified Domain Name (FQDN) of the Authz server that Unity Connection connects to.
Port	Read/Write	Integer	The port through which Unity Connection connects to the Authz server.
LastSyncStatus	Read Only	String (36)	The status and time of the last synchronization of authorization keys between Authz server and Unity Connection.

Cisco Unity Connection Provisioning Interface (CUPI) API -- System Default Language and TTS Language

About System Default Language and System Default TTS Language

This page contains information on how to use the API to display and update the System Default Language and the System Default TTS Language.

The System Default Language and System Default TTS Language must be one of the installed languages on your Cisco Unity Connection server. To retrieve the list of installed languages on your system, use:

```
GET http://<connection-server>/vmrest/installedlanguages
```

Viewing

The System Default Language and System Default TTS Language are considered part of the "local" Connection server. To retrieve the current values for these fields, use:

```
GET http://<connection-server>/vmrest/locations/locallocation
```

The following is the response from the above GET request:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<LocalLocation>
  <DefaultLanguage>1033</DefaultLanguage>
  <DefaultTTSLanguage>1033</DefaultTTSLanguage>
</LocalLocation>
```

Note that the returned values are the language codes for the System Default Language and System Default TTS language. In this case, 1033 is the code for US English.

Updating

The following is an example of a PUT request that modifies the System Default Language and System Default TTS Language. In this example, we set both to Japanese (language code 1041). Note that the language codes

must be valid, and that they must correspond to a language that has been installed and licensed on your Connection server.

```
PUT https://<connection-server>/vmrest/locations/locallocation

<LocalLocation>
  <DefaultLanguage>1041</DefaultLanguage>
  <DefaultTTSLanguage>1041</DefaultTTSLanguage>
</LocalLocation>
```

The following is the response from the above PUT request:

```
204
No Content
null
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Wave Formats

About Wave Formats

This page contains information on how to use the API to list wave formats. Cisco Unity Connection supports several different wave formats that recorded messages can be stored in. This URI is accessible to both users and administrators

Listing and Viewing

The following is an example of a GET that lists all wave formats:

```
GET http://<connection-server>/vmrest/waveformats
```

To retrieve a specific wave format by its object ID:

```
GET http://<connection-server>/vmrest/waveformats/<objectid>
```

The following is an example response from the above GET request:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<WaveFormat>
  <URI>/vmrest/waveformats/cb85b520-e2de-4878-96e2-3331607f4671</URI>
  <ObjectId>cb85b520-e2de-4878-96e2-3331607f4671</ObjectId>
  <AvgBytesPerSec>1000</AvgBytesPerSec>
  <BitsPerSample>0</BitsPerSample>
  <BlockAlign>10</BlockAlign>
  <Channels>1</Channels>
  <FormatName>G.729a</FormatName>
  <FormatTag>307</FormatTag>
  <SamplesPerSec>8000</SamplesPerSec>
  <JavaEncoding>G.729a</JavaEncoding>
  <CodecId>3</CodecId>
</WaveFormat>
```




CHAPTER 46

Cisco Unity Connection Provisioning Interface (CUPI) API for Schedules

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Schedules, on page 713](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Holiday Schedules , on page 729](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Schedules Set, on page 734](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Schedules Set Details, on page 740](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- Schedules Set Members, on page 740](#)

Cisco Unity Connection Provisioning Interface (CUPI) API -- Schedules

Overview of Cisco Unity Connection Schedule Objects

Schedules in Cisco Unity Connection are somewhat complicated, since they are composed of several different types of objects. Before presenting the API for accessing schedules, it may be useful to review what these objects are and how they are used.

ScheduleSet Objects

ScheduleSet objects are the top-level objects. They are comprised of one or more Schedules, each of which is marked as included or excluded in the ScheduleSet.

Schedule Objects

Schedule objects are composed of one or more ScheduleDetail objects.

ScheduleDetail Objects

ScheduleDetail objects are the atomic schedule building blocks which comprise Schedule objects. They can be specified with Start and End Dates, Start and End Times of the day, and active Days of the Week. ScheduleDetails have a link to the Schedule objects that they are part of, and said Schedule object in a sense owns the ScheduleDetail object.

ScheduleSetMemberMap Objects

ScheduleSetMemberMap objects provide the linkage between a ScheduleSet and a Schedule that is included or excluded from it (via a boolean called Exclude). There will be one ScheduleSetMemberMap object for each Schedule that is included in or excluded from a ScheduleSet.

A ScheduleSetMemberMap abstracts the linkage between a ScheduleSet and a Schedule since neither object has an explicit linkage or ownership relationship of the other. One reason for this is that several ScheduleSets might reference the same Schedule (a Holiday Schedule for example). This differs from the relationship between a Schedule and a ScheduleDetail, since a ScheduleDetail has an explicit link to a Schedule, the Schedule essentially owns the ScheduleDetail, and no other Schedule may use another Schedule's ScheduleDetail object.

Schedule Example

For example, let's model a weekday schedule with the lunch hour blocked out as unavailable every work day, and with various holidays blocked out as well. Using the objects discussed previously, this schedule might be composed like so:

- First, we create a top-level ScheduleSet called WeekdaySet. WeekdaySet includes the WeekdaySchedule and excludes the HolidaySchedule (2 Schedule objects).
- After we create these 2 Schedule objects, we create 2 ScheduleSetMemberMap objects for WeekdaySet - one to include WeekdaySchedule and one to exclude HolidaySchedule.
- Then, we create 2 ScheduleDetail objects for WeekdaySchedule - one active from 8AM to 12PM Mon-Fri, and the other active from 1PM to 5PM Mon-Fri.
- Finally, we create various ScheduleDetails objects for HolidaySchedule, one per holiday. For example, we might create a July4ScheduleDetail with start and end dates both set to July 4 2010, and a WinterBreakScheduleDetail with a start date of Dec 23 2010 and an end date of Jan 3 2011.

To see how to create this schedule via CUPI, see the Schedule Example page.

CUPI for Schedules

The previously described database objects are accessible to the administrator via CUPI. The following sections list the URIs to access these resources along with the data contained within them.

ScheduleSets in CUPI

ScheduleSets are top-level resources in CUPI, with a base URI of `+/vmrest/schedulesets+`.

A ScheduleSet object has the following fields:

Field Name	Field Type	Default	Notes
ObjectId	GUID	None	NA
TenantObjectId	Read Only	String (36)	The unique identifier of the tenant to which the schedulesets belong. This field is reflected in the response only if the schedulesets belong to a particular tenant.
DisplayName	String (64)	None	NA
OwnerLocationObjectId	GUID	Null	One of the Owners must be non-NULL

Field Name	Field Type	Default	Notes
OwnerPersonalRulesetObjectid	GUID	Null	NA
OwnerSubscriberObjectid	GUID	Null	NA
Undeletable	Boolean	False	Is only True for factory default objects

Retrieving the list of ScheduleSets

To retrieve the list of ScheduleSets, an administrator makes a GET to the schedulesets resource:

```
GET /vmrest/schedulesets
```

This would return the following on success:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<ScheduleSets total="3">
  <ScheduleSet>
    <URI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da</URI>
    <ObjectId>30d9c0df-534b-437a-a6b7-439adfd850da</ObjectId>
    <DisplayName>Weekdays</DisplayName>
    <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>
    <OwnerLocationURI>/vmrest/locations/connectionlocations/6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationURI>
    <Undeletable>true</Undeletable>
    <ScheduleSetMemberURI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers</ScheduleSetMemberURI>
  </ScheduleSet>
  <ScheduleSet>
    <URI>/vmrest/schedulesets/75af01af-d290-4e0e-9862-5adf8293536c</URI>
    <ObjectId>75af01af-d290-4e0e-9862-5adf8293536c</ObjectId>
    <DisplayName>All Hours</DisplayName>
    <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>
    <OwnerLocationURI>/vmrest/locations/connectionlocations/6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationURI>
    <Undeletable>true</Undeletable>
    <ScheduleSetMemberURI>/vmrest/schedulesets/75af01af-d290-4e0e-9862-5adf8293536c/schedulesetmembers</ScheduleSetMemberURI>
  </ScheduleSet>
  <ScheduleSet>
    <URI>/vmrest/schedulesets/e2e381e4-6096-4643-b0bb-b17a65b101bc</URI>
    <ObjectId>e2e381e4-6096-4643-b0bb-b17a65b101bc</ObjectId>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
    <DisplayName>Voice Recognition Update Schedule</DisplayName>
    <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>
    <OwnerLocationURI>/vmrest/locations/connectionlocations/6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationURI>
    <Undeletable>false</Undeletable>
    <ScheduleSetMemberURI>/vmrest/schedulesets/e2e381e4-6096-4643-b0bb-b17a65b101bc/schedulesetmembers</ScheduleSetMemberURI>
  </ScheduleSet>
</ScheduleSets>
```

Listing Specific Tenant Related ScheduleSets by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectID to list the specific tenant related schedulesets using the following URI:

```
GET https://<connection-server>/vmrest/schedulesets?query=(TenantObjectId is
<Tenant-ObjectId>)
```

To get the TenantObjectID, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Retrieving a ScheduleSet

To retrieve a single ScheduleSet, an administrator makes a GET to the schedulesets resource, specifying the ObjectID of the requested ScheduleSet in the URI:

```
GET /vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da
```

This would return the following on success:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<ScheduleSet>
  <URI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da</URI>
  <ObjectId>30d9c0df-534b-437a-a6b7-439adfd850da</ObjectId>
  <DisplayName>Weekdays</DisplayName>
  <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>

  <OwnerLocationURI>/vmrest/locations/connectionlocations/6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationURI>

  <Undeletable>true</Undeletable>

  <ScheduleSetMemberURI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers</ScheduleSetMemberURI>
</ScheduleSet>
```

This would return the following if the specified ScheduleSet does not exist:

```
404
Not Found
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>NOT_FOUND</code>
    <message>scheduleset - ObjectId=30d9c0df-534b-437a-a6b7-439adfd850da</message>
  </errors>
</ErrorDetails>
```

Adding a ScheduleSet

To add a new ScheduleSet, an administrator makes a POST to the schedulesets resource, specifying the new ScheduleSet via XML:

```
POST /vmrest/schedulesets

<ScheduleSet>
  <DisplayName>Night Shift</DisplayName>
  <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>
</ScheduleSet>
```

This will return the URI to the newly created ScheduleSet (which includes its ObjectId):

```
201
Created
/vmrest/user/schedulesets/0e58ec49-5064-4c9a-b1dc-dd47fe189419
```

Changing a ScheduleSet

To change an existing ScheduleSet, an administrator makes a PUT to the schedulesets resource, specifying the ObjectId of the ScheduleSet they wish to change in the URI and any data changes via XML:

```
PUT /vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da

<ScheduleSet>
  <DisplayName>Graveyard Shift</DisplayName>
</ScheduleSet>
```

This would return the following on success:

```
204
No Content
```

This would return the following if the specified scheduleset does not exist:

```
400
Bad Request
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>DATA_EXCEPTION</code>
    <message>ScheduleSet not found </message>
  </errors>
</ErrorDetails>
```

Deleting a ScheduleSet

To delete an existing ScheduleSet, an administrator makes a DELETE to the schedulesets resource, specifying the ObjectId of the ScheduleSet they wish to delete in the URI:

```
DELETE /vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da
```

This would return the following on success:

```
204
No Content
```

This would return the following if the specified scheduleset does not exist:

```
404
Not Found
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>NOT_FOUND</code>
    <message>scheduleset - ObjectId=30d9c0df-534b-437a-a6b7-439adfd850da</message>
  </errors>
</ErrorDetails>
```

Note that if an administrator deletes a ScheduleSet object, then all of the supporting ScheduleSetMembers for that ScheduleSet will also be deleted.

Schedules in CUPI

Schedules are top-level resources in CUPI, with a base URI of `+/vmrest/schedules+`.

A Schedule object has the following fields:

Field Name	Field Type	Default	Notes
ObjectId	GUID	None	Na
TenantObjectId	Read Only	String (36)	The unique identifier of the tenant to which the schedule belong. This field is reflected in the response only if the schedule belong to a particular tenant.
DisplayNamre	String (64)	None	NA
OwnerLocationObjectId	GUID	NULL	One of the Owner's must be non-NULL
OwnerPersonalRuleSetObjectId	GUID	NULL	Na
OwnerSubscriberObjectId	GUID	NULL	NA
Undeleteable	Boolean	False	Is only True for factory default objects
StartDate	DateTime	NULL	NULL means effective immediately
EndDate	DateTime	NULL	NULL means effective indefinitely
IsHoliday	Bolean	False	Holiday Greetings are used during this period if True

Retrieving the list of Schedules

To retrieve the list of Schedules, an administrator makes a GET to the schedules resource:

```
GET /vmrest/schedules
```

This would return the following on success:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<Schedules total="3">
  <Schedule>
    <URI>/vmrest/schedules/387f051e-3367-4cc8-abed-810293d39f76</URI>
    <ObjectId>387f051e-3367-4cc8-abed-810293d39f76</ObjectId>
    <DisplayName>Weekdays</DisplayName>
    <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>
    <OwnerLocationURI>/vmrest/locations/connectionlocations/6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationURI>
    <Undeletable>true</Undeletable>
    <IsHoliday>>false</IsHoliday>
    <ScheduleDetailsURI>/vmrest/schedules/387f051e-3367-4cc8-abed-810293d39f76/scheduledetails</ScheduleDetailsURI>
  </Schedule>
  <Schedule>
    <URI>/vmrest/schedules/75af01af-d290-4e0e-9862-5adf8293536c</URI>
    <ObjectId>75af01af-d290-4e0e-9862-5adf8293536c</ObjectId>
    <DisplayName>All Hours</DisplayName>
    <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>
    <OwnerLocationURI>/vmrest/locations/connectionlocations/6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationURI>
    <Undeletable>true</Undeletable>
    <IsHoliday>>false</IsHoliday>
    <ScheduleDetailsURI>/vmrest/schedules/75af01af-d290-4e0e-9862-5adf8293536c/scheduledetails</ScheduleDetailsURI>
  </Schedule>
  <Schedule>
    <URI>/vmrest/schedules/e2e381e4-6096-4643-b0bb-b17a65b101bc</URI>
    <ObjectId>e2e381e4-6096-4643-b0bb-b17a65b101bc</ObjectId>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
    <DisplayName>Holidays</DisplayName>
    <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>
    <OwnerLocationURI>/vmrest/locations/connectionlocations/6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationURI>
    <Undeletable>>false</Undeletable>
    <IsHoliday>>true</IsHoliday>
    <ScheduleDetailsURI>/vmrest/schedules/e2e381e4-6096-4643-b0bb-b17a65b101bc/scheduledetails</ScheduleDetailsURI>
  </Schedule>
</Schedules>

```

Listing Specific Tenant Related Schedules by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectId to list the specific tenant related schedules using the following URI:

```
GET https://<connection-server>/vmrest/schedules?query=(TenantObjectId is <Tenant-ObjectId>)
```

To get the TenantObjectId, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Retrieving a Schedule

To retrieve a single Schedule, an administrator makes a GET to the schedules resource, specifying the Objectid of the requested Schedule in the URI:

```
GET /vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76
```

This would return the following on success:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<Schedule>
  <URI>/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76</URI>
  <ObjectId>387f051e-3367-4cc8-abad-810293d39f76</ObjectId>
  <DisplayName>Weekdays</DisplayName>
  <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>

  <OwnerLocationURI>/vmrest/locations/connectionlocations/6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationURI>

  <Undeletable>true</Undeletable>
  <IsHoliday>>false</IsHoliday>

  <ScheduleDetailsURI>/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76/scheduledetails</ScheduleDetailsURI>
</Schedule>
```

This would return the following if the specified Schedule does not exist:

```
404
Not Found
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>NOT_FOUND</code>
    <message>schedule - ObjectId=387f051e-3367-4cc8-abad-810293d39f76</message>
  </errors>
</ErrorDetails>
```

Adding a Schedule

To add a new Schedule, an administrator makes a POST to the schedules resource, specifying the new Schedule via XML:

```
POST /vmrest/schedules

<Schedule>
  <DisplayName>EveningShift</DisplayName>
  <OwnerLocationObjectId>6a56503e-c1c8-406c-85fd-76be40994d39</OwnerLocationObjectId>
  <IsHoliday>>false</IsHoliday>
</Schedule>
```

This will return the URI to the newly created Schedule (which includes its ObjectId):

```
201
Created
/vmrest/user/schedules/df7faf3b-3278-4852-b488-7e3134dc3336
```


Changing a Schedule

To change an existing Schedule, an administrator makes a PUT to the schedules resource, specifying the ObjectId of the Schedule they wish to change in the URI and any data changes via XML:

```
PUT /vmrest/schedules/df7faf3b-3278-4852-b488-7e3134dc3336

<Schedule>
  <DisplayName>No Daylight Shift</DisplayName>
</Schedule>
```

This would return the following on success:

```
204
No Content
```

This would return the following if the specified schedule does not exist:

```
400
Bad Request
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>DATA_EXCEPTION</code>
    <message>Schedule not found </message>
  </errors>
</ErrorDetails>
```

Deleting a Schedule

To delete an existing Schedule, an administrator makes a DELETE to the schedules resource, specifying the ObjectId of the Schedule they wish to delete in the URI:

```
DELETE /vmrest/schedules/387f051e-3367-4cc8-abed-810293d39f76
```

This would return the following on success:

```
204
No Content
```

This would return the following if the specified schedule does not exist:

```
404
Not Found
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>NOT_FOUND</code>
    <message>schedule - ObjectId=387f051e-3367-4cc8-abed-810293d39f76</message>
  </errors>
</ErrorDetails>
```

Note that if an administrator deletes a Schedule object, then all of the supporting ScheduleDetail objects for that Schedule will also be deleted.

ScheduleSetMembers in CUPI

ScheduleSetMembers are the resources representing ScheduleSetMemberMaps objects. They are sub-resources of ScheduleSets in CUPI, and thus are at a sub-URI of the schedulesets resource:

+/vmrest/scheduleset/{_}<ScheduleSetObjectId>+{_}/schedulesetmembers+.

A ScheduleSetMember object has the following fields:

Field Name	Field Type	Default	Notes
ScheduleSetObjectId	GUID	None	Owning ScheduleSet
ScheduleObjectId	GUID	None	Schedule to include/exclude from ScheduleSet
Exclude	Boolean	False	False means Include, True means Exclude

Retrieving the list of ScheduleSetMembers

To retrieve the list of ScheduleSetMembers for a particular ScheduleSet, an administrator makes a GET to the schedulesetmembers resource, specifying the ObjectId of the ScheduleSet in the URI:

```
GET /vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers
```

This would return the following on success:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<ScheduleSetMembers total="2">
  <ScheduleSetMember>
    <URI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers/a1f34a57-b642-4d8b-9634-b4c2e37bfd2b</URI>
    <ScheduleSetObjectId>30d9c0df-534b-437a-a6b7-439adfd850da</ScheduleSetObjectId>
    <ScheduleSetURI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da</ScheduleSetURI>
    <ScheduleObjectId>a1f34a57-b642-4d8b-9634-b4c2e37bfd2b</ScheduleObjectId>
    <ScheduleURI>/vmrest/schedules/a1f34a57-b642-4d8b-9634-b4c2e37bfd2b</ScheduleURI>
    <Exclude>>false</Exclude>
  </ScheduleSetMember>
  <ScheduleSetMember>
    <URI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers/279fd73f-36a9-469a-9ad5-a0f80f09b2d</URI>
    <ScheduleSetObjectId>30d9c0df-534b-437a-a6b7-439adfd850da</ScheduleSetObjectId>
    <ScheduleSetURI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da</ScheduleSetURI>
    <ScheduleObjectId>279fd73f-36a9-469a-9ad5-a0f80f09b2d</ScheduleObjectId>
    <ScheduleURI>/vmrest/schedules/279fd73f-36a9-469a-9ad5-a0f80f09b2d</ScheduleURI>
    <Exclude>>true</Exclude>
  </ScheduleSetMember>
</ScheduleSetMembers>
```

Retrieving a ScheduleSetMember

To retrieve a single ScheduleSetMember for a particular ScheduleSet, an administrator makes a GET to the schedulesetmembers resource, specifying the ObjectIds of the ScheduleSet and the requested ScheduleSetMember in the URI:

```
GET
/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers/a1f34a57-b642-4d8b-9634-b4c2e37bfd2b
```

This would return the following on success:

```
200
OK
<?xml version="1.0" encoding="UTF-8"?>
<ScheduleSetMember>

<URI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers/a1f34a57-b642-4d8b-9634-b4c2e37bfd2b</URI>

  <ScheduleSetObjectId>30d9c0df-534b-437a-a6b7-439adfd850da</ScheduleSetObjectId>
  <ScheduleSetURI>/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da</ScheduleSetURI>

  <ScheduleObjectId>a1f34a57-b642-4d8b-9634-b4c2e37bfd2b</ScheduleObjectId>
  <ScheduleURI>/vmrest/schedules/a1f34a57-b642-4d8b-9634-b4c2e37bfd2b</ScheduleURI>
  <Exclude>>false</Exclude>
</ScheduleSetMember>
```

This would return the following if the specified ScheduleSetMember does not exist (meaning the Schedule is not listed as either included or excluded from the ScheduleSet):

```
404
Not Found
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>NOT_FOUND</code>
    <message>schedulesetmember - ObjectId=a1f34a57-b642-4d8b-9634-b4c2e37bfd2b</message>
  </errors>
</ErrorDetails>
```

Adding a ScheduleSetMember

To add a new ScheduleSetMember to a particular ScheduleSet, an administrator makes a POST to the schedulesetmembers resource, specifying the ObjectId of the ScheduleSet in the URI and the new ScheduleSetMember via XML:

```
POST /vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers

<ScheduleSetMember>
  <ScheduleSetObjectId>30d9c0df-534b-437a-a6b7-439adfd850da</ScheduleSetObjectId>
  <ScheduleObjectId>db46f878-bc72-4870-9482-9f1c336641ed</ScheduleObjectId>
  <Exclude>>false</Exclude>
</ScheduleSetMember>
```

This will return the URI to the newly created ScheduleSetMember (which includes its ObjectId):

```
201
Created
/vmrest/user/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers/68c53107-5d28-4f40-ae43-f83d35eee8d6
```



Note A ScheduleSet can have at most 1 Schedule marked as Included, and that Schedule must not be a Holiday Schedule. A ScheduleSet can also have at most 1 Schedule marked as Excluded, and that Schedule must be a Holiday Schedule. If an administrator makes a POST to the schedulesetmembers resource in an attempt to Include or Exclude more than 1 Schedule of a given type to a ScheduleSet, then CUPI will return an HTTP 400 error with a descriptive error message. Similarly, if an administrator makes a POST to the schedulesetmembers resource in an attempt to Include a Holiday Schedule or Exclude a non-Holiday Schedule, then CUPI will return an HTTP 400 error with a descriptive error message.

Changing a ScheduleSetMember

The schedulesetmembers resource does not support the PUT method. In order to change a ScheduleSetMember, an administrator must delete the existing one and then add it back with the requested change.

Deleting a ScheduleSetMember

To delete an existing ScheduleSetMember for a particular ScheduleSet, an administrator makes a DELETE to the schedulesetmembers resource, specifying the ObjectIds of the ScheduleSet and the ScheduleSetMember they wish to delete in the URI:

```
DELETE
/vmrest/schedulesets/30d9c0df-534b-437a-a6b7-439adfd850da/schedulesetmembers/a1f34a57-b642-4d8b-9634-b4c2e37bfd2b
```

This would return the following on success:

```
204
No Content
```

This would return the following if the specified schedulesetmember does not exist:

```
404
Not Found
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>NOT_FOUND</code>
    <message>schedulesetmember - ObjectId=a1f34a57-b642-4d8b-9634-b4c2e37bfd2b</message>
  </errors>
</ErrorDetails>
```

ScheduleDetails in CUPI

ScheduleDetails are sub-resources of Schedules in CUPI, and thus are at a sub-URI of the schedules resources: `+vmrest/schedules/{_}+<ScheduleObjectId>+{ }+/scheduledetails+`.

A ScheduleDetail object has the following field:

Field Name	Field Type	Default	Notes
ObjectId	GUID	None	NA
Subject	String (2048)	None	NA
ScheduleObjectId	GUID	None	Owning Schedule

Field Name	Field Type	Default	Notes
StartDate	DateTime	NULL	NULL means effective immediately, also Time portion of DateTime is ignored
StartTime	Int	NULL	NULL means 12:00AM, otherwise minutes past 12:00AM so 480 means 8:00AM
EndDate	DateTime	NULL	NULL means effective indefinitely, also Time portion of DateTime is ignored
EndTime	Int	NULL	NULL means End-of-Day (11:59:59PM), otherwise minutes past 12:00AM so 1020 means 5:00PM
IsActiveMonday	Boolean	False	NA
IsActiveTuesday	Boolean	False	NA
IsActiveWednesday	Boolean	False	NA
IsActiveThursday	Boolean	False	NA
IsActiveFriday	Boolean	False	NA
IsActiveSaturday	Boolean	False	NA
IsActiveSunday	Boolean	False	NA

Retrieving the list of ScheduleDetails

To retrieve the list of ScheduleDetails for a particular Schedule, an administrator makes a GET to the scheduledetails resource, specifying the ObjectId of the Schedule in the URI:

```
GET /vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76/scheduledetails
```

This would return the following on success:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<ScheduleDetails total="2">
  <ScheduleDetail>

<URI>/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76/scheduledetails/fb6cb280-ea91-4ee5-9225-6ca9c5e3b77e</URI>

  <ObjectId>fb6cb280-ea91-4ee5-9225-6ca9c5e3b77e</ObjectId>
  <ScheduleObjectId>387f051e-3367-4cc8-abad-810293d39f76</ScheduleObjectId>
  <ScheduleURI>/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76</ScheduleURI>
  <Subject>Weekday Mornings</Subject>
  <StartTime>480</StartTime>
  <EndTime>720</EndTime>
  <IsActiveMonday>true</IsActiveMonday>
  <IsActiveTuesday>true</IsActiveTuesday>
  <IsActiveWednesday>true</IsActiveWednesday>
  <IsActiveThursday>true</IsActiveThursday>
  <IsActiveFriday>true</IsActiveFriday>
  <IsActiveSaturday>false</IsActiveSaturday>
  <IsActiveSunday>false</IsActiveSunday>
</ScheduleDetail>
<ScheduleDetail>

<URI>/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76/scheduledetails/e049dc1e-7447-4e2a-907e-03d67e2d40a1</URI>

  <ObjectId>e049dc1e-7447-4e2a-907e-03d67e2d40a1</ObjectId>
  <ScheduleObjectId>387f051e-3367-4cc8-abad-810293d39f76</ScheduleObjectId>
  <ScheduleURI>/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76</ScheduleURI>
  <Subject>Weekday Afternoons</Subject>
  <StartTime>780</StartTime>
  <EndTime>1020</EndTime>
  <IsActiveMonday>true</IsActiveMonday>
  <IsActiveTuesday>true</IsActiveTuesday>
  <IsActiveWednesday>true</IsActiveWednesday>
  <IsActiveThursday>true</IsActiveThursday>
  <IsActiveFriday>true</IsActiveFriday>
  <IsActiveSaturday>false</IsActiveSaturday>
  <IsActiveSunday>false</IsActiveSunday>
</ScheduleDetail>
</ScheduleDetails>

```

Retrieving a ScheduleDetail

To retrieve a single ScheduleDetail for a particular Schedule, an administrator makes a GET to the scheduledetails resource, specifying the ObjectIds of the Schedule and the requested ScheduleDetail in the URI:

```

GET
/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76/scheduledetails/fb6cb280-ea91-4ee5-9225-6ca9c5e3b77e

```

This would return the following on success:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<ScheduleDetail>

<URI>/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76/scheduledetails/fb6cb280-ea91-4ee5-9225-6ca9c5e3b77e</URI>

  <ObjectId>fb6cb280-ea91-4ee5-9225-6ca9c5e3b77e</ObjectId>
  <ScheduleObjectId>387f051e-3367-4cc8-abad-810293d39f76</ScheduleObjectId>
  <ScheduleURI>/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76</ScheduleURI>
  <Subject>Weekday Mornings</Subject>
  <StartTime>480</StartTime>
  <EndTime>720</EndTime>
  <IsActiveMonday>true</IsActiveMonday>
  <IsActiveTuesday>true</IsActiveTuesday>
  <IsActiveWednesday>true</IsActiveWednesday>
  <IsActiveThursday>true</IsActiveThursday>
  <IsActiveFriday>true</IsActiveFriday>
  <IsActiveSaturday>false</IsActiveSaturday>
  <IsActiveSunday>false</IsActiveSunday>
</ScheduleDetail>

```

This would return the following if the specified ScheduleDetail does not exist:

```

404
Not Found
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>NOT_FOUND</code>
    <message>scheduledetail - ObjectId=fb6cb280-ea91-4ee5-9225-6ca9c5e3b77e</message>
  </errors>
</ErrorDetails>

```

Adding a ScheduleDetail

To add a new ScheduleDetail to a particular Schedule, an administrator makes a POST to the scheduledetails resource, specifying the ObjectId of the Schedule in the URI and the new ScheduleDetail via XML:

```

POST /vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76/scheduledetails

<ScheduleDetail>
  <Subject>Saturday (Half-day)</Subject>
  <StartTime>540</StartTime>
  <EndTime>780</EndTime>
  <IsActiveSaturday>true</IsActiveSaturday>
</ScheduleDetail>

```

This will return the URI to the newly created ScheduleDetail (which includes its ObjectId):

```

201
Created
/vmrest/schedules/387f051e-3367-4cc8-abad-810293d39f76/scheduledetails/9d8afb61-bd4b-4e65-b274-e870a2b51865

```

Changing a ScheduleDetail

To change an existing ScheduleDetail for a particular Schedule, an administrator makes a PUT to the scheduledetails resource, specifying the ObjectId of the Schedule and the ScheduleDetail they wish to change in the URI and the data changes via XML:

Deleting a ScheduleDetail

```
PUT
/vmrest/schedules/387f051e-3367-4cc8-abed-810293d39f76/scheduledetails/fb6cb280-ea91-4ee5-9225-6ca9c5e3b77e

<ScheduleDetail>
  <StartTime>450</StartTime>
</ScheduleDetail>
```

This would return the following on success:

```
204
No Content
```

This would return the following if the specified ScheduleDetail does not exist:

```
400
Bad Request
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>DATA_EXCEPTION</code>
    <message>ScheduleDetail not found </message>
  </errors>
</ErrorDetails>
```

Deleting a ScheduleDetail

To delete an existing ScheduleDetail from a particular Schedule, an administrator makes a DELETE to the scheduledetails resource, specifying the ObjectId of the Schedule and the ScheduleDetail they wish to delete in the URI:

```
DELETE
/vmrest/schedules/387f051e-3367-4cc8-abed-810293d39f76/scheduledetails/9d8afb61-bd4b-4e65-b274-e870a2b51865
```

This would return the following on success:

```
204
No Content
```

This would return the following if the specified ScheduleDetail does not exist:

```
404
Not Found
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ErrorDetails>
  <errors>
    <code>NOT_FOUND</code>
    <message>scheduledetail - ObjectId=9d8afb61-bd4b-4e65-b274-e870a2b51865</message>
  </errors>
</ErrorDetails>
```


Cisco Unity Connection Provisioning Interface (CUPI) API -- Holiday Schedules

Holiday Schedules API

Administrator can use this API to create/update/delete/fetch the holiday schedules. Various attributes of holiday schedules can also be updated using this API.

Listing the Holiday Schedule Details

The following is an example of the GET request that list the holiday schedules:

```
GET https://<connection-server>/vmrest/schedules/<holidayschedule-objectid>/scheduledetails
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<ScheduleDetails total="1">
  <ScheduleDetail>
<URI>/vmrest/schedules/f62e3780-4bfc-4c8f-91a4-3ac4e35803c4/scheduledetails/894f29bc-8ff1-4183-b8c1-f1c304d9109b</URI>

    <ObjectId>894f29bc-8ff1-4183-b8c1-f1c304d9109b</ObjectId>
    <ScheduleObjectId>f62e3780-4bfc-4c8f-91a4-3ac4e35803c4</ScheduleObjectId>
    <ScheduleURI>/vmrest/schedules/f62e3780-4bfc-4c8f-91a4-3ac4e35803c4</ScheduleURI>

    <IsActiveMonday>false</IsActiveMonday>
    <IsActiveTuesday>false</IsActiveTuesday>
    <IsActiveWednesday>false</IsActiveWednesday>
    <IsActiveThursday>false</IsActiveThursday>
    <IsActiveFriday>false</IsActiveFriday>
    <IsActiveSaturday>true</IsActiveSaturday>
    <IsActiveSunday>true</IsActiveSunday>
    <StartTime>480</StartTime>
    <EndTime>1020</EndTime>
  </ScheduleDetail>
</ScheduleDetails>
```

```
Response Code: 200
```

JSON Example

To list all the holiday schedules, do the following:

```
GET https://<connection-server>/vmrest/schedules/<holidayscheduleobjectid>/scheduleobjectid
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "1",
  "ScheduleDetail":
  {
    "URI":
    "/vmrest/schedules/f62e3780-4bfc-4c8f-91a4-3ac4e35803c4/scheduledetails/894f29bc-8ff1-4183-b8c1-f1c304d9109b",

    "ObjectId": "894f29bc-8ff1-4183-b8c1-f1c304d9109b",
    "ScheduleObjectId": "f62e3780-4bfc-4c8f-91a4-3ac4e35803c4",
    "ScheduleURI": "/vmrest/schedules/f62e3780-4bfc-4c8f-91a4-3ac4e35803c4",
    "IsActiveMonday": "false",
    "IsActiveTuesday": "false",
    "IsActiveWednesday": "false",
    "IsActiveThursday": "false",
    "IsActiveFriday": "false",
    "IsActiveSaturday": "true",
    "IsActiveSunday": "true",
    "StartTime": "480",
    "EndTime": "1020"
  }
}
```

Response Code: 200

Viewing the Specific Holiday Schedule

The following is an example of the GET request that lists the details of a specific holiday schedule represented by the provided value of holiday schedule object ID:

```
GET https://<connection-server>/vmrest/schedules/<holidayscheduleobjectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<Schedule>
  <URI>/vmrest/schedules/f62e3780-4bfc-4c8f-91a4-3ac4e35803c4</URI>
  <ObjectId>f62e3780-4bfc-4c8f-91a4-3ac4e35803c4</ObjectId>
  <DisplayName>Tenant1_Holiday_1</DisplayName>
  <OwnerLocationObjectId>97a1e9ab-6a69-4272-952a-b0e25c08aaaf</OwnerLocationObjectId>

  <OwnerLocationURI>/vmrest/locations/connectionlocations/97a1e9ab-6a69-4272-952a-b0e25c08aaaf</OwnerLocationURI>

  <IsHoliday>true</IsHoliday>
  <Undeletable>>false</Undeletable>

  <ScheduleDetailsURI>/vmrest/schedules/f62e3780-4bfc-4c8f-91a4-3ac4e35803c4/scheduledetails</ScheduleDetailsURI>
</Schedule>
```

Response Code: 200

JSON Example

To view a specific holiday schedule, do the following:

```
GET https://<connection-server>/vmrest/schedules/<holidayscheduleobjectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/schedules/10c9ac6c-6a4c-4559-be75-2c409ef85054",
  "ObjectId": "10c9ac6c-6a4c-4559-be75-2c409ef85054",
  "DisplayName": "Tenant2_Holiday_1",
  "OwnerLocationObjectId": "97a1e9ab-6a69-4272-952a-b0e25c08aaaf",
  "OwnerLocationURI":
"/vmrest/locations/connectionlocations/97a1e9ab-6a69-4272-952ab0e25c08aaaf",
  "IsHoliday": "true",
  "Undeletable": "false",
  "ScheduleDetailsURI":
"/vmrest/schedules/10c9ac6c-6a4c-4559-be75-2c409ef85054/scheduledetails"
}
```

Response Code: 200

Creating a New Holiday Schedule

The following is an example of POST request that can be used to create a new holiday schedule:

```
POST https://<connection-server>/vmrest/schedules
```

Request Body:

```
<Schedule>
  <DisplayName>Texoma_Holiday</DisplayName>
  <OwnerLocationObjectId>5150cb31-a665-47d8-a311-9cc4524810d39</OwnerLocationObjectId>
  <IsHoliday>true</IsHoliday>
</Schedule>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/schedules/f62e3780-4bfc-4c8f-91a4-3ac4e35803c4
```

JSON Example

To create a new holiday schedule, do the following:

```
POST https://<connection-server>/vmrest/schedules
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body:

```
{
  "DisplayName": "Texoma_Holiday ",
  "OwnerLocationObjectId": "5150cb31-a665-47d8-a311-9cc4524810d3",
  "IsHoliday": "true"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/schedules/f62e3780-4bfc-4c8f-91a4-3ac4e35803c4
```

Updating the Holiday Schedule

The following is an example of the PUT request that can be used to modify the holiday schedule where only description field can be updated:

The following is an example of the PUT request that can be used to modify the holiday schedule where only description field can be updated:

```
PUT https://<connection-server>/vmrest/schedules/<holidayscheduleobjectid>
```

Request Body:

```
<Schedule>
  <DisplayName>Texoma1_Holiday</DisplayName>
  <OwnerLocationObjectId>5150cb31-a665-47d8-a311-9cc4524810d3</OwnerLocationObjectId>
</Schedule>
```

Response Code: 204

JSON Example

To update the holiday schedule, do the following:

```
PUT https://<connection-server>/vmrest/schedules/<holidayscheduleobjectid>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body:

```
{
  "DisplayName": "Texoma1_Holiday ",
  "OwnerLocationObjectId": "5150cb31-a665-47d8-a311-9cc4524810d3"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Deleting a Holiday Schedule

This request can be used to delete an existing holiday Schedule; an administrator makes a DELETE to the schedules resource, specifying the object ID of the holiday schedule they wish to delete in the URI:

```
DELETE https://<connection-server>/vmrest/schedules/<holidayscheduleobjectid>
```

Response Code: 204

JSON Example

```
DELETE https://<connection-ip>/vmrest/schedules/<holidayschedule-objectid>
Accept: application/json
Connection: keep-alive
```

Response Code: 204

Explanation of Data Fields

The following chart lists all of the data fields:

Parameter	Data Type	Operations	Comments
ObjectId	String (36)	Read Only	Specifies a globally unique, system-generated identifier for a Schedule object.
URI	String	Read Only	Specifies the URI for schedule.
DisplayName	String (64)	Read/Write	Specifies the preferred text name of this schedule to be used when displaying entries in the administrative console and Cisco Personal Assistant.
OwnerLocationObjectId	String (36)	Read Only	Specifies the owner of this schedule. If the owner is a LocationVMS, the unique identifier of the LocationVMS objects to which this schedule belongs. Commonly referred to as a "system" schedule. Otherwise, this attribute is set to NULL.
OwnerPersonalRuleSetObjectId	String (36)	Read Only	Specifies the owner of this schedule. If the owner is a personal rule set, the unique identifier of the personal rule set to which this schedule belongs. Otherwise, this attribute is set to NULL. OwnerSubscriberObjectId String(36) Read Only Specifies the owner of this schedule. If the owner is a subscriber, the unique identifier of the Subscriber objects to which this schedule belongs. Otherwise, this attribute is set to NULL. Undeletable Boolean Read/Write Indicates a flag that checks whether this schedule can be deleted via an administrative application such as Cisco Unity Connection Administration. It is used to prevent deletion of factory defaults.
StartDate	DateTime	Read/Write	The date and time when schedule becomes active, or NULL if active immediately.
StartTime	Integer	Read/Write	The start time (in minutes) for the active day or days. The start time is stored as the number of minutes from midnight. So a value of 480 would mean 8:00 AM and 1020 would mean 5:00 PM. In addition, a value of NULL for the start time indicates 12:00 AM. <ul style="list-style-type: none"> • Range 0-1435
EndDate	DateTime	Read/Write	The date and time when schedule ends, or NULL if effective indefinitely.
EndTime	Integer	Read/Write	The end time (in minutes) for the active day or days. The end time is stored as the number of minutes from midnight. So a value of 480 would mean 8:00 AM and 1020 would mean 5:00 PM. In addition, a value of NULL means "till the end of the day" (e.g. 11:59:59 PM in Linux land). <ul style="list-style-type: none"> • Range 0-1435

Parameter	Data Type	Operations	Comments
IsHoliday	Boolean	Read/Write	A flag indicating whether this schedule represents a holiday.
SchedulesDetailsURI	String	Read Only	URI for scheduledetails

Cisco Unity Connection Provisioning Interface (CUPI) API -- Schedules Set

Schedule Set API

Administrator can use this API to create/update/delete/fetch the schedule sets. Various attributes of schedule sets can also be updated using this API.

Listing the Schedule Sets

The following is an example of the GET request that list the schedule sets:

```

GET https://<connection-server>/vmrest/schedulesets
The following is the response from the above *GET* request and the actual response will
depend upon the information given by you:
<pre>
<ScheduleSets total="3">
  <ScheduleSet>
    <URI>/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aeec903</URI>
    <ObjectId>e01b7fa7-521b-47f7-82d0-bb898aeec903</ObjectId>
    <DisplayName>Weekdays</DisplayName>
    <OwnerLocationObjectId>51bff648-e60f-44ec-b2c8-ae854dfc1f41</OwnerLocationObjectId>

    <OwnerLocationURI>/vmrest/locations/connectionlocations/51bff648-e60f-44ec-b2c8-ae854dfc1f41</OwnerLocationURI>

    <Undeletable>true</Undeletable>

    <ScheduleSetMembersURI>/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aeec903/schedulesetmembers</ScheduleSetMembersURI>

  </ScheduleSet>
  <ScheduleSet>
    <URI>/vmrest/schedulesets/8f2e394c-1d09-412e-8e09-c26b152344c1</URI>
    <ObjectId>8f2e394c-1d09-412e-8e09-c26b152344c1</ObjectId>
    <DisplayName>All Hours</DisplayName>
    <OwnerLocationObjectId>51bff648-e60f-44ec-b2c8-ae854dfc1f41</OwnerLocationObjectId>

    <OwnerLocationURI>/vmrest/locations/connectionlocations/51bff648-e60f-44ec-b2c8-ae854dfc1f41</OwnerLocationURI>

    <Undeletable>true</Undeletable>

    <ScheduleSetMembersURI>/vmrest/schedulesets/8f2e394c-1d09-412e-8e09-c26b152344c1/schedulesetmembers</ScheduleSetMembersURI>

  </ScheduleSet>
  <ScheduleSet>
    <URI>/vmrest/schedulesets/31c9ff78-f6b3-4731-9df2-dce8de411f33</URI>
    <ObjectId>31c9ff78-f6b3-4731-9df2-dce8de411f33</ObjectId>
    <TenantObjectId>fe6541fb-b42c-44f2-8404-ded14cbf7438</TenantObjectId>
    <DisplayName>Voice Recognition Update Schedule</DisplayName>
    <OwnerLocationObjectId>51bff648-e60f-44ec-b2c8-ae854dfc1f41</OwnerLocationObjectId>

    <OwnerLocationURI>/vmrest/locations/connectionlocations/51bff648-e60f-44ec-b2c8-ae854dfc1f41</OwnerLocationURI>

    <Undeletable>false</Undeletable>

    <ScheduleSetMembersURI>/vmrest/schedulesets/31c9ff78-f6b3-4731-9df2-dce8de411f33/schedulesetmembers</ScheduleSetMembersURI>

  </ScheduleSet>
</ScheduleSets>

```

Response Code: 200

JSON Example

To list all the schedule sets, do the following:

```

GET https://<connection-server>/vmrest/schedulesets
Accept: application /json
Connection: keep-alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing Specific Tenant Related ScheduleSets by System Administrator

```
{
  "@total": "3",
  "ScheduleSet": [
    {
      "URI": "/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aee903",
      "ObjectId": "e01b7fa7-521b-47f7-82d0-bb898aee903",
      "DisplayName": "Weekdays",
      "OwnerLocationObjectId": "51bff648-e60f-44ec-b2c8-ae854dfc1f41",
      "OwnerLocationURI":
"/vmrest/locations/connectionlocations/51bff648-e60f-44ec-b2c8-ae854dfc1f41",
      "Undeletable": "true",
      "ScheduleSetMembersURI":
"/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aee903/schedulesetmembers"
    },
    {
      "URI": "/vmrest/schedulesets/8f2e394c-1d09-412e-8e09-c26b152344c1",
      "ObjectId": "8f2e394c-1d09-412e-8e09-c26b152344c1",
      "DisplayName": "All Hours",
      "OwnerLocationObjectId": "51bff648-e60f-44ec-b2c8-ae854dfc1f41",
      "OwnerLocationURI":
"/vmrest/locations/connectionlocations/51bff648-e60f-44ec-b2c8-ae854dfc1f41",
      "Undeletable": "true",
      "ScheduleSetMembersURI":
"/vmrest/schedulesets/8f2e394c-1d09-412e-8e09-c26b152344c1/schedulesetmembers"
    },
    {
      "URI": "/vmrest/schedulesets/31c9ff78-f6b3-4731-9df2-dce8de411f33",
      "ObjectId": "31c9ff78-f6b3-4731-9df2-dce8de411f33",
      "TenantObjectId": "fe6541fb-b42c-44f2-8404-ded14cbf7438",
      "DisplayName": "Voice Recognition Update Schedule",
      "OwnerLocationObjectId": "51bff648-e60f-44ec-b2c8-ae854dfc1f41",
      "OwnerLocationURI":
"/vmrest/locations/connectionlocations/51bff648-e60f-44ec-b2c8-ae854dfc1f41",
      "Undeletable": "false",
      "ScheduleSetMembersURI":
"/vmrest/schedulesets/31c9ff78-f6b3-4731-9df2-dce8de411f33/schedulesetmembers"
    }
  ]
}
```

Response Code: 200

Listing Specific Tenant Related ScheduleSets by System Administrator

In Cisco Unity Connection 10.5(2) and later, the system administrator can use TenantObjectId to list the specific tenant related schedulesets using the following URI:

```
GET https://<connection-server>/vmrest/schedulesets?query=(TenantObjectId is
<Tenant-ObjectId>)
```

To get the TenantObjectId, use the following URI:

```
GET https://<connection-server>/vmrest/tenants
```

Viewing the Specific Schedule Set

The following is an example of the GET request that lists the details of specific schedule set represented by the provided value of schedule set object ID:

```
GET https://<connection-server>/vmrest/schedulesets/<scheduleset-objectid>
```


The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<ScheduleSet>
  <URI>/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aeec903</URI>
  <ObjectId>e01b7fa7-521b-47f7-82d0-bb898aeec903</ObjectId>
  <DisplayName>Weekdays</DisplayName>
  <OwnerLocationObjectId>51bff648-e60f-44ec-b2c8-ae854dfc1f41</OwnerLocationObjectId>

  <OwnerLocationURI>/vmrest/locations/connectionlocations/51bff648-e60f-44ec-b2c8-ae854dfc1f41</OwnerLocationURI>

  <Undeletable>true</Undeletable>

  <ScheduleSetMembersURI>/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aeec903/schedulesetmembers</ScheduleSetMembersURI>
</ScheduleSet>
```

Response Code: 200

JSON Example

To view a specific schedule set, do the following:

```
GET https://<connection-server>/vmrest/schedulesets/<scheduleset-objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aeec903",
  "ObjectId": "e01b7fa7-521b-47f7-82d0-bb898aeec903",
  "DisplayName": "Weekdays",
  "OwnerLocationObjectId": "51bff648-e60f-44ec-b2c8-ae854dfc1f41",
  "OwnerLocationURI":
"/vmrest/locations/connectionlocations/51bff648-e60f-44ec-b2c8-ae854dfc1f41",
  "Undeletable": "true",
  "ScheduleSetMembersURI":
"/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aeec903/schedulesetmembers"
}
```

Response Code: 200

Creating a New Schedule Set

The following is an example of POST request that can be used to create a new schedule set:

```
POST https://<connection-server>/vmrest/schedulesets
```

Request Body

```
<ScheduleSet>
  <DisplayName>Texoma_DayShift </DisplayName>
  <OwnerLocationObjectId>5150cb31-a665-47d8-a311-9cc4524810d3</OwnerLocationObjectId>
</ScheduleSet>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aeec903
```

JSON Example

To create a new schedule set, do the following:

```
POST https://<connection-server>/vmrest/schedulesets
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body

```
{
  "DisplayName": "Texoma_DayShift ",
  "OwnerLocationObjectId": "5150cb31-a665-47d8-a311-9cc4524810d3"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
Response Code: 201
/vmrest/schedulesets/e01b7fa7-521b-47f7-82d0-bb898aeec903
```

Updating the Schedule Set

The following is an example of the PUT request that can be used to modify the schedule set where only description field can be updated:

```
PUT https://<connection-server>/vmrest/schedulesets/<scheduleset-objectid>
```

Request Body

```
<ScheduleSet>
  <DisplayName>Texoma_Evening</DisplayName>
  <OwnerLocationObjectId>5150cb31-a665-47d8-a311-9cc4524810d3</OwnerLocationObjectId>
</ScheduleSet>
```

```
Response Code: 204
```

JSON Example

To update the schedule set, do the following:

```
PUT https://<connection-server>/vmrest/schedulesets/<scheduleset-objectid>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body

```
{
  "DisplayName": "Texoma_Evening ",
  "OwnerLocationObjectId": "5150cb31-a665-47d8-a311-9cc4524810d3"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Delete a Schedule Set

This request can be used to delete an existing schedule set; an administrator makes a DELETE to the schedule sets resource, specifying the object ID of the schedule set they wish to delete in the URI.

```
DELETE https://<connection-server>/vmrest/schedulesets/<scheduleset-objectid>
```

```
Response Code: 204
```

JSON Example

```
DELETE: https://<connection-ip>/vmrest/schedulesets/<scheduleset-objectid>
Accept: application/json
Connection: keep-alive
```

```
Response Code: 204
```

Explanation of Data Fields

Parameter	Data Type	Operation	Comments
ObjectId	String	Read Only	Specifies a globally unique, system-generated identifier for a schedule set object.
TenantObjectId	String	Read Only	The unique identifier of the tenant to which the schedule set belongs. This field is reflected in the response only if the schedule set belongs to a particular tenant.
URI	String	Read Only	Specifies the URI for schedule set.
DisplayName	String	Read/Write	Specifies the unique text name of this schedule set to be used when displaying entries in the administrative console and Cisco Personal Assistant.
OwnerLocationObjectId	String	Read Only	The owner of this schedule set. If the owner is a LocationVMS, the unique identifiers of the LocationVMS object to which this schedule set (i.e., "system" schedule) belongs. Otherwise, this attribute is set to NULL.
OwnerPersonalRuleSetObjectId	String	Read Only	The owner of this schedule set. If the owner is a personal rule set, the unique identifier of the personal rule set to which this schedule set belongs. Otherwise, this attribute is set to NULL.

Parameter	Data Type	Operation	Comments
OwnerSubscriberObjectId	String	Read Only	The owner of this schedule set. If the owner is a subscriber, the unique identifier of the Subscriber object to which this schedule set belongs. Otherwise, this attribute is set to NULL.
Undeletable	Boolean	Read/Write	Indicates a flag which checks whether this schedule set can be deleted via an administrative application such as Cisco Unity Connection Administration. It is used to prevent deletion of factory defaults. Default value: false.
ScheduleSetMembersURI	String	Read Only	Specifies the URI for schedule set members.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Schedules Set Details

Schedule Set Details API

Administrator can use this API to create/update/delete/fetch the schedule set details. Various attributes of schedule set details can also be updated using this API.

Cisco Unity Connection Provisioning Interface (CUPI) API -- Schedules Set Members

Schedule Set Members API

Administrator can use this API to create/update/delete/fetch the schedule set members. Various attributes of schedule set members can also be updated using this API.

Listing the Schedule Set Members

The following is an example of the GET request that lists the schedule set members:

```
GET https://<connection-server>/vmrest/schedulesets/<scheduleset-objectid>/schedulesetmembers
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<ScheduleSetMembers total="2">
  <ScheduleSetMember>
<URI>/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/2008f07d-4265-4570-ab6f-362228dd8180</URI>
    <ScheduleSetObjectId>c309414c-0c72-4d37-8a22-9ed7d9ee9b3e</ScheduleSetObjectId>
<ScheduleSetURI>/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e</ScheduleSetURI>
    <ScheduleObjectId>2008f07d-4265-4570-ab6f-362228dd8180</ScheduleObjectId>
    <ScheduleURI>/vmrest/schedules/2008f07d-4265-4570-ab6f-362228dd8180</ScheduleURI>
    <Exclude>>false</Exclude>
  </ScheduleSetMember>
  <ScheduleSetMember>
<URI>/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/c1bdc7d4-fd7c-4ae7-a836-6094f987ad74</URI>
    <ScheduleSetObjectId>c309414c-0c72-4d37-8a22-9ed7d9ee9b3e</ScheduleSetObjectId>
<ScheduleSetURI>/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e</ScheduleSetURI>
    <ScheduleObjectId>c1bdc7d4-fd7c-4ae7-a836-6094f987ad74</ScheduleObjectId>
    <ScheduleURI>/vmrest/schedules/c1bdc7d4-fd7c-4ae7-a836-6094f987ad74</ScheduleURI>
    <Exclude>>true</Exclude>
  </ScheduleSetMember>
</ScheduleSetMembers>
</pre>
Response Code: 200

```

JSON Example

To list all the schedule set members, do the following:

```

GET https://<connection-server>/vmrest/schedulesets/<scheduleset-objectid>/schedulesetmembers
Accept: application /json
Connection: keep-alive

```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "2",
  "ScheduleSetMember": [
    {
      "URI":
"/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/2008f07d-4265-4570-ab6f-362228dd8180",

      "ScheduleSetObjectId": "c309414c-0c72-4d37-8a22-9ed7d9ee9b3e",
      "ScheduleSetURI": "/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e",
      "ScheduleObjectId": "2008f07d-4265-4570-ab6f-362228dd8180",
      "ScheduleURI": "/vmrest/schedules/2008f07d-4265-4570-ab6f-362228dd8180",
      "Exclude": "false"
    },
    {
      "URI":
"/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/clbdc7d4-fd7c-4ae7-a836-6094f987ad74",

      "ScheduleSetObjectId": "c309414c-0c72-4d37-8a22-9ed7d9ee9b3e",
      "ScheduleSetURI": "/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e",
      "ScheduleObjectId": "clbdc7d4-fd7c-4ae7-a836-6094f987ad74",
      "ScheduleURI": "/vmrest/schedules/clbdc7d4-fd7c-4ae7-a836-6094f987ad74",
      "Exclude": "true"
    }
  ]
}
```

Response Code: 200

Viewing the Specific Schedule Set Member

The following is an example of the GET request that lists the details of specific schedule set member represented by the provided value of schedule set member object ID:

```
GET
https://<connection-server>/vmrest/schedulesets/<schedulesetobjectid>/schedulesetmembers/<schedulesetmember-objectid>
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you: </pre> <ScheduleSetMember>:

```
<URI>/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/2008f07d-4265-4570-ab6f-362228dd8180</URI>

  <ScheduleSetObjectId>c309414c-0c72-4d37-8a22-9ed7d9ee9b3e</ScheduleSetObjectId>

<ScheduleSetURI>/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e</ScheduleSetURI>

  <ScheduleObjectId>2008f07d-4265-4570-ab6f-362228dd8180</ScheduleObjectId>
  <ScheduleURI>/vmrest/schedules/2008f07d-4265-4570-ab6f-362228dd8180</ScheduleURI>
  <Exclude>>false</Exclude>
```

</ScheduleSetMember> </pre>

Response Code: 200

JSON Example

To view a specific schedule set member, do the following:

```
GET
https://<connection-server>/vmrest/schedulesets/<schedulesetobjectid>/schedulesetmembers/<schedulesetmember-objectid>
Accept: application/json
Connection: keep-alive
```

The following is the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI":
"/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/2008f07d-4265-4570-ab6f-362228dd8180",

  "ScheduleSetObjectId": "c309414c-0c72-4d37-8a22-9ed7d9ee9b3e",
  "ScheduleSetURI": "/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e",
  "ScheduleObjectId": "2008f07d-4265-4570-ab6f-362228dd8180",
  "ScheduleURI": "/vmrest/schedules/2008f07d-4265-4570-ab6f-362228dd8180",
  "Exclude": "false"
}
```

```
Response Code: 200
```

Creating a New Schedule Set Member

The following is an example of POST request that can be used to create a new schedule set member:

```
POST
https://<connection-server>/vmrest/schedulesets/<scheduleset-objectid>/schedulesetmembers
```

Request Body for a Non-Holiday Schedule:

```
<ScheduleSetMember>
  <ScheduleSetObjectId>11a4f6b1-c926-4404-9bba-964ebb3075c3</ScheduleSetObjectId>
  <ScheduleObjectId>4ac392b8-e276-46a1-978a-9b648c2c785b</ScheduleObjectId>
  <Exclude>>false</Exclude>
</ScheduleSetMember>
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

```
<pre>
Response Code: 201
/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/2008f07d-4265-4570-ab6f-362228dd8180
```



Note A schedule set can have at most 1 schedule marked as included, and that schedule must not be a holiday schedule. A schedule set can also have at most 1 schedule marked as excluded, and that schedule must be a holiday schedule.

JSON Example for a non-holiday schedule

To create a new schedule set member, do the following:

```
POST
https://<connection-server>/vmrest/schedulesets/<scheduleset-objectid>/schedulesetmembers
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

```
{
  "ScheduleSetObjectId": "11a4f6b1-c926-4404-9bba-964ebb3075c3",
  "ScheduleObjectId": "4ac392b8-e276-46a1-978a-9b648c2c785b",
  "Exclude": "false"
}
```

The following is the response from the above *POST* request and the actual response will depend upon the information given by you:

<pre>

Response Code: 201

/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/2008f07d-4265-4570-ab6f-362228dd8180

Request Body for a Holiday Schedule:

```
<ScheduleSetMember>
  <ScheduleSetObjectId>11a4f6b1-c926-4404-9bba-964ebb3075c3</ScheduleSetObjectId>
  <ScheduleObjectId>4ac392b8-e276-46a1-978a-9b648c2c785b</ScheduleObjectId>
  <Exclude>true</Exclude>
</ScheduleSetMember>
```

Response Code: 201

/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/2008f07d-4265-4570-ab6f-362228dd8180

JSON Example to create Schedule set member which is a Holiday Schedule:

```
POST https://<connection-ip>/vmrest/schedulesets/<scheduleset-objectid>/schedulesetmembers
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

```
{
  "ScheduleSetObjectId": "11a4f6b1-c926-4404-9bba-964ebb3075c3",
  "ScheduleObjectId": "4ac392b8-e276-46a1-978a-9b648c2c785b",
  "Exclude": "true"
}
```

Response Code: 201

/vmrest/schedulesets/c309414c-0c72-4d37-8a22-9ed7d9ee9b3e/schedulesetmembers/2008f07d-4265-4570-ab6f-362228dd8180

Updating the Schedule Set Members

The following is an example of the PUT request that can be used to modify the schedule set members where only description field can be updated:

```
PUT
https://<connection-server>/vmrest/schedulesets/<schedulesetobjectid>/schedulesetmembers/<schedulesetmember-objectid>
```

Request Body

```
<ScheduleSetMember>
  <ScheduleSetObjectId>11a4f6b1-c926-4404-9bba-964ebb3075c3</ScheduleSetObjectId>
  <ScheduleObjectId>f4e064d5-e21e-4234-a157-91554fd657e5</ScheduleObjectId>
  <Exclude>true</Exclude>
</ScheduleSetMember>
```

Response Code: 204

JSON Example

To update the schedule set member, do the following:

```
PUT
https://<connection-server>/vmrest/schedulesets/<schedulesetobjectid>/schedulesetmembers/<schedulesetmember-objectid>
Accept: application/json
Content-Type: application/json
Connection: keep-alive
```

Request Body

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

```
Response Code: 204
```

Deleting a Schedule Set Member

To delete an existing schedule set member, an administrator makes a DELETE to the schedule set members resource, specifying the object ID of the schedule set member they wish to delete in the URI:

```
DELETE
https://<connection-server>/vmrest/schedulesets/<schedulesetobjectid>/schedulesetmembers/<schedulesetmember-objectid>
```

```
Response Code: 204
```

JSON Example to delete an existing ScheduleSet Member:

```
DELETE
https://<connection-ip>/vmrest/schedulesets/<schedulesetobjectid>/schedulesetmembers/<schedulesetmember-objectid>
Accept: application/json
Connection: keep-alive
```

```
Response Code: 204
```

Explanation of Data Fields

| Parameter | Data Type | Operation | Comments |
|---------------------|-----------|------------|---|
| ScheduleSetObjectId | String | Read Only | The unique identifier of the ScheduleSet object to which the schedule belongs. |
| ScheduleSetURI | String | Read Only | URI of the ScheduleSet |
| ScheduleObjectId | String | Read Only | The unique identifier of the Schedule object that is a member of the schedule set |
| ScheduleURI | String | Read Only | URI of the Schedule |
| Exclude | Boolean | Read/Write | A flag indicating whether the schedule is to be included or excluded from the schedule set.

Default value is false |



CHAPTER 47

Cisco Unity Connection Provisioning Interface (CUPI) API for SMTP Configuration

Cisco Unity Connection 14SU2 and later, supports secure SMTP client communication over port 25 and 587 using authentication support. Administrator can use this API to update or fetch the SMTP configuration. Unity Connection can act as both server or client depending upon the requirement.

- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- SMTP Server Configuration, on page 747](#)
- [Cisco Unity Connection Provisioning Interface \(CUPI\) API -- SMTP Client Configuration, on page 752](#)

Cisco Unity Connection Provisioning Interface (CUPI) API -- SMTP Server Configuration

Administrator can configure port 25 or port 587 for inbound SMTP communications over STARTTLS.

Listing SMTP Server Configuration

The request can be used to fetch the SMTP server side configuration present currently on the system.

```
GET https://<connection-server>/vmrest/smtpserver/serverconfigs
```

The following is the response from the above *GET* request and the actual response will depend upon the current SMTP server configuration.

```
<SmtpServerConfiguration>
  <Port>587</Port>
  <domainName>ucbu-aricent-vm234.cisco.com</domainName>
  <maxNumberConnections>20</maxNumberConnections>
  <smtpClientThreads>2</smtpClientThreads>
  <maxMessageSizeKb>10000</maxMessageSizeKb>
  <maxNumberMessagesSession>10</maxNumberMessagesSession>
  <maxNumberRecipients>15000</maxNumberRecipients>
  <retryDeliveryTimeoutMin>240</retryDeliveryTimeoutMin>
  <allowConnectionsFromUntrustedIpAddresses>true</allowConnectionsFromUntrustedIpAddresses>

  <requireAuthenticationFromUntrustedIpAddresses>true</requireAuthenticationFromUntrustedIpAddresses>

  <requireTlsFromUntrustedIpAddresses>1</requireTlsFromUntrustedIpAddresses>
</SmtpServerConfiguration>
```

Response Code: 200

JSON Example

```
GET https://<connection-server>/vmrest/smtpserver/serverconfigs
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the current SMTP server configuration:

```
{
  "Port": "587",
  "domainName": "ucbu-aricent-vm234.cisco.com",
  "maxNumberConnections": "20",
  "smtpClientThreads": "2",
  "maxMessageSizeKb": "10000",
  "maxNumberMessagesSession": "10",
  "maxNumberRecipients": "15000",
  "retryDeliveryTimeoutMin": "240",
  "allowConnectionsFromUntrustedIpAddresses": "true",
  "requireAuthenticationFromUntrustedIpAddresses": "true",
  "requireTlsFromUntrustedIpAddresses": "1"
}
```

Response Code: 200

Updating SMTP Server Configuration

The following is an example of the PUT request that update the configuration of SMTP Server.

```
PUT https://<connection-server>/vmrest/smtpserver/serverconfigs
```

```
<SmtpServerConfiguration>
  <Port>25</Port>
  <domainName>ucbu-aricent-vm234.cisco.com</domainName>
  <maxNumberConnections>20</maxNumberConnections>
  <smtpClientThreads>2</smtpClientThreads>
  <maxMessageSizeKb>10000</maxMessageSizeKb>
  <maxNumberMessagesSession>10</maxNumberMessagesSession>
  <maxNumberRecipients>15000</maxNumberRecipients>
```

```

    <retryDeliveryTimeoutMin>240</retryDeliveryTimeoutMin>
    <allowConnectionsFromUntrustedIpAddresses>true</allowConnectionsFromUntrustedIpAddresses>

    <requireAuthenticationFromUntrustedIpAddresses>true</requireAuthenticationFromUntrustedIpAddresses>

    <requireTlsFromUntrustedIpAddresses>1</requireTlsFromUntrustedIpAddresses>
  </SmtplibServerConfiguration>

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 200

JSON Example

```

PUT https://<connection-server>/vmrest/smtpserver/serverconfigs
Accept: application/json
Connection: keep_alive
Request Body: {
  "Port": "25",
  "domainName": "ucbu-aricent-vm234.cisco.com",
  "maxNumberConnections": "20",
  "smtpClientThreads": "2",
  "maxMessageSizeKb": "10000",
  "maxNumberMessagesSession": "10",
  "maxNumberRecipients": "15000",
  "retryDeliveryTimeoutMin": "240",
  "allowConnectionsFromUntrustedIpAddresses": "true",
  "requireAuthenticationFromUntrustedIpAddresses": "true",
  "requireTlsFromUntrustedIpAddresses": "1"
}

```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 200

Explanation of Data Fields

The following table explain the data fields:

| Parameter | Data Type | Operations | Comments |
|------------|-----------|------------|---|
| Port | Integer | Read/Write | Specifies the port that Unity Connection uses to support secure/non-secure SMTP client communication. Possible values: <ul style="list-style-type: none"> • 25 • 587 Default Value : 25 |
| DomainName | String | Read/Write | Specifies the domain name that Unity Connection uses to route messages between digitally networked Unity Connection servers and to construct the SMTP address of the sender on outgoing SMTP messages. |

| Parameter | Data Type | Operations | Comments |
|--------------------------|-----------|------------|---|
| MaxNumberConnections | Integer | Read/Write | Specifies the maximum number of SMTP clients that can be connected to the Unity Connection SMTP server at one time for sending messages.

Possible values can be between 0 - 50.

Default setting: 20 Unity Connections. |
| SmtplibClientThreads | Integer | Read/Write | Specifies the maximum number of outgoing connections that the Unity Connection SMTP server can have open with other SMTP servers at one time.

Possible values can be between 0 - 10.

Default setting: 2 connections. |
| MaxMessageSizeKb | Integer | Read/Write | Specifies the maximum size of message that clients can send to Unity Connection using SMTP.

Possible values can be between 0 - 50000 Kilobytes.

Default setting: 10,000 kilobytes (approximately 10 megabytes). |
| MaxNumberMessagesSession | Integer | Read/Write | Specifies the maximum number of messages that a client can send to Unity Connection in a single SMTP session.

Possible values can be between 0 - 100.

Default setting: 10 messages. |
| MaxNumberRecipients | Integer | Read/Write | Specifies the maximum number of recipients allowed for a single message that is sent by a client to Unity Connection using SMTP.

Possible values can be between 0 - 50000

Default setting: 15,000 recipients. |
| RetryDeliveryTimeoutMin | Integer | Read/Write | Specifies the time interval in minutes to have Unity Connection periodically retries the delivery of SMTP messages that have failed because of issues that may be temporary (for example, the remote SMTP server is not responding). If the timeout has passed without success, Unity Connection sends a non-delivery receipt to the sender.

Default setting: 0 minutes (Unity Connection immediately sends a non-delivery receipt to the sender and does not retry delivery of failed SMTP messages). |

| Parameter | Data Type | Operations | Comments |
|---|-----------|------------|--|
| AllowConnectionsFromUntrustedIPAddresses | Boolean | Read/Write | <p>A flag indicating whether the Unity Connection enable or disable the SMTP connections from clients or servers whose IP addresses do not match any address pattern that is configured on the IP Address Access List.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false • true <p>Default setting: false</p> |
| RequireAuthFromUntrustedIPAddresses | Boolean | Read/Write | <p>A flag indicating whether the Unity Connection requires authentication for SMTP connections from clients or servers whose IP addresses do not match any address pattern that is configured on the IP Address Access List.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false : Unity Connection allows clients to connect without authenticating. • true : Unity Connection require authentication from clients for connections. <p>This option is unavailable when the Allow Connections from Untrusted IP Addresses field is disabled.</p> |
| RequireTlsFromUntrustedIPAddresses | Integer | Read/Write | <p>Specifies how Unity Connection handles Transport Layer Security (TLS) with a client or server that attempts to connect from an IP address that does not match any address pattern configured on the IP Address Access List.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • 0 : Unity Connection does not offer TLS as an option for SMTP sessions initiated by clients or servers with untrusted IP addresses. • 1 : Clients or servers connecting from untrusted IP addresses must use TLS to initiate SMTP sessions with the Unity Connection server. • 2 : Clients or servers connecting from untrusted IP addresses can use TLS to initiate SMTP sessions with the Unity Connection server, but are not required to do so. <p>This option is unavailable when the Allow Connections from Untrusted IP Addresses field is disabled.</p> |

Cisco Unity Connection Provisioning Interface (CUPI) API -- SMTP Client Configuration

Administrator can configure port 25 or port 587 for outbound SMTP communications over STARTTLS.

Listing SMTP Client Configuration

The request can be used to fetch the SMTP client side configuration present currently on the system.

```
GET https://<connection-server>/vmrest/smtpclient/clientconfigs
```

The following is the response from the above *GET* request and the actual response will depend upon the the current SMTP client configuration:

```
<SmtpClientConfiguration>
  <smtpSmartHost>outbound.cisco.com</smtpSmartHost>
  <isClientSecure>true</isClientSecure>
  <smtpPort>25</smtpPort>
  <isAuthEnabled>true</isAuthEnabled>
  <smtpUsername>Admin</smtpUsername>
  <smtpPassword></smtpPassword>
</SmtpClientConfiguration>
```

Response Code: 200

JSON Example

```
GET https://<connection-server>/vmrest/smtpclient/clientconfigs
Accept: application/json
Connection: keep_alive
```

The following is the response from the above *GET* request and the actual response will depend upon the current SMTP client configuration.

```
{
  "smtpSmartHost": "outbound.cisco.com",
  "isClientSecure": "true",
  "smtpPort": "25",
  "isAuthEnabled": "true",
  "smtpUsername": "Admin",
  "smtpPassword": "",
}
```

Response Code: 200

Updating SMTP Client Configuration

The following is an example of the PUT request that update the configuration of SMTP Client.

```
PUT https://<connection-server>/vmrest/smtpclient/clientconfigs
```



```
<SmtpClientConfiguration>
  <smtpSmartHost>outbound.cisco.com</smtpSmartHost>
  <isClientSecure>true</isClientSecure>
  <smtpPort>25</smtpPort>
  <isAuthEnabled>true</isAuthEnabled>
  <smtpUsername>Admin</smtpUsername>
  <smtpPassword>smtp</smtpPassword>
</SmtpClientConfiguration>
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

JSON Example

```
PUT https://<connection-server>/vmrest/smtpclient/clientconfigs
Accept: application/json
Connection: keep_alive
Request Body:{
  "smtpSmartHost": "outbound.cisco.com",
  "isClientSecure": "true",
  "smtpPort": "587",
  "isAuthEnabled": "false",
  "smtpUsername" : "Admin"
  "smtpPassword" : "smtp"
}
```

The following is the response from the above *PUT* request and the actual response will depend upon the information given by you:

Response Code: 204

Explanation of Data Fields

The following table explain the data fields:

| Parameter | Data Type | Operations | Comments |
|---------------|-----------|------------|---|
| SMTPSmartHost | String | Read/Write | Specifies the IP address or fully qualified domain name of the SMTP smart host through which Cisco Unity Connection relays SMTP messages. |

| Parameter | Data Type | Operations | Comments |
|----------------|-----------|------------|---|
| IsClientSecure | Boolean | Read/Write | <p>A flag indicating whether the SMTP communication on Unity Connection is secure or non secure.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false • true <p>Default setting: false</p> <p>Note If IsClientSecure checkbox is not checked, Unity Connection will initiate request towards Smart Host over port 25 without using STARTTLS. It is non secure mode of communication. If it is checked, then Unity Connection will initiate request towards Smart Host over port 587 using STARTTLS. It is secure mode of communication.</p> |
| SMTPPort | Integer | Read/Write | <p>Unity Connection will communicate to external SMTP servers on below ports.</p> <ul style="list-style-type: none"> • 25 • 587 |
| isAuthEnabled | Boolean | Read/Write | <p>A flag indicating whether the SMTP communication is password protected or not.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • false • true <p>Default setting: false</p> |
| smtpUsername | String | Read/Write | Username of Smart Host. |
| smtpPassword | String | Only Write | Password of Smart Host. |



CHAPTER 48

Cisco Unity Connection Provisioning Interface (CUPI) API for Telephony Integrations

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Cisco Unity Connection Provisioning Interface (CUPI) API -- Phone Systems

About Phone Systems

This page contains information on how to use the API to create, list, modify, and delete Phone Systems. The phone system pages in Cisco Unity Connection Administration identify the phone systems that Cisco Unity Connection integrates with. In Connection Administration, a phone system has one or more port groups, which in turn have voice messaging ports. You can manage the phone systems to meet the changing needs of your system.

Listing Phone Systems

Example 1

The following is an example of the GET request that lists the Phone Systems:

```
https://<connection_server>/vmrest/phonesystems
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<PhoneSystems total="1">
  <PhoneSystem>
    <URI>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a</URI>
    <ObjectId>aa6d3f45-ccdf-4fa2-8170-e5c94b51813a</ObjectId>
    <DisplayName>PhoneSystem</DisplayName>
    <MwiAlwaysUpdate>>false</MwiAlwaysUpdate>
    <MwiPortMemory>>false</MwiPortMemory>
    <CallLoopSupervisedTransferDetect>>false</CallLoopSupervisedTransferDetect>
    <CallLoopForwardNotificationDetect>>false</CallLoopForwardNotificationDetect>
    <CallLoopDTMF>A</CallLoopDTMF>
    <CallLoopGuardTimeMs>2500</CallLoopGuardTimeMs>
    <PortCount>0</PortCount>
    <EnablePhoneApplications>>false</EnablePhoneApplications>
    <DefaultTRaPSwitch>>true</DefaultTRaPSwitch>
    <MwiForceOff>>false</MwiForceOff>
    <RestrictDialUnconditional>>false</RestrictDialUnconditional>
    <RestrictDialScheduled>>false</RestrictDialScheduled>
    <RestrictDialStartTime>0</RestrictDialStartTime>
    <RestrictDialEndTime>0</RestrictDialEndTime>
    <CallLoopExtensionDetect>>true</CallLoopExtensionDetect>

    <AXLServerURI>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a/axlservers</AXLServerURI>

    <PhoneSystemAssociationURI>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a/phonesystemassociations</PhoneSystemAssociationURI>

  </PhoneSystem>
</PhoneSystems>

```

Response Code: 200

Example 2

The following is an example of the GET request that lists a particular phone system represented by <phonesystemId>:

```
https://<connection_server>/vmrest/phonesystem/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<PhoneSystem>
  <URI>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a</URI>
  <ObjectId>aa6d3f45-ccdf-4fa2-8170-e5c94b51813a</ObjectId>
  <DisplayName>PhoneSystem</DisplayName>
  <MwiAlwaysUpdate>>false</MwiAlwaysUpdate>
  <MwiPortMemory>>false</MwiPortMemory>
  <CallLoopSupervisedTransferDetect>>false</CallLoopSupervisedTransferDetect>
  <CallLoopForwardNotificationDetect>>false</CallLoopForwardNotificationDetect>
  <CallLoopDTMF>A</CallLoopDTMF>
  <CallLoopGuardTimeMs>2500</CallLoopGuardTimeMs>
  <PortCount>0</PortCount>
  <EnablePhoneApplications>>false</EnablePhoneApplications>
  <DefaultTRaPSwitch>>true</DefaultTRaPSwitch>
  <MwiForceOff>>false</MwiForceOff>
  <RestrictDialUnconditional>>false</RestrictDialUnconditional>
  <RestrictDialScheduled>>false</RestrictDialScheduled>
  <RestrictDialStartTime>0</RestrictDialStartTime>
  <RestrictDialEndTime>0</RestrictDialEndTime>
  <CallLoopExtensionDetect>>true</CallLoopExtensionDetect>

  <AXLServerURI>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a/axlservers</AXLServerURI>

  <PhoneSystemAssociationID>/vmrest/phonesystems/aa6d3f45-ccdf-4fa2-8170-e5c94b51813a/phonesystemassociations</PhoneSystemAssociationID>
</PhoneSystem>

```

Response Code: 200

Adding a New Phone System

The following is an example of the POST request that adds the Phone Systems:

```
https://<connection_server>/vmrest/phonesystems
```

The actual response will depend upon the information given by you.

```

<PhoneSystem>
  <DisplayName>PhoneSystem1</DisplayName>
</PhoneSystem>

```

Response Code: 201



Note To create a phone system, only the <DisplayName> parameter is mandatory.

Modifying a Phone System

The following is an example of the PUT request that modifies the Phone System as represented by <phonesystemid>:

```
https://<Connection_server>/vmrest/phonesystem/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:.

```

<PhoneSystem>
  <MwiAlwaysUpdate>false</MwiAlwaysUpdate>
  <MwiPortMemory>false</MwiPortMemory>
  <CallLoopSupervisedTransferDetect>false</CallLoopSupervisedTransferDetect>
  <CallLoopForwardNotificationDetect>false</CallLoopForwardNotificationDetect>
  <CallLoopDTMF>A</CallLoopDTMF>
  <CallLoopGuardTimeMs>2500</CallLoopGuardTimeMs>
  <PortCount>2</PortCount>
</PhoneSystem>

```

```
Response Code: 204
```

You can also update the following in a phone system:

- AXL Servers
- Phone System Associations

AXL Servers

This page contains information on how to use the API to create, list, modify, and delete Phone Systems AXL Servers. AXL servers are supported only for Cisco Unified Communications Manager phone systems and are needed when Cisco Unity Connection must have access to the Cisco Unified CM database for importing Cisco Unified CM users and for changing certain phone settings for users of Connection personal call transfer rules.

With Unity Connection 11.5(1) and later, a new field, **IsPinSyncEnabled** is introduced in this API, which enables synchronization of phone PIN for Cisco Unity Connection with the PIN for Cisco Unified CM. By default, the value of this field is set to false. To enable PIN synchronization, set the value of the field to true.

Note: The **IsPinSyncEnabled** field is applicable only for primary AXL server.

Listing AXL Servers

The following is an example of the GET request that lists the AXL Servers:

```
https://<connection_server>/vmrest/phonesystems/<objectId>/axlservers
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<AXLServers total="2">
<AXLServer>
<URI>
/vmrest/phonesystems/a560c009-e802-466f-b42d-4c64e8ea8260/axlservers/59daf270-3e88-4d81-8dae-a3b0a5fbeb1
</URI>
<ObjectId>59daf270-3e88-4d81-8dae-a3b0a5fbeb1</ObjectId>
<MediaRemoteServiceEnum>103</MediaRemoteServiceEnum>
<HostOrIPAddress>0:0:0:0:1</HostOrIPAddress>
<Port>443</Port>
<TlsPort>443</TlsPort>
<Precedence>1</Precedence>
<MediaSwitchObjectId>a560c009-e802-466f-b42d-4c64e8ea8260</MediaSwitchObjectId>
<PhoneSystemURI>
/vmrest/phonesystems/a560c009-e802-466f-b42d-4c64e8ea8260
</PhoneSystemURI>
<SkinnyStateMachineEnum>10</SkinnyStateMachineEnum>
<IsPinSyncEnabled>>false</IsPinSyncEnabled>
<CcmAXLUser>admin</CcmAXLUser>
<CcmAXLPassword/>
<CcmVersion>5</CcmVersion>
</AXLServer>
<AXLServer>
<URI>
/vmrest/phonesystems/a560c009-e802-466f-b42d-4c64e8ea8260/axlservers/59daf270-3e88-4d81-8dae-a3b0a5fbeb1
</URI>
<ObjectId>59daf270-3e88-4d81-8dae-a3b0a5fbeb1</ObjectId>
<MediaRemoteServiceEnum>103</MediaRemoteServiceEnum>
<HostOrIPAddress>0.0.0.1</HostOrIPAddress>
<Port>443</Port>
<TlsPort>443</TlsPort>
<Precedence>1</Precedence>
<MediaSwitchObjectId>a560c009-e802-466f-b42d-4c64e8ea8260</MediaSwitchObjectId>
<PhoneSystemURI>
/vmrest/phonesystems/a560c009-e802-466f-b42d-4c64e8ea8260
</PhoneSystemURI>
<SkinnyStateMachineEnum>10</SkinnyStateMachineEnum>
<IsPinSyncEnabled>>false</IsPinSyncEnabled>
<CcmAXLUser>admin</CcmAXLUser>
<CcmAXLPassword/>
<CcmVersion>5</CcmVersion>
</AXLServer>
</AXLServers>

```

Response Code: 200

Adding New AXL Server

The following is an example of the POST request that adds the AXL servers in the Phone Systems:

```
https://<connection_server>/vmrest/phonesystems/<objectId>/axlservers
```

The actual response will depend upon the information given by you.

Modifying AXL Server

```
<AXLServer>
  <MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
  <MediaRemoteServiceEnum>103</MediaRemoteServiceEnum>
  <HostOrIPAddress>10.105.255.1</HostOrIPAddress>
  <Port>2001</Port>
  <TlsPort>2000</TlsPort>
  <Precedence>1</Precedence>
  <CcmAXLUser>abcd</CcmAXLUser>
  <CcmAXLPassword/>
  <CcmVersion>5</CcmVersion>
  <IsPinSyncEnabled>>false</IsPinSyncEnabled>
</AXLServer>
```

Response Code: 201

Modifying AXL Server

The following is an example of the PUT request that modifies the AXL Server as represented by <axlserverid>:

```
https://<connection_server>/vmrest/phonesystems/<objectId>/axlservers/<objectId>
```

The following is an example of the response from the above *PUT* request and the actual response will depend upon the information given by you:.

```
<AXLServer>
  <MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
  <CcmAXLUser>CiscoCCM</CcmAXLUser>
  <CcmAXLPassword/>
  <CcmVersion>5</CcmVersion>
</AXLServer>
```

Response Code: 204

Deleting AXL Server

The following is an example of the DELETE request that deletes an AXL Server as represented by <axlserverid>:

```
https://<connection_server>/vmrest/phonesystems/<objectId>/axlservers/<objectId>
```

The input for the PUT request will be. The output for this request returns the successful response code.

Response Code: 204

Phone System Associations

This page contains information on how to use the API to list Phone Systems Associations. Phone Systems Associations are required to view a list of all of the Cisco Unity Connection users who are associated with your phone system. Listing Phone System Associations

Listing Phone Systems Associations

The following is an example of the GET request that lists the Phone Systems Associations:

```
https://<connection_server>/vmrest/phonesystems/<objectId>/phonesystemassociations
```


The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<PhoneSystemAssociations total="2">
  <PhoneSystemAssociation>

<URL>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b/phonesystemassociations/219ce340-a3a5-428c-8dc6-4776690b69ee</URL>

  <Alias>undeliverablemessagesmailbox</Alias>
  <DisplayName>Papa Recommended Web Application Authentication Rule</DisplayName>
  <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
  <MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b</PhoneSystemURI>

  <numNotificationDevice>4</numNotificationDevice>
  <numNotificationMWI>1</numNotificationMWI>
  <numPrimaryCallHandler>1</numPrimaryCallHandler>
  <ObjectId>219ce340-a3a5-428c-8dc6-4776690b69ee</ObjectId>
</PhoneSystemAssociation>
<PhoneSystemAssociation>

<URL>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b/phonesystemassociations/6b455973-13d1-4b10-871e-1d1d55f160d2</URL>

  <Alias>operator</Alias>
  <DisplayName>Operator</DisplayName>
  <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
  <MediaSwitchObjectId>24f1171f-27b3-4ad3-a94c-66d1fb2e448b</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/24f1171f-27b3-4ad3-a94c-66d1fb2e448b</PhoneSystemURI>

  <numNotificationDevice>4</numNotificationDevice>
  <numNotificationMWI>1</numNotificationMWI>
  <numPrimaryCallHandler>1</numPrimaryCallHandler>
  <ObjectId>6b455973-13d1-4b10-871e-1d1d55f160d2</ObjectId>
</PhoneSystemAssociation>
</PhoneSystemAssociations>>
```

Response Code: 200

Deleting a Phone System

The following is an example of the DELETE request that deletes Phone System as represented by <phonesystemid>:

```
https://<server-ip>/vmrest/phonesystems/<objectId>
```

The input for the PUT request will be. The output for this request returns the successful response code.

Response Code: 204

Cisco Unity Connection Provisioning Interface (CUPI) API -- Port Groups and Ports

About Port Groups and Ports

This page contains information on how to use the API to:

- List, view, and update port groups
- List and view ports



Note Port groups cannot be created or deleted via the API, and only two fields (MwiOnCode & MwiOffCode) can be updated by using the PUT method.

Listing and Viewing

The following is an example of a GET that lists all port groups:

```
GET http://<connection-server>/vmrest/portgroups
```

The following is the response from the above GET request:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<PortGroups total="1">
  <PortGroup>
    <URI>/vmrest/portgroups/035853ce-f4e6-4de2-bda2-84acf827a555</URI>

    <MediaPortGroupTemplateObjectId>90dd306f-b8af-46b6-8289-f13437cc1e5e</MediaPortGroupTemplateObjectId>

    <MediaSwitchObjectId>05186ad4-572c-48d1-aaa6-ac22280c8702</MediaSwitchObjectId>

    <PhoneSystemURI>/vmrest/phonesystems/05186ad4-572c-48d1-aaa6-ac22280c8702</PhoneSystemURI>

    <TelephonyIntegrationMethodEnum>1</TelephonyIntegrationMethodEnum>
    <EnableMWI>true</EnableMWI>
    <DisplayName>PhoneSystem-1</DisplayName>
    <CcmDoAutoFailback>true</CcmDoAutoFailback>
    <MwiOnCode/>
    <MwiOffCode/>
    <MwiRetryCountOnSuccess>0</MwiRetryCountOnSuccess>
    <MwiRetryIntervalOnSuccessMs>5</MwiRetryIntervalOnSuccessMs>
    <ObjectId>035853ce-f4e6-4de2-bda2-84acf827a555</ObjectId>
    <SipTransportProtocolEnum>10</SipTransportProtocolEnum>
    <SipRegisterWithProxyServer>>false</SipRegisterWithProxyServer>
    <SipDoAuthenticate>>false</SipDoAuthenticate>
    <SkinnyDevicePrefix>test-VI</SkinnyDevicePrefix>
    <MwiMinRequestIntervalMs>0</MwiMinRequestIntervalMs>
    <MwiMaxConcurrentRequests>0</MwiMaxConcurrentRequests>
    <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
    <PortCount>2</PortCount>
    <SipDoSRTP>true</SipDoSRTP>
    <SipTLSModeEnum>11</SipTLSModeEnum>
    <ResetStatusEnum>0</ResetStatusEnum>
  </PortGroup>
</PortGroups>

```

Sorting can be done on columns that are indexed, such as display name. To retrieve a sorted list of all port groups, add the following query parameter: `sort=(column [asc|desc])`

For example, to retrieve a list of all port groups sorted by display name in descending order:

```
GET http://<connection-server>/vmrest/portgroups?sort=(DisplayName%20desc)
```

To retrieve a specific port group by its object ID:

```
GET http://<connection-server>/vmrest/portgroups/<objectid>
```

Similarly, to retrieve a list of all ports, use:

```
GET http://<connection-server>/vmrest/ports
```

The following is the response from the above GET request:

```

200
OK
<?xml version="1.0" encoding="UTF-8"?>
<Ports total="2">
  <Port>
    <URI>/vmrest/ports/2806ecdc-0a3d-43f3-a2c8-93d786fa506b</URI>
    <ObjectId>2806ecdc-0a3d-43f3-a2c8-93d786fa506b</ObjectId>
    <MediaPortGroupObjectId>035853ce-f4e6-4de2-bda2-84acf827a555</MediaPortGroupObjectId>
    <PortGroupURI>/vmrest/portgroups/035853ce-f4e6-4de2-bda2-84acf827a555</PortGroupURI>
    <TelephonyIntegrationMethodEnum>1</TelephonyIntegrationMethodEnum>
    <PortNumInGroup>1</PortNumInGroup>
    <SkinnySecurityModeEnum>0</SkinnySecurityModeEnum>
    <SkinnyDoMediaEncryption>>false</SkinnyDoMediaEncryption>
    <VmsServerObjectId>a7ba129e-6420-4d44-b060-93b638ba866a</VmsServerObjectId>
    <HuntOrder>0</HuntOrder>
    <DisplayName>PhoneSystem-1-001</DisplayName>
    <SkinnyDeviceName>test-VI1</SkinnyDeviceName>
    <PingPortNumber>1</PingPortNumber>
    <CapAnswer>>true</CapAnswer>
    <CapNotification>>true</CapNotification>
    <CapMWI>>true</CapMWI>
    <CapEnabled>>true</CapEnabled>
    <CapDeliverAmis>>false</CapDeliverAmis>
    <CapTrapConnection>>true</CapTrapConnection>
    <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
    <MediaSwitchObjectId>05186ad4-572c-48d1-aaa6-ac22280c8702</MediaSwitchObjectId>
  </Port>
  <PhoneSystemURI>/vmrest/phonesystems/05186ad4-572c-48d1-aaa6-ac22280c8702</PhoneSystemURI>
  <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
  <MediaPortGroupEnableMWI>>true</MediaPortGroupEnableMWI>
  <MediaPortGroupMwiReqPortSpecific>true</MediaPortGroupMwiReqPortSpecific>
  <SipSendPort>0</SipSendPort>
  <VmsServerName>cuc-install-55</VmsServerName>
  </Port>
  <Port>
    <URI>/vmrest/ports/f87ad180-7d06-48c9-b9bd-e6b5cd2311bc</URI>
    <ObjectId>f87ad180-7d06-48c9-b9bd-e6b5cd2311bc</ObjectId>
    <MediaPortGroupObjectId>035853ce-f4e6-4de2-bda2-84acf827a555</MediaPortGroupObjectId>
    <PortGroupURI>/vmrest/portgroups/035853ce-f4e6-4de2-bda2-84acf827a555</PortGroupURI>
    <TelephonyIntegrationMethodEnum>1</TelephonyIntegrationMethodEnum>
    <PortNumInGroup>2</PortNumInGroup>
    <SkinnySecurityModeEnum>0</SkinnySecurityModeEnum>
    <SkinnyDoMediaEncryption>>false</SkinnyDoMediaEncryption>
    <VmsServerObjectId>a7ba129e-6420-4d44-b060-93b638ba866a</VmsServerObjectId>
    <HuntOrder>0</HuntOrder>
    <DisplayName>PhoneSystem-1-002</DisplayName>
    <SkinnyDeviceName>test-VI2</SkinnyDeviceName>
    <PingPortNumber>2</PingPortNumber>
    <CapAnswer>>true</CapAnswer>
    <CapNotification>true</CapNotification>
    <CapMWI>true</CapMWI>
    <CapEnabled>true</CapEnabled>
    <CapDeliverAmis>>false</CapDeliverAmis>
    <CapTrapConnection>true</CapTrapConnection>
    <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
    <MediaSwitchObjectId>05186ad4-572c-48d1-aaa6-ac22280c8702</MediaSwitchObjectId>
  </Port>
  <PhoneSystemURI>/vmrest/phonesystems/05186ad4-572c-48d1-aaa6-ac22280c8702</PhoneSystemURI>
  <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
  <MediaPortGroupEnableMWI>true</MediaPortGroupEnableMWI>
  <MediaPortGroupMwiReqPortSpecific>true</MediaPortGroupMwiReqPortSpecific>
  <SipSendPort>0</SipSendPort>

```

```
<VmsServerName>cuc-install-55</VmsServerName>
</Port>
</Ports>
```

Finally, to retrieve a specific port by its object ID, use:

```
GET http://<connection-server>/vmrest/ports/<objectid>
```

Searching

To retrieve a list of port groups or ports that meet a specified search criteria, add the following query parameter to a GET: query=(column [is|startswith] value)

Note that the search column must either be an indexed column or contain boolean values.

For example, to find all port groups with a display name that starts with "PhoneSystem":

```
GET
http://<connection-server>/vmrest/portgroups?query=(displayname%20startswith%20PhoneSystem)
```

The next example finds all port groups with a EnableMwi that is set to 1 (i.e., enabled):

```
GET http://<connection-server>/vmrest/portgroups?query=(EnableMWI%20is%201)
```

Updating

Ports are read-only resources and cannot be updated. Port groups, however, contain two fields, MwiOnCode and MwiOffCode, that can be updated.

The following is an example of a PUT request that modifies these fields of an existing port group:

```
PUT https://<connection-server>/vmrest/portgroups/<objectid>

<PortGroup>
  <MwiOnCode>678</MwiOnCode>
  <MwiOffCode>876</MwiOffCode>
</PortGroup>
```

The following is the response from the above PUT request:

```
204
No Content
null
```

Cisco Unity Connection Provisioning Interface (CUPI) API -- Ports

About Ports

This page contains information on how to use the API to create, list, modify, and delete Ports. The voice messaging ports let Cisco Unity Connection receive calls (for example, to record a message) and let Connection make calls (for example to send message notifications or to set MWIs). Each voice messaging port can belong to only one port group. Port groups, when there are several, each have their own voice messaging ports. The total voice messaging ports belonging to all port groups must not exceed the maximum number of voice messaging ports that are enabled by the Connection license files.

Listing Ports

Example 1

The following is an example of the GET request that lists the Ports:

```
https://<connection_server>/vmrest/ports
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<Ports total="2">
  <Port>
    <URI>/vmrest/ports/ec664876-5879-4cff-a022-4929b37bd575</URI>
    <ObjectId>ec664876-5879-4cff-a022-4929b37bd575</ObjectId>
    <MediaPortGroupObjectId>1edf504a-e9a1-4876-bcfc-bb674da8e385</MediaPortGroupObjectId>
    <PortGroupURI>/vmrest/portgroups/1edf504a-e9a1-4876-bcfc-bb674da8e385</PortGroupURI>
    <TelephonyIntegrationMethodEnum>2</TelephonyIntegrationMethodEnum>
    <VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>
    <DisplayName>PhoneSystem-1-001</DisplayName>
    <CapAnswer>true</CapAnswer>
    <CapNotification>true</CapNotification>
    <CapMWI>true</CapMWI>
    <CapEnabled>true</CapEnabled>
    <CapTrapConnection>true</CapTrapConnection>
    <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
    <MediaSwitchObjectId>a8eb65f5-795b-41cd-98b1-934f6b987313</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/a8eb65f5-795b-41cd-98b1-934f6b987313</PhoneSystemURI>

    <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
    <VmsServerName>ucbu-aricent-vm413</VmsServerName>
  </Port>
  <Port>
    <URI>/vmrest/ports/761fa322-63ae-47d9-9fbf-b35142b11eef</URI>
    <ObjectId>761fa322-63ae-47d9-9fbf-b35142b11eef</ObjectId>
    <MediaPortGroupObjectId>1edf504a-e9a1-4876-bcfc-bb674da8e385</MediaPortGroupObjectId>
    <PortGroupURI>/vmrest/portgroups/1edf504a-e9a1-4876-bcfc-bb674da8e385</PortGroupURI>
    <TelephonyIntegrationMethodEnum>2</TelephonyIntegrationMethodEnum>
    <VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>
    <DisplayName>PhoneSystem-1-002</DisplayName>
    <CapAnswer>true</CapAnswer>
    <CapNotification>true</CapNotification>
    <CapMWI>true</CapMWI>
    <CapEnabled>true</CapEnabled>
    <CapTrapConnection>true</CapTrapConnection>
    <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
    <MediaSwitchObjectId>a8eb65f5-795b-41cd-98b1-934f6b987313</MediaSwitchObjectId>
    <PhoneSystemURI>/vmrest/phonesystems/a8eb65f5-795b-41cd-98b1-934f6b987313</PhoneSystemURI>

    <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
    <VmsServerName>ucbu-aricent-vm413</VmsServerName>
  </Port>

```

Response Code: 200

Example 2

The following is an example of the GET request that lists the Ports configuration:

```

<Port>
  <URI>/vmrest/ports/e4a48f12-d22b-438c-89eb-0b25f2f73d12</URI>
  <ObjectId>e4a48f12-d22b-438c-89eb-0b25f2f73d12</ObjectId>
  <MediaPortGroupObjectId>668e5869-7c16-48d6-8858-cd0e00fdd47c</MediaPortGroupObjectId>
  <PortGroupURI>/vmrest/portgroups/668e5869-7c16-48d6-8858-cd0e00fdd47c</PortGroupURI>
  <TelephonyIntegrationMethodEnum>2</TelephonyIntegrationMethodEnum>
  <VmsServerObjectId>d190d99e-e9e8-4d63-8c6c-9aca4956afff</VmsServerObjectId>
  <DisplayName>PhoneSystem-1-002</DisplayName>
  <CapAnswer>>true</CapAnswer>
  <CapNotification>>false</CapNotification>
  <CapMWI>>true</CapMWI>
  <CapEnabled>>true</CapEnabled>
  <CapTrapConnection>>true</CapTrapConnection>
  <MediaSwitchDisplayName>PhoneSystem</MediaSwitchDisplayName>
  <MediaSwitchObjectId>0d15753c-e1b4-4865-b00b-999a1ccf56ce</MediaSwitchObjectId>
  <PhoneSystemURI>/vmrest/phonesystems/0d15753c-e1b4-4865-b00b-999a1ccf56ce</PhoneSystemURI>

  <MediaPortGroupDisplayName>PhoneSystem-1</MediaPortGroupDisplayName>
  <VmsServerName>ucbu-aricent-vm413</VmsServerName>
</Port>

```

Adding Ports

This section contains information on how to add ports:

- Adding SCCP Ports
- Adding SIP Ports
- Adding PIMGTIMG Ports

Note: Before adding ports to port group, you need to know the id of the vmservers. The vmservers id is required as you need to mention the machine on which the ports need to be added.

The following is an example of the GET request that lists the vmservers:

```
https://<connection_server>/vmrest/vmsservers
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<VmsServers total="1">
  <VmsServer>
    <URI>/vmrest/vmsservers/574ca5d3-9041-4ff9-8e7d-727c32d80dab</URI>
    <ServerName>ucbu-aricent-vm413</ServerName>
    <VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>
  </VmsServer>
</VmsServers>

```



Note Make sure that you always add ports in even number and not in odd number.

Adding SCCP Ports

The following is an example of the POST request that lists the SCCP Ports:


```
https://<server_ip>/vmrest/ports
```

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
<Port>
  <MediaPortGroupObjectId>3c011243-e3e2-42f7-b658-d9fbc966f26</MediaPortGroupObjectId>

  <VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>
  <HuntOrder>0</HuntOrder>
  <CapAnswer>>true</CapAnswer>
  <CapNotification>>true</CapNotification>
  <NumberOfPorts>10</NumberOfPorts>
  <CapEnabled>>true</CapEnabled>
  <CapTrapConnection>>true</CapTrapConnection>
  <VmsServerName>ucbu-aricent-vm413</VmsServerName>
</Port>
```

```
RESPONSE Code: 201
```

Adding SIP Ports

The following is an example of the POST request that lists the SIP Ports:

```
https://<server_ip>/vmrest/ports
```

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
<Port>
  <MediaPortGroupObjectId>575f43be-f5d0-4af7-a689-06d968227ff7</MediaPortGroupObjectId>
  <VmsServerObjectId>574ca5d3-9041-4ff9-8e7d-727c32d80dab</VmsServerObjectId>
  <HuntOrder>0</HuntOrder>
  <DisplayName>PhoneSystem-Rohit-001</DisplayName>
  <CapAnswer>>true</CapAnswer>
  <CapNotification>>true</CapNotification>
  <NumberOfPorts>4</NumberOfPorts>
  <CapEnabled>>true</CapEnabled>
  <CapTrapConnection>>true</CapTrapConnection>
  <VmsServerName>ucbu-aricent-vm413</VmsServerName>
</Port>
```

```
RESPONSE Code: 201
```

Adding PIMGTIMG Ports

The following is an example of the POST request that create the PIMGTIMG Ports:

```
https://<server_ip>/vmrest/ports
```

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
<Port>
  <MediaPortGroupObjectId>2c24f5a9-fb22-47fe-a74b-da9c72d6e7f3</MediaPortGroupObjectId>
  <HuntOrder>0</HuntOrder>
  <DisplayName>PhoneSystem-Rohit-002</DisplayName>
  <CapAnswer>true</CapAnswer>
  <CapNotification>true</CapNotification>
  <NumberOfPorts>2</NumberOfPorts>
  <CapEnabled>true</CapEnabled>
  <CapTrapConnection>true</CapTrapConnection>
</Port>
```

```
RESPONSE Code: 201
```

The number of ports should be in even number and not in odd number.

Modifying Ports

This section contains information on how to modify Ports:

- Modifying SCCP Ports
- Modifying SIP Port

Modifying SCCP Ports

The following is an example of the PUT request that modifies the SCCP Ports:

```
https://<connection_server>/vmrest/ports/<sccpobjectId>
```

The actual response will depend upon the information given by you.

```
<Port>
  <CapAnswer>true</CapAnswer>
  <CapNotification>true</CapNotification>
  <CapMWI>true</CapMWI>
  <CapTrapConnection>true</CapTrapConnection>
  <HuntOrder>0</HuntOrder>
  <SkinnySecurityModeEnum>0</SkinnySecurityModeEnum>
  <CapEnabled>true</CapEnabled>
</Port>
```

```
RESPONSE Code: 204
```

Modifying SIP Ports

The following is an example of the PUT request that modifies the SIP Ports:

```
https://<connection_server>/vmrest/ports/<sipobjectId>
```

The actual response will depend upon the information given by you.

```
<Port>
  <CapAnswer>true</CapAnswer>
  <CapNotification>true</CapNotification>
  <CapMWI>true</CapMWI>
  <CapTrapConnection>true</CapTrapConnection>
  < HuntOrder>0</ HuntOrder>
  <SkinnySecurityModeEnum>0</SkinnySecurityModeEnum>
  <CapEnabled>true</CapEnabled>
</Port>
```

```
RESPONSE Code: 204
```

Deleting ports

The following is an example of the DELETE request that deletes a Port as represented by <portId>:

```
https://<connection_server>/vmrest/ports/<objectId>
```

The output for this request returns the successful response code.

```
RESPONSE Code: 204
```

Cisco Unity Connection Provisioning Interface (CUPI) API – SIP Certificates

About SIP Certificates

This section contains information on how to list, modify, and delete SIP Certificates. The SIP certificate is used only by SIP trunk integrations with Cisco Unified CM 7.0 and later, and is required for authentication of the Cisco Unity Connection voice messaging ports.

Listing SIP Certificates

Example 1

The following is an example of the GET request that lists the SIP Certificates:

```
https://<connection_server>/vmrest/sipcertificates
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

Listing SIP Certificates

```

<SipCertificates total="1">
<SipCertificate>
  <URI>
    /vmrest/sipcertificates/c55ef2c3-2475-4505-9566-bcea04a6bb6e
  </URI>
  <ObjectId>c55ef2c3-2475-4505-9566-bcea04a6bb6e</ObjectId>
  <Certificate>
    -----BEGIN CERTIFICATE----- MIICVzCCAcCgAwIBAgIQmAlZbMuRhSQnNHI4sqpDjANBgkqhkiG9w0BAQUFADA6
    MTgwNgYDVQQDEy9DaXNjb1VuaXR5LWJ1Mjc5NzZjLTZlNmUtNDE5Zi04NTNkLWlWz
    NzY0ODgxZGZiMDAeFw0xMjA3MTgxMzE1MTdaFw0xOTA3MTAwOTAwNThaMDSxGzAZ
    BgNVBAoTEkNpc2NvIFN5c3R1bXMgSW5jLjEOMAwGA1UECxFFRUNTQ1UxDDAKBgNV
    BAMTA2FhYTCBnzANBgkqhkiG9w0BAQEFAAOBjQAwYkCgYEAwslps1QPmb/mtfSD
    mHQ8tdnAPcIWriAqF283p7eQcGKdj9jji+YpDGmMFbaKG5NyPBzVCA2EXgNSrh2tX
    8PTTUDUOlFGeqrol0H3kT1viFPxNIVVfnn6fuq4A8thoH54+QGlnOWqfuR6+Y4EZ
    yT4yhygh5yhRIDW6PTHCyhUnMuUCAwEAAANdMFswHQYDVR0OBBYEFJ2AaJ5nN36z
    W6BaE5jvTEmAj54/MAsGA1UdDwQEAwIDqDAdBgNVHSUEFjAUBgggrBgEFBQcDAQYI
    KwYBBQUHAwIwDgYDVR0RBACwBYDYWFhMA0GCSqGSIb3DQEBBQUAA4GBAJffzqLV
    7pmQ+1HEBUO3dVnNdDr7V6izeh3KgoUHW7cEzUuM5wjsRLV7Mh8H9YvGyQP2sMMc
    iDRpJp4oNpnXZtwd8WEQCtoaxvDOR9TfMr5tX9NdkAQGvb8pvt3kPd5cv3s79/Zy
    DRhjKYIr7A0dKZEpnAFUHTThbTeNQiOibaGF -----END CERTIFICATE-----
  </Certificate>

  <PrivateKey>
    [REDACTED]

  </PrivateKey>
  <SubjectName>test</SubjectName>
  <DisplayName>test</DisplayName>
</SipCertificate>
</SipCertificates>

```

Response code: 200

Example 2

The following is an example of the GET request that lists a specified SIP Certificate:

```
https://<connection_server>/vmrest/sipcertificate/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```

<SipCertificate>
  <URI>
    /vmrest/sipcertificates/c55ef2c3-2475-4505-9566-bcea04a6bb6e
  </URI>
  <ObjectId>c55ef2c3-2475-4505-9566-bcea04a6bb6e</ObjectId>
  <Certificate>
    -----BEGIN CERTIFICATE----- MIICVzCCAcCgAwIBAgIQQmAlZbMuRhSQnNHI4sqpDjANBgkqhkiG9w0BAQUFADA6
    MTgwNgYDVQQDEy9DaXNjb1VuaXR5LWJlMjc5NzZjLTZlNmUtNDE5Zi04NTNkLWlWZ
    NzY0ODGxZGZiMDAeFw0xMjA3MTgxMzE1MTdaFw0xOTA3MTAwOTAwNThaMDSxGzAZ
    BgNVBAoTEkNpc2NvIFN5c3RlbXMgSW5jLjEOMAwGA1UECzMFRUNTQ1UxDDAKBgNV
    BAMTA2FhYTCBnzANBgkqhkiG9w0BAQEFAAOBjQAwYkCgYEAwslps1QPmb/mtfSD
    mHQ8tdnAPcIWriaqF283p7eQcGKdj9ji+YpDGMfbaKG5NypBzVCA2EXgNSrh2tX
    8PTTU0U0lfGeqro10H3kT1viFPxNIVVfnn6fuq4A8thoH54+QGlN0WqfuR6+Y4EZ
    yT4yhygh5yhRIDW6PTHcyUnMuUCAwEAAaNDMFswHQYDVR0OBBYEFJ2AaJ5nN36z
    W6BaE5jVTEmAj54/MASGA1UdDwQEAwIDqDAdBgNVHSUEFjAUBgggrBgEFBQcDAQYI
    KwYBBQUHAWIwDgYDVR0RBACwBYDYWFhMA0GCSqGSIb3DQEBBQUAA4GBAJffZqLV
    7pmQ+1HEBUO3dVnNdr7V6izeh3KgoUHW7cEzUuM5wjsRLV7Mh8H9YvGyQP2sMMc
    iDRpJp4oNpnXZtwd8WEQcToaXvDOR9TfMr5tX9NdkAQGvb8pvt3kPd5cv3s79/Zy
    DRhjKYIr7A0dKZEpnAFUHtTHbTeNQiOibaGF -----END CERTIFICATE-----
  </Certificate>
  <PrivateKey>
    [REDACTED]
  </PrivateKey>
  <SubjectName>test</SubjectName>
  <DisplayName>test</DisplayName>
</SipCertificate>

```

Response code: 200

Modifying SIP Certificates

The following is an example of the PUT request that modifies the SIP Certificates:

```
https://<connection_server>/vmrest/ sipcertificates/<objectId>
```

The actual response will depend upon the information given by you.

```

<SipCertificate>
  <SubjectName>test2</SubjectName>
  <DisplayName>test2</DisplayName>
</SipCertificate>

```

Response code: 204

Deleting SIP Certificates

The following is an example of the DELETE request that deletes a specified SIP Certificates as represented by <sipcertificateid>:

```
https://<connection_server>/vmrest/sipcertificates/<objectId>
```

The output for this request returns the successful response code.

Response code: 204

Cisco Unity Connection Provisioning Interface (CUPI) API -- SIP Profiles

Listing SIP Profiles

Generic Examples to List SIP Profiles

Example 1

The following is an example of the GET request that lists the SIP Profiles:

```
https://<server_ip>/vmrest/sipsecurityprofiles
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<SipSecurityProfiles total="2"><SipSecurityProfile>
  <URI>/vmrest/sipsecurityprofiles/87cab9a5-c68d-447a-ab4f-7cd2837aa240</URI>
  <ObjectId>87cab9a5-c68d-447a-ab4f-7cd2837aa240</ObjectId><Port>5069</Port>
  <DoTLS>false</DoTLS><DisplayName>5069</DisplayName>
</SipSecurityProfile><SipSecurityProfile>
  <URI>/vmrest/sipsecurityprofiles/4d7e055a-cdcf-43ff-a922-4ce743939a23</URI>
  <ObjectId>4d7e055a-cdcf-43ff-a922-4ce743939a23</ObjectId><Port>5066</Port>
  <DoTLS>true</DoTLS><DisplayName>5066/TLS</DisplayName>
</SipSecurityProfile></SipSecurityProfiles>

<Pre> RESPONSE Code: 200
```

Example 2

The following is an example of the GET request that lists a specified SIP Profile:

```
https://<connection_server>/vmrest/sipsecurityprofiles/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
<SipSecurityProfile>
  <URI>/vmrest/sipsecurityprofiles/87cab9a5-c68d-447a-ab4f-7cd2837aa240</URI>
  <ObjectId>87cab9a5-c68d-447a-ab4f-7cd2837aa240</ObjectId><Port>5069</Port>
  <DoTLS>false</DoTLS><DisplayName>5069</DisplayName>
</SipSecurityProfile><SipSecurityProfile>

<pre> Response code: 200
```

JSON Examples to List SIP Profiles

Example 1

The following is a JSON example of the GET request that lists the SIP Profiles:

```
https://<connection_server>/vmrest/sipsecurityprofiles
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "@total": "6",
  "SipSecurityProfile":
  {
    {
      "URI": "/vmrest/sipsecurityprofiles/08aef04e-8775-4ea5-916b-f7e36cbdb3d4",
      "ObjectId": "08aef04e-8775-4ea5-916b-f7e36cbdb3d4",
      "Port": "5065",
      "DoTLS": "true",
      "DisplayName": "5065/TLS"
    },
    {
      "URI": "/vmrest/sipsecurityprofiles/b3c533a4-bc28-4c70-9912-c22edf81910e",
      "ObjectId": "b3c533a4-bc28-4c70-9912-c22edf81910e",
      "Port": "5062",
      "DoTLS": "true",
      "DisplayName": "5062/TLS"
    },
    {
      "URI": "/vmrest/sipsecurityprofiles/e667342c-3ce2-49f7-ae2b-27daf850b159",
      "ObjectId": "e667342c-3ce2-49f7-ae2b-27daf850b159",
      "Port": "5088",
      "DoTLS": "true",
      "DisplayName": "5088/TLS"
    },
    {
      "URI": "/vmrest/sipsecurityprofiles/9062519a-05d4-42f2-933e-250d5a24efb5",
      "ObjectId": "9062519a-05d4-42f2-933e-250d5a24efb5",
      "Port": "5067",
      "DoTLS": "false",
      "DisplayName": "5067"
    },
    {
      "URI": "/vmrest/sipsecurityprofiles/9adbf7ac-c882-4ad1-84d5-d67d56d44d6d",
      "ObjectId": "9adbf7ac-c882-4ad1-84d5-d67d56d44d6d",
      "Port": "5077",
      "DoTLS": "false",
      "DisplayName": "5077"
    },
    {
      "URI": "/vmrest/sipsecurityprofiles/15a3a4d9-65a0-456a-be38-4a4aff36554c",
      "ObjectId": "15a3a4d9-65a0-456a-be38-4a4aff36554c",
      "Port": "5060",
      "DoTLS": "false",
      "DisplayName": "5060"
    }
  }
}
<pre> RESPONSE Code: 200
```

Example 2

The following is an example of the GET request that lists a specified SIP Profile:

```
https://<connection_server>/vmrest/sipsecurityprofiles/<objectId>
```

The following is an example of the response from the above *GET* request and the actual response will depend upon the information given by you:

```
{
  "URI": "/vmrest/sipsecurityprofiles/9adbf7ac-c882-4ad1-84d5-d67d56d44d6d",
  "ObjectId": "9adbf7ac-c882-4ad1-84d5-d67d56d44d6d",
  "Port": "5077",
  "DoTLS": "false",
  "DisplayName": "5077"
}
```

RESPONSE Code: 200

Adding a new SIP Profiles

Example 1

The following is an example of the POST request that lists the SIP Profiles:

```
https://<connection_server>/vmrest/sipsecurityprofiles
```

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
<SipSecurityProfile>
  <Port>5070</Port>
  <DoTLS>true</DoTLS>
</SipSecurityProfile>
```

Response code: 201

Example 2

The following is a JSON example of the POST request that lists the SIP Profiles:

```
https://<connection_server>/vmrest/sipsecurityprofiles
```

The following is an example of the response from the above *POST* request and the actual response will depend upon the information given by you:

```
{
  "Port": "5080",
  "DoTLS": "true"
}
```

Response code: 201

Modifying SIP Profiles

Example 1

The following is an example of the PUT request that modifies the SIP Profile:

```
https://<connection_server>/vmrest/sipsecurityprofiles/<objectId>
```

The actual response will depend upon the information given by you.


```
<SipSecurityProfile>
  <Port>5070</Port>
  <DoTLS>true</DoTLS>
</SipSecurityProfile>
```

```
Response code: 204
```

Example 2

The following is a JSON example of the PUT request that modifies the SIP Profile:

```
https://<connection_server>/vmrest/sipsecurityprofiles/<objectId>
```

The actual response will depend upon the information given by you.

```
{
  "Port": "5077",
  "DoTLS": "true"
}
```

```
Response code: 204
```

Deleting SIP Profiles

The following is an example of the DELETE request that deletes a specified SIP Profiles as represented by <sipsecurityprofileid>:

```
https://<server-ip>/vmrest/ sipsecurityprofiles/<objectId>
```

The output for this request returns the successful response code.

```
Response Code: 204
```

