Cisco TelePresence Management Suite 14.6.2

Software Release Notes
RevisedSeptember 2020

Changes to interoperability

Ensure that you read the Interoperability [p.85] section of this document, which contains important information about current and future support for products, systems, and components of Cisco TMS. This section changes with each release.

Product documentation

The following documents provide guidance on installation, initial configuration, and operation of the product:

- Web help integrated in the Cisco TMS software
- *Cisco TelePresence Management Suite Installation and Upgrade Guide*
- *Cisco TelePresence Management Suite Administrator Guide*
- *Cisco TMS Extensions Deployment Guides*

New features

New in 14.6.2

Added system support

Support for Cisco Unified Communications Manager version 11 has been added to Cisco TMS.

New in 14.6.1

Updated localization

This release includes updated localization for all supported languages and multiple localization improvements to the Cisco TMS software.

New in 14.6

Externally Hosted Conference

You can now book conferences hosted on a bridge outside of Cisco TMS using the **Booking > New Conference** page or the booking API (Cisco TMSBA).

To book from the **New Conference** page, check **Externally Hosted** and provide a SIP URI in the **Video Address** field.

Note that externally hosted conferences do not support adding the following features: WebEx, cascading, Cisco TMS-managed bridges, dial-out participants, recording, or encryption.

Changes to the users that receive booking confirmation and cancellation emails

All users involved in booking a conference will now receive booking confirmation and error notification email messages when the conference is booked, updated, or deleted. This includes the following:

- Conference creator: The user who books the conference.
- Conference owner.
- Any other user who has ever updated the conference.

Note that the service accounts used for Cisco TMSXE, Cisco TMSXN or Cisco TMSPE Smart Scheduler will now receive a large number of emails, as they are involved in all bookings made through these interfaces. If this becomes an issue, do one of the following:

- Configure your mail server to archive and purge old emails for these accounts.
- Change the service user's email address in Cisco TMS to `noreply@example.org` or similar.

Conference save performance improvements

Saving a conference is now significantly faster in large deployments.

The routing mechanism has been improved to optimize bridge selection during booking, by distributing conferences more evenly across bridges in your deployment.

Cisco TMS will now randomly select a bridge if there are two or more that are identical (model, IP zone, protocols, and so on), which minimizes delays when allocating and launching conferences.

Previously Cisco TMS would always favor the same bridge if there were two or more that were identical.

Improved handling of changes to ongoing conferences

Adding or removing participants from ongoing conferences will never change the Main participant (conference host).

This could happen in previous releases when adding participants to ongoing conferences when using clients such as Microsoft Outlook or Smart Scheduler. Ongoing conferences will no longer be disrupted or moved to a different bridge.

Improved scheduling logging

All four of the scheduling log files now contain significantly more information about bridge selection. It is generally no longer necessary to enable debug logging when troubleshooting bridge selection issues as all relevant information is now displayed at the INFO log level.

Note that scheduling logs are disabled by default.

Enforcing upper limit of 5000 systems

Starting with Cisco TMS 14.6, adding more than 5000 systems licenses will generate a warning that using more than 5000 systems is not supported. This warning will be displayed every time the **General Settings** page is accessed.

In earlier versions, 5000 was the documented maximum, but there was no warning in Cisco TMS that this is the upper limit. Contact tms-marketing@cisco.com if you have a deployment that exceeds or is likely to exceed 5000 systems.

TelePresence Conductor Scheduling improvements

TelePresence Conductor scheduling with CMR Hybrid

It is now possible to schedule a conference hosted on a TelePresence Conductor that includes WebEx participants.

To enable this for a TelePresence Conductor:

1. Go to **Systems > Navigator** and select a TelePresence Conductor.
2. Go to the **TelePresence Conductor** tab **> Aliases >** select an alias **>** click **View/Edit > Allow Booking with WebEx**.
3. Set this option to *Yes* to select whether or not a particular alias will be used for conferences that include CMR Hybrid.

Note that the setting **Systems > Navigator >** select a TelePresence Conductor **> Settings > Edit Settings > Allow WebEx Booking** is enabled by default for all TelePresence Conductors as part of the upgrade to Cisco TMS 14.6.

Add WebEx to an ongoing TelePresence Conductor conference

You can now add WebEx to an ongoing scheduled conference hosted on a TelePresence Conductor.

Restricting participants in TelePresence Conductor conferences

It is now possible to configure Cisco TMS to restrict the number of participants that are allowed to join conferences hosted on TelePresence Conductor. If this setting is enabled, only the scheduled number of participants will be allowed to join.

This is configured for each TelePresence Conductor in Cisco TMS here:

Systems > Navigator > select a TelePresence Conductor **> Settings > Extended Settings > Limit Ports to Number of Scheduled Participants**

and per conference here:

Booking > New Conference > add participants including TelePresence Conductor **> TelePresence Conductor Settings tab > Limit Ports to Number of Scheduled Participants**

Setting picture layout mode per conference

Picture layout can now be set per conference during booking, using **Booking > New Conference >** add participants including TelePresence Conductor **> TelePresence Conductor Settings tab > Conference Layout**.

Added conference lock/unlock support

The **Conference Control Center** button that locks a conference is now enabled for conferences hosted on TelePresence Conductor. Locking a conference prevents the bridge from allowing any more participants to dial in.

Placement of in-video messages

In-video messages will now always appear at the top center of the screen for endpoints in scheduled TelePresence Conductor conferences.

Changed behavior when TelePresence Conductor conferences already exist

Occasionally when Cisco TMS tries to create a conference on TelePresence Conductor, the conference already exists on the TelePresence Conductor.

Cisco TMS will now tear down and recreate these existing TelePresence Conductor conferences. This is because Cisco TMS needs to be sure that it created the conference so that the conference has the correct security settings, PIN etc.

Examples of when this can happen:

- If the create command sent from Cisco TMS to TelePresence Conductor timed out, but the TelePresence Conductor managed to create the conference anyway, which can happen if the TelePresence Conductor is under heavy load when the conference is about to start.
- If the TelePresence Conductor conference template setting **Scheduled conference** is set to *No*, and a participant dials in just before the start time thereby creating the conference before Cisco TMS was able to.

Previously Cisco TMS would do nothing with the existing conference on TelePresence Conductor, and would either failover to a different TelePresence Conductor or bridge, or fail to create the conference altogether.

Note: Versions of TelePresence Conductor earlier than XC3.0 are not supported for scheduling with Cisco TMS14.6.

SNMP Traps

Windows SNMP Service is now disabled by default for new installations of Cisco TMS. Customers using legacy equipment that requires SNMP can enable the service after installation.

The service will remain in the enabled state when upgrading to 14.6 from older versions of Cisco TMS.

System support

Support for Cisco TelePresence IX5000 registered to Unified CM has been added to Cisco TMS.

Requirements

- Support for Microsoft Windows Server 2012 R2 64 bit has been added in this release.
- Support for Microsoft Windows SQL Server 2008 R1 has been removed in this release.
- Support for Microsoft SQL Server 2008 R2 (32 bit) has been removed in this release.

Other changes

- All option keys that have been added to an endpoint are now visible in **Systems > Navigator >** select an endpoint **> Settings > Extended Settings**. Previously only *Multisite*, *PremiumResolution* and *Presenter* were displayed here.
- Removed the redundant **Details** button in the **Booking > New Conference > Add Participants** popup window. System details are still accessible via the **Details** link in the **Actions** column.
- Cisco TMS now fully supports the Russian time zone changes of October 2014.

- Removed redundant **TMS Scheduling Settings** section from **Systems > Navigator** for non-bookable systems.
- Added **IP Bandwidth** value *6000 kbps* when scheduling using **Booking > New Conference** and Cisco TMSBA.
- The configuration template for TC software has been updated to incorporate new settings introduced in the TC7.2.1 release.
- For redundant Cisco TMS deployments, the following will now be logged when a failover takes place:
  - Which services were running on the node that retires.
  - When the services entered an active state.

Cisco TMS Booking API (Cisco TMSBA)

ClientSession ID now required on all licensed API calls

The client must now include a ClientSession ID in the SOAP header of each call requiring a license key, or Cisco TMS will throw an exception and the call will fail. This exception will include a suggested ID string.

This change only affects API version 13 and later. The API version for 14.6 is 15.

License requirement changes

The following Cisco TMSBA methods no longer require a license key:

- GetTransactionsSince
- GetTransactionsSinceWithExternalId
- GetRecordingAliases
- GetConferenceInviteMail
- GetConferenceBookingEventMail

These methods do now require a license key:

- EndConferenceById
- DeleteConferenceById
- DeleteConferenceRecInstanceById
- DeleteConferenceByExternalId
- DeleteConferenceInstanceByExternaId
- EndConferenceByExternalId

For a full overview of license key requirement, see Cisco TMSBA Programming Reference Guide.

Specifying recipients of booking email

It is now possible to specify email addresses that will receive booking confirmation and error notification email messages when booking a conference using Cisco TMSBA. In the Cisco TMS web application this is entered on the **Conference Information** tab when booking a conference.

Reserved external source IDs

Using "TMS" and "TMS-ADHOC" as external source IDs is now reserved for Cisco TMS internal use. Cisco TMSBA will throw an exception if either is used by another client.

New in 14.5

Added support for Unmanaged Bridges

Unsupported legacy and third party bridges (including Cisco TelePresence Multipoint Switch) can now be added into Cisco TMS and scheduled in conferences.

These bridges are added from **Systems > Navigator > Add Systems > Add Unmanaged Bridge**. Once added, they are displayed in **Systems > Navigator**, where you can view and edit a limited number of settings, including limiting capacity by IP bandwidth and maximum number of concurrent calls.

You can also specify the number of audio and video ports as follows:

- If *0* is entered in **Max Number of Audio Calls**, the value set as the **Max Number of Video Calls** will be the number of generic ports that can be used to book either video or audio participants.
- If anything higher than *0* is entered in **Max Number of Audio Calls**, video and audio calls are counted separately and can not be used interchangeably.

It is only possible to schedule participants to dial in to the unmanaged bridge. Both SIP and H.323 are supported.

If the conference includes participants that are direct-managed by Cisco TMS or registered to a Unified CM, some limited monitoring of scheduled conferences hosted on unmanaged bridges is available in **Conference Control Center**. You can send participants messages, view basic details for each participant and add participants to the conference.

Unmanaged bridge conferences are listed in **Booking > List Conferences**. Note that ending the conference will result in the conference appearing as finished, but endpoints will stay connected.

A Network Integration license key must be purchased for each unmanaged bridge before adding it into Cisco TMS. Up to 25 meeting addresses can be configured for each bridge, reflecting conference addresses already created on the bridge itself.

An unmanaged bridge can be configured as **Immersive**, if it supports hosting conferences including multiscreen systems. Unmanaged bridges that are configured as immersive are preferred in routing if multiscreen systems are added to a conference.

The following features are not supported for unmanaged bridges in Cisco TMS:

- Cascading
- Reporting
- CMR Hybrid
- ISDN
- Resource guarantees
- Native API support for Cisco TelePresence Multipoint Switch
- Guaranteed encryption
- Participant templates
- Ad Hoc calls
- Meeting extension
- Meeting end notifications
- Automatic disconnection of conferences at scheduled end time

Unmanaged Endpoint tab replaces Room / Equipment tab

This tab under **Systems > Navigator > Add Systems** allows you to add legacy or third party endpoints to Cisco TMS and schedule them in conferences.

Unmanaged endpoint dialing options

Unmanaged endpoints can now be scheduled to dial out to other unmanaged endpoints. Cisco TMS cannot initiate this, but after being booked, the person using the unmanaged endpoint can manually dial the scheduled number. This can be enabled and disabled for the system in **Systems > Navigator**.

On upgrade, any unmanaged endpoint will get the same "Allow Outgoing <PROTOCOL> Calls" settings as it already has for "Allow Incoming <PROTOCOL> Calls". Unmanaged endpoints that were configured to dial in using H.323 and SIP will now also have the option to dial out on H.323 and SIP after upgrading Cisco TMS.

This change also allows scheduling calls between unmanaged bridges and unmanaged endpoints.

Adding equipment no longer possible

Support for adding equipment such as DVD players or projectors to Cisco TMS has been removed.

Equipment that has been added to Cisco TMS prior to this release will still be available to book from the **Add Participants** popup window, under the **Equipment** tab. This equipment will still appear under the Equipment System Category in **Systems > Navigator**.

Changes to the Add Systems page

Add Systems tab

- Renamed to **Add by Address**.
- Simplified **Advanced Settings** section.

From List tab

Renamed to **Add from Unified CM or TMS**; **Unified CM** is now the default sub-tab in this tab.

Improved user experience when booking from external clients

Conferences booked from an external client can now be stored as *Defective* in Cisco TMS rather than being declined when there is a resource conflict or other routing issue.

In an upcoming release of Cisco TMSXE, this mechanism will be used to replace the “Downgrade to Reservation” feature for most routing failure scenarios.

Administrators can easily locate and diagnose defective conferences by going to **Administrative Tools > Diagnostics > Conference Diagnostics** or **Booking > List Conferences**. Many defects can also be resolved by the user directly from the client, and proposed actions for the user will be included in the email notification returned from Cisco TMS, flagged as ACTION REQUIRED.

A defective conference retains all properties of the booking request, and sets the endpoints to *Busy* unless there is an endpoint availability conflict. Defective conferences will not be sent to endpoints or initiated until all issues are resolved. Until resolved, it will also not be routed or consume any telepresence resources.

To achieve the behavior described above, external clients must use the latest version of Cisco TMSBA and specify the booking mode *BestEffortForced*.

Booking mode *Strict* will make Cisco TMS decline conferences rather than save them as defective.

This change is versioned and does not affect clients using older versions of the API.

Booking confirmation email prefix

The title of booking confirmation emails will now include a prefix as follows:

All booking methods:

CONFIRMED: <conference title>

Bookings using Cisco TMSBA clients such as Cisco TMSXE only:

- DECLINED: <conference title>
- ACTION REQUIRED: <conference title>

Dial-in addresses in booking confirmation emails

Booking confirmation emails now always include dial-in numbers, regardless of whether participants are scheduled to dial into the conference. For multipoint conferences hosted on an external bridge, dial-in numbers to the bridge for all protocols used are included. For point-to-point calls or calls hosted on an endpoint with embedded multisite, addresses of all participants are included.

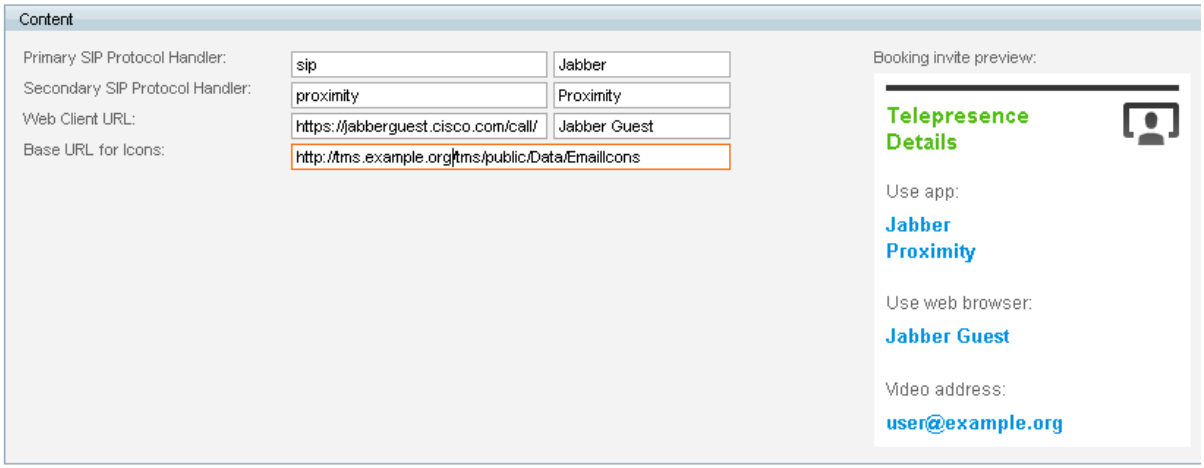
Direct Join

You can now include links to two different applications and a web client from booking invites, so that users can join directly from the invite. To support this, new settings have been added to **Administrative Tools > Configuration > Email Settings**:

- **Primary SIP Protocol Handler**
- **Secondary SIP Protocol Handler**
- **Web Client URL**
- **Base URL for Icons**

Note that both the protocol handler/URL field and the App Name field (to the right) for each of these settings must be populated for each link to work.

A preview of what the booking invite email will look like is displayed and updates in real time as you enter text in the fields. Clicking the links to the apps and web browser in the preview will open them so it is clear what users receiving the booking invite will see and have access to.



For more detail on configuring these settings and customizing email templates, see the updated context-sensitive web help or the Administrator Guide.

New Bridge Utilization report

Note: This feature is a Technical Preview only: this feature could change significantly in future releases and is not currently supported by TAC.

Accessed from **Reporting > Bridge Utilization**.

Two graphs and a data table show how much your bridges are being used. The upper graph compares the total number of available bridge ports with the peak used port count for a given point in time. The lower graph presents the same information as a percentage and shows the usage trend over time.

The report uses the ISO week numbering model to define the timespan of data in the graph.

The raw data can be exported as a .csv file to Microsoft Excel (both 2010 and 2013 are supported). The data is downloaded as daily regardless of which timespan has been selected in the **Show Last** menu.

The data is collected using an extract, transform and load (ETL) process in the SQL database. The ETL job runs at 04:05 every day. This time is non-configurable. There is a new ETL log downloadable in the Diagnostic Files log bundle for assistance in troubleshooting ETL job failure. The report page displays the date and time that the ETL job last ran.

Port capacity and usage prior to upgrading to 14.5 is estimated after upgrade. This calculation is based on the bridges currently in Cisco TMS and their current capacity, and the data is estimated from the day they were added to Cisco TMS. Certain factors can affect the accuracy of this data, such as whether a bridge had a capacity upgrade or reduction in the past. Once 14.5 is running however, capacity and usage are calculated on a daily basis and will be correct.

WebEx using deferred connect on TelePresence Server

When WebEx is included in a conference hosted on a TelePresence Server, the WebEx participant will now be added to the bridge at conference start time, but will not connect until there is another participant in the telepresence conference. In the conference event log, the WebEx participant will show as ‘SIP Dial Deferred’ when added to the conference, and ‘Connected’ once it is connected to the conference.

This change does not apply to other bridge types.

Note that WebEx will not be connected during the early join window.

Changes to the List Conferences GUI

It is now possible to filter on **Conference Type**:

- The **Search** area has been split into two sections:
  - **Search**: Status, Date range and Users.
  - **Advanced** (This section is collapsed by default): Conference Type, filter on recorded and defective conferences, filter on systems.

Other improvements include:

- **Save Query** button has been renamed to **Save as Default**.
- Improved feedback messages when saving a search.
- Start and end time column headers now show the logged in user's UTC time zone offset.

Search-only Phone Book Sources

It is no longer possible to schedule contacts from a phone book source that is **Update Type**: *Search Only*:

- Phone books that contain only *Search Only* sources are no longer displayed in the dropdown list of the **Add Participants** popup window.
- When browsing or searching phone books with multiple sources in the **Add Participants** popup window, only entries from non-search-only sources are displayed.

Localization

Localization enabled for error messages received by Cisco TMSBA clients

Error messages sent from Cisco TMS through Cisco TMSBA to a client can now be translated if the client uses the new ClientLanguage request header:

- If the client language is set to one to one of the Cisco TMS GUI-supported languages: (French, German, Japanese, Russian, Korean, Chinese (Simplified) and English) all error messages will be translated to the client language.
- If the client language is set to one of the other supported user languages, some errors will appear translated into the client language, the others will fall back to the booking user's language selection in Cisco TMS (unless this selection is also not a Cisco TMS GUI-supported language, in which case the errors will display in English).

ClientLanguage can be used with any version of Cisco TMSBA.

Improved support for long conference titles in Booking > List Conferences

Long conference names are now truncated at 100 characters followed by '...'. Previously some GUI elements were not shown and the title did not display correctly.

Load balancer probe URL polling

The name of the service that reports the status of NLB probe URL polling in redundant deployments has been changed from TMSWeb to TMSProbeURL, to assist admins with troubleshooting.

Participant dial string

It is no longer possible to edit the dial string for a participant from the **Connection Settings** tab in **Booking > New Conference**. The **Number** column has been renamed to **Dial String**, and is not editable. The dial string can now be edited by clicking the **Settings** link, to launch the **Participant Connection Settings** popup window.The 'Number Settings' section has been renamed to Dial String Settings and allows editing of the dial string for the individual participant as well as adding an Extension Number.

This change was made to help users understand that editing the **Dial String** field changes the dial string dialed by that participant, but will not change anything on the remote end, for example allocated ports on bridges.

Reconnect message on Master endpoint

- **Administrative Tools > Configuration > Conference Settings >Show Reconnect Message Box on (Non Master) Endpoints** has been renamed to **Show Reconnect Message Box on Endpoints**.
- Reconnect messages are now displayed on the Master endpoint when **Show Reconnect Message Box on Endpoints** is set to *No*.

Conference and user time zones

The logged in user's UTC time zone offset is now displayed here:

- The link to the **Edit Personal Information** popup window in the bottom left corner of Cisco TMS.
- **Booking > List Conferences** **Start Time** and **End Time** column headings.
- Participant List tab and Add Participant availability table (Availability mouse tooltip).

In **Conference Control Center** the conference time zone is now shown when editing a conference.

Improvements to the Booking Confirmation page

Includes no longer showing the Participant IP addresses. Instead only the system names are shown.

View active Cisco TMSBA clients

To help with identifying and resolving Cisco TMSBA access problems, **Administrative Tools > Configuration > General Settings > Licenses and Option Keys** now contains a new table: **Active Application Integration Clients**.

The table displays:

- **Session ID** (if applicable, only clients using Cisco TMSBA version 13 or later will use this)
- **Network Address** (either the hostname or IP address, in redundant Cisco TMS deployments this could be the load balancer address)
- **Last Access** timestamp

The **Active Application Integration Clients** section is only displayed if there are active clients to show.

Changes to Edit Event Notification page

In **Systems > Event Notification Manager >** **Edit** a user **> Edit Event Notification**, a **Select Folder** panel has been added. This is to improve performance on the page, and fix a bug with loading this page when there were a large number of stored event notifications for a user.

Up to 1000 stored event notifications will display for a user at any one time in the **Stored Event Notifications** panel, and stored event notifications can only be deleted in batches of up to 1000 at a time.

The **Save** button has been changed to **Apply** (to apply any changes made to the event notifications for a user and stay on the page).

The **Cancel** button has been changed to **Back** (to exit the page without saving changes/if you have not made any changes).

Allocation attempts

Improved consistency in the frequency of allocation attempts, by making this a configurable field:

Administrative Tools > Configuration > Conference Settings >Connection Timeout for Scheduled Calls and Allocation (in seconds).

Cisco TMS will wait at least as long as the value set here. Note that the timeout is not capped so it could take longer than the value set here before the next allocation is attempted.

Improvements to the Event Log

The Event Log now identifies whether changes were made to conferences series or single instances by using the prefixes: 'Conference' or 'Instance' in log entries.

The log now captures whether an instance is an exception, or no longer an exception, and the number of exceptions in a series.

Software FTP Directory location

The option to configure the Software FTP Directory location has been removed from the installer. To change the path after installation, go to **TMS Tools > Configuration > Directory Locations**.

Changes to Cisco TMSBA (booking API)

- To enable clients to verify that they are updating the latest version of a conference, conference versioning is now available through Cisco TMSBA.
  A **Version** element has been added to the **Conference** object.
  When trying to update a conference version that is not the latest, Cisco TMS will throw an exception.
  This change only applies to API version 14 and later.
- Cisco TMS now throws an exception when trying to book a conference with a title longer than 255 characters through Cisco TMSBA.
  This change is not versioned and will apply to any version of Cisco TMSBA used with Cisco TMS 14.5 and later.

Other changes

- In **Booking > List Conferences**, the Excel document generated by clicking **Export Log** or **Export Details Log** now contains a new **Status** column that describes whether the conference is, for example, *Pending*, or *Finished*.
- A warning is now displayed if Site Administrator is set as a default group. The warning explains that all new Cisco TMS users will get site administrator access and suggests removing the default flag from the Site Administrator group.
- Ad hoc calls including participants scheduled in a No Connect conference are no longer disconnected when the No Connect conference is about to start.
- Future scheduled conferences in the **Activity Status** page are now shown with the conference title in the **Description** column, instead of the conference ID in brackets. Conferences that were scheduled before the upgrade to 14.5 will still be shown in the old format.
- Changed the timestamp date format in the Installer logs to be ISO compliant. The new format is YYYY-MM-DD.
- Localization: Multiple improvements to layout and quality of translated versions of Cisco TMS.
- Improvements to logging information provided when applying calendars to endpoints. The system ID is now shown, and communication/authentication problems are not logged as they are visible elsewhere in Cisco TMS.
- When adding or editing a Cisco TMS user, the following fields are now mandatory:
  - **Windows Username**
  - **First Name**
  - **Last Name**
  - **E-mail Address**

Removed in this release

Support for the following systems is removed in this release:

- TANDBERG Movi Server (Movi 1.0 hardware appliance server)
- TANDBERG 3G Gateway
- TANDBERG Entrypoint
- TANDBERG Experia
- TANDBERG Video Portal
- Cisco 7985G and other Cisco SCCP video endpoints
- Cisco Gatekeeper/Multimedia Conference Manager (IOS Gatekeeper)

Support for Internet Explorer 9 is removed in this release. IE9 will probably work with this version of Cisco TMS but it is no longer a supported browser and was not tested for compatibility.

Changed in 14.4.2

Summary of the release

14.4.2 was a maintenance release addressing an issue with duplicate external primary keys, affecting customers using Cisco TMS Booking API (Cisco TMSBA) clients such as Cisco TMSXE and Cisco TMSXN. This issue was found in Cisco TMS versions 14.4 and 14.4.1 and causes problems replicating bookings from Cisco TMS to Microsoft Exchange or IBM Domino.

Technical description of external primary key issue: CSCup76424

In Cisco TMS 14.4 and 14.4.1, Cisco TMS assumes that every conference has a unique ExternalPrimaryKey value. Under certain conditions, earlier versions of Cisco TMS allowed multiple meetings to share the same key, and the 14.4 and 14.4.1 upgrade scripts failed to de-duplicate these keys.

Cisco TMSBA clients such as Cisco TMSXE use the ExternalPrimaryKey to retrieve conferences from Cisco TMS, always expecting to get the same conference when a specific ExternalPrimaryKey is provided to Cisco TMSBA. If conference A and conference B have the same ExternalPrimaryKey value in the tmsng database, Cisco TMSBA could return data belonging to conference A when Cisco TMSXE asks for conference B, and vice versa. If this happens to Cisco TMSXE, the Cisco TMSXE replicator could permanently delete data from Microsoft Exchange based upon incorrect data returned from Cisco TMSBA.

Versions of Cisco TMS prior to 14.4 do not rely upon the ExternalPrimaryKey being unique, and are not at risk of data corruption unless upgraded to 14.4 or 14.4.1.

Similar mechanisms are used for synchronization with Cisco TMSXN, so some conferences in IBM Domino deployments may also be affected by this issue.

Resolution of CSCup76424 in 14.4.2

Cisco TMSXE and Microsoft Exchange

This version of Cisco TMS fixes the majority of affected conferences automatically, but in some cases that will not be possible:

- A tool has been added to **TMS Tools** that identifies most remaining duplicate conferences allowing the administrator to select which is the correct conference after upgrading Cisco TMS.

- A small number of duplicated appointments could remain in the Exchange resource calendars after the Cisco TMS and Cisco TMSXE upgrades. These cannot be cleaned up automatically by Cisco TMS, or by using **TMS Tools**, and require further manual intervention. See Upgrading to 14.6.2 [p.86].

Cisco TMSXN and IBM Domino

This version of Cisco TMS fixes the majority of affected conferences automatically, but in some cases that will not be possible:

- A tool has been added to **TMS Tools** that identifies most remaining duplicate conferences allowing the administrator to select which is the correct conference after upgrading Cisco TMS.
- A small number of duplicate bookings originating in IBM Domino could still exist in Cisco TMS. Re-replicating all conferences from Cisco TMS to IBM Domino will resolve these issues. See Upgrading to 14.6.2 [p.86].
- There is a very small chance that bookings may exist in IBM Domino but not in Cisco TMS. These cannot be cleaned up by Cisco TMS, Cisco TMSXN, or by using **TMS Tools**. It is most likely that these bookings were created either from Conference Templates, or by copying existing conferences in versions of Cisco TMS earlier than 14.4, and that these conferences were subsequently edited (either in Cisco TMS or in IBM Domino) in 14.4 or 14.4.1.These 'ghost' bookings will cause incorrect free/busy information in IBM Domino. The only impact here is that the room will appear to be booked in Domino when it is not booked in Cisco TMS. It is not possible to identify these bookings, but if you notice that a video resource cannot be booked in Domino, but has no corresponding booking in Cisco TMS, you can simply delete the booking in Domino.

Note: You must read Upgrading to 14.6.2 [p.86] before upgrading to this version of Cisco TMS if you are using Cisco TMSXE or Cisco TMSXN.

Resolve duplicate keys

Cisco TMS version 14.4 introduced an issue affecting customers using Cisco TMSBA clients such as Cisco TMSXE who have upgraded to Cisco TMS versions 14.4 and 14.4.1. See above for a description of the problem.

A new tool: **Resolve Duplicate Keys**, has been added to TMS Tools to assist administrators with resolving any duplicate conferences remaining after upgrading to 14.4.2.

The tool displays the duplicate conferences, and allows the administrator to select which of a number of conferences is the correct one. Once a conference has been selected, the one or more duplicates that were not selected are deleted from the Cisco TMS database.

A new log: **log-tmstools-duplication-resolution.txt** lists which conferences were kept and which were deleted. The log is located in the tmsdebug logs folder and contained in the **Download Diagnostic Files** download bundle.

New in 14.4

New redundancy model

Cisco TMS has moved to an active/passive failover redundancy model. Previously two nodes load-balanced the network traffic and requests, now only one node is active at any one time. If the connection to that node from the load balancer fails, or one of the services on the active node fails, the other node will activate and take over.

This feature is enabled in **General Settings > Enable TMS Redundancy**. Once enabled, redundancy settings are visible in **Administrative Tools > TMS Server Maintenance**.

For more details see the chapter 'Setting up a redundant deployment' in the Cisco TelePresence Management Suite Installation and Upgrade Guide.

In conjunction with this new redundancy model, a new group permission has been added. In **Administrative Tools > User Administration > Groups > Set permissions** for a group, the **Administrative Tools > Configuration** setting now has an *Update* option as well as a *Read* option. The **Administrative Tools > TMS Server Maintenance > TMS Redundancy > Force Manual Failover** button is disabled unless the logged in user is a member of a group with *Update* selected.

Conference recurrence improvements

Extensive improvements to the Cisco TMS recurrence model including:

- Cisco TMS now checks availability for only the current instance of a series when checking to see whether the meeting can be extended. Previously Cisco TMS would check the entire series, so if one of the participants was unavailable for another instance, the extend meeting request would be rejected.
- Recurrence information expanded in the booking confirmation email.
- A series that only contains exceptions is now supported. Cisco TMS retains information about the original conference series, when all instances are edited to become exceptions to the original recurrence pattern.
- Improved the level of detail displayed in the **Activity Log** and the **Conference Log** when changes are made to instances in a recurrent series using the Cisco TMS web UI and Cisco TMSBA.
- Cisco TMS now supports richer recurrence patterns.
- Improved feedback to user when editing an instance that belongs to a series external to Cisco TMS.

Changes to the handling of past, ongoing and deleted meetings

Ongoing or past conferences are no longer affected if a recurrent series is edited.

Meetings in the past and ongoing meetings can no longer be deleted:

- Attempting to delete a conference in the past will not work as conference data is retained for call detail records.
- Deleting an ongoing meeting will end it immediately, modify the end time, and free up all scheduled resources used in the meeting. The ended meeting will not be deleted.
- Ending an instance of a series before the scheduled time will similarly modify the end time, free up resources, and mark the instance as an exception.
- Making changes to a series with an ongoing instance will now transform the instance into a single meeting. Any instances of the modified series that conflict with the single meeting will not be created. Pending instances will be assigned new conference IDs.
- Improved handling of editing series where some instances are in the past. The recurrence pattern start date is now correctly persisted.

Note that past instances of a series booked prior to upgrading to 14.4 will not be linked to the series in **Booking > List Conferences**. They will appear as single instance conferences.

Recurrence changes on the **New Conference** page

The recurrence user interface has been redesigned:

- Recurrence icon replaced with **Add Recurrence...** button in **Booking > New Conference**. The button text changes to **Edit Recurrence...** once a recurrent series has been added to the conference.
- Improved **Recurrence** pop up window, including new **Remove Recurrence** button.
- New intuitive **Exceptions** pop up window including a calendar for editing and clear feedback for users.
- It is now possible to edit all instances in a series while choosing not to edit any exceptions.
- All exceptions in a series can be removed with one click using the new **Reset Exceptions** button.
- Improved the validation of compatible recurrence patterns when WebEx is added to a conference series.

Conference Diagnostics

This new feature allows administrators to identify and fix problems with existing conferences, and is particularly useful in the case of dial plan or infrastructure changes to your deployment, such as replacing a bridge.

When the diagnostics are run, Cisco TMS checks the following for all future scheduled conferences:

- That all participants exist in the database.
- That the route is valid: that all participants are still routable.

The Autocorrect feature attempts to fix selected conferences automatically, taking action such as rerouting the conference, or removing invalid participants.

For further information see the Web Help for the **Conference Diagnostics** page in Cisco TMS.

Resource availability check on extension

Introduction of a new global setting: **Administrative Tools > Configuration > Conference Settings > Resource Availability Check on Extension**.

This setting works in conjunction with **Extend Conference Mode** and applies to *Automatic Best Effort* or *Endpoint Prompt*.

The options are:

- *Best Effort*: Conferences will only automatically extend beyond the scheduled end time on a best effort basis if all resources are available for the next 15 minutes.
- *Ignore*: Cisco TMS will ignore the resource availability check, and conferences will automatically extend beyond the scheduled end time regardless of whether all the resources are available or not. The only exception to this is if the port used on the main participant clashes with another conference that takes place during that extended time - in that case the conference will not be extended.

The default is *Best Effort* and is how the extend meeting function worked in previous releases.

Do not set this to *Ignore* in combination with **Conference Type**: *Automatic Connect*. This feature must only be used with **Conference Type**: *No Connect* or *One Button To Push*.

This feature must be used with caution, as once enabled, participants may be unable to join new conferences if resources are still in use by the previous conference. However, conferences will always be allocated: if extending the conference would block a new conference from being able to start (for example, by using the same URI on the bridge), the extension will not take place.

Maximum number of automatic extensions

The new setting: **Maximum Number of Automatic Extensions** defines how many times you want conferences to Auto Extend when **Extend Scheduled Meetings Mode** is set to *Automatic Best Effort*. The

maximum value is 16. In previous releases of Cisco TMS, the number of auto-extends was hard-coded to 16.

Lowering this value gives administrators a way to restrict the amount of time spent on a video call.

Allow early join

Introduced the ability to enable participants to join a conference 5 minutes before the conference start time:

- When set to *Yes*, **Administrative Tools > Configuration > Conference Settings > Allow Participants to Join 5 Minutes Early** ensures that Cisco TMS allocates the conference 5 minutes before the conference start time on the Main Participant.
- This duration is non-configurable and the setting is global.
- **Conference Control Center** reports that the conference started 5 minutes early in the event log, and shows the conference as active from the Early Join start time. Conference Statistics reports will still track the original start time, while Call Detail Records (CDRs) track the actual connection times.
- This is a best effort feature, so if the Main Participant does not have the resources available, some or all participants may be unable to join the conference within the 5 minute window.
- This feature extends the early join option to Cisco TMSBA clients, which did not support the Setup/Teardown buffer that this feature has replaced.
- Note that Cisco TMS does not dial out to WebEx until the scheduled start time of the conference.

Installer improvements

Significant improvements to the Cisco TMS installer including:

- The Complete/Custom choice has been removed to simplify the installation. The installer contains all necessary dialogs in one install path. This means you can no longer change the database location during an upgrade; if required this must be done using TMS Tools before upgrading.
- SQL Server is no longer installed as part of the Cisco TMS install.
- The SQL Server backup dialog has been removed.
- Customers upgrading from a version earlier than 14.2 will get a warning advising them to upgrade to 14.3.2, run the Time Zone Migration Tool, then upgrade to 14.4.

Improved support for Unified CM clustering

- A new **Clustering** tab has been added to **Systems > Navigator** for Unified CM systems. The following cluster information is displayed for all Unified CMs:
  - A list of the cluster members.
  - Which is the primary node.
  - A **View Details** link to navigate to the other cluster nodes in **Systems > Navigator**.
- Of the nodes in a cluster, Cisco TMS identifies the Publisher as the primary node, unless it is unavailable in which case it picks a Subscriber. This is the only node that Cisco TMS communicates with to scan and update Unified CM-imported systems.
- Unified CM versions 9.x and 10.x are supported (8.x is not).

Replace System GUI and functionality improvements

- Systems registered to a Unified CM can now be replaced in the same way as systems registered to a Cisco VCS.
- All endpoints can now be replaced with any other endpoint regardless of which call control system they are registered to.

- Bridges can be replaced with any other bridge, but this is a best effort feature and should be used with caution. **Conference Diagnostics** must be run after swapping a bridge.
- On replacing a system, a warning is shown stating that future conferences may be affected and advising that **Conference Diagnostics** should be run to check and fix any errors. This is particularly valuable for identifying issues when swapping bridges.
- The original system will now always be purged.
- The GUI has been simplified and now includes a search feature.

Improvements to the web interface, text strings, and error messages

- Added the field **Protocol for Web Interface Link** to Room systems.
- Clicking the Help icon after selecting a system in **Systems > Navigator** will now bring up a help page for that particular **System Type**. Previously the main Navigator help page would be displayed regardless of which system was selected.
- You can now delete option keys from the **Administrative Tools > General Settings** page. This could previously only be done directly in the database.
- You can now search the **Audit Log** using both date and time constraints: the fields **Start Date** and **End Date** have been replaced with **Start Time** and **End Time**.
- System names in **Software Manager** have been updated to reflect current product group names.
- Updated the Windows icon for the Cisco TMS application and for Cisco TMS Tools and the tool to enable HTTPS.
- All input fields with a maximum value are now restricted to a maximum of 5 digits.
- New fields in **Systems > Navigator** indicate which Unified CM or TelePresence Conductor a system is managed by.
- The hostname of the Cisco TMS server is now displayed in parentheses at the bottom right of the web interface, next to the serial number. In a redundant deployment, the hostname of the active node will be shown.
- When selecting a TelePresence Conductor in **Systems > Navigator**, the tab **Managed Systems** has been renamed to **Conference Bridges** to better reflect the functionality.
- Several improvements have been made to **Systems > Navigator >** select a system **> Summary**, including useful links to the Tickets section.

Phone book support for Unified CM-registered Cisco TelePresence System TC Series endpoints

It is now possible to set Cisco TMS phone books on endpoints running Cisco TelePresence System TC series software version 7 or later that are registered to a Unified CM. The parameters of the phone book server (the Cisco TMS server) must be provisioned to the endpoint by the Unified CM.

Improvements to migration of endpoints from Cisco VCS- to Unified CM-provisioned

For administrators migrating their call control infrastructure from Cisco VCS to Unified CM, Cisco TMS now understands that a system being added from a Unified CM was already managed by Cisco TMS.

If a system that is direct-managed by Cisco TMS is registered to a Unified CM and then imported to Cisco TMS using **Add Systems > From List > Unified CM**, Cisco TMS now recognizes that the two systems are in fact the same, and replaces the original system with the Unified CM-registered one, so all CDR and future conference data is retained.

Conference Diagnostics must be run after migrating an endpoint.

Changes to conference encryption logic

Endpoints can now be booked in a secure conference hosted on a bridge or TelePresence Conductor regardless of their encryption capabilities, as encryption will now be set on the bridge or TelePresence Conductor as well as on the individual endpoint participants.

For point-to-point or multisite calls, if **Booking > New Conference > Secure** *Yes* is selected, each leg of the call must be secure otherwise Cisco TMS will not allow the booking.

Overhaul of the TMS Tools interface

- An updated user-friendly look and feel.
- Streamlined modernized layout.
- Improvements to text strings.
- It is now possible to specify the database port for both Cisco TMS and Cisco TMSPE in **TMS Tools > Configuration** in the new **Port** field.

TelePresence Server content port

Cisco TMS now displays content port information for TelePresence Server and uses this information during resource calculation. This information is displayed under **Systems > Navigator >** select a TelePresence Server **> Settings > View/Edit Settings > Call Settings > Total Dedicated Content Ports**.

Scheduling for Cisco TelePresence Server and Cisco TelePresence MCU SIP-trunked to Unified CM

It is now possible to schedule conferences hosted on TelePresence Servers and TelePresence MCUs that are SIP-trunked to Unified CM and in *Locally Managed* operation mode.

TelePresence MCUs must run software version 4.5 or later.

Conference bridge Numeric ID Quantity

In **Systems > Navigator >** select a conference bridge **> Settings > Extended Settings**, **Numeric ID Quantity** is now limited to a maximum value of 200. Previously the maximum value that could be used was the total number of ports on the bridge.

Increasing the maximum value enables extended scheduling of recurrent conferences on the bridge.

TelePresence Server with Cisco Collaboration Meeting Rooms Hybrid

The dial out sequence on conference start has changed so that the WebEx participant is the last one to be connected.

Improved support for TelePresence Server CDRs

Cisco TMS now uses an improved TelePresence Server API to collect Call Detail Records (CDRs), making 'Remote Site', 'Call Direction' and 'Call Protocol' data available in the CDRs. This feature requires TelePresence Server version 4.0.

Call Detail Record cause codes for endpoints running Cisco TelePresence TC & TE software

In **Reporting > Call Detail Record > Endpoint**, when receiving a non-standard disconnection cause code from an endpoint running Cisco TelePresence TC or TE software, Cisco TMS previously mapped it to -1 in the call detail record. Now any cause code sent by a TC or TE endpoint is displayed in Cisco TMS with 1000 added to the number.

Database scanner service

Significantly improved the performance of this service especially in large deployments. Admins will note that Cisco TMS quickly detects configuration changes on managed systems. This work has had a positive effect on all database performance. Admins may notice an increase in CPU and memory usage as a result of the changes, as the service is no longer blocked while waiting for data, which allows for increased activity.

Endpoint description changes

'Cisco TelePresence Personal' and 'Cisco TelePresence Group Systems' have been changed to 'Cisco TelePresence TE Endpoints' and 'Cisco TelePresence TC Endpoints' respectively in the following areas of Cisco TMS:

- Configuration templates.
- Notification emails.
- Grouping in the Reporting pages.

Logs

- Added API logging for commands sent to and feedback received from managed systems both for services and IIS.
- Added WebEx API logging - the log name is: log-webex-web-tms.
- Reduced non-critical and superfluous log entries.
- Scheduling events are no longer shown in **Systems > Navigator >** select a system **> Logs > Feedback Log**.
- Removed redundant event-stats log.
- Added debug logging for Cisco TMSBA license usage to log-web-external log.
- Scheduling logs now include bandwidth calculations.

Improvements to the Conference Event Log

In **Booking > List Conferences > View Conference** the **Log** tab has been renamed to **Event Log**.

The following are now captured in the conference Event Log (also viewable in **Conference Control Center**):

- Changes to the recurrence pattern.
- Adding or removing WebEx.
- That a series has been recreated after edits to the conference.

Changes to one instance no longer update the conference event log for other instances. Changes to the series will update the log for all instances.

Editing the time or participants of a series will recreate all instances. The new instances will have a fresh conference event log. The old conference event logs will be available in the deleted original instances.

Updated hardware requirements and recommendations

For Cisco TMS, Cisco TMSXE 4.0, and Cisco TMSPE 1.2, we provide new guidance on estimating the size of your deployment, and updated hardware requirements based on deployment size.

- Memory requirements have been increased from earlier minimums to accommodate new functionality, including more extensive data caching that improves the overall application performance.

- Specific hardware and virtualization recommendations are made available for large deployments.
- Identical information on deployment sizes and hardware requirements can be found in *Cisco TMS Installation and Upgrade Guide*, and the Cisco TMSXE and Cisco TMSPE deployment guides.

Changes to managed system support

Support for the following has been added in this release:

- Cisco TelePresence MX200 G2
- Cisco TelePresence MX300 G2
- Cisco TelePresence MX700 Dual 55"
- Cisco TelePresence MX800 Single 70"
- Cisco TelePresence SX80
- Cisco TelePresence SX10

Support for the following has been removed in this release:

- TANDBERG Border Controller
- TANDBERG Gatekeeper
- TANDBERG ISDN Gateway
- TANDBERG Classic MCU
- TANDBERG Classic Endpoint
- Sony PCS1
- Polycom Viewstation (1st and 2nd generation)
- Polycom iPower
- Polycom ViaVideo
- Polycom MGC
- VTEL Galaxy
- Aethra VegaStar
- Radvision ViaIP Gateway
- Radvision ECS Gatekeeper
- Radvision / Cisco 3500 Series MCU

Updated configuration templates

The configuration template for TC software has been updated to incorporate new settings introduced in the TC7.1 release.

Time Zone Migration Tool

The time zone migration tool has been removed from this version of Cisco TMS.

Setup/Teardown buffers

The option to add setup and teardown buffers to conferences has been removed. Setup buffers have been replaced with the new Allow early join [p.17] feature.

Upgrading to 14.4 will remove any buffers from existing scheduled conferences. Early join is disabled by default, and will need to be configured in order to give a 5 minute 'early join' window before conferences.

Endpoints that are scheduled in One Button To Push conferences that take place in the 72 hours after the upgrade to 14.4 will have a mismatched start time as the buffer is removed from Cisco TMS but still exists on the endpoint. (The calendar is pushed to the endpoint by Cisco TMS 72 hours before the conference starts.)

To force an updated calendar to an endpoint, reboot it.

WebEx option key requirement removed

Enabling WebEx in Cisco TMS no longer requires an option key.

Removed Discover Non-SNMP Systems

In **Systems > Navigator > Add Systems > Advanced Settings**, the option to **Discover Non-SNMP Systems** has been removed, as Cisco TMS now discovers HTTP/HTTPS systems by default, if SNMP times out.

The setting **Administrative Tools > Configuration > Network Settings > Telnet/HTTP Connection Timeout** is used when adding systems using HTTP/HTTPS.

TelePresence Conductor scheduling improvements

In **Systems > Navigator >** select a TelePresence Conductor, the **Aliases** tab has been renamed to **TelePresence Conductor** and contains two new tabs: **Aliases** and **Service Preferences**.

Improved TelePresence Conductor scheduling implementation:

- The Database Scanner service regularly updates Cisco TMS with the capacity of the TelePresence Conductor. This also happens on **Force Refresh**.
- There is now a notification if a TelePresence Conductor is running out of capacity.
- The alias **Priority** number range now includes 0 in line with the TelePresence Conductor range of 0-65535. The default value is now 0, previously it was 1.
- The **Aliases** tab has been redesigned.
- Only XC2.3 is supported with 14.4. Customers running XC2.2 must carry out these tasks in the following order:
  a. Upgrade Cisco TMS to 14.4.
  b. Upgrade the TelePresence Conductor to version 2.3.
  c. In **Systems > Navigator >** select the TelePresence Conductor **> Settings > Edit Settings > TMS Scheduling Settings**, ensure that **Allow Booking** is checked and that the dialing settings are configured appropriately.
  d. Run **Conference Diagnostics** in Cisco TMS to identify and fix any conferences affected by the upgrades.
- The order in which a preferred bridge is chosen when routing has now changed as follows:
  a. TelePresence Server
  b. TelePresence MCU
  c. TelePresence Conductor
- Improved multi-screen system resource count.
- Added option to regenerate alias, if a conference is edited and the original alias is no longer available. Previously the conference had to be rebooked from scratch to find a new available alias.
- Ability to disable aliases so they can be 'retired' by deselecting the **Allow Booking** setting.
- If an alias in Cisco TMS does not exist on TelePresence Conductor, a ticket will now display. This is helpful if somehow an alias was edited or deleted on TelePresence Conductor.

- Added setting: **Administrative Tools > Configuration > Conference Settings > Restrict TelePresence Conductor Resources**.
- A warning will now be displayed if an MCU is no longer bookable directly in Cisco TMS because it has been added to a TelePresence Conductor.
- Removed the **Call Status** tab in **Systems > Navigator** for MCUs behind a TelePresence Conductor. No data was ever shown on this tab.
- New **Service Preference** tab for resource calculation.
  - Capacity calculation and adjustment
    - **Resource Cost Calculator** - adjust what percentage of a service preference's capacity is bookable by Cisco TMS. It is possible to adjust to between 1% and 200% of the capacity the TelePresence Conductor reports for a service preference.
    - Tracking in **Audit Log** whenever a change is made to capacity adjustments.

TelePresence Conductor scheduling limitations

As the TelePresence Conductor scheduling solution has notable limitations at this time, we recommend carefully considering these Limitations [p.83] and their workarounds prior to deployment. Upcoming releases of TelePresence Conductor and Cisco TMS will address these limitations, and an updated deployment guide for Cisco TMS with TelePresence Conductor will be made available at that time.

Documentation changes

- Redundancy information has moved from the Administrator Guide into the Installation and Upgrade Guide.
- New Participant Templates section in the Web Help/Administrator Guide.
- New section on best practices for database maintenance planning in the Installation and Upgrade Guide.

Other changes

- The SIP URI field has been removed from Cisco TMS user configuration. As a result, the SIP URI contact method is no longer displayed in the TMS User Phone Book Source.
- **Monitoring > Map Monitor** has been removed from Cisco TMS.
- Time zone information for Unified CM-provisioned endpoints has been removed from **Systems > Systems Overview** as all time zone data and updates are carried out by Unified CM. As a result, conference end time and extend messages are sent in the conference time zone for these systems, rather than the endpoint time zone.
- **Systems > Navigator >** select a bookable system **> Summary > Conferences** panel has been changed to **This Week's Bookings** to accurately reflect that this is a list of upcoming bookings for the system for the next 7 days.
- Enabled **Conference Control Center** snapshots for systems running Cisco TelePresence TC software version 6 and later.
- Purging a system is now done in batches as an asynchronous background event. This prevents purging from failing due to database timeouts if there is a large amount of data to be purged.
- The mechanism for receiving and processing participant feedback from conference bridges and TelePresence Conductor in **Conference Control Center** has been improved.
- Meeting end notifications will now display at the top of the screen for conferences hosted on a TelePresence MCU or TelePresence Server. The notification will remain in the centre for conferences hosted on TelePresence Conductor.
- The Cisco TMS installer now automatically sets the snapshot isolation settings when the database has been created manually. It is no longer necessary to set them using SQL Server Management Studio.

- Added secure-only support for Cisco TelePresence ISDN Gateway.
- SchedulerService now retries failed registrations of scheduled conferences every 5 minutes until 5 minutes after the conference was scheduled to start.
- Cisco TMS's Windows services are now configured to restart automatically if they unexpectedly crash. The restart will be attempted every 1 minute. Previously no action was taken if one of the services unexpectedly crashed.
- It is no longer possible to delete *Registering conference* events from the **Activity Status** overview list, as doing so would prevent the conference from launching.
- It is no longer possible to sort by **Owner** on the **List Conferences** page.
- Conferences booked on behalf of another user are now visible to users in groups that have the following permissions set:
  - **List Conferences - All**: No options checked
  - **List Conferences - Mine**: *Read* and *Update* checked

Changes to Cisco TMSBA (Booking API)

The Cisco TMSBA version number for this release is 13. Note that some of the changes below are not versioned, and will affect any client using the API with Cisco TMS14.6.2, regardless of the API version called.

For technical detail on features, see *Cisco TMSBA Programming Reference Guide*.

Changes to the handling of ongoing and deleted meetings

All changes in Changes to the handling of past, ongoing and deleted meetings [p.15] above also affect all Cisco TMSBA versions used with Cisco TMS 14.4.

Support for the No Connect meeting type

Cisco TMSBA now supports booking meetings as *No Connect*, which is where all participants must dial in, and none are connected or prompted automatically.

Support for including email addresses in meetings

Including an email address per participant is now supported, and can be used to make Cisco TMS send conference email notifications to participants. As of Cisco TMSPE 1.2, Smart Scheduler uses this feature to invite Cisco TMSPE users to meetings.

License tracking change

A client session string has been added to the SOAP header to allow Cisco TMS to recognize each client consuming a license key. Previously, the key was tied to the IP address of the client server.

The new implementation allows different nodes in a redundant client deployment to use the same license key for Cisco TMSBA.

See the SOAP header section of *Cisco TMSBA Programming Reference Guide* for implementation details.

Meeting extensions no longer synchronized

Manual or automatic extensions of conferences are no longer synchronized through Cisco TMSBA; the scheduled end time will be retained in the client. See also Resource availability check on extension [p.16].

Saving a series with instances in the past

It is now possible to save a meeting series that originated with a Cisco TMSBA client, where one or more instances occurred in the past.

New recurrence pattern

Monthly recurrence at a given day of the month is now supported.

Support for series where all instances are exceptions

Making a meeting series consisting only of exceptions from the original recurrence pattern is now supported.

External Primary Key now used to uniquely identify a conference

The SaveConference function now uses ExternalPrimaryKey, if present, as the primary identifier for API-scheduled conferences, and treats it as a unique value. When the ExternalPrimaryKey is present, matches on ExternalPrimaryKey will take precedence over matching on ConferenceID in Cisco TMSBA functions for querying and saving conferences. As of 14.4, saving a conference with an existing ExternalPrimaryKey will therefore overwrite the existing conference. This change impacts all Cisco TMSBA versions.

Other changes

- Anonymous authentication is no longer supported with Cisco TMSBA.
- Ad hoc conferences are no longer made available for synchronization via the transaction log. This functionality has only been used by Cisco TMSXE in the past.
- More specific conference log messages in Cisco TMS when modifying meeting series through Cisco TMSBA.
- Several new error messages, see Cisco TMSBA Programming Reference Guide for an overview.
- Increased the number of empty fields that are exposed as empty XML elements, where they were previously omitted.
- Delete exceptions now include modified data.
- GetConferencesForSystems and GetConferencesForUser now only take input in UTC time.
- Added method **GetRecurrentConferenceByIdWithFirstOngoingOrPendingStartTime**.
  The start time of the conference returned will be mapped to the first ongoing or pending conference instance.
- Added several new methods primarily in support of Cisco TMSXE.

Changed in 14.3.2

TelePresence Server communication

Cisco TMS now keeps track of the protocol a TelePresence Server is using to communicate. Previously Cisco TMS always attempted to communicate with a TelePresence Server over HTTPS regardless of whether the last successful connection had fallen back to HTTP or not. TelePresence Servers communicating using HTTP will experience a significant improvement in performance as a result of this change.

Escalation of conferences to TelePresence Server

Adding a multiscreen participant to an existing conference that was booked by adding an MCU manually now reroutes the conference onto a TelePresence Server to accommodate the multiscreen participant.

Allocation documented in Cisco TMS Administrator Guide

A new section has been added to the Routing chapter describing how Cisco TMS allocates participants for scheduled conferences.

Field added to Time Zone Update Tool

A new field: **Number of conference series to process** has been added to the **Time Zone Update Tool**. This configurable field has a default of *1000*, and is the number of conference series that will be checked by the tool when it is run. To check more conference series than the value in this field, the tool must be run again.

New in 14.3.1

Improvements to the web interface

Text string changes include:

- Changed **First Meeting Id** , **Meeting Id Step**, and **Meeting Id Quantity** to **Numeric ID Base**, **Numeric ID Step**, and **Numeric ID Quantity** in **Systems > Navigator >** select a TelePresence Conductor, TelePresence Server or TelePresence MCU **Settings > Extended Settings**.
- Conference password is now referred to as PIN as this must be a numeric rather than alpha-numeric value.
- **Administrative Tools > TMS Server Maintenance > Download Log Files** renamed to **Download Diagnostic Files** to more accurately represent the contents of the downloaded zip folder.

Behavior changes include:

- Added a clickable link in **Systems > Navigator >** select a system **> Summary > Conferences** that will launch the selected conference in the **View Conference** page.
- Removed the setting: **Systems > Navigator >** select a Cisco VCS **> Provisioning > VCS Provisioning Mode** as Cisco TMS Agent Legacy is not supported in Cisco TMS 14.x. The only possible provisioning mode is *Provisioning Extension*.
- Setting **Administrative Tools > Configuration > Network Settings > Lookup User Information from Active Directory** to *No* now disables all the other fields in the **Active Directory** section of this page.
- Removed validation for the **Phone Number** fields in the **Edit Personal Information** popup window.
- The Time Zone Update Tool now remembers the value entered for **Hostname** when the tool is run multiple times.
- Added a new setting: **Allow WebEx Booking** in **Systems > Navigator >** select a TelePresence Server or MCU **> TMS Scheduling Settings**. This is enabled by default for new bridges or existing bridges after upgrade.
- Added a new configurable setting in **Administrative Tools > Configuration > Conference Settings**: **Allocation Attempts for Scheduled Calls**, which specifies how many times Cisco TMS will attempt to allocate the conference on the bridge. The default value is 4.
- The system **SIP URI** for endpoints and MCUs is now displayed in **Systems > Navigator >** select a system **> Call Status**.

Security

- Adding and managing a TelePresence Server on a secure-only Cisco TMS is now supported.
- Introduced conference encryption support for TelePresence Server for H.323 calls.

- Added support for encryption and reading of SIP transport type to Unified CM-registered TC/TE endpoints. Encrypted calls are now possible if SIP transport type is SSL.

Endpoints

- Cisco TelePresence TC software packages are no longer downloaded in Cisco TMS due to the changes to release key policy that occurred with the TC 6.1 release. For further details see: TC6 Software release notes.
- The maximum bandwidth for a Polycom HDX 8000 has been increased to 6144kbps.

Logs

- Log files for Cisco TelePresence Management Suite Analytics Extension (Cisco TMSAE) are now contained in the **Download Diagnostic Files** zip file.
- The **Conference Control Center** Event Log for conferences scheduled through a TelePresence Conductor now contains information on the bridges that were used in the conference.

New in 14.3

The following features and functionality are new or changed in 14.3:

Improvements to TelePresence Server support

The operation mode for any TelePresence Server in Cisco TMS will now be displayed as one of:

- *Remotely Managed*
- *Locally Managed*

Note that TelePresence Server in *Remotely Managed* mode is only supported in Cisco TMS if it is managed by a TelePresence Conductor that is present in Cisco TMS. A warning ticket will be raised if these criteria are not met for a TelePresence Server in Cisco TMS.

Cisco TMS will clear its management address from any TelePresence Server set to *Remotely Managed*.

Other improvements in this release:

- Updated icons and descriptions; the icon will now indicate whether TelePresence Server is in a rack.
- TelePresence Server version 2.2 or later is now required. Make sure to upgrade TelePresence Server before upgrading Cisco TMS to 14.3.
- Added support for Cisco TelePresence Server on Virtual Machine.
- When adding TelePresence Server to Cisco TMS, **Use Lobby Screen for Conferences** is now set to *On*.
- Now reconnecting calls through TelePresence Server after any disconnection, including for WebEx video.

Improvements to TelePresence Conductor support

To better accommodate the dial plan restrictions of each organization, the numeric variable part of the TelePresence Conductor aliases used by Cisco TMS has been made configurable for the administrator.

The new settings are found by going to **Systems > Navigator**, selecting TelePresence Conductor and going to the **Extended Settings** tab:

- **First Meeting Id**—the number to start at when creating numeric IDs.
- **Meeting Id Step**—how much to increase the numeric ID by with each ID generated.

- **Meeting Id Quantity**—the number of meeting IDs to allow.

Other changes in this release:

- Alias selection will now be done using a prioritized list specified by the administrator. Different prioritizations can be defined for immersive and other aliases.
- SIP and H.323 settings for scheduling have been added to the TelePresence Conductor**Edit Settings** tab.

Version XC2.2 is now supported and required. Support for XC1.2 is discontinued as of 14.3. Cisco TMS will raise a ticket if a previous version of TelePresence Conductor is detected.

The recommended deployment model for XC2.2 is the back-to-back user agent (B2BUA), which is SIP-only.

TelePresence Conductor scheduling limitations

As the TelePresence Conductor scheduling solution has notable limitations at this time, we recommend carefully considering these Limitations [p.83] and their workarounds prior to deployment. Upcoming releases of TelePresence Conductor and Cisco TMS will address these limitations, and an updated deployment guide for Cisco TMS with TelePresence Conductor will be made available at that time.

Meeting ID quantity setting for TelePresence Server and MCU

The **Meeting Id Quantity** setting has also been implemented for TelePresence Server and MCU and is available on the **Extended Settings** tab of each system.

Improved support for TelePresence Conductor-managed TelePresence Server and MCU

- Cisco TMS will now use feedback from TelePresence Conductor for managed bridges and ignore any feedback sent directly from those bridges.
- Irrelevant settings and diagnostic tickets, and all extended settings for TelePresence Conductor-managed bridges have been removed from Cisco TMS. Removed tickets are related to bandwidth, gatekeeper, and SIP server registration.
- Cisco TMS will now ignore the setting **Administrative Tools > Configuration > Conference Settings > Advanced Conference Options >Automatic MCU failover** if set to *If conference start or MCU polling fails* for conferences hosted by TelePresence Conductor.

Configurable length for auto-generated PINs

In **Administrative Tools > Configuration > Conference Settings**, a new setting has been introduced that allows the administrator to specify the number of digits Cisco TMS will include when auto-generating PIN codes for each conference created.

The name of the new field is **Auto Generated Password Length**. The setting is only applied when **Auto Generate Password on New Conferences** is enabled.

Notifications to all participants that a scheduled conference is ending

If a conference is hosted on a multipoint bridge, all conference participants can now receive in-video notifications at configurable intervals; by default the notifications will be sent at 5 and 1 minutes before the conference is scheduled to end.

Previously, in conferences hosted on a TelePresence MCU, TelePresence Server, or TelePresence Conductor, only master participants that supported notifications sent directly from Cisco TMS would be warned that the conference was ending.

To enable this feature:

1. Go to **Administrative Tools > Configuration > Conference Settings**.
2. In **Conference Connection/Ending Options**, set **Show In-Video Warnings About Conference Ending** to *Yes*.

To configure the interval:

1. Go to **Administrative Tools > Configuration > Conference Settings**.
2. In **Show Message X Minutes Before End**, enter the number of minutes before the end of the conference that you want the message to appear.
   To make the message appear multiple times, enter several values separated by a comma.

The setting was previously supported only for the legacy TelePresence MPS system with only three possible values: 10, 5, and 1.

Improved support for CTS / TX endpoints

Cisco TMS now makes it possible for CTS / TX endpoints to:

- be the video conference master.
- receive and display alerts and notifications from Cisco TMS, including meeting start and end notifications for the video conference master.
- receive setup buffers that can be used to determine whether and when to allow participants to call in early.

Note that the above features only work with software versions TX 6.0.2 and CTS 1.10.1.

New scheduling logs and improved log documentation

Four new logs for debugging routing and scheduling-related events have been added to Cisco TMS.

The logs are turned off by default. To activate, set "SchedulingLogger" to **`INFO`** or **`DEBUG`** in the configuration files listed below.

Log name	Description	Configuration file
log-scheduling-liveservice.txt	Keeps a record of LiveService routing decisions.	**C:\Program Files (x86)\TANDBERG\TMS\Services\TMSLiveService.exe.CONFIG**
log-scheduling-schedulerservice.txt	Keeps a record of SchedulerService routing decisions.	**C:\Program Files (x86)\TANDBERG\TMS\Services\TMSSchedulerService.exe.CONFIG**
log-scheduling-web-external.txt	Keeps a record of Cisco TMSBA routing decisions.	**C:\Program Files (x86)\TANDBERG\TMS\wwwTMS\external\Web.config**
log-scheduling-web-tms.txt	Keeps a record of routing decisions for bookings created using the Cisco TMS web interface.	**C:\Program Files (x86)\TANDBERG\TMS\wwwTMS\Web.config**

A section on logs has also been added to the Troubleshooting chapter of *Cisco TMS Administrator Guide* and the built-in help, including a complete overview of Cisco TMS logs and their respective configuration files.

Improvements to WebEx Enabled TelePresence

For customers using Cisco Collaboration Meeting Rooms Hybrid, Cisco TMS now supports:

- TSP Audio with TelePresence Server
- Participant Access Code in conferences booked through Cisco TMS web interface or Cisco TMSBA.

The participant access code has been added to:

- the **WebEx Details** tab in **View/Edit Conference** displays the access code.
- booking confirmation email, when the field is in use.
- **ParticipantAccessCode** in the WebEx element.

Email warning when no setup buffer is included

Booking invitations can now be configured to include a special warning when no setup buffer is configured and it is not possible for telepresence participants to call in before the start time.

The tag {NO_SETUP_BUFFER_MESSAGE} is included in the template by default, but is empty and will not be displayed. Adding a descriptive text will make the text appear in a yellow warning section at the top of the booking invite.

Database storage optimization

Customers with very large databases will notice a reduction of database size.

Other changes

- The **Navigator** tree is now sorted alphabetically in *Search* and *All Systems* views.
- No longer appending SEP+ Mac address to the system name for endpoints managed by Unified CM, unless the endpoint does not have a name in Unified CM.
  Names will be updated when systems are first refreshed in Cisco TMS, manually or automatically.

Support has been removed for:

- Windows Server 2003 on customer-supplied servers.
- Languages other than English in the Cisco TMS installer.
- A number of other 3rd party/deprecated systems: for details see Interoperability [p.85].

Removed redundant and deprecated options:

- Deprecated user account setting *Exchange Integration Service Account* removed from user settings.
- Redundant options for virtual directories removed from upgrade dialog.
- Deprecated IIS component XAPsite removed.
- TelePresence Conductor entry removed from "Set on Systems" list for phone books. TelePresence Conductor cannot receive phone books.
- "Snapshot" option from Conference Control Center in encrypted conferences and other scenarios where the TelePresence Server or MCU will not provide snapshots.

Map Monitor will be removed in a future release.

New in 14.2

Introducing support for Smart Scheduler

This release removes the TMS Scheduler from Cisco TMS.

The new Smart Scheduler has been introduced to replace it, available free as part of the Cisco TelePresence Management Suite Provisioning Extension (Cisco TMSPE). See the Cisco TMSPE Release Notes for further details.

WebEx Enabled TelePresence support

It is now possible to schedule video meetings in Cisco TMS that include both TelePresence and WebEx participants:

- Combined WebEx and TelePresence meetings with fully integrated video between the two.
- Seamless booking of TelePresence systems and WebEx users through Cisco TMS.
- Support for booking meetings with WebEx from the Booking API.
- Support for Single Sign On, also referred to as Delegated Authentication within WebEx.

Time zone awareness

As of version 14.2, all booking-related functionality in Cisco TMS is fully time zone aware. This functionality is necessary to ensure the validity of bookings that span daylight savings time (DST) change events and other changes to time zones.

The changes include:

- Booking-related dates are now stored in UTC on the server, along with a full set of DST change rules for the time zone in which the conference was booked.
- Conferences that were booked prior to upgrading to Cisco TMS 14.2 will be automatically updated with the current time zone information available for the server time zone.
- The **Conference Booking Time** setting in Conference Settings has been removed.

Existing data from previous releases may contain discrepancies affecting meetings spanning DST change events.

The Cisco TMS Time Zone Update Tool is supplied to assist administrators in avoiding incorrect meeting times post upgrade from previous versions.For backwards compatibility with reporting functionality, dates are also stored in the local server time.

The time zone update tool uses Cisco TMSBA to modify time zones. Note that you cannot change the time zone of an existing conference using the Cisco TMS web interface.

Prior to this release, all bookings were automatically made in the configured Cisco TMS server time zone. Conversion from server time zone to UTC would therefore sometimes fail in connection with DST changes.

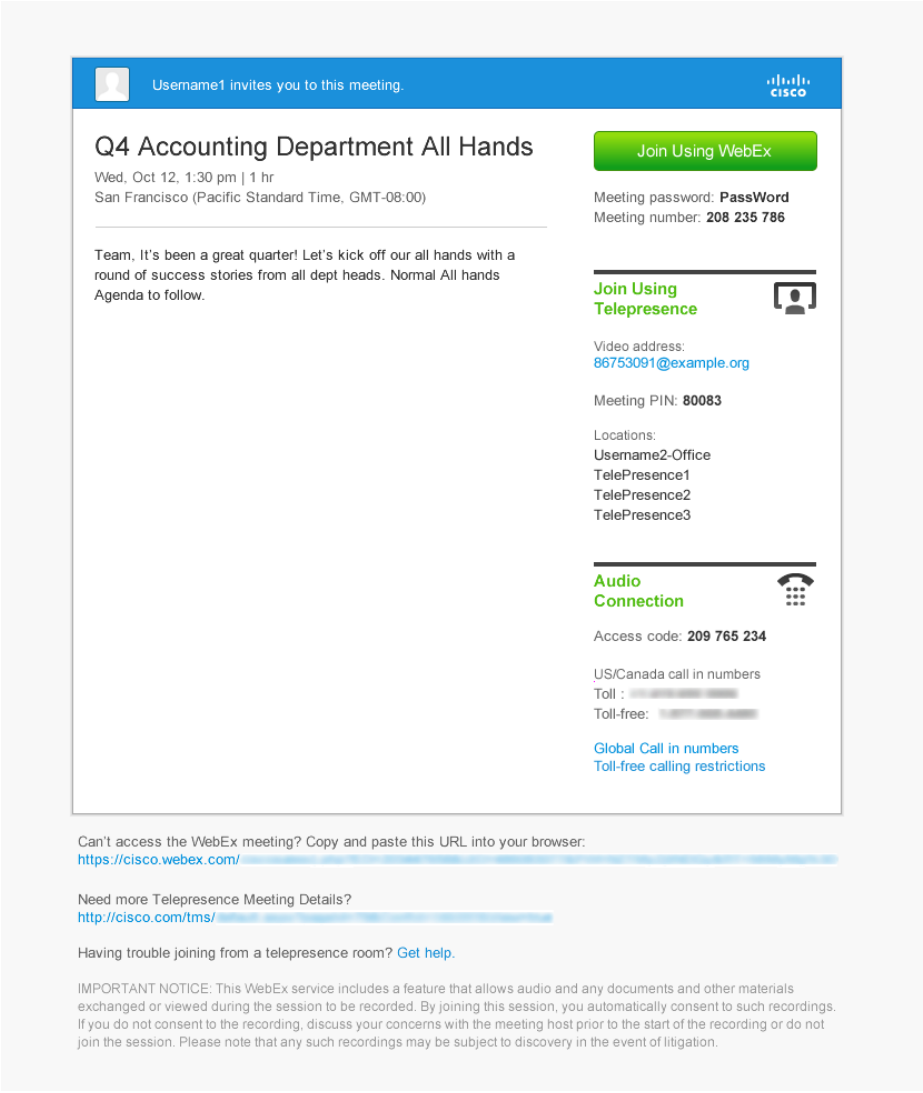
Note that changing the time zone of the Cisco TMS server is still not supported.

For more detail on how the time zone changes affect booking data and time zone data migration, see *Cisco TelePresence Management Suite Installation Guide*.

For information on how the APIs are affected by these changes, see also Cisco TelePresence Management Suite Extension Booking API [p.33]

Updated email template design and functionality

New email templates have been designed that incorporate images, clickable links, and a more intuitive layout:



Features include:

- The data contained in the email notifications has been simplified to contain only the most important details for each participant.
- Clickable links: the SIP link will open Cisco Jabber Video for TelePresence on the client machine, or any other SIP client.
- There are HTML and plain text versions of each template.
- Localization: 26 languages are now supported.

The following email notifications are affected:

- Booking Invite - (Legacy: Confirmation): Email sent to participants in a meeting. Shows the most important information for each participant.

- Booking Cancel - (Legacy: Delete): Email sent to the participants if a meeting is cancelled.
- Booking Event - New for use with the booking API so that if a conference request fails, this email with some details can be sent to the administrator.

Backwards compatibility with the legacy templates has been prioritized:

- The old templates (Booking Confirm and Booking Delete) are no longer used by Cisco TMS and have been replaced by the new Booking Invite and Booking Cancel.
- You will see both the old and new templates in the templates list, the old templates have LEGACY after them.
- After upgrading to 14.2, administrators can copy and paste the content from the old legacy templates into the corresponding new template.

Option to limit MCU conference size in Cisco TMS

Cisco TMS can now limit conference size on Cisco TelePresence MCUs and TelePresence Servers even if they are not in Port Reservation mode. A new setting has been added in **Systems > Navigator >** select an MCU **> Extended Settings >** **Limit Ports to Number of Scheduled Participants**. If port reservation mode is enabled for this MCU, this setting will be set to *Yes* and grayed out. If port reservation is not enabled for the MCU, you can use this setting to choose whether you want to limit the number of ports used to the number of scheduled participants.

This can also be set on a per conference basis during booking, the same setting appears in the MCU **Settings** tab once participants have been added to a conference.

New option to update System Connectivity Status

A new setting has been introduced: **Administrative Tools > Configuration > Network Settings**: **Update System Connectivity for Systems**.

You can now choose whether Cisco TMS will change a system's connectivity status if it detects it is behind a firewall or thinks it is reachable on the public internet. If set to *Automatic*, it will change the status, if set to *Manual*, Cisco TMS will not change it from whatever status it was in before, but you can change this in **Systems > Navigator >** select a system **> Connection** tab **> System Connectivity** for each system.

For more information see the 'How Cisco TMS communicates with managed systems' section of the 'System management overview' chapter of the Cisco TelePresence Management Suite Administrator Guide.

Removed option to modify call route for a No Connect conference

Booking a “No Connect” type of conference will reserve the systems and generate a call route for that conference, but requires all participants to dial in to the conference manually. As of this release, users can no longer modify the generated call route when scheduling a No Connect conference.

Cisco TelePresence Management Suite Extension Booking API

Cisco TMSBA is now at version 11. Feature updates include:

- The new time zone awareness features for scheduling also apply to Cisco TMSBA.
  Integrating clients can now supply a full set of time zone rules along with the conference data when booking, using ConferenceTimeZoneRules. If no rules are provided, Cisco TMS will use the time zone rules of the conference owner. See Time zone awareness [p.31] for more information on transitioning from previous versions.

- Cisco Collaboration Meeting Rooms Hybrid is supported by Cisco TMSBA. We strongly recommend using the new ExternalConference attribute to add WebEx to a conference.
  The previous way of adding WebEx to conferences (DataConference) has been kept for backwards compatibility. Support for non-WebEx data conferences was discontinued in API version 10 (Cisco TMS 14.1).
- Booking of SIP Audio dial-in and dial-out participants is now fully supported.
- Clients now have two new functions for invoking email confirmation or notifications of other booking events; **GetConferenceBookingEventMail** and **GetConferenceInviteMail**. Clients may also insert their own errors, warnings, or informational messages into email notifications. A new SendConfirmationMail flag in the SOAP header lets clients determine whether email notifications should be sent for each booking request.
- Language support for email notifications: The new ConferenceLanguage attribute of the Conference object specifies which language to use for notifications. The new Remote Setup API function **GetConferenceLanguages** returns a full list of supported languages.

The following changes have been made to existing functionality:

- **GetConferencesForSystems** now returns scheduled conferences only, and no longer includes ad hoc conferences.
- **GetConferencesForUser** and **GetConferencesForSystem** now calculate using minutes instead of rounding to the nearest day.

Several changes have been implemented to how ongoing conferences are handled:

- Cisco TMS no longer clears the existing call route when adding or removing a participant using Cisco TMSBA during an ongoing conference.
- When the start time of an ongoing conference is changed, the conference will be re-seeded, and the ongoing conference may be disrupted.
- For any changes to the booking of an ongoing occurrence of a series using **SaveConference**, a new **Ongoing** element has been introduced which the client may use to prevent the ongoing meeting from being affected by changes, to avoid disruptive effects to the meeting or series.
- **GetRecurrentConferenceById** now returns the start and end time both for any ongoing occurrence and the next upcoming occurrence of the series.

For further detail on the features described above and how to use them, see *Cisco TelePresence Management Suite Extension Booking API Programming Reference Guide* for this version.

Changed in 14.2

Changes to service pack requirements for Windows Server 2008 and Windows Server 2008 R2

Before upgrading to this version of Cisco TMS:

- Windows Server 2008 requires Service Pack 2.
- Windows Server 2008 R2 requires Service Pack 1.

HTTPS enabled by default for the Cisco TMS website

To improve security, HTTPS is now enabled by default for the Cisco TMS website. Administrators will be asked if they want to provide a certificate or generate a self-signed certificate during install.

Windows Server 2003 ASP.NET version updated

For installations of Cisco TMS on Windows Server 2003, the installer will set the ASP.NET version on the default web site to version 4.0.

Routing and distribution in cascaded MCU conferences

Least cost routing

In cascaded conferences:

Cisco TMS will now prefer MCUs in this order:

1. Cisco TelePresence MCU
2. Cisco TelePresence MPS
3. Tandberg MCU
4. 3rd party MCU

Cisco TMS will always prefer the MCU with the most remaining capacity. This will effectively give you fewer MCUs than you needed in previous Cisco TMS releases which is a more efficient use of resources.

Best impression distribution

In this release there have been two changes to Best Impression distribution:

- MCUs are now sorted by available number of video ports instead of by total number of ISDN ports.
- Improved route checking before saving a conference, this will prevent some issues with saving conferences.

Removed Enable Cisco CTS Native Interop Call Routing

This setting, which was under **Administrative Tools > Configuration > Conference Settings**, was for use with Cisco Unified Communications Manager (Unified CM) and CTS endpoints to enable scheduling of a call between an endpoint running TC or TE software and a Cisco CTS endpoint in Cisco TMS without the requirement for a TelePresence Server to bridge the call.

This applied only to CTS version 1.7.4 and earlier and Unified CM version 8.5 or earlier.

The default setting was *No*: A Cisco TelePresence Server will host the conference. Now, the setting has effectively been set to *Yes* permanently: (A TelePresence Server will not be used), and removed in the GUI, so Cisco TMS will not use a TelePresence Server by default when routing CTS endpoints in calls.

CTS endpoints and Unified CMs running older software must be upgraded before upgrading Cisco TMS, or you will lose the ability to schedule calls between CTS endpoints and endpoints running TE and TC software because routing will fail.

Upgrading Cisco TMS to 14.2 will change the setting to *Yes* even if it was previously disabled. Routing behavior for future conferences booked before the upgrade will not change. These calls will still use a TelePresence Server.

Add Participants window Last Used tab: number of systems listed

The **Add Participants** pop up window **Last Used** tab now lists the last 10 systems used by the logged in user as default. Previously this was a configurable value.

Updated configuration templates

The configuration template for TC software has been updated to incorporate new settings introduced in the TC6.0.1 release.

Allocation attempts for scheduled calls

The number of allocation attempts now follows the number set here: **Administrative Tools > Configuration > Conference Settings > Connection Attempts for Scheduled Calls**. Previously a maximum of 3 allocations was attempted.

Database snapshot isolation

ALLOW_SNAPSHOT_ISOLATION is now *On* by default for the tmsng database. Administrators setting up the database manually must ensure that this setting is enabled. **READ_COMMITTED_SNAPSHOT** must still be set to *Off*.

Conference Control Center Send Message function

The message received on systems has been moved from the center to the bottom of the screen, for systems hosted on MCUs only. This does not affect systems hosted on a TelePresence Server at this time, this is scheduled to be changed in a future Cisco TMS release.

Removed support for 3rd party systems

This release removes support for the following 3rd party systems:

- Sony PCS-Series
- Polycom Viewstation (1st and 2nd gen)
- Polycom iPower
- Polycom ViaVideo
- VTEL Galaxy
- Aethra VegaStar
- Rad ViaIP Gateway
- Rad ECS GK
- Vision Series

Planned changes for future releases

Support for Microsoft Windows Server 2003, and Microsoft Windows Server 2008 32-bit operating systems will be removed in the next release of Cisco TMS. Note that we will still support the Cisco TMS Server Appliance on Windows Server 2003.

Monitoring > Map Monitor will be removed in a forthcoming release.

New in 14.1

Cisco TelePresence Conductor scheduling support

Cisco TMS now supports scheduling conferences with Cisco TelePresence Conductor XC1.2.

The following features have been introduced:

- Make TelePresence Conductor the preferred MCU in routing.
- Configure TelePresence Conductor alias patterns in Cisco TMS and view the regular expression for use on the TelePresence Conductor and VCS.
- Free choice of alias in booking. Create your own conference address by modifying the variable part.
- Automatic generation of conference address unless modified during booking.
- Cisco TMS will reserve conference addresses it has generated from alias patterns.
- Check availability of your chosen conference address during the booking process.
- Configure a maximum number of concurrent scheduled calls bookable on the TelePresence Conductor from Cisco TMS – does not affect the resource allocation on the TelePresence Conductor, but allows the administrator to save some TelePresence Conductor resources for ad hoc calls.
- CDRs from MCUs managed by a TelePresence Conductor if the MCUs are added into Cisco TMS. Note that the CDRs will not contain a ConferenceID.
- Monitoring of scheduled and ad hoc calls in **Conference Control Center**.

New endpoint upgrade API

Cisco endpoints running software version TC 6.0 have a new API for use in software upgrades. Endpoints on earlier TC software use the previous upgrade API.

- It is now the endpoint that retrieves the software package from Cisco TMS. The upgrade will start when the endpoint itself initiates it.
- The **System Upgrade Status** page in Cisco TMS has also been improved. The endpoint itself sends continuous feedback throughout the process. To see the upgrade status, see **Systems > System Upgrade > System Upgrade Activity Status**.

Cisco Unified CM phonebook sources

It is now possible to create a phone book source from a Cisco Unified CM list of users and their associated devices through **Phone Books > Manage Phone Book Sources**. This applies only to Cisco Unified CMs running software version 8.6.2 or later.

Cisco TelePresence Server

When booking a new conference, the **Password/PIN** field is now also applied to conferences booked using TelePresence Server version 2.3 or later.

Cisco TMS can now limit the number of ports used when scheduling a TelePresence Server 2.2 and later. Two fields have been added:

- A TelePresence Server-wide setting, **Port Reservation** in **Systems > Navigator >** select TelePresence Server **> Settings > Extended Settings,** has been added.
- The setting can be altered on a per conference basis in **Booking > New Conference >** Add some participants including a TelePresence Server **> MCU Settings** tab **> Port Reservation.**

New Administrator Guide and web help

Improvements to the Cisco TMS documentation for this release include:

- The Administrator Guide and web help have been merged and updated. All information is now available both in PDF on cisco.com and HTML format inside the application.
- New chapters explain routing and systems management.

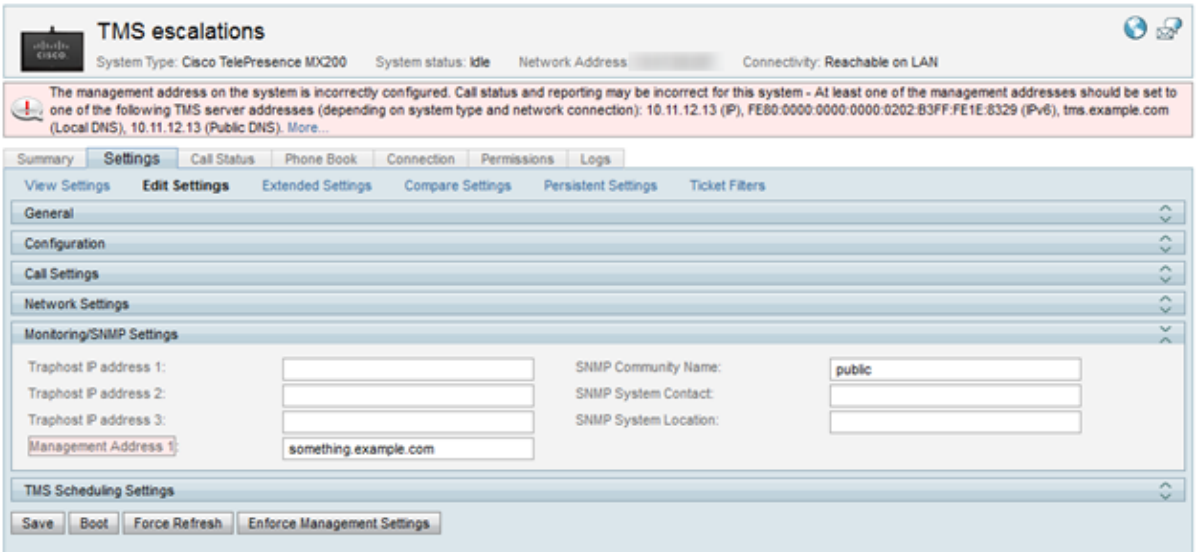
- Redundancy deployment is now a part of the Administrator Guide.
- The TMS tools application is now documented in full.
- Everything is available in one pdf on Cisco.com.
- The information has been restructured to focus on the tasks carried out by the Cisco TMS users.
- All screen and field descriptions are still available as context-sensitive help from the Cisco TMS application.

As part of this consolidation, “Getting Started” is no longer a part of the Cisco TMS Installation Guide. All guidance on setting up and configurating Cisco TMS is now found in the Administrator Guide and web help.

Highlighting of fields in Systems > Navigator

When one or more settings for a managed system are incorrect, the incorrect settings are now highlighted in **Systems > Navigator** so that the administrator can easily identify which settings require attention.

The color scheme follows the Ticketing Service, where “Critical” and “Major” errors are marked in red, and “Warnings” are marked in yellow.



The **Systems > Navigator** window for a system with an incorrect **management address**.

Configurable database timeout value when upgrading Cisco TMS

The default database timeout value when upgrading Cisco TMS is 30 minutes. This value applies to each of the installer’s internal database operations. For large deployments with years of historic call or system data, some of the operations may need more than 30 minutes to complete.

The timeout value is now configurable via a command line option. To use a timeout value of 60 minutes, run the installer using the command line:

```
TMS14.1.exe /z"sqltimeout 60"
```

Substitute *60* with a higher value if needed.

We recommend using the default value of 30 minutes, and only increasing the timeout value if the initial upgrade attempt is failing.

Content Mode options on the Cisco TelePresence MCU

Cisco TMS now supports the new Content Mode settings introduced in version 4.3 of the Cisco TelePresence MCU.

In **Systems > Navigator >** select a Cisco TelePresence MCU on 4.3 or later **> Settings > Extended Settings**, the **Content Mode** setting now has the following options: *Disabled*, *Passthrough*, *Transcoded*, and *Hybrid*.

Discontinued support for Cisco TMS Agent Legacy

Cisco TMS Agent Legacy has been removed from Cisco TMS 14.

If you are currently utilizing Cisco TMS Agent Legacy, you must migrate to Cisco TelePresence Management Suite Provisioning Extension (Cisco TMSPE) before upgrading Cisco TMS. The Cisco TMS installer will stop attempted upgrades to 14.1 if detecting that Cisco TMS Agent Legacy is in use.

For details on upgrading with provisioning, see Upgrading to 14.6.2 [p.86].

Note: For new installations of Cisco TMSPE with Cisco TMS 14.1, the TMS Provisioning Extension Windows service will have its **Startup Type** set to *Manual*. To automatically start Cisco TMSPE after server reboots, change the **Startup Type** to *Automatic* using the Windows services panel.

Cisco TMS Agent Legacy remains supported in Cisco TMS 13.2.x.

Discontinued support for Cisco TMSXE 2.x

Cisco TMS 14.1 and later does not support Cisco TMSXE 2.x. Customers still running Cisco TMSXE 2.x must migrate to Cisco TMSXE 3.x before upgrading to Cisco TMS 14.1.

Cisco TMSXE 2.x remains supported in Cisco TMS 13.2.x.

Editing of local phone books

It is no longer possible to edit local phone books for systems in **Systems > Navigator**.

Trap Log changed to Feedback Log

Reporting > System > Trap Log is now called **Feedback Log**.

Format of Active Directory username

Cisco TMS now requires the format of the Active Directory username to be:

domain\username or username@domain

This applies to:

- **Administrative Tools > Configuration > Network Settings >Active Directory**
- The Active Directory phone book source

Web Conferences

Cisco TMS 14.1 does not support Web Conferences: Cisco WebEx OneTouch 1.0, TANDBERG See&Share, and Microsoft Office LiveMeeting.

These solutions remain supported in Cisco TMS 13.2.x.

Cisco Cisco Collaboration Meeting Rooms Hybrid 2.0 will be supported in a future version of Cisco TMS.

Cisco TMS Installer

The installer no longer enforces a reboot of the Windows Server after an upgrade. The installer now only prompts the administrator to reboot the server if necessary.

Removed the Call Status page for MCUs

Previously, Cisco TMS allowed users to create ad hoc conferences on MCUs using the **CallStatus** page in the **System > Navigator**. These ad hoc conferences were assigned a number that was in the range reserved for scheduled use by Cisco TMS, and could thus lead to two conferences having the same number.

In Cisco TMS 14.1, it is no longer possible to create new conferences on MCUs using this page.

Protocol priorities when routing scheduled calls

Cisco TMS now prioritizes SIP over dialing an IP address when routing scheduled calls. Cisco TMS still prefers using H.323 (dialing the H.323 ID or E.164 alias) over SIP.

Option for database re-indexing removed

The *Re-index database* option found under **Administrative Tools > TMS Server Maintenance** has been removed. Cisco TMS no longer supports automatically re-indexing tables in the tmsng database.

New in 14.0

Release statement

This is a controlled distribution release aimed at United States of America Federal Government customers requiring a JITC-compliant version of Cisco TMS.

This release includes specific features intended for use in environments that require using Cisco TMS as approved on the DISA Approved Products list.

Improved platform security

- Cisco TMS Windows Services now run under the Network Service account as default instead of the Local System account.
- Configuration and control files are no longer stored in the same directory as user data.
- Encryption of the Database Connection string has been upgraded to encrypt the entire connection string and now uses a FIPS-compliant encryption module.
- Configuration of the Cisco TMS setting for the software download folder has been moved from **Administrative Tools > Configuration > General Settings > Software FTP Directory** in the web interface to the TMS Tools application under **Directory Locations.**

Improved website security

- Additional protection against Cross-site Request Forgery and Cross-site Scripting attacks has been added.
- Permissions on the Cisco TMS web directories have been tightened.
- The default log folder is now C:\Program Files\TANDBERG\TMS\data\Logs. The previous location was C:\Program Files\TANDBERG\TMS\wwwTMS\data\Logs.
- All HTTPS communication is now restricted to TLS v1.0 or later. Support for SSL v3.0 and earlier has been removed.

- TLS client certificate validation in Cisco TMS has been introduced. When endpoints try to establish a TLS connection to the /tms/public website:
  - IIS validates the certificate against its trusted list of certificates.
  - Cisco TMS validates that the CN field of the certificate corresponds to the hostname used to contact the system. Any system that tries to impersonate another system will fail this check.
- Support for Certificate Revocation Checking has been added. When enabled, all certificates checked by the server will also check the revocation status of the certificate with its Certificate Authority.
- Client Certificate support for Cisco TMS-initiated communication to managed systems has been added. When enabled, Cisco TMS will provide a certificate if challenged when communicating to managed systems.
- Customized Banner text can now be added at the top and/or bottom of web pages and all pdf and excel document outputs.

Improved database security

- Encryption of authentication credentials stored in the database has been upgraded to use a FIPS-compliant encryption module. This new method uses a unique encryption key generated during installation of Cisco TMS.
- Support for running Cisco TMS with Windows Authenticated logins has been added. This requires additional manual configuration of the SQL database and windows server after initial installation of Cisco TMS. This functionality is recommended for JITC-compliant deployments only.

Updated TMS Tools application

The TMS Tools application has been redesigned to improve usability and incorporate the new features introduced in 14.0.

Configuration

- Updated the **TMS Database Connection Settings / Provisioning Extension Database Connection Settings** sections to include authentication configuration fields.
- Added the **Directory Locations** setting which is where the software download folder location is specified.

Security

- Added the **Encryption Key** section to support the new encryption key for credentials in the database. The encryption key which will decrypt the encrypted data can be changed or entered here.
- Added the **TLS Client Certificates** section to support the new TLS client certificate feature Cisco TMS uses for authenticating to systems. The x509 certificates Cisco TMS will use are specified here.

Advanced Security Settings

Cisco TelePresence Management Suite JITC Configuration Deployment Guide details how to activate these settings and perform additional Windows and Cisco TMS configuration changes that will make your installation comply with JITC operational guidelines.

- Optional Features Control:
  - **Disable TMS Scheduler**: Disables and removes links to TMS Scheduler.
  - **Disable Provisioning**: Disables and removes links to Cisco TMS Provisioning Extension.
  - **Disable SNMP**: Disables all use of SNMP within Cisco TMS.

- Auditing: **Auditing Always Enabled:** Ensures that auditing is always enabled regardless of the setting in **Administrative Tools > Configuration > General Settings >Enable Auditing.**
- Transport Layer Security Options:
  - **Require Client Certificates for HTTPS API:** When enabled (along with settings in IIS) Cisco TMS will require certificates from clients using public APIs.
  - **Enable Certificate Revokation Check:** When enabled, all certificates verified by the server are always checked against the revocation lists of the signing Certificate Authority. If revocation checking is enabled, and fails, the certificate will be rejected.
- Banners: Adds banners to the top and bottom of web pages and pdf and excel document outputs.

Diagnostic Tools

The new **Scan Database for Encryption Key Mismatch** tool scans the database to identify encrypted credentials which cannot be decrypted by the current encryption key. A **Cleanup** option resets mismatched entries to a default value. This feature is useful if the database encryption key has been lost or is in an unknown state.

Audit log

The Audit Log will now show the IP Address of the client machine used to make a change in Cisco TMS. For changes made by a service user, the IP address field will be blank.

Logs

The following logs have been added to the logs downloaded when clicking on **Administrative Tools > TMS Server Maintenance > TMS Diagnostics >Download Log Files**:

- event-stats.txt
- log-TMSAgent-console.txt
- phonebook-stats.txt

Installer

The Cisco TMS installer will now state the software version which will be installed in the welcome dialog.

Obsolete functionality removed

- Cisco TMS Agent Legacy has been replaced by Cisco TMS Provisioning Extension and is no longer supported in Cisco TMS 14.0. Support for Cisco TMS Agent Legacy will continue in Cisco TMS 13.2.x.
- The **Free Busy Overview** page has been removed from Cisco TMS.
- Connection scripts for conferences created in Cisco TMS versions older than 10.0 are no longer supported. All conferences booked in Cisco TMS 10.0 or earlier must now be rebooked.
- Support for Polycom MGC MCU pre software version 7 has been removed from Cisco TMS.

Resolved issues

Resolved in 14.6.2

Follow the link below to find up-to-date information about the resolved issues in this release:

https://tools.cisco.com/bugsearch/search?kw=*&pf=prdNm&pfVal=283688292&rls=14.6.2&sb=anfr&srtBy=byRel&bt=empCustV

You need to refresh your browser after you log in to the Cisco Bug Search Tool.

Resolved in 14.6.1

Follow the link below to find up-to-date information about the resolved issues in this release:

https://tools.cisco.com/bugsearch/search?kw=*&pf=prdNm&pfVal=283688292&rls=14.6.1&sb=anfr&srtBy=byRel&bt=empCustV

You need to refresh your browser after you log in to the Cisco Bug Search Tool.

Resolved in 14.6

Follow the link below to find up-to-date information about the resolved issues in this release:

https://tools.cisco.com/bugsearch/search?kw=*&pf=prdNm&pfVal=283688292&rls=14.6&sb=fr&svr=3nH&srtBy=byRel&bt=custV

You need to refresh your browser after you log in to the Cisco Bug Search Tool.

Resolved in 14.5

The following issues were found in previous releases/iterations and were resolved in 14.5:

Booking

Identifier	Description
CSCuo27097	Resolved the issue where an unhandled exception could occur when accessing the **Participant Templates** page.
CSCul36174	Resolved the issue on the **Booking Confirmation** page where the 'Participants will connect using this route' section contained no line breaks.
CSCun33908	Resolved the issue with the **Billing Code** field in **Booking > New Conference** and **Administrative Tools > Billing Codes > Manage Billing Codes** where only 16 characters were persisted regardless of the number of characters entered, but no warning was displayed. The field is now limited to 50 characters and a warning is displayed if more than 50 characters are entered.
CSCuo09044	Resolved the issue that occurred when adding a dial-out participant template to a conference, where Cisco TMS changed the direction from dial-out to dial-in.
CSCuo65380	Resolved the issue where editing a conference with a customized dial string for a participant incorrectly gave a 'Route not valid' error.
CSCup09925	Resolved the issue where the booking confirmation email contained untranslated text relating to WebEx booking.
CSCup09798	Resolved the issue in **Booking > New Conference > Connection Settings** tab **>Select Main** where the possible main participants were not sorted correctly. Participants are now sorted by participant name, previously they were sorted by routing preference.
CSCup09777	Resolved the issue in **Booking > New Conference > Connection Settings** tab where the ISDN-SIP and SIP-ISDN **Call Alternatives** did not contain the protocol text.
CSCuj74298	Resolved the issue where conference notification messages were not sent to endpoints although **Administrative Tools > Configuration > Conference Settings >Show Messages On Endpoints About Conference Starting In X Minutes** was set to *Yes*.

Identifier	Description
CSCuo29442	Resolved the issue where creating a recurrent meeting without selecting an end date contained untranslated text in the error message that was displayed.
CSCup09468	Improved useability when adding external dial-out participants to a conference in the **Add Participants** popup window. The **Number** field has changed so that for IP/H323 it is now **Alias**, and for SIP it is now **SIP URI**. In all other cases the field is still **Number**.
CSCuo27133	Resolved the issue where adding a participant to an extended conference after the original end time gave the error: 'you cannot book a meeting in the past'.
CSCup09635	Resolved the issue that occurred if the WebEx Global Call-in Number URL was more than 100 characters long. The link in the booking confirmation email contained only the first 100 characters and therefore did not work. This field has now been increased to a maximum of 250 characters in the database.
CSCup09689	Resolved the issue where Cisco TMS tried to connect the call 1 more time than the number specified in **Administrative Tools > Configuration > Configuration >Connection Attempts for Scheduled Calls**.
CSCup09641	Resolved the issue where it was possible to book a single instance meeting that started more than 15 minutes in the past. The meeting would never start as LiveService will not load meetings that started more than 15 minutes ago.
CSCup44089	**Booking > List References** is now sorted by **Reference Name** instead of **Reference Code**.
CSCup46738	Resolved the issue where adding WebEx to a point to point conference incorrectly generated an error message stating that a bridge had been removed from the conference.
CSCup16141	Resolved the issue where Cisco TMS Scheduling Event emails (enabled in **Systems > Navigator >** select a system **> Alert System Contact when Booked**) were not received by the system contact.
CSCup29588	Resolved the issue where a conference did not appear in **Booking > List Conferences**. This could occur if only one endpoint was scheduled in a conference with no other participants, and another endpoint joined the conference.
CSCup68140	Resolved the issue that affected scheduled conferences hosted on a TelePresence Conductor, where participants did not connect if the encryption setting for the conference was **Secure***If Possible*.
CSCup44408	Resolved the issue where the first instance was not sent to WebEx when booking a recurrent CMR Hybrid meeting. This occurred if the first instance was today.
CSCun36393	Resolved the issue where Cisco TMS crashed when booking two conferences with the same recording alias for the same time period instead of giving a 'resource unavailable' error.
CSCuq58713	Resolved the issue where changing the conference type to Reservation during booking could incorrectly display the route in the Participants tab and in the conference save confirmation screen.
CSCuo74446	Resolved the issue that affected conferences hosted on a TelePresence Conductor, where Cisco TMS repeatedly dialed out to ISDN participants even though they were already connected.
CSCud62923	Resolved the issue where Cisco TMS sent meeting end notifications to participants that had already left the conference.
CSCuq58701	Resolved the issue where meeting end notifications and extend meeting messages were shown on endpoints for conferences that never took place.

Identifier	Description
CSCuo65380	Resolved the issue where editing the dial string for a participant incorrectly gave a 'Route not valid' error.

Monitoring

Identifier	Description
CSCup09674	Resolved the issue in **Conference Control Center** where the user 'network service' was incorrectly logged as sending a message to participants instead of the actual user who sent the message.
CSCue18466	Resolved the issue where Cisco TMS did not resolve systems correctly. For example, if endpoint A and endpoint B were connected to the same MCU conference, attempting to mute or disconnect endpoint A actually muted or disconnected endpoint B. This occurred only when using an E.164 dial plan.
CSCup46749	Resolved the issue where snapshots for participants on a slave MCU in a cascaded conference did not display in **Conference Control Center**.
CSCup67129	Resolved the issue where it was not possible to add a participant to an ongoing meeting using **Conference Control Center**, if the **Limit Ports to Number of Scheduled Participants** setting was set to *On* in **Systems > Navigator >** select the TelePresence Server or TelePresence MCU hosting the conference **> Extended Settings**.
CSCuq58773	Resolved the issue where muting a participant in **Conference Control Center** using the **Mute** button could result in an error banner.
CSCuo93268	Resolved the issue where purging a bridge that was scheduled in future conferences generated a stack trace error when viewing those conferences in **Conference Control Center**. The bridge is now shown in CCC as 'Deleted system'.

Systems Management

Identifier	Description
CSCun15404	Resolved the issue with **Configuration Templates** where it was only possible to search once for systems to apply the template to. The **Search** button disappeared after the initial search.
CSCuq58824	Removed the **Phone Books** tab that was visible when adding Rooms and Equipment (now unmanaged endpoints) to Cisco TMS. You cannot set phone books on unmanaged systems.
CSCuq58813	Added missing field label text for **ISDN Gateway DID Quantity** in **Systems > Navigator > Extended Settings** for bridges.
CSCuo97722	Resolved the issue where an exception occurred in **Systems > Navigator** when viewing a system that had been purged in another instance of Cisco TMS, for example in another browser window.
CSCum57946	Resolved the issue where the **Provisioning** tab for Cisco VCS in **Systems > Navigator** was empty if the Cisco VCS's Provisioning Extension services were incorrectly configured.
CSCup09823	Removed redundant **Admin Password** field from **Systems > Navigator > Add Systems > Advanced Settings**.
CSCup09814	Removed redundant ID column from **Systems > Navigator >** select a system **> Call Status** tab.

Identifier	Description
CSCup09806	Resolved the issue in **Systems > Navigator >Add Systems > Pre-register Systems** where the text on the **Add System(s)** button incorrectly changed to **Next>>** after systems were added.
CSCup09832	Renamed **Systems > System Upgrade >Check for Updates (All Systems)** button to **Check for Updates** to reflect the fact that this applies only to some system types.
CSCup09661	Improved the search mechanism used in **Systems > Navigator >Add Systems> From List >** Unified CM **>System Name** field.
CSCup09686	Improved the ticket text shown for systems that are not in an IP zone.
CSCuo51286	Resolved the issue where Meeting End Notifications appeared on endpoints at the wrong time containing the wrong information.
CSCup09622	Resolved the issue where Cisco TMS incorrectly identified the Primary node in a Unified CM cluster.
CSCup09598	Added the missing *Accepts Scheduling* and *Accept Outgoing Calls* settings to **Systems > System Overview >Meeting Settings**.
CSCuo58685	Resolved the issue where Cisco TMS incorrectly set the H.323 ID of an endpoint to the endpoint's system name if no H.323 ID had been set on the endpoint but it did have an E.164 address. Now, Cisco TMS will only set the system name as the H.323 ID if both the H.323 ID and E.164 address are not set.
CSCup46729	Removed the **Systems > Navigator > Summary > This Week's Bookings** panel for systems that are not bookable.
CSCuc98305	Resolved the issue where the **Take Snapshot** button did not appear in **Systems > Navigator**, even though the endpoint supported snapshots.
CSCul95527	Resolved the issue where setting **SNMP Community Name** and **Password** in a configuration template did not update those settings on a system.
CSCup13800	Resolved the issue where changing the **Apply At** time for a persistent configuration template incorrectly updated the **Apply At** time to the time the change was made.
CSCup69976	Resolved the issue where using the **Configuration TemplateTMS Command**: *Password* to change a system's password could cause endpoint authentication failure.
CSCuq58757	Resolved the issue that occurred when replacing a system, where the ticket log was copied onto the new system even if **Logs** was deselected in the **Inherit from Current System** section.
CSCuo26906	Resolved the issue where a stack trace displayed in **Systems > Navigator** when viewing **Settings** for a Cisco TelePresence MCU.
CSCup13800	Resolved the issue where changing the **Apply At** time for a persistent configuration template incorrectly updated the **Apply At** time to the time the change was made.
CSCup32732	Resolved the issue where adding a Unified CM to Cisco TMS displayed an "Unsupported System" error. This occured if the default SNMP community strings configured in Cisco TMS matched one or more community strings configured on the Unified CM.

Reporting

Identifier	Description
CSCuo43420	Resolved the issue in **Reporting > Return on Investment** and **Reporting > CO2 Savings** where the pages crashed if the **Start Date** was set to be after the **To Date**. An error message is now shown.
CSCui99284	Resolved the issue where site administrators were unable to delete other users' reporting templates.
CSCuj57862	Resolved the issue where Japanese symbols did not appear correctly in **Reporting > Billing Code Statistics** and the **Remote Site** column in CDR reports.
CSCui10081	Resolved the issue with the Connected Event Notification email, where the **Remote Name** field was displayed with no data if no remote name was sent in the event. The **Remote Name** field now only displays if a remote name is supplied in the event.
CSCuq30914	Resolved the issue where an error occurred when attempting to run a Reporting Template.

Recurrence

Identifier	Description
CSCup46766	Improved the consistency of error messages generated in Cisco TMS and Cisco TMSBA when trying to save a recurrent series which has an invalid recurrence pattern.
CSCup64505	Resolved the issue where attempting to delete or update an instance of a recurrent series failed with the error: "The specified time zone information is not valid".
CSCup25109	Resolved the issue where updating a series could be blocked by a deleted instance if that deleted instance was an exception before being deleted.
CSCup29577	Resolved the issue where updating the reservation type of a series with exceptions could be blocked by a non-existent room conflict.
CSCup18241	Resolved the issue that affected exceptions in a recurrent series that had a different route to the rest of the series, where updating the series (for example to change the title) cleared the manually configured route for the exceptions.

TMS Tools

Identifier	Description
CSCup45663 CSCup45535	Resolved the issue where changing the encryption key generated a ticket in Cisco TMS, but **Scan Db for Encryption Key Mismatch** in **TMS Tools** incorrectly found no mismatches.
CSCuq58674	Resolved the issue where TMS Tools reported that having a blank **Database Name** created a successful connection to the database. In **TMS Tools > Configuration > Cisco TMS Database Connection**, the **Save** button is now disabled until something has been entered in the **Database Server/Instance** and **Database Name** fields.

Install and Upgrade

Identifier	Description
CSCuo65350	Resolved the issue where the Cisco TMS installer failed with an authentication error during database creation even though the supplied credentials were correct.

Identifier	Description
CSCuo73268	Resolved the issue where manually created databases could fail to upgrade.
CSCuo65350	Resolved the issue where installation of Cisco TMS could fail with an authentication error during database creation although credentials entered were correct.
CSCuq58795	Resolved the issue where the installer could hang if any other client (for example, TMS Tools) was connected to the tmsng database during upgrade.
CSCuq58740	Resolved the issue where the Cisco TMS installer could not install IIS.
CSCuo65350	Resolved the issue where the Cisco TMS installer failed during database creation with an authentication failure even though the credentials supplied during install were correct.
CSCup94543	Resolved the issue where upgrading from 14.3.2 to 14.4.x could fail with a database error.
CSCup19131	Resolved the issue where installing Cisco TMS failed when using non-standard IIS settings.

Database

Identifier	Description
CSCup27180	Resolved the issue where scheduled tasks, and accessing the Portal web page could fail with an 'Index was out of range' error. This occurred if the database table [field_SystemField] contained NULL values.
CSCuq11731	Resolved the issue where purging conferences did not remove transaction log entries for the deleted conferences. This could result in the ConferenceInstanceTransaction database table growing indefinitely.
CSCum50618	Resolved the issue where Cisco TMS did not correctly check the actual size of the database.

Users and groups

Identifier	Description
CSCuo65385	Resolved the issue where it was not possible to edit a user if Cisco TMS could not contact the WebEx site configured for that user.
CSCuq58789	In **Administrative Tools > User Permissions > Groups >Set permissions**, the **Network History** setting has been moved from its incorrect location under **Systems**, to the correct location under **Reporting**. As a result of this, users who belong to groups that do not have this permission are no longer able to view **History** for a system using **Systems > Navigator >** select a system **> Logs > History**.
CSCup64605	Resolved the issue where imported Active Directory users were deleted from Cisco TMS during Active Directory synchronization.
CSCuf34881	Resolved the issue where it was not possible to remove a large number of event notifications for a user in a single operation.
CSCuq58690	Resolved a number of permissions issues that caused users in some groups to be unable to use participant templates correctly.

Booking API (Cisco TMSBA)

Identifier	Description
CSCuo65488	Resolved the issue where saving conferences booked using Cisco TMSBA could fail when using very long external source ids or primary keys.
	Resolved the issue where Cisco TMSBA did not correctly tag future exceptions in a series as deleted.
CSCup09612	Resolved the issue where using Cisco TMSBA to change a non-recurrent meeting that took place in the past into a recurrent series with instances in the future, failed.
CSCuq11756	Resolved the issue where clients using the Cisco TMSBA GetConferenceInvite function were not able to use the "E-mail Content Type" setting in Cisco TMS.
CSCuq25690	Resolved the issue where Cisco TMSBA incorrectly reported the status of Deleted conferences as Finished.

General

Identifier	Description
CSCul12852 CSCul49128	Resolved a number of issues with sorting in the **Systems > Navigator** page.
CSCuj91844	Resolved the issue where it was not possible to save changes on the Email Settings page if the SMTP server took longer than 2 seconds to respond. The changes will now save and a warning will display if it was not possible to contact the server to verify the settings.
CSCum60887	Resolved the issue where it was not possible to expand the details of an event in the **Activity Status** page.
CSCup09789	Added Databaselog.txt to the files downloaded from the Install directory when downloading log files using **Administrative Tools > TMS Server Maintenance >Download Diagnostic Files**.
CSCup09680	Resolved the issue where no data ever appeared in **Administrative Tools > Diagnostics > Provisioning Extension Diagnostics >Cisco VCS Communication** .
CSCup09667	Resolved the issue where characters were incorrectly encoded in the 'Unable to access Cisco TMS' message displayed when it was not possible to access the passive node in a redundant Cisco TMS deployment.

Resolved in 14.4.2

The following issues were found in previous releases and were resolved in 14.4.2:

Identifier	Description
CSCup76424	Resolved the issue where Cisco TMSBA returned incorrect conferences because of duplicate external primary key values. This could lead to out-of-sync conditions between Cisco TMS and Microsoft Exchange.
CSCup82726	Resolved the issue where purging of old conference data failed, leading to unchecked database growth.
CSCup66989	Resolved the issue where meetings that were part of series external to Cisco TMS were not correctly marked as exceptions by Cisco TMSBA. This could lead to replication inconsistencies with Microsoft Exchange.

Resolved in 14.4.1

The following issues were found in previous releases and were resolved in 14.4.1:

Identifier	Description
CSCuo54112	Resolved the issue where Cisco TMSAE failed to process data if the Cisco TMS database contained participants with names longer than 50 characters.
CSCuo76802	Resolved the issue where the Recurrence popup window did not work at all if using Internet Explorer 9.
CSCuo51356	Resolved the issue that occurred after associating a user with a non-default WebEx site, where the user was moved back to the default WebEx site.
CSCuo71987	Resolved the issue with **Booking > List Conferences >** **Export Details Log** where the **Participants** column contained no data. This was a regression introduced in 14.4.
CSCuo92594	Resolved the issue that occurred when upgrading to Cisco TMS version 14.4, where the IIS folders that are deleted during an upgrade were not recreated during the installation of 14.4. This only occurred if Cisco TMS was installed on the root of the drive (for example: **E:** instead of **E:\Program Files**).
CSCuo81346	Resolved the issue where it was possible for a user with Read access to copy devices to a folder in **Systems > Navigator**.
CSCuo93490	Resolved the issue where Cisco TMS could attempt to update the time zone for a Unified CM-registered system running Cisco TelePresence TC or TE software. This bug was reported fixed in Cisco TMS 14.4, but there were still some outstanding issues that have been resolved in this release.

Resolved in 14.4

The following issues were found in previous releases and were resolved in 14.4:

Booking

Identifier	Description
CSCun25265	Resolved the issue where Cisco TMS threw an exception when saving a conference. This occurred if the conference was set to **Secure**: *Yes*, and one of the participants was added from a phone book entry and not managed by Cisco TMS, and the contact method was changed during booking from the **Connection Settings** tab.
CSCun25278	Resolved the issue where the Booking Confirmation Email did not show the number for participants to dial for point-to-point conferences.
CSCun25553	Resolved the issue in **Booking > List Conferences** where filtering on selected systems, then resetting the filter to include all systems, caused an error. This was most likely to occur in deployments with more than 400 systems managed by Cisco TMS.
CSCun80913	Resolved the issue with conferences hosted on an MCU that used almost all the capacity (for example one port is left). When editing the conference to add more dial-in participants, Cisco TMS added one more than requested.

Identifier	Description
CSCue62960	Improved the error message displayed when booking a recurrent conference where the duration of the conference had incorrectly been set as longer than how frequently it occurred.
CSCun26524	Resolved the issue where making changes to the MCU Settings during an ongoing conference hosted by a TelePresence Server did not apply the changes to the TelePresence Server.
CSCun27746	Resolved the issue where it was possible to overbook an MCU that had been booked to full capacity by adding a dial in to the conference after it was initially saved. A message will now be displayed stating that the conference will be rerouted.
CSCul81027 CSCul66891	Resolved the issue where **Booking > List Conferences > Delete** & **Export Log Details** threw an error and the deletion or log export did not occur.
CSCun28082	Resolved the issue in **Booking > List Conferences** where clicking on a conference, then selecting **View** from the dropdown menu, then clicking **Cancel**, generated an error. This occurred if the server time was set to “pure” UTC (i.e. UTC with no DST rules).
CSCun70487	Resolved the issue where deleting a future conference did not delete the registration event, which caused a failed event to appear in the Activity Status log.
CSCun72824	Resolved the issue with booking a conference of type *Manual Connect* on a bridge and one endpoint that did not have Master capability. On saving the conference, a message appeared stating that the route was not valid. The correct behavior is that Cisco TMS changes the connection type to *No Connect* without displaying an error message.
CSCun72876	Resolved the issue where the Booking Availability Grid could incorrectly show a system as free when it was actually booked during a particular time period if the duration of the booked conference was less than 30 minutes.
CSCun80937	Resolved the issue where meetings of duration 24 hrs displayed in the booking confirmation email with a duration of 0 hrs. Meetings of duration 25 hrs were displayed with a duration of 1 hr and so on.
CSCul68806	Resolved the issue in **Booking > New Conference > Billing Code** where double byte characters were not supported.
CSCuo27224	Resolved the issue where Cisco TMS automatically extended meetings that contained only a Content Server (where dial in participants had never dialed in, or where all the other participants had disconnected). This occurred when **Extend Meeting Mode** was set to *Automatic Best Effort*.
CSCuh00285	Resolved the issue where the 'Meeting has been extended' message did not show on all participants on meeting extension. Instead they continued to see the meeting end notification message although the meeting had been extended.
CSCuo49883	Resolved the issue where adding a recording profile to a point-to-point conference with two participants with no multisite capabilities, did not display an error as expected.
CSCui91195	Resolved the issue with conferences that were scheduled to start simultaneously hosted on a TelePresence Server, where the conference start could be delayed for some of the conferences.
CSCum50651	Resolved the issue where scheduled conferences did not start or allocation failed when the master or main participant was an endpoint running TC7.x software. This occurred if **Picture Mode** was set to *Enhanced CP* and **Connection Type** was set to either *Automatic Connect* or *Manual Connect*.

Routing

Identifier	Description
CSCun25453	Resolved the issue where Cisco TMS could incorrectly instruct a TelePresence Server to dial out to an endpoint twice if the TelePresence Server was slow to connect to the endpoint.
CSCuf21982	Resolved the issue where Cisco TMS changed the call direction to dial in when scheduling a One Button To Push conference using a dial out Participant Template.
CSCun28043	Resolved the issue where changing the dial plan for an MCU did not invalidate the route in existing conferences that included that MCU.
CSCuj62186	Resolved the issue where Cisco TMS occasionally did not correctly randomize numbers for recording aliases when scheduling using a Content Server that was in Gateway Mode. This could cause simultaneous conferences using the same recording alias to merge into the same recorded stream.
CSCuc50556	Resolved the issue where Cisco TMS allocated the wrong dial in number for the allocated port on the MCU.
CSCum98292	Improved dial-in number allocation for back to back meetings. Cisco TMS is now less likely to assign the same number for back-to-back meetings when the bridge is close to full capacity.
CSCuo27217	Resolved the issue where attempting to schedule a Best Impression distribution cascaded conference caused an infinite loop in Cisco TMS. This occurred if there were a large number of dial-in participants.

Monitoring

Identifier	Description
CSCun25273	Resolved the issue where using **Conference Control Center** to lock a cascaded conference locked the conference on the slave MCU but not the master MCU.
CSCun25310	Resolved the issue where muting an endpoint using its own interface was not reflected in **Conference Control Center**, although the endpoint was muted in the conference.
CSCun25471	Resolved the issue where it was not possible to disconnect a participant from a conference using **Conference Control Center**. This occurred if the system name contained an apostrophe.
CSCum42607	Resolved the issue where accessing the **Conference Control Center** could generate a Java warning: *Do you want to run this application?* after updating Java to version 7 update 45 on the Cisco TMS server. In some environments **Conference Control Center** did not load at all.
CSCuj34799	Resolved the issue where **Conference Control Center** could incorrectly display scheduled conferences on a TelePresence Conductor as ad hoc conferences with a duration value of 0.
CSCuh57792	Resolved the issue in **Conference Control Center** where layouts on endpoints did not change if the layout was changed first to a custom layout, then back to Default Family View, then back to a custom layout.
CSCun72842	Resolved the issue where Cisco TMS did not correctly resolve ad hoc conferences hosted on a TelePresence Server in **Conference Control Center**. A separate conference was displayed for each call leg.
CSCue26774	Resolved the issue where moving a conference to a different bridge was not reflected in **Conference Control Center** until the conference was selected on the old bridge.

Identifier	Description
CSCun72817	Resolved the issue where the conference event log displayed incorrect information about participants being added to and removed from a conference hosted on a TelePresence Conductor.

Systems Management

Identifier	Description
CSCun25326	Improved the page loading time for **Systems > Configuration Templates >** select a template **> Set on Systems** for Cisco TMS deployments with a large number of managed systems.
CSCun25385	It is no longer possible to change settings in **Systems > Manage Dial Plan** for a Unified CM-registered system. Previously it was possible to do this although the changes would have no effect.
CSCun25679	Resolved the issue where searching for systems in **Systems > Navigator > Add Systems > From List > Unified CM >** **System name** was incorrectly case-sensitive. This search field is now case-insensitive.
CSCun28098	Resolved the issue where adding a system that was Unified CM-registered to Cisco TMS generated an *Incorrect Management Address* error. Cisco TMS now displays an 'Incorrect Feedback Address' ticket instead if a Unified CM-registered endpoint's HttpFeedback 3 URL is incorrectly configured.
CSCun80968	It is no longer possible to edit the **Management Address 1** field In **Systems > Navigator >** select a system that is registered to a Unified CM **> Settings > Edit Settings**. The option for this field is set by the Unified CM, not by Cisco TMS.
CSCun27576	Resolved the issue where adding a Unified CM-registered endpoint running Cisco TelePresence TC or TE software to Cisco TMS did not alert the administrator that the **HttpFeedback 3 URL** was not yet set to the Cisco TMS server's IP address or hostname. An error will now be shown with the option to **Add system despite warnings**.
CSCun27651	Resolved a number of issues with **Systems > Navigator >** select a Unified CM **> Managed Systems** tab.
CSCun27664	Resolved the issue where Cisco TMS used HTTP to access the system.xml file for TelePresence Server and Cisco TelePresence MCU, with fallback to HTTPS. This has now been changed so HTTPS is used first with fallback to HTTP.
CSCuj93926	Resolved the issue where replacing a system could result in duplication of the system record in the database due to a MAC address mismatch. This occurred only if the system was set to **Track System on Network by**: *MAC Address* on the **Connection** tab in **Systems > Navigator**.
CSCul46511	Resolved the issue where meeting allocation failed if the video conference master was a CTS endpoint running 1.10.1 or earlier or a TX endpoint running 6.0.2 or earlier. This is because Cisco TMS incorrectly checked the software version that supported being video conference master for these endpoints.
CSCua51358	Resolved the issue where Cisco TMS reported that a system was not registered to a Unified CM even though it was registered, could make and receive calls, and could be scheduled in conferences.
CSCun27802	Missing **Location Settings** panel added to **Systems > Navigator > Add Systems > From List > Unified CM**.

Identifier	Description
CSCuh83367	Resolved the issue where it was not possible to set the time zone on systems that were pre-registered in Cisco TMS. Initially on adding the system, specification of the time zone appeared to work.
CSCun80989	Resolved the issue where adding systems registered to a Unified CM was very slow and could result in errors, although the systems would eventually be added successfully.
CSCun27847	Resolved the issue in **Systems > Navigator >** select a TelePresence Server **> Settings > Extended Settings** where the following settings did not save after editing: ■ **Register with Gatekeeper** ■ **Conference SIP registration** ■ **Dual Video Stream**
CSCtx40937	Resolved the issue where Cisco TMS could not import endpoints from a Unified CM if the Unified CM had more than 100 unregistered endpoints.
CSCun28025	Resolved the issue where Cisco TMS did not check a CTS or TX endpoint's connection type when giving a 'No HTTPS response' error. Cisco TMS now displays 'No HTTP response' if the traffic is HTTP.
CSCum63715	Resolved the issue where Cisco TMS could attempt to update the time zone for a Unified CM-registered system running Cisco TelePresence TC or TE software.
CSCum68031	Resolved the issue where Cisco TMS incorrectly calculated the maximum bandwidth per call leg for a TelePresence Server as 4Mbps instead of 6Mbps.
CSCun10195	Resolved the issue where removing a TelePresence Server from a TelePresence Conductor did not update the **Operation Mode** from *Remotely Managed* to *Locally Managed*. It was necessary to purge the TelePresence Server from Cisco TMS and re-add it.
CSCuo39236	Resolved the issue where some software packages could not be uploaded to the software manager. An HTTP 404 error was displayed.
CSCun63201	Resolved the issue where **Enforce Management Settings** did not work for CTS and TX systems.
CSCuo49879	All current products now display **Manufacturer**: *Cisco* instead of *Tandberg*.
CSCuo49882	Resolved the issue seen when selecting time zone: 'GMT -03:00 Buenos Aires, Georgetown, Montevideo' on an endpoint running Cisco TelePresence TC v 7.1. The following error ticket displayed for the system in Cisco TMS: "Time Zone set in TMS for system is different from Time Zone on system. - In TMS: (UTC-03:00) Buenos Aires, Georgetown, On System: (UTC) Dublin/ Edinburgh/ Lisbon/ London". Trying to push the correct time zone to the system from Cisco TMS failed with the error: "Could not update all settings. Details: System did not accept time zone GMT-03:00 (Buenos Aires, Georgetown)".
CSCun25307	Warnings about H.323 gatekeeper mode have been removed for bridges behind a TelePresence Conductor.
CSCun27576	Resolved the issue where searching for a system using the host name could fail.
CSCun79003	Resolved the issue that occurred when adding a TelePresence Conductor running XC 2.3 to Cisco TMS. The management address stayed blank in **Systems > Navigator**, and a ticket stating "The management address on the system is incorrectly configured ..." was displayed.

Phone Books

Identifier	Description
CSCun25502	Resolved the issue where phone book entries that appeared in more than one phone book could appear as duplicated in phone book searches. Duplicate entries should appear only once in search results.
CSCuj42053	Resolved the issue where adding a new entry to a phone book set on a Polycom endpoint did not update the phone book on the endpoint with that new entry.
CSCul84164	Reinstated the missing bandwidth options: *Auto*, *Telephone* and *Max* for Manual List phone book source contacts.

Reporting

Identifier	Description
CSCug10144	**Reporting > Conferences > Conference Statistics > Calculate By:** *Utilization* has been removed as it was not possible to calculate this data by utilization, and the generated graph was always empty.
CSCun25641	Resolved the issue where it was not possible to filter MCU Call Detail Records by **Call Protocol**.

Recurrence

Identifier	Description
CSCun81304	Resolved the issue where editing a recurrent conference series with recurrence pattern ' First Day of every month' changed the recurrence pattern to 'First Sunday of every month'. Cancelling the edit and then saving the conference changed it from a recurrent to a non-recurrent conference.
CSCun81313	Resolved the issue where deleting the first occurrence of a recurrent series, then editing the series to disable recurrence, deleted all occurrences of the conference. The instance that was edited to remove recurrence should have remained as a non-recurrent conference.
CSCue26779	Resolved the issue where Cisco TMS consumed ports after a conference had been moved to a different MCU. This only occurred for recurrent conferences, if an instance was moved to a different MCU.
CSCtr53461	Resolved the issue where swapping the bridge for one meeting occurrence in a recurrent series still showed that bridge as being in the conference in the **List Conferences** page, when filtering on the original bridge.
CSCum41801	Resolved the issue where booking a daily recurrent conference using the End by Date option ended the conference series the day before the date specified. This occurred if the user booking the conference was in a time zone with a negative UTC offset.
CSCun81618	It is now possible to move an instance past a deleted or previously moved instance of the same series.
CSCui04546	Resolved the issue where Cisco TMS incorrectly selected a bridge for a recurrent series that had no capacity for one of the occurrences; as a consequence, saving the conference failed.
CSCun81408	Resolved the issue where deleted participants in a recurrent series incorrectly appeared under the **Location** section of the Booking Confirmation Email.

Identifier	Description
CSCui68087	Resolved the issue that occurred when a recurrent meeting series was edited, where any changes made previously to an individual occurrence in the series were lost.
CSCtt45102	Resolved the issue where it was not possible to make changes to a recurrent series when a participant that had been removed from the series was part of a new booking that overlapped the first series.
CSCuo49886	In **Booking > List Conferences > Edit Conference**, made **Owner** field read-only when editing an instance of a series.

TMS Tools

Identifier	Description
CSCul81067	Resolved the issue where it was not possible to access the Cisco TMSPE Database Connection settings page in **TMS Tools.** The message: "Current settings could not be read, the dialog will be populated with default values." was displayed.
CSCul44318 CSCun15585	**TMS Tools > Configuration >** Cisco TMSPE **Database Connection Settings** incorrectly accepted a comma as the port delimiter. This did not, however, set the port and Cisco TMS was not able to connect to the Cisco TMSPE database. A **Port** field has been added to this page.
CSCum88383	Resolved the issue where editing the Cisco TMSPE Database Connection Settings using Cisco TMS Tools could wipe the database connection password field, breaking the connection between Cisco TMS and Cisco TMSPE.

Install and Upgrade

Identifier	Description
CSCun27560	Resolved the issue where upgrading Cisco TMS caused conferences hosted on an MCU, that were due to start immediately after the upgrade time, not to launch.
CSCua65350	Resolved the issue where the HTTPS Tool window could disappear behind the installer window during installation of Cisco TMS.
CSCum50657	Resolved the issue where upgrading the Cisco TMS database failed with the following error in the databaseinstalllog: "Error Code 2627 at line 26: Violation of PRIMARY KEY constraint 'PK_ SchedulerEvents'. Cannot insert duplicate key in object 'dbo.SchedulerEvent'. The duplicate key value is (22)."
CSCun70393	Resolved the issue seen in the Installer when upgrading Cisco TMS, where clicking the **Back** button on the **Encryption Key** page did not work.

Services

Identifier	Description
CSCun41589	Resolved the issue where the database scanner service could time out, throw out-of-memory exceptions, and use excessive CPU.
CSCul94870	Resolved the issue where Live Service used almost 100% of the CPU. This led to problems launching and controlling conferences.

Identifier	Description
CSCum41321	Resolved the issue where the installer could remove the SNMP Trap Windows service. The service is now no longer removed during install/upgrade but for older installations, the service may need to be manually repaired after upgrade has completed.
CSCug04138	Resolved the issue where the following services did not restart after connection to the SQL database was temporarily lost: ■ TMSDatabaseScannerService ■ TMSPLCMDirectoryService ■ TMSLiveService

Users and groups

Identifier	Description
CSCun28017	Resolved the issue where editing any setting for a user when there were more existing groups than the **Records per Page** value removed the user from any group that was not displayed in the current page.
CSCun28084	Resolved the issue where an Active Directory user that had never logged into Cisco TMS before was unable to log in. This occurred if **Administrative Tools > Configuration > Network Settings > Active Directory >Lookup User Information from Active Directory** was set to *Yes*, but one or more of the other fields in the **Active Directory** section contained incorrect information.

Booking API (Cisco TMSBA)

Identifier	Description
CSCun25408	Resolved the issue where booking a conference using Cisco TMSBA gave an error in Cisco TMS. This occurred when the user making the booking did not already exist in Cisco TMS and had a username greater than 36 characters.
CSCul50039	Resolved the issue where the "Allow Remote Booking" option was not visible in **Systems > Navigator** for Unified CM-registered endpoints. This occurred if the "Per 25 Endpoints" option key was used for activating Cisco TMSBA. This was mainly a cosmetic issue as the endpoints were still bookable using Cisco TMSBA.
CSCun27792	Resolved the issue where creating a conference that contained deleted systems using Cisco TMSBA generated an exception. An email message is now sent.
CSCun81238	Resolved issue where GetRecurrentConference would be one day off when booking a monthly recurrent series at the end of a month. This was a regression introduced in 14.2.2.
CSCun81246	Cisco TMS will now always return a populated DayOfWeek list when an empty list is submitted.
CSCum99999	Resolved issue where an exception to a series would sometimes be saved as a single meeting.
CSCun81291	Resolved issue where Cisco TMS would overwrite the specified time zone for single instances with telepresence booked as part of a meeting series in Microsoft Outlook or another client using Cisco TMSBA.
CSCug26332	Resolved the issue where Cisco TMSBA's recurrenceID value did not correctly follow DST changes.

Identifier	Description
CSCud35946	Resolved a number of inconsistencies in how Cisco TMS interpreted and executed recurrence patterns.
CSCug37575	Editing a conference that included a system that no longer existed in Cisco TMS caused Cisco TMSXE to re-attempt the booking every 30 seconds, leading to an influx of email notifications. To prevent this, remove the non-existent system from Cisco TMSXE using the configuration tool.
CSCuh55290	Resolved the issue with modifying the start time of an occurrence of a meeting series using Cisco TMSBA so that the occurrence started earlier than originally scheduled, where Cisco TMS correctly updated the end date, but not the start date, of the meeting.
CSCun81228	Resolved the issue with booking a monthly recurrent meeting with the pattern: Occurs on the ___ DOW of every _____ month(s), using Cisco TMSXE, where Cisco TMS and the Microsoft Exchange server were in different time zones. The instances would be booked on the wrong days.
CSCun26518	Resolved the issue where creating a recurrent conference with pattern 'Occurs on [the last day] of every month' selected an incorrect date for February if Microsoft Exchange and Outlook were in a different time zone to the Cisco TMS server.
CSCun81296	Resolved issue where the email generated when editing an instance of a recurrent series using Cisco TMSBA suggested the entire series had been edited, and incorrect conference ID information was returned by Cisco TMS.
CSCun83458	Resolved the issue where conferences that were scheduled using **FrequencyType** *Default* were incorrectly auto extended. This affected bookings through Cisco TMSXE, if users scheduled a single telepresence meeting that was part of a non-telepresence series in Exchange.

General

Identifier	Description
CSCun25480	Resolved the issue where it was not possible to save an email template that used the deprecated MOVI2_URL tag.
CSCtx98924	Resolved the issue where if two or more endpoints in a conference had system names that exceeded 31 characters and the first 31 characters were identical, Cisco TelePresence MCU could dial out to one, but not the others, as Cisco TMS crops the system name to conform to MCU API requirements. The endpoints then appeared as duplicates to the MCU, which only dialed the first participant.
CSCun28058	Resolved the issue where the *Ticket Log* was not purged according to the **Number of Days To Keep Data** set in **Administrative Tools > TMS Server Maintenance > Purge Old Data in Database Tables Plan**.
CSCun27778	Resolved the issue where deadlocks on the query to get ticket counts could cause an exception when loading the Cisco TMS front page.
CSCun27836	Resolved some display issues that occurred when banners were applied to Cisco TMS.
CSCun27847	Resolved a number of layout issues with Internet Explorer 10 when compatibility mode was turned off.
CSCum65583	Resolved the issue where conference start could be delayed during failover in a redundant deployment.

Identifier	Description
CSCun70364	Resolved the issue where the date picker did not open and generated JavaScript errors when using Internet Explorer 10 in standards mode.

Resolved in 14.3.2

The following issues were found in previous releases and were resolved in 14.3.2:

Booking

Identifier	Description
CSCul42930	Resolved the issue where a dial-in endpoint joined a conference using the IP bandwidth set for the conference despite having a lower bandwidth set for the endpoint when booking the conference.
CSCul33187	Resolved the issue where it was not possible to schedule a conference of **Type**: *No Connect* with systems that were behind a firewall.
CSCul35748	Resolved the issue where Cisco TMS repeatedly added the same participants to a conference. This occurred with SIP dial-out participants that did not contain a domain suffix. This occurred most frequently for conferences hosted on a TelePresence Conductor deployed in Cisco VCS B2BUA mode.
CSCuh32674	Resolved the issue where it was not possible to create conferences with ISDN dial-in and dial-out participants when scheduling with TelePresence Conductor.
CSCuf21982	Resolved the issue where a dial-out participant template was changed to a dial-in participant when added to a One Button to Push conference.
CSCuj60215	Resolved the issue where booking a recurrent conference on a date where DST changed at midnight in the logged in user's time-zone generated an error.
CSCuj47583	Resolved the issue where it was not possible to add audio participants with country code +382 for Montenegro to a conference. The error: *382 is not a valid country code* was displayed.

Routing

Identifier	Description
CSCul86790	Resolved the issue where adding a participant to an existing conference that was booked by adding the MCU manually, where the capacity of the MCU was already full, did not reroute to an MCU with more capacity, which it should have done to accommodate the extra participant.
CSCul30272	Resolved the issue where Cisco TMS did not choose a Cisco TelePresence MCU MSE 8510 to host a conference when that was the most appropriate routing choice and all the participants were in the same IP zone as that MCU.
CSCuc45195	Resolved the issue where Cisco TMS did not add a bridge to a conference that was escalated from point to point to three or more participants, when **Administrative Tools > Configuration > Conference Settings > External MCU Usage in Routing** was set to *Always, except point to point.*. This occurred if the main participant had a multisite key.
CSCuj57675	Resolved the issue where automatic MCU failover did not work.
CSCul17740	Resolved the issue where Cisco TMS disconnected ad hoc calls when a scheduled One Button to Push (OBTP) conference was about to start. This occurred for all participants scheduled in the OBTP conference, even if the ad hoc call was between the scheduled participants.

Monitoring

Identifier	Description
CSCua17474	Resolved the issue where in **Conference Control Center >** select a conference **> Settings**, the **Recording** field incorrectly displayed the options available to the logged in user, instead of the conference owner.
CSCug52302	Resolved the issue with setting an endpoint to have floor control through **Conference Control Center**, where floor control was not always applied.
CSCuj65341	Resolved the issue in **Conference Control Center** where conference snapshots were not viewable. This occurred if one or more participants were late connecting to the conference, and the status remained on *Connecting*. Snapshots will now be displayed as soon as the first participant has successfully connected to the conference.

Systems Management

Identifier	Description
CSCum00103	Resolved the issue where incorrectly adding a system registered to a Unified CM using the **Add Systems** tab generated an exception. An error message is now displayed. Unified CM-registered systems must be added using the **From List** tab.
CSCul66281	Resolved the issue where it was not possible to add a system that was behind a firewall to Cisco TMS.
CSCud53982	Resolved the issue where Cisco TMS did not immediately pick up resource changes for TelePresence Server, leading to incorrect reporting of resource availability for the TelePresence Server in Cisco TMS

Phone Books

Identifier	Description
CSCuj42053	Resolved the issue where adding a new entry to a phone book set on a Polycom endpoint did not update the phone book on the endpoint until it was rebooted.

Reporting

Identifier	Description
CSCuj87555	Resolved the issue where Cisco TMS incorrectly tried to fetch Call Detail Records from cluster slave TelePresence Servers, instead of the cluster master.
CSCul35913	Resolved the issue where Cisco TMS did not gather Call Detail Records from TelePresence Servers that were set to communicate using HTTPS only.

WebEx Enabled TelePresence

Identifier	Description
CSCul86783	Resolved the issue where **Administrative Tools > User Administration > Users >Synchronize all users with AD** did not update WebEx usernames.

Cisco TMSPE

Identifier	Description
CSCui86265	Resolved the issue with deployments using Cisco TelePresence Management Suite Provisioning Extension, where it was not possible to access the pages under **Systems > Provisioning** if the **machine.config** file contained a section to control the maximum number of connections.

General

Identifier	Description
CSCul19103	Resolved the issue with the **Time Zone Update Tool** where it was only possible to view and correct affected conferences in batches of 350. This also caused the update of conferences to fail in some cases.
CSCui25158	Resolved the issue with **Administrative Tools > TMS Server Maintenance > Purge Log Plan** where the log-api, log-web-external and the log-tmsagentproxy logs were not purged according to the **Number of Days To Keep Data**.
CSCul50874	Resolved the issue where an exception was thrown when trying to edit a user in **Administrative Tools > User Administration > Users**. This occurred if another user had been edited immediately beforehand.
CSCul28417	Resolved the issue where Cisco TMS did not send meeting end notification messages to TelePresence Servers that were set to communicate using HTTPS only.

Resolved in 14.3.1

The following issues were found in previous releases and were resolved in 14.3.1:

Booking

Identifier	Description
CSCuj25656	Resolved the issue where Cisco TMS incorrectly calculated resource availability for a Cisco TelePresence Recording Server cluster node by looking at the availability for the entire cluster instead of the single node. This could lead to overbooking of resources.
CSCuj04722	Resolved the issue where an error occurred when adding a Cisco TelePresence Recording Server recording alias to a booking in Cisco TMS, if there was already a conference that included recording scheduled for the same day. This applied to clustered recording server setups only.
CSCui09851	Resolved the issue where the Location for a meeting is not shown in the .ics file or in the Microsoft Outlook calendar, although it does show in Cisco TMS.
CSCuh99378	Resolved the issue where Cisco TMS did not route scheduled conferences through a TelePresence Conductor even though **Administrative Tools > Configuration > Conference Settings >Preferred MCU Type in Routing** was set to *Cisco TelePresence Conductor*.
CSCuh89503	Resolved the issue where scheduled conferences with extremely long durations (one or two years) could suddenly end for no apparent reason, a long time before the conference was scheduled to end.
CSCuh43897	Resolved the issue where removing the <ADD:ICALENDAR_ATTACHMENT> tag from the Booking Invite HTML email template did not remove the ICS attachment from the HTML email that was generated and sent.

Identifier	Description
CSCuh61606	Resolved the issue where carriage returns and line breaks were not displayed in the booking confirmation email.
CSCug88031	It is no longer possible to book a secure conference that includes a TelePresence Conductor. As this is not supported in Cisco TMS, an error is now generated if the secure option is chosen. Previously no error was shown during booking and the conference appeared to be secure although it was not.
CSCug75561	Resolved the issue where Cisco TMS did not resend updated calendar information to Cisco TelePresence System 3000, 1000 and 500 series endpoints, or endpoints running Cisco TelePresence TC software. This affected endpoints scheduled in recurrent conferences, if one instance of the recurrent series was edited, or the entire recurrent series was deleted.
CSCuh39031	Resolved the issue where incomplete data was generated in the **Booking > List Conferences > Export Log** and **Export Details Log**.
CSCuh36391	Resolved the issue where it was not possible to create a conference that included ISDN audio dial in participants.
CSCui74583	Resolved the issue where a conference with a teardown buffer could display the wrong end date in **Booking > List Conferences**.
CSCug86198	Resolved the issue where the extend meeting message was not received on endpoints if there was a special character in the field: **Administrative Tools > Configuration > Conference Settings > Contact Information to Extend Meetings**.
CSCuh46375	Resolved the issue where editing the **Extend Mode** of an ongoing conference failed: it is no longer possible to edit the **Extend Mode** for an ongoing conference.
CSCuh63880	Resolved the issue where in-video meeting end notifications would not be sent if the meeting had been extended.
CSCui24634	Resolved the issue where conferences with **Status:***Rejected* were incorrectly listed under the *Deleted* conferences on the **List Conferences** page.

Monitoring

Identifier	Description
CSCtx61206	Resolved the issue where an ad hoc conference including a Polycom endpoint that had disconnected from a conference with **Cause Code** *0* could display in **Conference Control Center** in the Idle folder after the conference had ended.
CSCui32501	Resolved the issue where a Polycom endpoint that had disconnected from an earlier conference with **Cause Code** *0* could display as a participant in a subsequent conference in **Conference Control Center**, although the endpoint was not actually connected to the later conference.
CSCui74563	Resolved the issue where an interworked ad hoc conference displayed in **Conference Control Center** as two conferences instead of one.
CSCui85949	Resolved the issue where the mute command in **Conference Control Center** for participants hosted on a TelePresence Server did not work correctly.
CSCui74290	Resolved the issue where muting a participant from a TelePresence Server did not update the mute icon in **Conference Control Center**.
CSCui74335	Resolved the issue where **Conference Control Center** could not display any conferences if the owner of one conference was unknown.

Identifier	Description
CSCuh51719	Removed the option to **Lock** a conference that included a TelePresence Conductor in **Conference Control Center**. This functionality is not supported.
CSCui01713	Resolved the issue where the Cisco TMS Live Service was unable to resolve dial outs from a TelePresence Conductor. This created duplicate entries in **Conference Control Center** (CCC), and could also cause Cisco TMS to make the TelePresence Conductor dial out again although the participant was already connected.
CSCui24688	Added the Unified CM icon to the **Graphical Monitor**.

Systems Management

Identifier	Description
CSCui67809	Resolved the issue where Cisco TMS could instruct systems to dial out twice in One Button To Push and No Connect conferences.
CSCui81432	Resolved the issue where it was not possible to upgrade a system that had a password using Cisco TMS. This affected Cisco TelePresence E20 systems and systems running Cisco TelePresence TC software versions earlier than TC 6.0.
CSCui66934	Resolved the issue for ISDN-capable systems in **Systems > Navigator >** select a system **> Settings > TMS Scheduling Settings** where the text for the **Allow Outgoing Telephone Dialing** checkbox was missing.
CSCui75542	Resolved the issue where the SNMP scan of systems did not occur at the time interval configured in **Administrative Tools > Configuration > Network Settings > TMS Services >** **System Alive-Status Scan Interval (in seconds)**.
CSCui74636	Resolved the issue where a bridge behind a TelePresence Conductor that had been deleted but not purged from Cisco TMS did not display the *System(s) Managed by Cisco TelePresence Conductor Not Found in TMS* error.
CSCui74421	Resolved the issue where changing the H.323 and SIP username directly on an endpoint was not reflected in Cisco TMS after performing a **Force Refresh**.
CSCuh85852	Resolved the issue where Cisco TMS showed the following warning on a Cisco VCS: *The number of concurrent traversal calls has approached the licensed limit* , when the ticket had previously been acknowledged on both Cisco TMS and the Cisco VCS.
CSCui74362	Resolved the issue where a warning: *#1255 - Incorrect SNMP CN* was displayed when adding a Cisco TelePresence MCU that had SNMP disabled to Cisco TMS. There should not have been a warning in this case as these systems can be added to Cisco TMS with SNMP disabled.
CSCui24563	Resolved the issue where messages sent from Cisco TMS that contained special characters were not displayed on systems.
CSCui74343	An error is now displayed if deleting or purging a system from Cisco TMS fails. Previously no error was displayed.
CSCtr17122	Resolved the issue in **Systems > Navigator >** select a Cisco VCS**> Active Calls** where no data was shown in the **Duration** column.
CSCuf57343	Resolved the issue where setting a SIP or H.323 password in **Systems > Navigator >** select a system **> Settings > Edit Settings > Network Settings** did not set the password on the system.
CSCuh37146	Time zone fields are no longer displayed for Unified CM-registered systems in Cisco TMS as this information cannot be read from the systems or from the Unified CM.

Identifier	Description
CSCui24592	Cisco TMS now checks all NTP server entries for a system. Previously it checked only the first entry which, if blank, resulted in there being no NTP server setting for the system in Cisco TMS.
CSCuh57929	Resolved the issue where scheduled software upgrades of systems could occur before the scheduled day and time.
CSCui16561	Resolved the issue affecting Room type systems where if **Systems > Navigator >** select a system of type Room **> Settings > Edit Settings >Allow Incoming SIP URI Dialing** was checked, the same field did not show as enabled in the **View Settings** window.
CSCui85980	Resolved the issue where the **Filter Name** was not displayed when creating a global ticket filter in **Systems > Navigator >** select a system **> Settings > Ticket Filters**.
CSCud04905	Removed the **AllowWebSnapshots** setting from **Configuration Templates**. This setting cannot be applied remotely.
CSCuh53350	Removed the **Replace System** option for systems registered to a Unified CM, as they do not support this feature.
CSCue50533	Removed IP dialing for Cisco TelePresence T1 and T3 systems as this feature is not supported.
CSCui07157	Resolved the issue where Cisco TMS identified a Cisco TelePresence TX1310 as a three screen system, allocating three times as much bandwidth as it should to these systems. This could cause scheduling of TX1310s in multipoint conferences to fail as Cisco TMS incorrectly believed the bridge had no more available bandwidth.
CSCui24613	Resolved the issue where the **Service Contract Status** for a Cisco TelePresence Recording Server displayed as *-1* instead of *Unknown* in **Systems > System Overview**.
CSCui85968	Resolved the issue where Cisco TMS incorrectly displayed the SIP domain of an MCU as the *Active SIP Server Address*.
CSCui24605	Changed the error message 'This system is provisioned. Phonebooks and Enforce Management Settings from TMS are disabled.' from an error to an information message.
CSCuh43150	Resolved the issue where the *Last Backup* timestamp was missing from the **Systems > Configuration Backup > Perform Backup** page.

Phone Books

Identifier	Description
CSCuh22305	Resolved the issue where setting Phone Book Access Control permissions for Provisioning Directory groups failed if there were more than 100 folders.
CSCue66084	Resolved the issue where searching for a contact in a phone book source of type Manual List did not return any matches unless the **Number of Contacts** specified was large enough to display all contacts up to and including the one being searched for.
CSCui24661	Resolved the issue where an error generated on a Phone Book Source did not clear when navigating to another phone book source that did not have a problem.

Reporting

Identifier	Description
CSCug71311	Resolved several issues with charts in the **Reporting** pages.

Identifier	Description
CSCty45266	Resolved the issue where dialing from a Cisco TMSPE-provisioned device could cause duplicate User Call Detail Records in Cisco TMS: both the device URI and the FindMe URI (which showed up as device type: Unknown) were displayed.
CSCud81781	Resolved a number of issues where User Call Detail Records did not work correctly.

Booking API (Cisco TMSBA)

Identifier	Description
CSCui93184	Improved the text of the error message generated when booking a conference using Cisco TMSBA that did not include a billing code, when **Administrative Tools > Configuration > Conference Settings >Billing Code for Scheduled Calls** was set to *Required*.
CSCub53243	Resolved the issue where the booking confirmation email contained an incorrect number for the Cisco TelePresence Recording Server if the booking was made using Cisco TMSBA. The problem occurred if the recording alias selected during booking was not the first in the list returned by GetRecordingAliases.
CSCuh11794	Resolved the issue where the number of clients that could access Cisco TMSBA was limited to 5 if using the 'per 25 systems' license.

Cisco Collaboration Meeting Rooms Hybrid

Identifier	Description
CSCui69249	Resolved the issue where it was not possible to save the WebEx configuration for a user that had a WebEx Single Sign On site configured. Cisco TMS would report that it was unable to communicate with the WebEx site.
CSCui09920	Resolved the issue where an MCU could fail to dial out to WebEx participants in a scheduled meeting if the WebEx site was configured with a bandwidth of 1536 or 1280 kbps in Cisco TMS.
CSCui29432	Resolved the issue where **Administrative Tools > Configuration > WebEx Settings >** select a Center & Connect WebEx authentication site **> Edit > WebEx Site Configuration >Connection Status** displayed the error: *Could not connect to site*. Scheduling using this site worked correctly despite this error.
CSCuh43678	Resolved the issue with Cisco TMSBA-scheduled recurrent meetings with WebEx, where the first occurrence would have started before the time that the conference was booked in Cisco TMS. When viewing the **Connection Settings** tab for the conference, the **Number** column for the participants "Cisco WebEx Meeting" and "Cisco WebEx TSP Audio" would display as *To be populated by WebEx*, instead of the correct information.

Database

Identifier	Description
CSCue08333	Resolved the issue where Cisco TMS incorrectly warned about database size as it approached 4Gb for SQL Server 2008 R2. This version supports databases of up to 10Gb.
CSCui85970	It is no longer possible to add the value -1 in **Administrative Tools > TMS Server Maintenance > Purge Old Data in Database Tables Plan** and **Purge Log Plan**.
CSCui71982	Resolved the issue where upgrading the Cisco TMS database failed and the database upgrade log contained this error: "Violation of PRIMARY KEY constraint 'PK_field_SystemFieldSettings'". This only affected deployments that included pre-registered Polycom systems.

General

Identifier	Description
CSCuj25642	Resolved the issue where the Time Zone Update Tool did not update the first instance of a recurrent conference series. All other occurrences were updated correctly.
CSCuc00547	Resolved the issue where users in a different but trusted Active Directory (AD) domain to the domain that the Cisco TMS server is a member of were removed from the Cisco TMS local users group on AD sync.
CSCui04173	Resolved the issue where Cisco TMS was unable to authenticate to an HTTP proxy using NTLM authentication when checking for software upgrades.
CSCuj25633	Resolved the issue where changing the protocol for a Participant Template that had **Bandwidth** set to *Conference Bandwidth* resulted in a stack trace error.
CSCui35048 CSCui74631	Resolved the issue where Cisco TMS did not import Active Directory (AD) groups recursively. This applied to both user and phone book source imports.
CSCuh08527 CSCug16589	Resolved the issue where an error was displayed when clicking on the **Log Out** icon in Cisco TMS.
CSCua81744	Resolved the issue where Cisco TMS did not send its FQDN in its HELO/EHLO message. The value specified in **Administrative Tools > Configuration > Network Settings > TMS Server Fully Qualified Hostname**will now be used.
CSCui74577	Resolved the issue where non-ASCII characters such as æ,ø and å did not display correctly in the title of a conference.
CSCuj56225	Resolved the issue where non-ASCII characters such as æ,ø and å did not display correctly in the title of a Billing Code.
CSCui24677	Changed the **System Contact** for a system on the **Search** page (accessed in the top right corner of the Cisco TMS web interface) to be a clickable link.
CSCui24708	Added a column to **Administrative Tools > Locations > ISDN/IP Zones**: **Default ISDN/IP Zone** so it is clear which of several zones is the default and must not be deleted.
CSCuj25622	Cisco TMS now works without compatibility view or quirks mode enabled in Internet Explorer.

Resolved in 14.3

The following issues were found in previous releases and were resolved in 14.3:

Booking and routing

Identifier	Description
CSCui50615	Resolved issue where, in some situations, Cisco TMS would not add dial-out participants to conferences scheduled with TelePresence Conductor due to not determining that the meeting was successfully created. Dial-in participants would still be able to join.
CSCui57322	Resolved issue where Cisco TMS could fail to add dial-out participants to a TelePresence Conductor-scheduled conference when an alias was quickly reused.
CSCui24558	Resolved issue where some conferences scheduled in Cisco TMS were not created correctly on TelePresence Conductor, and Cisco TMS never requested that TelePresence Conductor Conductor dial out to the participants.

Identifier	Description
CSCuh66269	Resolved issue where, when WebEx part of booking failed, MCU was still added to a conference with one telepresence participant only.
CSCuh66292	Now only cascading compatible MCUs when Cisco TMS selects the MCU. Blocking users from manually creating cascades with incompatible MCUs.
CSCug92256	Resolved issue where an error would be displayed in the Cisco TMS UI when trying to view the connection settings for a Cisco TMSBA-scheduled conference with one endpoint and one content server.
CSCug86538	Solved issue causing new MCU ports to be selected that did not match existing dial-in participants in some scenarios when adding participants.
CSCuf45798	No longer sending out PIN code in booking confirmation for point to point meetings, as PINs are only relevant for calls that involve an MCU.
CSCug21987	Resolved issue where WebEx meeting details would sometimes be included in booking confirmations where adding WebEx failed.
CSCtz53143	When no participants are able to be master, if *Manual Connect* is selected, the connection type will now be automatically changed to *No Connect*.
CSCuh77452	Resolved issue where time zone differences could cause a conference series to be booked on different days in WebEx and Cisco TMS.
CSCue88554	Cisco TMS now checks MCU specifically for available streaming and content channel ports during booking.
CSCug73952	Resolved issue where, with large UTC offsets, an extra day would be displayed when listing today's conferences in the **List Conferences** page.
CSCuc62054	Resolved issue where participants who dialled in during setup buffer were disconnected.
CSCtz21445	Resolved issue where Extend Meeting would sometimes fail when the master participant for the meeting had changed.
CSCui24558	Resolved issue where some conferences scheduled on TelePresence Conductor were not created correctly in Cisco TMS; as a consequence the TelePresence Conductor did not dial out to the participants. This typically occurred if the TelePresence Conductor was under high load.

Monitoring

Identifier	Description
CSCuh66222	Resolved issue where layout drop-down was hidden in Conference Control Center when a single participant was selected.
CSCud34671	Resolved issue with editing DTMF tones in Conference Control Center for multipoint calls.
CSCue94376	Sound alerts for monitored conferences now work as expected.
CSCuh72094	Added missing system types and icons for some Unified CM-registered systems in Conference Control Center.
CSCtr08909	Resolved issue where participants moved between conferences would receive notifications from the original conference after being moved.
CSCue83453	Correctly declaring UTF-8 encoding in messages to locally managed TelePresence Server, resolving issues with display of non-ASCII characters.
CSCuh66259	Solved issue with resolving interworked calls (SIP-H.323) through TelePresence Conductor.

Identifier	Description
CSCuh99386	Resolved issue where duplicate conference entries were shown in Conference Control Center when scheduling through a TelePresence Conductor.

Database

Identifier	Description
CSCuh16360	Resolved issue causing database export and import to fail with SQL error.
CSCuf93871	Log table purge job will now be scheduled for 00:13 on install/upgrade, regardless of defaults in older versions.
CSCuh66317	Provisioning Extension user import job will now be scheduled for 04:12 on install/upgrade, regardless of defaults in older versions.
CSCuf92526	Solved issue where, after upgrading from 13.x, errors would be thrown when accessing some Cisco TMS pages if certain database values were *Null*.

Systems management

Identifier	Description
CSCuh66279	Solved issue with erroneous display of connection status for TANDBERG Classic endpoints with IP password.
CSCue92568	Corrected handling of authentication error when stored credentials for Polycom HDX endpoints in Cisco TMS become out of sync.
CSCue67212	Made TelePresence Server unbookable when it operates as a slave in a cluster, displaying only core details in **Navigator**.
CSCue80457	Resolved issue where SNMP commands were incorrectly formatted for legacy TANDBERG Classic endpoints, causing settings not to be updated.
CSCty54810	Resolved issue where applying persistent configuration templates to Polycom endpoints would fail.
CSCug21218	Resolved issues preventing software upgrades from Cisco TMS for endpoints in secure environments.

Reporting

Identifier	Description
CSCug56244	Resolved reporting issues in Cisco TMSAE caused by Cisco TMS failure to read global call ID for specific versions of Cisco VCS.
CSCue03849	Added all Cisco TelePresence MCU cause codes, resolving some issues with incomplete CDRs.
CSCud61615	Resolved font issues with generated reporting PDFs in Japanese.

Cisco TMSBA (Booking API)

Identifier	Description
CSCug94489	Resolved issue where bookings created using Cisco TMSBA would get erroneous start and end times when setup and teardown buffers are enabled. Buffers will now be ignored by Cisco TMSBA.
CSCuh66250	Cisco TMSBA will now silently ignore all requests to modify WebEx conferences created by Cisco TMS, with the exception of changing the WebEx meeting password.
CSCuh72120	Validation of end time added to Cisco TMSBA**SaveConference** function. A new conference will only be created if the end time is in the future.
CSCub55674	Resolved issue where concurrent bookings using different recording aliases on the same content server would not be allowed by Cisco TMSBA.

Other

Identifier	Description
CSCue57675	Added tag validation to email templates to ensure that the tags included when modifying the default templates are supported.
CSCue27719	Resolved issue where custom login banners would display with visible HTML tags.
CSCuh72106	Reduced response time when changing WebEx sites and the selected site is unavailable.
CSCud83843	Now registering disconnects from Endpoints with call logging turned off in the Feedback log. **Enforce Management Settings** must be performed on each endpoint for the change to take effect.
CSCuc00547	Resolved issue where users from a trusted domain would be removed from their Cisco TMS user group on each synchronization with Active Directory.
CSCuh83558	Resolved issue where the Time Zone Migration Tool could crash during migration, and the time zone update could be canceled.

Resolved in 14.2.2

The following issues were found in previous releases and were resolved in 14.2.2.

Identifier	Description
CSCuh09140	Resolved the issue where modifying the start time of a single (non-recurrent) conference using the Cisco TMS web interface would cause Cisco TMSBA to return incorrect conference times to clients. This would cause free/busy information for rooms in Cisco TMSXE, Smart Scheduler (Cisco TMSPE), and other API clients to be out of sync with the Cisco TMS database.
CSCuh24788	Resolved the issue where the Cisco TMSPE Smart Scheduler did not allow bookings, and displayed an error message: "An option key is required to use this feature. For more information, contact Cisco". The Smart Scheduler does not require an option key.

Resolved in 14.2.1

The following issues were found in previous releases and were resolved in 14.2.1:

Identifier	Description
CSCug68465 CSCug61584	Resolved two issues where upgrading the database could fail.
CSCug53694	Resolved the issue where, under some circumstances, Cisco TMSBA would return meeting series with deleted exceptions incorrectly, causing Cisco TMSXE to remove the series.

Resolved in 14.2

The following issues were found in previous releases and were resolved in 14.2:

Booking

Identifier	Description
CSCts02650	Resolved the issue where booking a conference on a Cisco TelePresence MCU that had HTTPS enabled and HTTP disabled could be very slow. This was due to a time-out while Cisco TMS attempted to contact the MCU on HTTP first.
CSCud49452	Resolved the issue where editing an existing conference that included two or more dial-in participants, and removing one participant, resulted in an error. This occurred only when editing the booking using the Booking API.
CSCug18393	Resolved the issue where creating a recurrent conference, then editing any occurrence except the first and setting **Recurrence Interval** to *None*, still treated the conference as recurrent.
CSCud83501	Resolved the issue where booking a conference with a recording alias that is not the first one in the list in **Booking > New Conference >Recording**, and then changing the route from the default route defined by Cisco TMS, would disable recording for that conference.
CSCud83494	Resolved the issue where editing an ongoing conference that included recording to be *No Recording* could disconnect the conference. This occurred if the route was changed during booking from the default route defined by Cisco TMS.
CSCud71435	Resolved the issue where **Booking > View Conferences >** select a scheduled recurrent conference **> Connection Settings** displayed an error and did not load.
CSCud95569	Resolved the issue where an unhandled exception occurred when a user who was a member of a group that had Booking permissions only, clicked on **Booking > New Conference > Add Participant**.
CSCug18417	Resolved the issue when searching for a conference in **Booking > List Conferences**, where setting the search start date to be the same as the search end date did not find conferences for that date.
CSCue09213	Reinstated the **Recording URL** in the **View Conferences** page.
CSCue08624	Resolved the issue where changing the setup buffer after a conference had been created changed the connect time to 12:00 AM + setup buffer.
CSCug28928	Resolved the issue where if a conference was booked with three participants, and an external MCU was automatically added to host the conference, and then one participant was removed, the conference would still use the MCU even though this was not necessary as the conference could have been re-routed as point to point.
CSCud90734	Resolved the issue when booking a recurrent conference where selecting dates in the date picker did not update the number of occurrences.
CSCug18437	It is no longer possible to book a conference with recording and no participants.

Identifier	Description
CSCud72945	Resolved the issue where a conference scheduled on a TelePresence Server at 6144kbps connected at 1920 kbps.
CSCuf06925	Cisco TMS will now only dial participants if allocation is successful, previously Cisco TMS would dial participants even if allocation failed.
CSCua15627	Resolved the issue where Cisco TMS could select too many MCUs or fail to create a route when cascading.
CSCuh19000	Resolved the issue where the maximum setup and tear down buffer value that could be set in **Administrative Tools > Configuration > Conference Settings >** **Default Setup Buffer/Default Tear Down Buffer** did not reflect the documented maximum value of 30 minutes.

Systems Management

Identifier	Description
CSCue22625	Resolved the issue where the **Systems > System Overview** page could crash if all systems were selected in the left hand pane, and all parameters or the SNMP settings were selected in the right hand pane; the crash occurred when **View** was clicked.
CSCue22723	Resolved the issue where Cisco TMS could show a system with **Service Contract Status:***No Contract* as having a contract expiry date in the future.
CSCue23402	Resolved the issue in **Systems > System Upgrade > Software Manager** where an error occurred when using Microsoft Internet Explorer and trying to upload a valid software package. This occurred only when accessing Cisco TMS on the server itself using http://localhost/tms.
CSCud90922	Introduced support for leading zeros in meeting ids for ad hoc calls on Cisco TelePresence MCUs.
CSCud95411	Resolved the issue where it was not possible to add a Cisco Unified CM-registered EX series endpoint to Cisco TMS if it did not have an 'empty' password. Cisco TMS now reads the credentials from the Unified CM rather than the endpoints themselves.
CSCue78404	Changed the Software Upgrade Service URL to point to cisco.com. Upgrading to 14.2 will change this automatically in **Administrative Tools > Configuration > Network Settings >****Service URL**.
CSCue45487	Resolved the issue where it was not possible to add a Unified CM-managed system to Cisco TMS unless the 'admin' account was used.
CSCug18468	Resolved some issues with management of endpoints behind a firewall/NAT, including calendar support for One Button To Push conferences.
CSCuf32756	The setting **Systems > Navigator >** select a TelePresence Server**> Settings > Extended Settings >****Port Reservation** has been changed to **Limit Ports to Number of Scheduled Participants** for consistency with the MCU products.
CSCty88233	Resolved the issue where Cisco TMS did not set a port limit for TelePresence Servers. This is only supported for TelePresence Servers running software version 2.2 or later.
CSCue94672	Resolved the issue where the Database Scanner Service did not automatically refresh managed systems.

Phone Books

Identifier	Description
CSCue28933	Resolved the issue with the Cisco TMS Provisioning Directory phone book source where it was not possible to expand the root directory to view any subfolders containing provisioning users.
CSCue22884	Resolved the issue where searching on the TMS Endpoints phone book source could return an incorrect number of entries.

Monitoring

Identifier	Description
CSCug37698	Resolved issue where some Java/browser combinations were sometimes very slow or unable to run **Conference Control Center**.
CSCug28886	Resolved the issue where having a blank TelePresence Server password caused commands sent to participants in a conference hosted on a TelePresence Server via Conference Control Center to fail.

Reporting

Identifier	Description
CSCud95025	Resolved the issue where Cisco TMS could not resolve feedback from Cisco TelePresence MCU 5300 series MCUs. This resulted in no Call Detail Records (CDRs) being created if Cisco TMS did not recognize the cause code reported by the MCU.
CSCue00174	Resolved the issue with creating a pdf report via **Booking > List Conferences > Conference Report** where the generated pdf could include blank pages and some data was illegible.
CSCud78269	Resolved the issue where generating CDR reports when the logged in user's language was Japanese included TANDBERG instead of CISCO in the title of the report.

Time Zones

Identifier	Description
CSCud89551	Resolved the issue where creating a weekly recurrent conference as a user in for example, time zone GMT+11, when the Cisco TMS server was in for example, time zone GMT-5, led to the conference being saved on the incorrect date. This occurred only when selecting a day for the recurrence, and when the user time zone and the server time zone were on a different day.
CSCuc48691	Resolved the issue where recurrent bookings that spanned a DST change were replicated from Cisco TMS to Microsoft Exchange with the wrong meeting time for occurrences on dates after the DST change, leading to systems being set to unavailable when they were available for bookings.
CSCtx61207	Resolved the issue where booking availability for a system was incorrectly shown for the day before or the day after the requested date when certain time zones were chosen for the conference.
CSCtz40911	Resolved the issue where a recurrent conference would change to be a day out if the server and user time zones were different and the recurrence period spanned a DST change in one of the time zones.
CSCug11549	Resolved the issue where booking a conference in a different time zone to the one your Windows user is in could display incorrect conference information in the Microsoft Outlook recurrence tool.

Email

Identifier	Description
CSCug11500	Resolved the issue where the ICS calendar attachment set the Reminder as "Invalid" by default for Microsoft Outlook on a Mac.
CSCue22710	Resolved the issue in **Administrative Tools > Configuration > Edit E-mail Templates >Phrase File** where untranslated phrases were shown as empty instead of being shown in English.
CSCug11515	Resolved the issue where using curly brackets { } in an email either in the subject or in the message did not display the brackets or the text inside the brackets.
CSCue22932	Resolved the issue affecting conference emails for One Button To Push conferences where the Conference Type section was missing from the emails.
CSCua28976	Resolved a number of time zone issues with the VCal and ICS attachments to booking confirmation emails.
CSCud83837	Resolved the issue with custom created email templates for booking where the generated email could contain the name of the MCU after the conference ID in the URI.
CSCtt07448	Resolved the issue where the booking confirmation email was received in UK English although the user booking the conference was set to US English.

Booking API (Cisco TMSBA)

The current Cisco TMSBA is version 11. All changes to the booking API may affect API clients such as Cisco TMSXE, Smart Scheduler, Cisco TMSXN and customer-developed extensions.

Identifier	Description
CSCuc48691	Resolved multiple issues caused by missing time zone support. For implementation details, see Time zone awareness [p.31]
CSCug11371	Resolved issue where caching might lead to API not applying newly changed profile information for the conference owner. When a conference is saved, the latest version of the conference owner's profile will now be read.
CSCue26369	Resolved issue where Cisco TMS would persist some instances of recurrent conference series incorrectly when they are created using the API, causing the last instance to be omitted when series later retrieved from Cisco TMS.
CSCue30850	Cisco TMS no longer clears the existing call route when adding or removing a participant using Cisco TMSBA during an ongoing conference.

General

Identifier	Description
CSCtx30758	Improved the error message displayed when a duplicate option key is added into Cisco TMS.
CSCue00035	Resolved the issue where the TMSSNMPService could crash after certain database operations returned an exception.
CSCue13739	Resolved the issue in Cisco TMS Analytics Extension (Cisco TMSAE) where Cisco TMS Provisioning Extension users were not imported. The databases were in an inconsistent state, with many users missing from the Cisco TMSAE"User" dimension. Customers using the data in the Cisco TMSAE 'user' dimension must contact Cisco to obtain a database cleanup script.

Identifier	Description
CSCug11344	If **Administrative Tools > Configuration > Conference Settings >Auto Generate Password on New Conferences** is set to *Yes*, Cisco TMS will now generate a password of 3 characters between 000 and 999, instead of incorrectly generating a password of 1, 2 or 3 characters between 0 and 999.
CSCug11311	Resolved the issue with upgrading Cisco TMS where the installer could hang if one of the Cisco TMS services did not start.
CSCue02749	Resolved the issue where updating the password for Cisco TMSPE from TMS Tools failed, even though it appeared to succeed in the TMS Tools interface.
CSCuf79069 CSCug27660	Resolved a number of issues where Cisco TMS disconnected ad hoc calls.

Resolved in 14.1.1

The following issues were found in previous releases and were resolved in 14.1.1:

Identifier	Description
CSCud86151 CSCud88001	Resolved the issue where it was not possible to schedule conferences or edit existing bookings in Cisco TMS.
CSCud88003	Resolved the issue where it was not possible to create a phone book source of type File Based Phone Book using a file from a URL.
CSCud88006	Resolved the issue where the password field did not contain any data after creating and saving a phone book source that required credentials. This caused the connection to the source to appear to fail on the first attempt.

Resolved in 14.1

The following issues were found in previous releases and were resolved in 14.1:

Booking

Identifier	Description
CSCua57784	Resolved the issue where *One Button To Push* conferences with participants added from a phone book failed.
CSCud07712	Resolved the issue where Cisco TMS booked all ports on an MCU type system, even though the booking was not *Reservation Only*. The issue happened when a user edited an existing booking and removed all participants except the MCU.
CSCtz48797	Resolved the issue where the meeting password was not saved for a password protected meeting when the reservation type was set to *Manual Connect*.
CSCud07690	Removed the non-functioning **Details** link for external dial in participants in the **New Conference** and **Edit Conference** pages. Added a tool-tip displaying *Name* and *Direction*.

Identifier	Description
CSCtx51962	Resolved the issue where if a user cancelled an edit of a conference in **Booking >List Conferences,** the start and end time of the conference changed. When the user entered the **List Conferences** page again, the start and end time were correct.
CSCua18048	Resolved the issue where conferences created from Microsoft Outlook via Cisco TMSXE defaulted to 64k bandwidth when trying to set other values in Microsoft Outlook.
CSCua77446	Resolved the issue where scheduling a participant template made all participant templates seem scheduled in **Booking > New Conference > Add Participants** button > **Template** tab. This issue occurred for systems not managed by Cisco TMS.
CSCua23453	Resolved the issue where a system appeared as available when it was already booked. This happened when a new date had started in UTC, but not in Cisco TMS's time zone.
CSCtx73847	Resolved the issue where if scheduling a OBTP conference in Cisco TMS involving one or more "room" type systems, the Cisco TMS routing logic failed to set up the connection.
CSCud07423	When deleting a conference from a recurrent series, it was possible for the user to click **OK** without an option selected. Now the option *Delete the selected occurrence* will be preselected.
CSCtt27466	Resolved the issue where setting **Set Conferences as Secure by Default** to *Yes* in **Administrative Tools > Configuration > Conference Settings**, did not enable secure conferencing in Cisco TMS Scheduler as default.
CSCud10011	Resolved the issue where after going to **Booking > New Conference**, clicking the **Add Participant** button and adding an MCU to the conference, the **MCU** tab did not show the correct status for the MCUs.
CSCub19010	Resolved the issue where scheduling a conference with endpoints running TC/TE software or MXP endpoints when **Administrative Tools > Conference Settings > Conference Create Options >Set Conferences as Secure by Default** was set to *If Possible* or *Yes*, Cisco TMS could in certain circumstances incorrectly change the configuration.
CSCuc88037	Resolved the issue where it was possible to remove the main participant (the host or the MCU) in an ad hoc conference. This would disconnect the call.
CSCtr32362	Resolved the issue where a conference booked at midnight in Cisco TMS could be replicated to the previous day in Microsoft Exchange.

Systems Management

Identifier	Description
CSCuc65075	Removed the warning given by Cisco TMS when trying to add a Cisco VCS using the VCS's IP address. As provisioning has been improved with Cisco TMSPE, there is no longer a requirement for this warning.
CSCtx12293	Resolved the issue where a system took longer to upgrade than Cisco TMS expected and therefore Cisco TMS reported the upgrade as unsuccessful. This issue applied to systems running TC and TE software version 6 or earlier.
CSCud16380	Resolved the issue where if adding a system using SNMP, not all the systems capabilities were added by the first **Force Refresh**.

Identifier	Description
CSCud07392	Resolved the issue in **System Upgrade** where if **Upgrade Mode***Basic* was selected, both .pkg and .zip files were displayed. Adding a .zip file is not a valid option here.
CSCua25689	Resolved the issue where adding a Cisco TelePresence MCU with only HTTPS enabled failed.
CSCud21809	Resolved the issue where a Cisco TelePresence MCU on a dual stack network could be added twice to Cisco TMS.
CSCuc88048	Resolved the issue where Cisco TMS did not allow the administrator to specify a user name when adding a Cisco VCS or a Cisco TelePresence Conductor. The problem occured if the default 'admin' accounts were disabled.
CSCuc88015	Resolved the issue where it was not possible to remove an inaccessible VCS from a cluster.
CSCtr32285	Resolved the issue in **Systems > Navigator >** select system **> Settings** tab **> Persistent Settings**, where the **SIP URI** field was empty even though the SIP URI had been set using **Systems > Manage Dial Plan**.
CSCty20327	Resolved the issue where exporting option key values from all systems from the **Systems Overview** page displayed the data as XML.
CSCud07618	Resolved the issue where Cisco TMS allowed adding a Cisco Unified CM several times.
CSCud10019	Resolved the issue where [IPV6] or ipv6 address (enclosed or not enclosed in square brackets) were treated as separate entries when adding systems to Cisco TMS.
CSCty90084	Resolved the issue where Cisco TMS incorrectly displayed Cisco TelePresence MCU's status as *In Call* when there was no call remaining on the Cisco TelePresence MCU.
CSCtx03704	Resolved the issue where **Systems > Navigator >System Status** could incorrectly display as *Idle* for Cisco TelePresence MCUs and Cisco TelePresence Servers when they were in a call.
CSCud07379	Improved the message where Cisco TMS displayed "an unexpected error has occurred" when viewing a Cisco Unified CM in the **System Navigator**. The issue occurred when there had been too many requests from Cisco TMS to the Cisco Unified CM over the last minute; the Unified CM then refused the connection.
CSCud07411	Resolved the issue where the registration policy for the a Cisco VCS in **Systems > Navigator** was wrong. It was always listed as *Unknown*.
CSCua84377	Resolved the issue where **System Name** for systems provisioned by Cisco Unified CM was displayed as editable in **Systems > Navigator**. Changing **System Name** of Cisco Unified CM provisioned systems must be done from the Cisco Unified CM.
CSCud07698	Resolved the issue where Cisco TMS could display erroneous warnings in **Systems > Navigator**. Cisco TMS did not compare IPv6 feedback receiver URLs correctly for Cisco TelePresence MCUs.

Phone Books

Identifier	Description
CSCub86648 CSCub86700	Resolved the issue where it was not possible to synchronize phonebook sources if the source name contained a non-standard character such as \ or ". A provisioning extension error occurred.

Identifier	Description
CSCud07646	Resolved the issue where synchronization of phone books could fail due to the provisioning phone book synchronization, even if provisioning was not enabled. Phone Book Source Activity Status displayed an error message/resent an email saying: *A phone book connected to the source {0} is currently undergoing internal maintenance*. The error also prevented other phone book jobs from running.
CSCud07492	Resolved the issue where the display of the **Manage Phone Book Sources >** Manual List sources **> View/Edit Contacts** tab only displayed half the amount of contacts the setting was set to show.
CSCua00704	Resolved the issue where searching for names in phone books on EX60 and EX90 systems containing ", ' or – e.g. O'Neill, produced no search results.

Monitoring

Identifier	Description
CSCub67739	Resolved the issue where **Conference Control Center** did not load a conference if one of the participants had been deleted from a file based phone book.
CSCuc65141	Resolved the issue where if scheduling a multipoint conference in Cisco TMS that included Cisco TelePresence Server (TS), the Set floor functionality showed as available even though TelePresence Server does not support this feature.
CSCtx66027	Resolved the issue where removing a participant from a multipoint call using the **Remove** option in **Conference Control Center** failed.
CSCtv21740	Resolved the issue where the date fields in the **Conference Control Center** displayed the dates of the server's time zone instead of the time zone configured for the Cisco TMS user.
CSCuc65062	Resolved the issue where the event log erroneously displayed: "Error: No incoming video from participant: (system name)" when an administrator manually muted a participant in the **Conference Control Center**.
CSCts02684	Resolved the issue where alarms were not cleared correctly in **Conference Control Center** even though the issue had been resolved.
CSCtx27847	Resolved the issue where "&" in the conference name broke the Cisco TelePresence MCU conference snapshot in **Conference Control Center**.

Reporting

Identifier	Description
CSCud07720	Resolved the issue where Cisco TMS did not log boot events from the Cisco TelePresence Supervisor MSE 8050 or the Cisco TelePresence ISDN Gateway.
CSCtr32354	Resolved the issue where Cisco TMS displayed an error in **Reporting > Billing Code Statistics**, when trying to view detailed data records for billing codes that contain certain UTF-8 characters (for example: æ,ø,å,# and &).
CSCud07585	Resolved the issue where a boot event for a Cisco TelePresence MCU did not show in Cisco TMS when the MCU rebooted. Now, a boot event will always show immediately in Cisco TMS, but if the MCU is not available yet to report a reason for its reboot, no reason will be shown in Cisco TMS.

Identifier	Description
CSCty13851	Resolved the issue where Cisco TMS sent an incorrect “Conference ends in 5 minutes” message for a conference stretching over several days.
CSCtw61036	Resolved the issue where Cisco TMS didn’t generate a "Lost Response" trap log event for Cisco VCS systems if the network connection was lost.
CSCud07502	Resolved the issue in the **Reporting** pages where the date picker and date input fields used an inconsistent date format. The date picker used an American date format (month/date), while the date input field used a European date format (date/month).
CSCty67470	Resolved the issue where an SQL timeout error occurred when viewing Gateway CDR.

Booking API (Cisco TMSBA)

Identifier	Description
CSCud16387	Resolved the issue where GetDefaultConference method did not contain IP Bandwith or ISDN Bandwith elements. This issue only occurred when the client specified an API version later than 3.
CSCud07675	Resolved the issue where a misleading error message was displayed if no option key was installed. The error message was: "There are no Application Integration options installed".
CSCuc01451 CSCtx29637	Implemented support for ParticipantCallType *Directory*, allowing phone book entries to be used as participants.
CSCtz01880	Resolved the issue where all bookings from Microsoft Outlook (through Cisco TMSXE) and IBM Lotus Notes (through Cisco TMSXN) failed displaying the error: "You do not have enough licenses to book this conference" even though licenses were in place. The bookings did not show in Cisco TMS.
CSCud07475	Resolved the issue where Cisco TMS returned one too many days when booking conferences through the booking API (Cisco TMSBA’s function GetConferencesForUser).

TMS Tools

Identifier	Description
CSCuc65089	Resolved the issue in TMS Tools where settings for Cisco TMSPE database connections were configurable in deployments without Cisco TMSPE.
CSCuc65094	Resolved the issue in TMS Tools where Cisco TMSPE windows authentication credentials could not be validated after editing.

General

Identifier	Description
CSCua60214	Resolved the issue where the third party calendar drop-down component showed an Unlicensed message when FIPS mode was enabled on the Cisco TMS server.
CSCtx39000	Corrected the issue where Russian time zones were displayed incorrectly in **Systems > Navigator >** select a system **> Settings** tab **>Time Zone** field.

Identifier	Description
CSCud07681	Resolved the issue where Cisco TMS did not respect the **Number of Days To Keep Data** setting in **Administrative Tools > TMS Server Maintenance > Purge Log Plan**.
CSCud07608	Resolved the issue where a confirmation message displayed a message containing a reference to an outdated product.
CSCud07407	Errors are no longer displayed on the **Compare Settings** tab in **Systems > Navigator** when encountering encrypted Cisco VCS passwords that cannot be verified by Cisco TMS. The passwords are now highlighted without showing errors.
CSCud07636	Improved e-mail address verification to conform to ICANN rules which allows for top level domains to be anything and also contain national characters.
CSCud10033	Resolved the issue where Cisco TMS failed to do Active Directory look-up of existing users. The issue happened if the **Lookup User Information from Active Directory** in the **Network Settings** was enabled and the **GC server or AD forest DNS name** field was empty.
CSCud07261	Resolved the issue where during installation, in an IPv6 environment and with IPv4 disabled, the Cisco TMS installer did not automatically fill in IPv6 address.
CSCud07268	Option key for Cisco TMSPE in **General Settings > Option Keys** changed to “Cisco TMS Provisioning Extension”.
CSCuc65118	Updated the Cisco TMS' list of SIP server types for the Cisco IP Video Phone E20. TE 4.1.x software allows Standard/Alcatel/Avaya/Cisco/Microsoft/Nortel/Broadsoft as valid types.
CSCua28639	Resolved the issue with incorrect distribution of participants in cascaded conference template: If you create a conference template with No Distribution routing, then create another conference template with Best Impression routing which requires cascading, the number of participants distributed to each MCU in the second conference template is incorrect.
CSCtx29067	It is now also possible to use a 10 digit base ISDN number starting with any digit in **Systems > Navigator >** select an MCU **> Settings > Extended Settings > ISDN Gateway DID First Number.**
CSCtr32338	Character limit for **Systems > Navigator > Extended Settings >First Meeting ID** for MCU and TelePresence Server increased to 19. Leading zeroes are supported.
CSCuc88003	Resolved the issue where Cisco TMS was unable to handle a search in **Systems > Configurations Templates > Configuration Templates > Select Advanced Settings**.
CSCub31632	Resolved the issue where Cisco TMS failed to import Billing Codes from a text file.
CSCty74386	Resolved the TMS Scheduler issue where adding a phone book entry as the first participant followed by a dial-out number would lead to the phone book entry replacing all other participant addresses.
CSCud39079	Improved Cisco TMS’ handling of database deadlocks.

Resolved in 14.0

The following issues were found in previous releases and were resolved in 14.0:

Booking

Identifier	Description
CSCua62217	Resolved the issue where an error could appear in the log-web.txt log when adding a non-Cisco TMS-managed participant (dial-in, dial-out, phone book entry, user) to a One Button To Push conference.
CSCty98098	Resolved the issue where confirmation emails were not received when booking a One Button To Push conference which included at least one non-Cisco TMS-managed participant (dial-in, dial-out, phone book entry, user).
CSCty94156	Resolved the issue where a SIP conference scheduled on an MCU in Cisco TMS did not register as SIP if H323 was disabled on the MCU. This happened because SIP registration was dependent on the H323 MCU prefix setup, meaning it would fail if H323 was turned off on the MCU.
CSCtx64185	Resolved the issue where Cisco TMS did not register SIP participants as taking up resources in stored bookings on an MCU, which made it possible to overbook SIP participants on the MCU in subsequent bookings.
CSCua26100	Resolved the issue where in **Booking > New Conference >Recurrence Settings** the calendar sometimes did not display in the **Recurrence Settings** pop up window.
CSCua60010	In **Booking > New Conference > Add participants>** add an MCU and some participants **>OK>MCU Settings** tab – the fields on this tab will now be shown in the language the logged-in Cisco TMS user has selected. Previously they were always in English regardless of the user language selected in Cisco TMS.
CSCty32654	Resolved the issue where it was possible to double book a system, if the start date of a recurrent meeting series in which it was a participant was changed to a date in the past.

Monitoring

Identifier	Description
CSCua60141	Resolved the issue where removing a participant from a scheduled One Button To Push conference did not update that participant's Meetings calendar to inform it that it had been removed from the conference.

Systems Management

Identifier	Description
CSCtz83514	Resolved the issue where it was not possible to add Cisco TelePresence MX300, Profile 55 and SX20 systems which were registered to a Cisco Unified CM to Cisco TMS.
CSCua52567	Cisco TMS now downloads software and release keys for provisioned systems.
CSCua52587	Resolved the issue where enforcing management settings on a Cisco VCS in Cisco TMS changed the external manager address set on the Cisco VCS from the FQDN of the Cisco TMS to the IP address of the Cisco TMS.

Identifier	Description
CSCua65556	Resolved the issue where it was not possible to add systems to Cisco TMS if the default ISDN or IP Zone value had been set to *None* in **Administrative Tools > General Settings >Default ISDN/IP Zone** after initially creating the default zones during the install process. A “System not found!” error was invoked.
CSCua26092	Resolved the issue where changing the **URL Where Software Packages Can Be Downloaded:** in **Administrative Tools > Configuration > Network Settings > General Network Settings** could cause a stack trace error when accessing the **Systems > System Upgrade > Software Manager** page. This happened if the IIS user Cisco TMS was running under did not have access to the folder specified. A valid error message will now appear.
CSCua26087	Removed the field **SNMP Get Community Name:** from **Systems > Navigator >** Select a system **> Connection** tab for systems which do not support this setting, for example Cisco Unified CM and Cisco TelePresence Server.
CSCua59944	Resolved the issue where no system name was displayed for systems which did not have a name. This occurred in **Systems > Event Notification Manager >** edit an account in the **Name** column. Select a system with *No Name* in the **Select Systems** column, and an event type in the **Select Event Types** column, then click on the arrow to move it into the **Stored Event Notifications** column and click **Save**. Now view the same account in **Systems > Event Notification Manager**. Nothing is displayed in the **System** column for the system name.
CSCtr25908	Resolved the issue where endpoints running TC and TE software, and the Cisco VCS showed the SNMP port as 0 instead of 161 in **Systems > System Overview >** Select a system from the **Systems** folder list and **SNMP Settings** from **System Parameters** list **>** click **View>SNMP port** column. This is a hard-coded value in Cisco TMS, it is not read from the system itself.

Phone Books

Identifier	Description
CSCua67525	Resolved the issue where incorrect data could be returned when searching via the **View Contacts** tab in an Active Directory or H.350 Phone Book Source.
CSCua60451	Resolved an issue where if there were lots of phone book contacts without any contact information, deletion of one manual contact could fail with an exception due to a time-out.
CSCua59896	Resolved an issue where synchronizing very large phone books could fail with an exception due to a time-out.
CSCua59975	Resolved the issue where deleting a very large phone book from the Cisco TMS GUI could fail due to a time-out in the SQL database.
CSCua59911	Improved GUI performance when accessing **Booking > New Conference >Add Participants…** > **Phone Books** tab and **Phone Books > Manage Phone Books >** select a very large phone book **> View Contacts** tab. These pages were very slow to load if the phone books contained thousands of contacts.

Reporting

Identifier	Description
CSCua26084	The *Utilization* option has been removed from the **Reporting > Call Detail Record > Gatekeeper and VCS > Query >Calculate by:** field. It is not possible to calculate CDRs by utilization for these products.

Installation

Identifier	Description
CSCua65350	Resolved the issue where during the installation of Cisco TMS, the **HTTPS Enable Wizard** could disappear behind the **Installer** window leading the user to think that the installer had hung. The **HTTPS Enable Wizard** will now always be on top of the Installer.
CSCua65522	Resolved the issue where errors appeared during install if **TMS** was deselected and only the **Database** was installed, during a Custom install of Cisco TMS.
CSCua60164	Cisco TMS installer will now give a proper error message when an install is attempted on the unsupported Windows 2003 64-bit operating system.

Booking API

Identifier	Description
CSCua65538	Resolved the issue in the Booking API where GetDefaultConference was not versioned correctly.
CSCtr37992	Resolved the issue where the master participant in a OBTP conference did not update correctly if the conference was updated through the booking API.

General

Identifier	Description
CSCua65316	Resolved the issue where the **HTTPS Enable Wizard** crashed when running with insufficient privileges. A message is now displayed if the tool is not run by a user with Administrator privileges.
CSCty46186	Resolved the issue where removing a user from an Active Directory group did not remove that user from Cisco TMS when clicking on **Administrative Tools > User Administration > Groups>Update Groups from AD** or **Administrative Tools > User Administration > Users >Synchronize all users with AD**.
CSCty90987	Resolved the issue where tickets generated from Cisco VCS alarms and/or warnings were not clearing correctly in Cisco TMS once the issue had been fixed/acknowledged on the Cisco VCS.
CSCua26063	Resolved the issue where a **Lost Response** event was not generated when Cisco TMS was unable to communicate with a Cisco Unified CM or a Cisco CTS system. An event will now be generated if communication is lost.

Identifier	Description
CSCua26066	Resolved the issue where a **TMS Connection Error** ticket was not generated when Cisco TMS was unable to communicate with a Cisco Unified CM or a Cisco CTS system. A ticket will now be generated if communication is lost.
CSCua60189	Resolved the issue where changing the SMTP Server in **Administrative Tools > Configuration > E-mail Settings** did not correctly update the email server used by Cisco TMS. This was due to a caching issue whereby Cisco TMS could try to use the old server with the new server's username and password.
CSCua60131	Added event-stats.txt, log-TMSAgent-console.txt and phonebook-stats.txt to the logs downloaded when clicking on **Administrative Tools > TMS Server Maintenance > TMS Diagnostics >Download Log Files**.
CSCtw61027	Added the option to use a port other than 25 for SMTP server communication. It is now possible to add :<port number> after the SMTP server name under **Administrative Tools > Configuration > E-mail Settings >SMTP Server**.
CSCtr90501	Resolved the issue where event notification emails were not received when more than one email address was entered in **Administrative Tools > Configuration > Network Settings > Event Notification >E-mail Addresses to Receive System and Network Notifications**.

Contents

Open issues

Follow the link below to find up-to-date information about the open issues in this release:

https://tools.cisco.com/bugsearch/search?kw=*&pf=prdNm&pfVal=283688292&rls=14.6.2&sb=anfr&srtBy=byRel&bt=empCustV

You need to refresh your browser after you log in to the Cisco Bug Search Tool.

Limitations

Feature	Limitation
Time zone support	■ The Cisco TMS server time zone cannot be changed. ■ International time zone amendments such as changes to DST dates or time zone regions are automatically updated on the Cisco TMS server and in Cisco TMS through Microsoft Windows Updates. The same is not true of endpoints running Cisco TelePresence TE or TC software—they have a manual pre-defined list of time zones, so any changes to DST dates or time zone regions will not be reflected. This can lead to time zone mismatch errors on direct-managed endpoints. Scheduling will not be affected, but Cisco TMS could fail to read/write time zone data.

Feature	Limitation
TelePresence Conductor scheduling	TelePresence Conductor waits up to 30 seconds before releasing resources between meetings. This may cause denial of inbound and outbound calls for back-to-back meetings and utilization spikes when participants repeatedly leave and join a meeting. Bug toolkit identifier: CSCuf34880. This limitation will be addressed in coming releases of TelePresence Conductor and Cisco TMS. See also TelePresence Conductor scheduling improvements [p.22]
TelePresence Conductor scheduling	Multiple TelePresence Conductor cluster nodes are not supported in Cisco TMS.
TelePresence Conductor scheduling	Scheduling Cisco TMSPE-generated Collaboration Meeting Rooms is not supported.
TSP Audio and meeting extension	If two meetings are allocated the same TSP audio number by WebEx, Cisco TMS has no awareness of this when deciding whether to extend the meeting. This could lead to two conferences containing the same audio participants.
Monitoring and reporting	■ Conferences using FindMe and Multiway may cause duplicates in **Conference Control Center** and **Reporting**. ■ Conferences where participants have been put on hold or have been transferred may cause duplicates in **Conference Control Center** and **Reporting**. ■ **Conference Control Center** and **Graphical Monitor** will not work in Google Chrome version 42 and above as it no longer supports Netscape Plugin Application Programming Interface (NPAPI). Until the support for Netscape Plugin Application Programming Interface (NPAPI) is completely removed in a future release, you may try the following steps to open **Conference Control Center** and **Graphical Monitor** in Google Chrome: i. In your system open Command Prompt as an Administrator. ii. Run `reg add HKLM\software\policies\google\chrome\EnabledPlugins /v 1 /t REG_SZ /d java` command. iii. Restart Google Chrome. ■ The auto refresh functionality for Participants snapshot and Event Log data in **Conference Control Center** does not work in any version of Google Chrome.
WebEx	■ Advanced recurrence patterns are not supported for CMR Hybrid. When booking from the **New Conference** page, include WebEx before specifying the recurrence pattern to display only supported recurrence patterns. ■ Deleting a recurrent meeting series while one instance is ongoing will delete the meeting in Cisco TMS but not in WebEx. This is because WebEx does not allow changes to ongoing meetings, this includes deletion.
Collaboration Edge	Cisco TMS does not currently support devices that are behind Collaboration Edge.
Expressway	Cisco Expressway-C and Cisco Expressway-E will display in Cisco TMS with system type TANDBERG VCS.
System Type field	Some systems that previously contained TANDBERG in the system type may still show up as TANDBERG in Cisco TMS. This is primarily based on Cisco TMS reading the system type directly from the system's API. In some cases, Cisco TMS added the system type where one was not available through the API. Therefore, the name may continue to show up with TANDBERG in the system type.

Feature	Limitation
Scheduling meetings in Cisco TMS	In some cases, Cisco TMS does not allow to book a recurrence meeting, if it overlaps with a meeting that is scheduled for 24 hours or more. Bug toolkit identifier: CSCux64873.
Resource Availability Check on Extension	If '**Resource Availability Check on Extension**' is set to '**Ignore**' with '**Extend Conference Mode**' set to "**Automatic Best Effort**", and '**Allow participants to Join Early**' is set to **Yes**, unexpected results could occur when one participant of the meeting is in a back-to-back point-to-point meeting.

Interoperability

The interoperability test results for this product are posted to http://www.cisco.com/go/tp-interop, where you can also find interoperability test results for other Cisco TelePresence products.

Compatibility with existing integration products

Product	Version
Cisco TelePresence Management Suite Extension Booking API	API version 4 and later. The latest version is 15.
Cisco TelePresence Management Suite Extension for Microsoft Exchange	4.1
Cisco TelePresence Management Suite Provisioning Extension	1.4
Cisco TelePresence Management Suite Network Integration Extension	Not versioned
Cisco TelePresence Management Suite Analytics Extension	1.2.1
Cisco TelePresence Management Suite Extension for IBM Lotus Notes	11.3.3

Planned changes for future releases

Reporting

The following reports will be removed in a future release:

- **CO2 Savings**
- **Return On Investment Global**
- **Return On Investment Local**
- **System > FTP Audit**
- **System > Low Battery On Remote Control**
- **Network > Packet Loss Log**
- **Network > Packet Loss Conference**
- **Network > Bandwidth Usage**

Network > Network History will be renamed to **History** and will be moved under **Reporting > System**.

Export to PDF functionality

The ability to export to PDF, used in **Reporting**, will be removed in a future version of Cisco TMS. Instead, use the Export to Microsoft Excel feature.

Graphical Monitor

This feature will be removed in a future version of Cisco TMS.

HTTPS

Cisco TMS will communicate on HTTPS only in a future version.

Upgrading to 14.6.2

Before you upgrade

Redundant deployments

Customers using a redundant Cisco TMS deployment must read the upgrade instructions in Cisco TelePresence Management Suite Installation and Upgrade Guide 14.6 before upgrading to Cisco TMS 14.6.2.

Upgrading from 14.4 or 14.4.1

Customers upgrading from 14.4 or 14.4.1 that use Cisco TMSXE or Cisco TMSXN must follow the upgrade procedure described in Cisco TelePresence Management Suite Installation and Upgrade Guide 14.6 when upgrading to Cisco TMS14.6.2.

Upgrading from a version earlier than 14.2

Customers upgrading from a version of Cisco TMS earlier than 14.2 must read the upgrade instructions in Cisco TelePresence Management Suite Installation and Upgrade Guide 14.6 before upgrading to Cisco TMS 14.6.2.

Prerequisites and software dependencies

See *Cisco TelePresence Management Suite Installation and Upgrade Guide* for the full list of compatible operating systems and database servers.

Upgrade and installation instructions

Cisco TMS uses the same installation program for both new installations of Cisco TMS and upgrades of previous Cisco TMS versions.

See *Cisco TelePresence Management Suite Installation and Upgrade Guide* for complete instructions for upgrade or installation.

Using the Bug Search Tool

The Bug Search Tool contains information about open and resolved issues for this release and previous releases, including descriptions of the problems and available workarounds. The identifiers listed in these release notes will take you directly to a description of each issue.

To look for information about a specific problem mentioned in this document:

1. Using a web browser, go to the Bug Search Tool.
2. Sign in with a cisco.com username and password.
3. Enter the bug identifier in the **Search** field and click **Search**.

To look for information when you do not know the identifier:

1. Type the product name in the **Search** field and click **Search**.
2. From the list of bugs that appears, use the **Filter** drop-down list to filter on either *Keyword*, *Modified Date*, *Severity*, *Status*, or *Technology*.

Use **Advanced Search** on the Bug Search Tool home page to search on a specific software version.

The Bug Search Tool help pages have further information on using the Bug Search Tool.

Technical support

If you cannot find the answer you need in the documentation, check the website at www.cisco.com/cisco/web/support/index.html where you will be able to:

- Make sure that you are running the most up-to-date software.
- Get help from the Cisco Technical Support team.

Make sure you have the following information ready before raising a case:

- Identifying information for your product, such as model number, firmware version, and software version (where applicable).
- Your contact email address or telephone number.
- A full description of the problem.

To view a list of Cisco TelePresence products that are no longer being sold and might not be supported, visit: www.cisco.com/en/US/products/prod_end_of_life.html and scroll down to the TelePresence section.

Document revision history

Date	Revision	Description
August 2016	22	Added scheduling meetings in Cisco TMS limitation.
May 2015	21	Release of 14.6.2.
February 2015	20	Release of 14.6.1. Added missing functionality change for scheduling No Connect conferences in 14.2.
January 2015	19	Release of 14.6.
September 2014	18b	Updated 'WebEx using deferred connect on TelePresence Server' feature description.
September 2014	18	Release of 14.5.

Date	Revision	Description
July 2014	17	Release of version 14.4.2.
June 2014	16	Release of version 14.4.1.
April 2014	15	Release of version 14.4.
December 2013	14	Release of version 14.3.2.
October 2013	13b	Added CSCuj56225 to resolved issues.
October 2013	13	Release of version 14.3.1.
September 2013	12b	Added CSCuh99386 to resolved issues.
August 2013	12	Release of version 14.3.
2013-06-17	11	Release of version 14.2.2.
2013-06-06	10	Amended 'Removed support for 3rd party systems' section to reflect withdrawal of support for entire Sony PCS Series.
2013-05-29	09	Changed 'Upgrade - Before you install' section text removing reference to Windows server 2003 for hotfix. Added missing resolved issue CSCuh19000.
2013-05-03	08	Release of version 14.2.1.
2013-04-29	07	Windows Server 2008 service pack information clarification.
2013-04-24	06	Release of version 14.2.
2013-02-01	05	Added software version of Cisco Unified CM for phone book source.
2013-01-25	04	Added missing resolved issues CSCub86700 and CSCub86648.
2013-01-03	03	Release of version 14.1.1.
2012-12-14	02	Release of version 14.1.
2012-07	01	Limited distribution release of version 14.0.