Configure RADIUS Attribute Mapping for FlexVPN Remote Users

Contents

Introduction

This document describes how to configure FlexVPN using Cisco Identity Services Engine (ISE) to verify identities and perform attribute group mapping.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Remote Access Virtual Private Network (RAVPN) with IKEV2/IPsec configuration on a Cisco IOS® XE Router through CLI
- Cisco Identity Services Engine (ISE) configuration
- Cisco Secure Client (CSC)
- RADIUS protocol

Components Used

This document is based on these software and hardware versions:

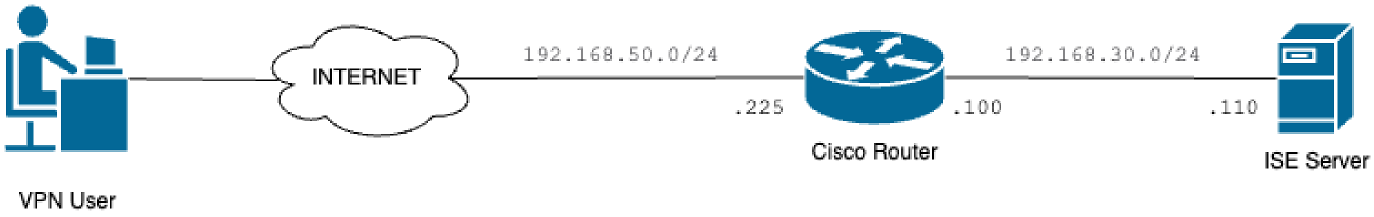
- Cisco CSR1000V (VXE) - Version 17.03.04a
- Cisco Identity Services Engine (ISE) - 3.1
- Cisco Secure Client (CSC) – Version 5.0.05040

- Windows 11

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Configure

Network Diagram



Basic Network Diagram

Configurations

Router Configuration

Step 1. Configure a RADIUS server for authentication and local authorization on the device:

```
aaa new-model
aaa group server radius FlexVPN-Authentication-Server
server-private 192.168.30.110 key Cisco123
aaa authentication login FlexVPN-Authentication-List group FlexVPN-Authentication-Server
aaa authorization network FlexVPN-Authorization-List local
```

The **aaa authentication login <list_name>** command refers to the authentication, authorization, and accounting (AAA) group (which defines the RADIUS server).

The **aaa authorization network <list_name>** local command states that locally defined users/groups are to be used.

Step 2. Configure a trustpoint to store the router certificate. Since the local authentication of the router is type RSA, the device requires that the server authenticates itself using a certificate:

```
crypto pki trustpoint FlexVPN-TP
enrollment url http://192.168.50.230:80
subject-name CN=192.168.50.225
revocation-check none
rsakeypair FlexVPN_KEY
```

Step 3. Define an IP local pool for each different user group:

```
ip local pool group1 172.16.10.1 172.16.10.50
ip local pool group2 172.16.20.1 172.16.20.50
```

Step 4. Configure the local authorization policy:

```
crypto ikev2 authorization policy FlexVPN-Local-Policy
```

No configuration is required on the authorization policy since the authentication server is responsible for sending the relevant values (DNS, pool, protected routes and so on) based on the group the user belongs. However, it must be configured to define the username in our local authorization database.

Step 5 (Optional). Create an IKEv2 proposal and policy (if not configured, smart defaults are used):

```
crypto ikev2 proposal IKEv2-prop
 encryption aes-cbc-256
 integrity sha256
 group 14

crypto ikev2 policy IKEv2-pol
 proposal IKEv2-prop
```

Step 6 (Optional). Configure the transform-set (if not configured, smart defaults are used):

```
crypto ipsec transform-set TS esp-aes 256 esp-sha256-hmac
 mode tunnel
```

Step 7. Configure an IKEv2 profile with the proper local and remote identities, authentication methods (local and remote), trustpoint, AAA and the virtual template interface used for the connections:

```
crypto ikev2 profile FlexVPN-IKEv2-Profile
match identity remote key-id cisco.example
identity local dn
authentication local rsa-sig
authentication remote eap query-identity
pki trustpoint FlexVPN-TP
aaa authentication eap FlexVPN-Authentication-List
aaa authorization group eap list FlexVPN-Authorization-List FlexVPN-Local-Policy
aaa authorization user eap cached
virtual-template 100
```

The command **aaa authorization user eap cached** specifies that the attributes received during EAP authentication must be cached. This command is essential for the configuration because without it, the data sent by the authentication server is not used, leading to a failed connection.

Note: The remote key-id must match the key-id value in the XML file. If it is not modified in the XML file, the default value (*$AnyConnectClient$*) is used and must be configured on the IKEv2 profile.

Step 8. Configure an IPsec profile and assign the transform-set and the IKEv2 profile:

```
crypto ipsec profile FlexVPN-IPsec-Profile
set transform-set TS
set ikev2-profile FlexVPN-IKEv2-Profile
```

Step 9. Configure a loopback interface. The Virtual-Access interfaces borrows the IP address from it:

```
interface Loopback100
ip address 10.0.0.1 255.255.255.255
```

Step 10. Create the virtual template that is going to be used to create the different virtual-access interfaces and link the IPSec profile created on Step 8:

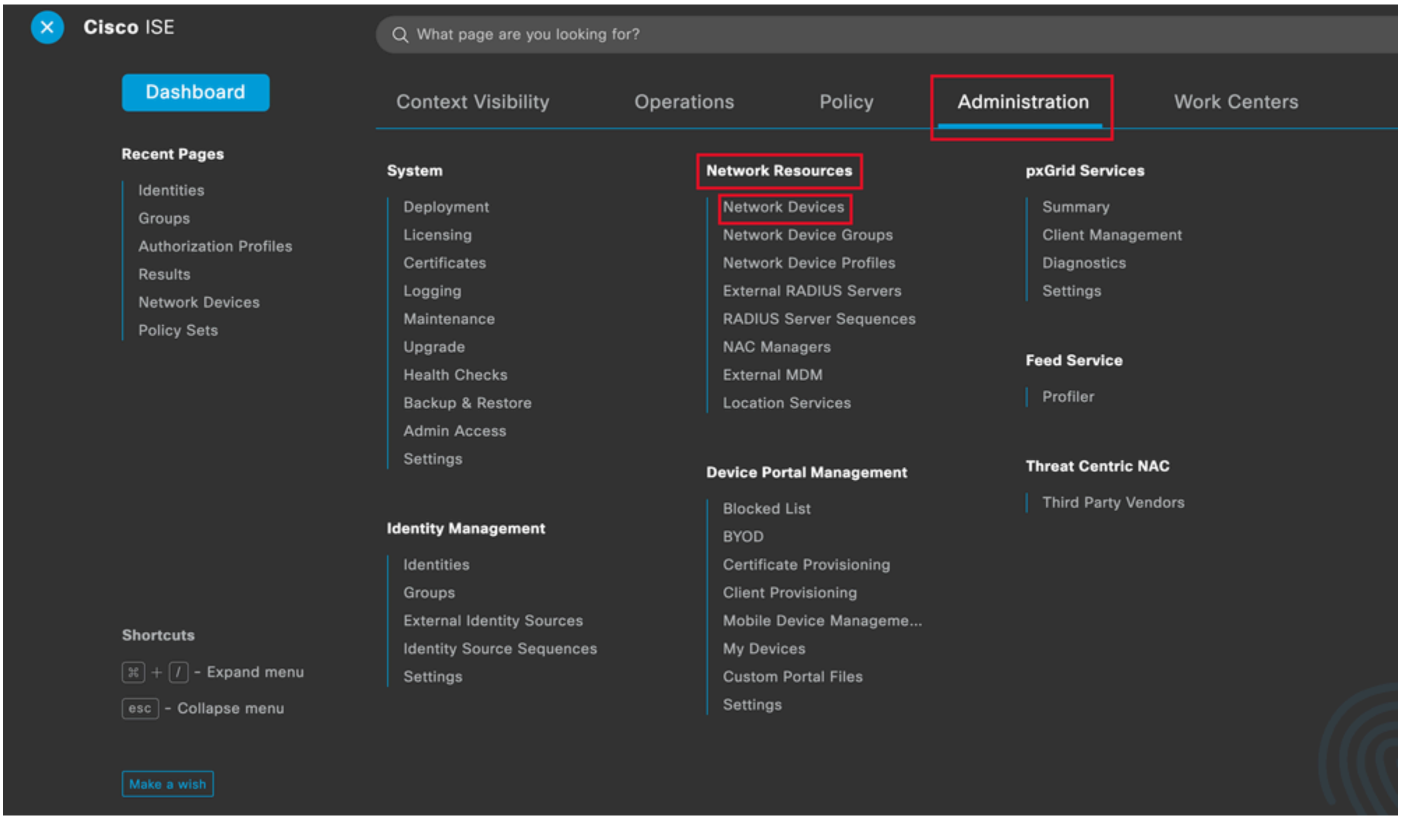
```
interface Virtual-Template100 type tunnel
ip unnumbered Loopback100
tunnel mode ipsec ipv4
tunnel protection ipsec profile FlexVPN-IPsec-Profile-1
```

Step 11. Disable HTTP-URL based certificate lookup and HTTP server on the router:

```
no crypto ikev2 http-url cert
no ip http server
no ip http secure-server
```

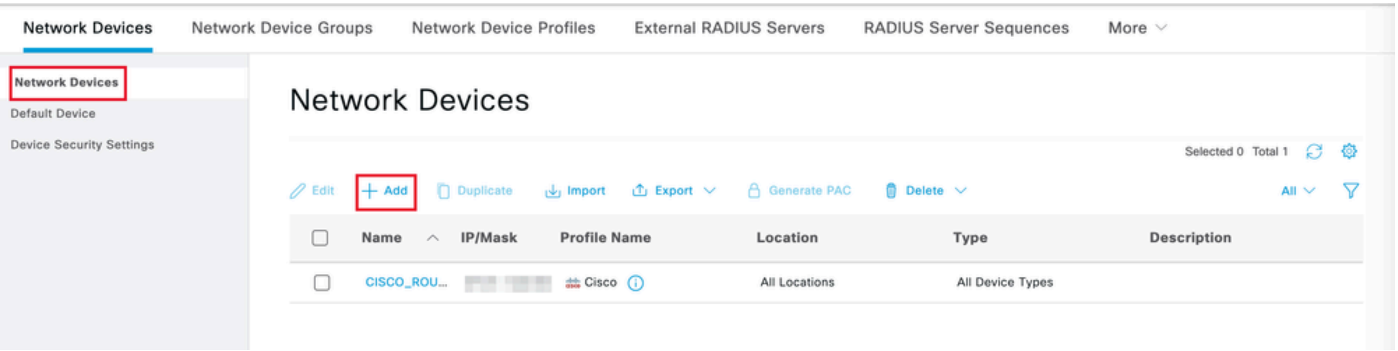
Identity Services Engine (ISE) Configuration

Step 1. Log into the ISE server and navigate to **Administration** > **Network Resources** > **Network Devices**:



ISE General Menu

Step 2. Click **Add** to configure the router as a AAA client:

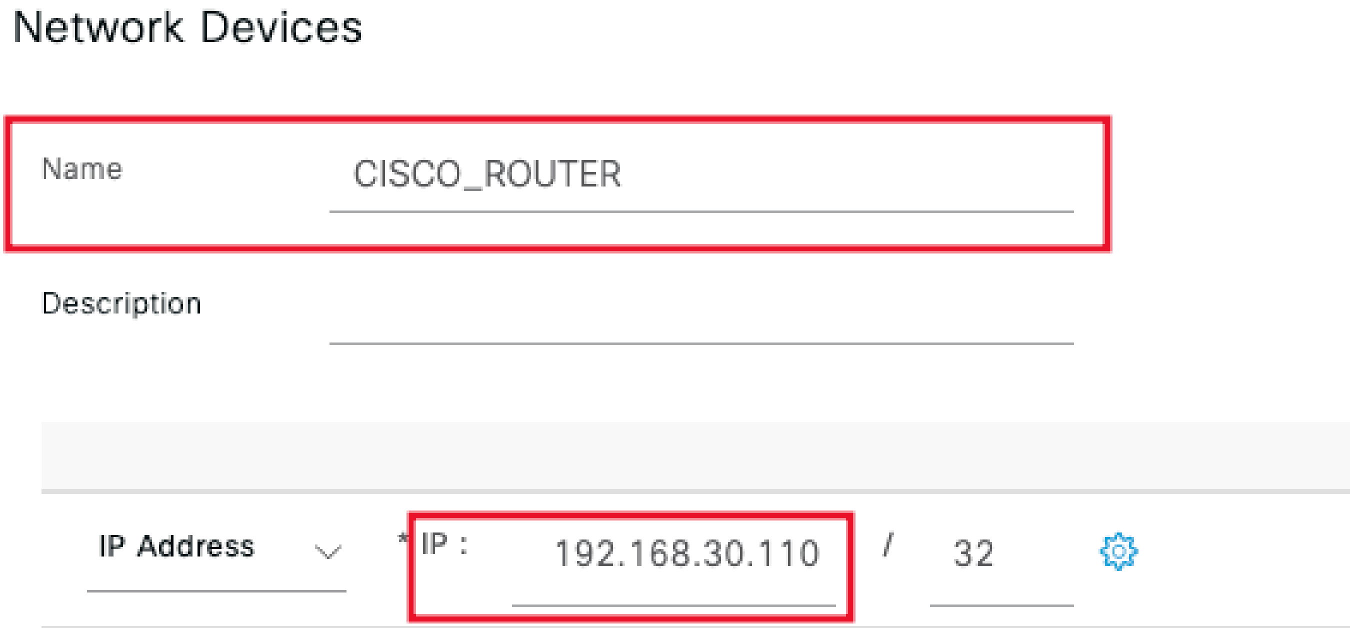


Network Devices

□	Name	IP/Mask	Profile Name	Location	Type	Description
□	CISCO_ROU...	[redacted]	Cisco	All Locations	All Device Types	

Adding a New Network Device

Enter the network device **Name** and **IP Address** fields and then check **RADIUS Authentication Settings** box and add the **Shared Secret**, this value must be the same one that was used when the RADIUS Server object on router was created.



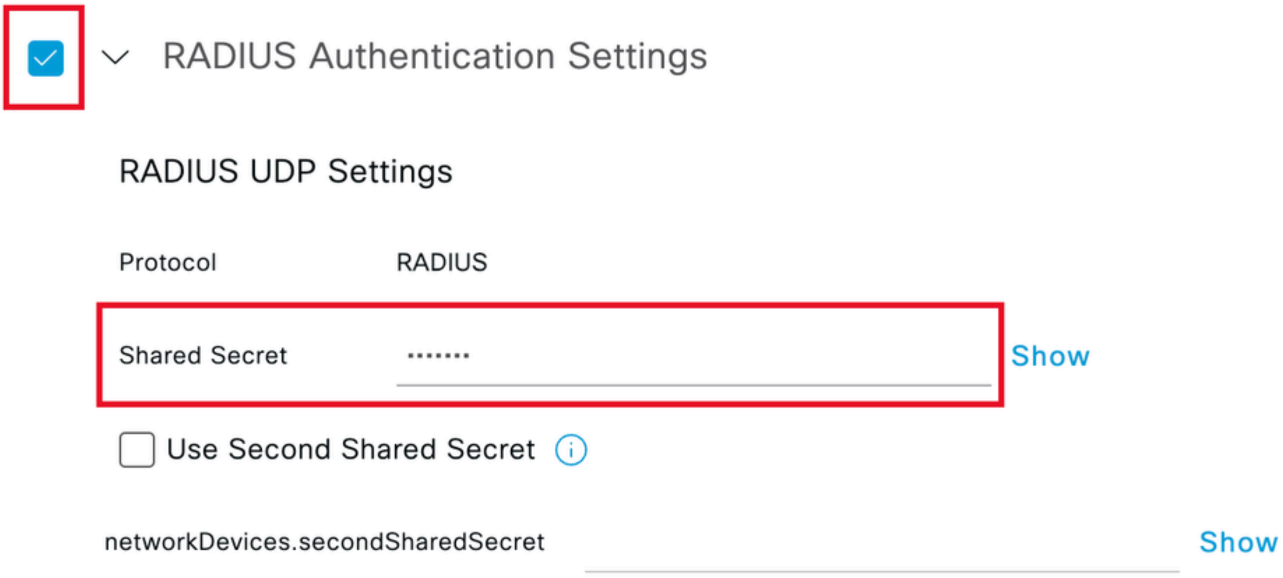
Network Devices

Name: CISCO_ROUTER

Description:

IP Address * IP : 192.168.30.110 / 32

Name and IP Address



☑ RADIUS Authentication Settings

RADIUS UDP Settings

Protocol RADIUS

Shared Secret ••••••• Show

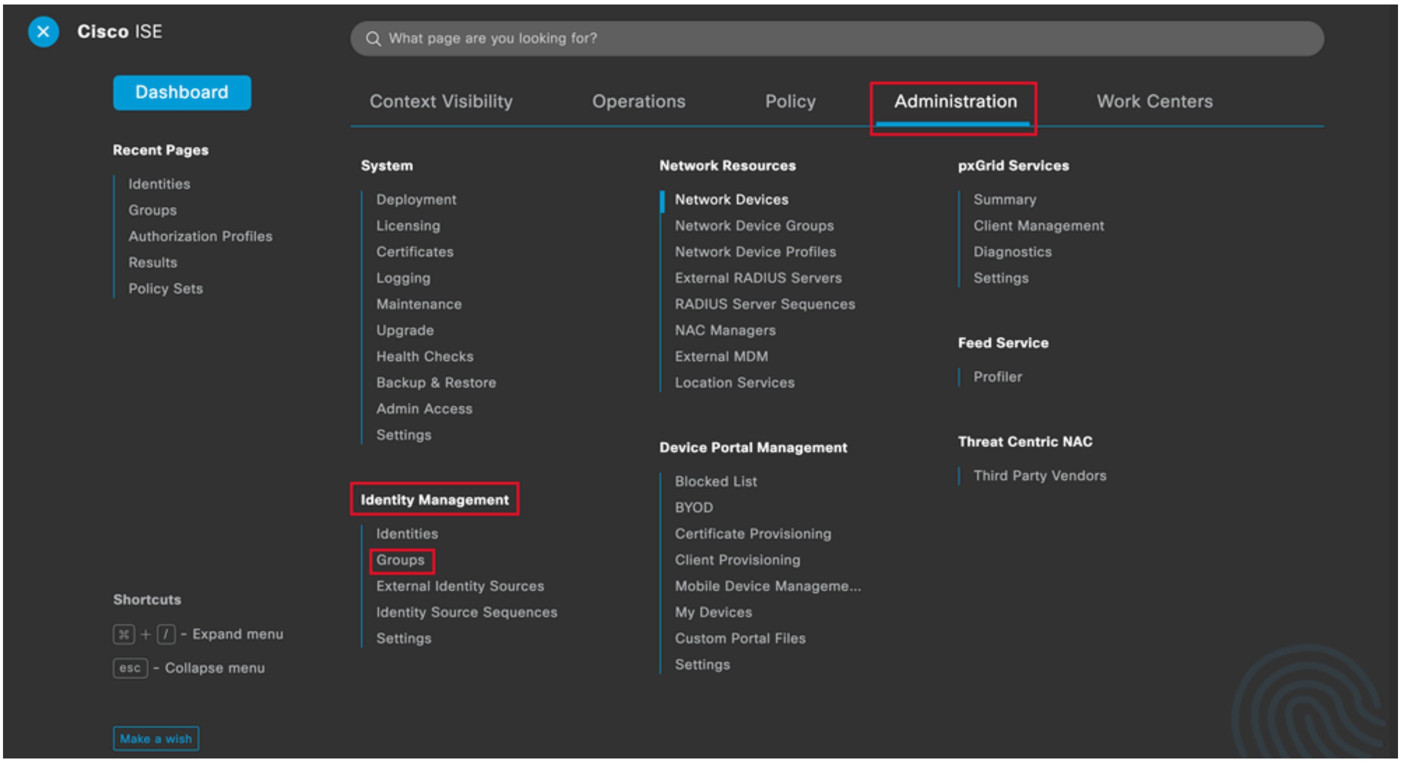
□ Use Second Shared Secret ⓘ

networkDevices.secondSharedSecret Show

Radius Password

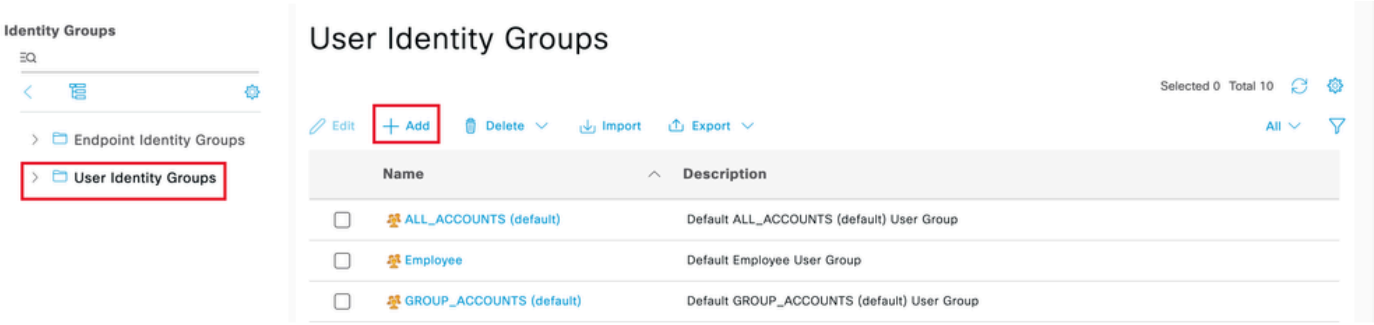
Click **Save**.

Step 3. Navigate to **Administration** > **Identity Management** > **Groups**:



ISE General Menu

Step 4. Click **User Identity Groups** and then click **Add**:

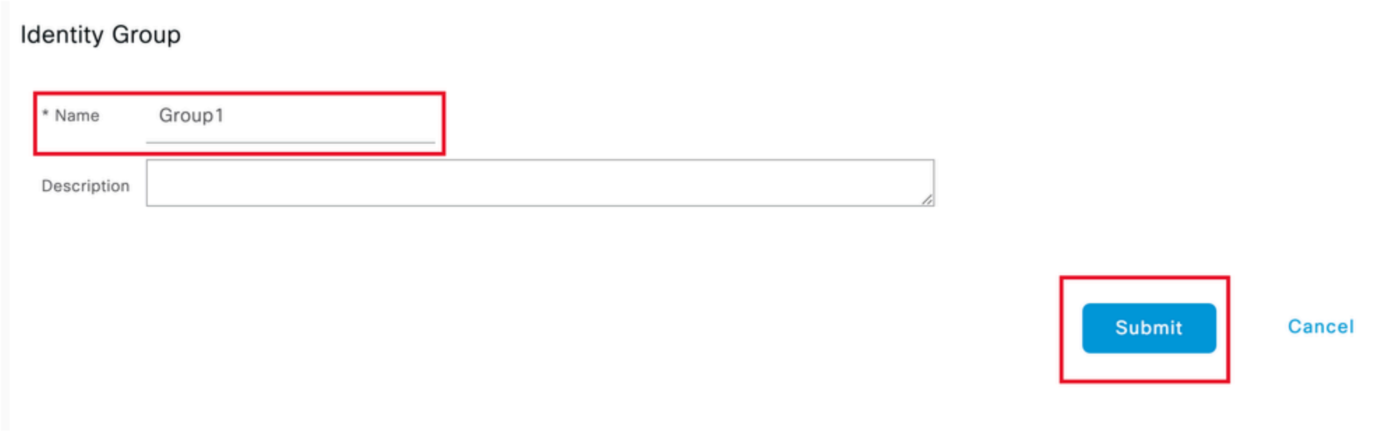


User Identity Groups

	Name	Description
□	ALL_ACCOUNTS (default)	Default ALL_ACCOUNTS (default) User Group
□	Employee	Default Employee User Group
□	GROUP_ACCOUNTS (default)	Default GROUP_ACCOUNTS (default) User Group

Add a New Group

Enter the group **Name** and click **Submit**.



Identity Group

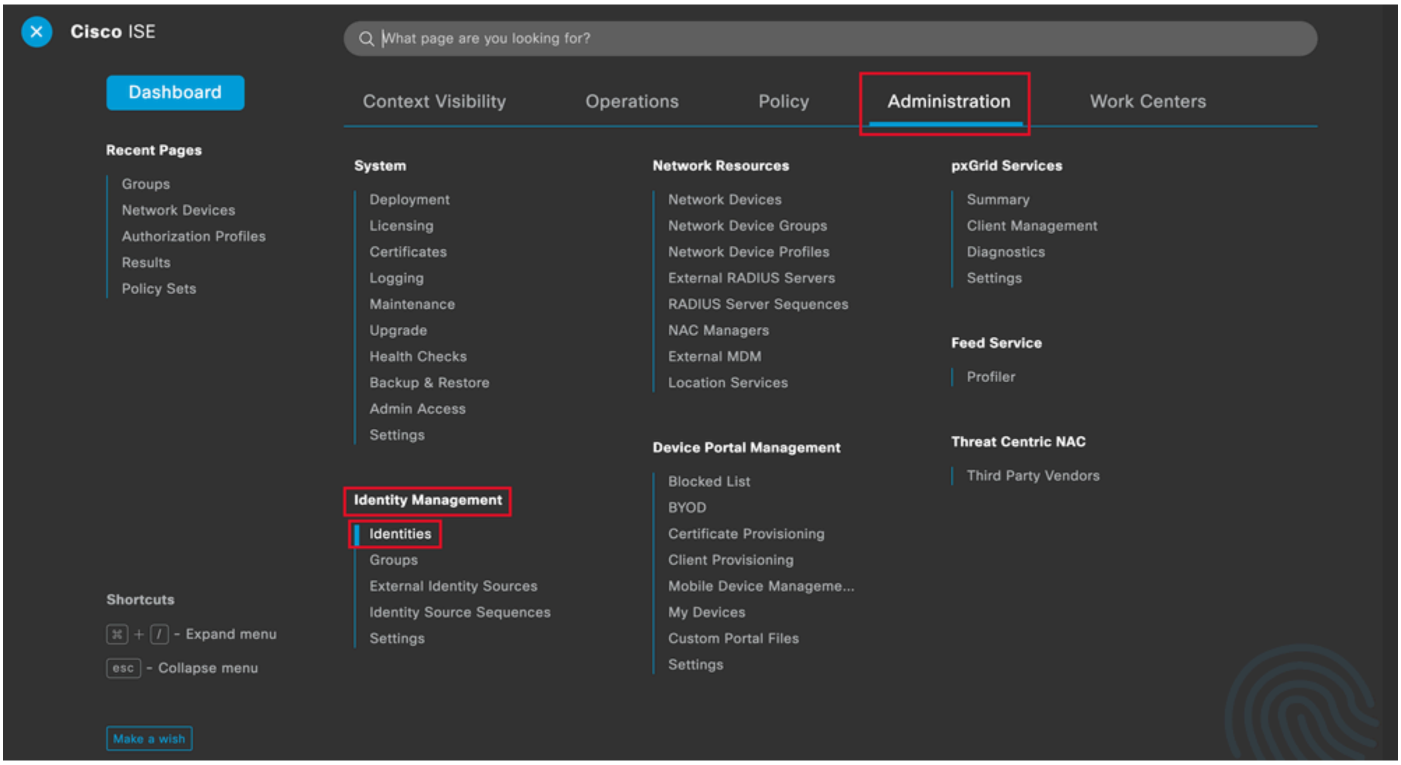
* Name: Group1

Description:

Group Information

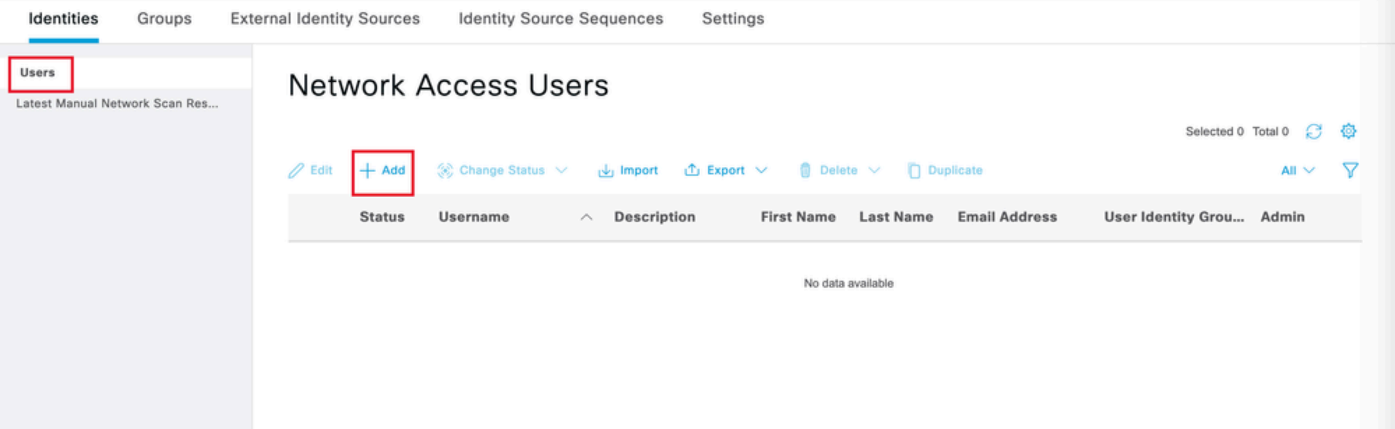
Note: Repeat steps 3 and 4 to create as many groups as needed.

Step 5. Navigate to **Administration > Identity Management > Identities**:



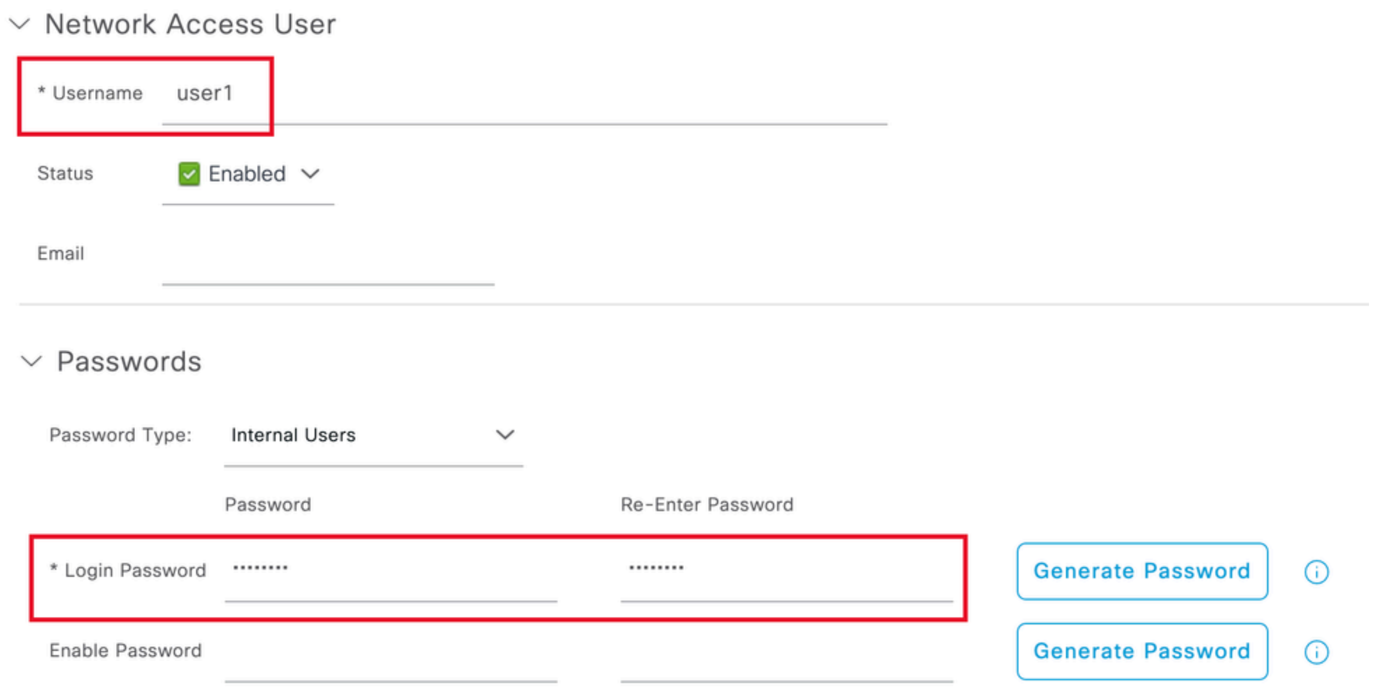
ISE General Menu

Step 6. Click **Add** in order to create a new user in the server local database:



Add a User

Enter the **Username** and **Login Password**. Then, navigate to the end of this page and select the **User Group**:



Network Access User

* Username user1

Status ☑ Enabled

Email

Passwords

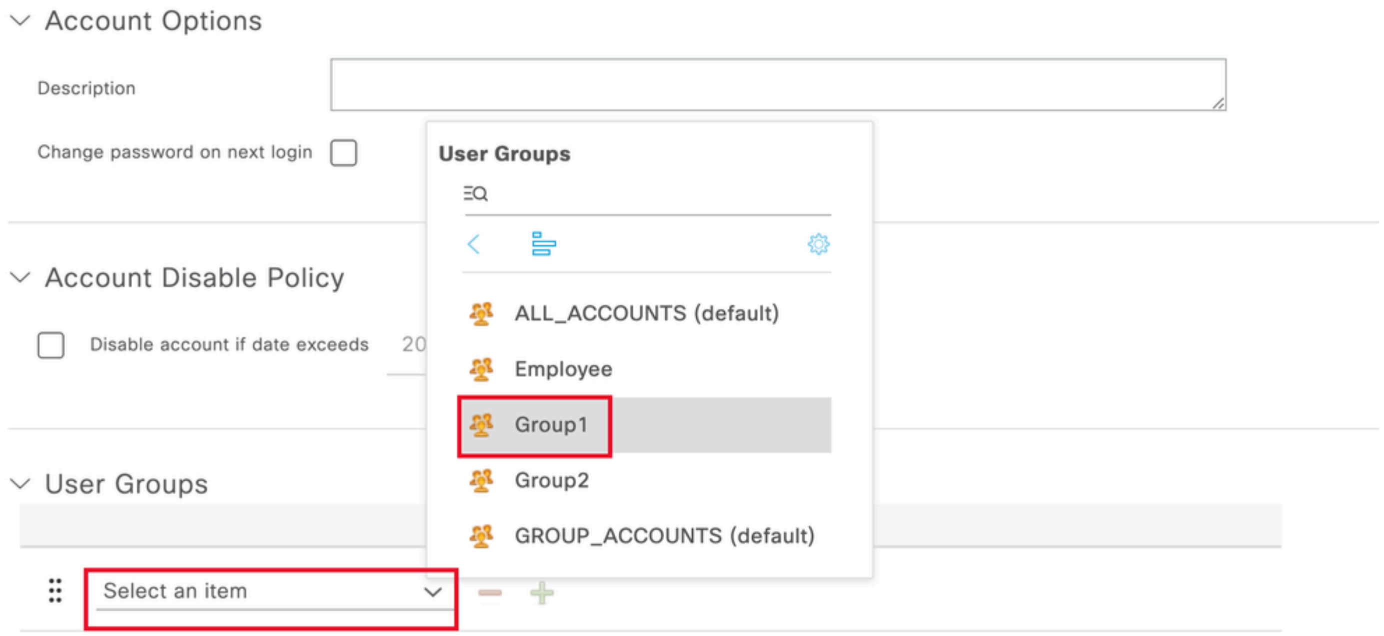
Password Type: Internal Users

Password / Re-Enter Password

* Login Password ••••••••• •••••••••

Enable Password

Username and Password



Account Options

Description

Change password on next login □

Account Disable Policy

□ Disable account if date exceeds 20

User Groups

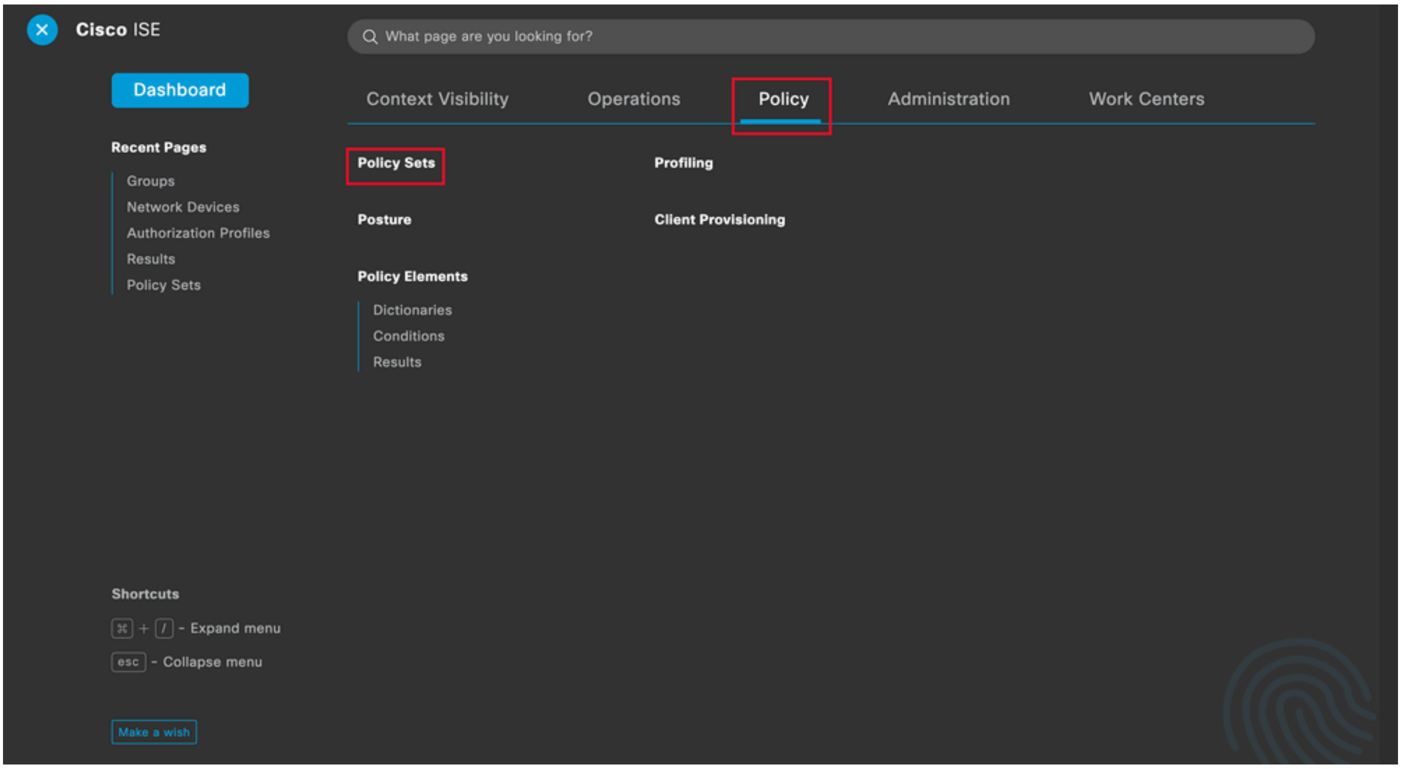
Select an item

Assign the Correct Group to the User

Click **Save**.

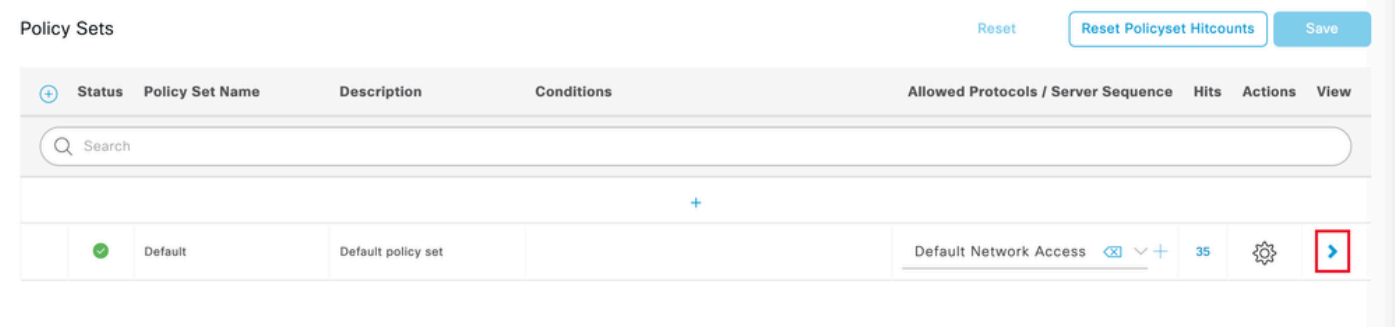
Note: Repeat steps 5 and 6 to create the users you need and to assign them to the corresponding group.

Step 7. Navigate to **Policy** > **Policy Sets**:



ISE General Menu

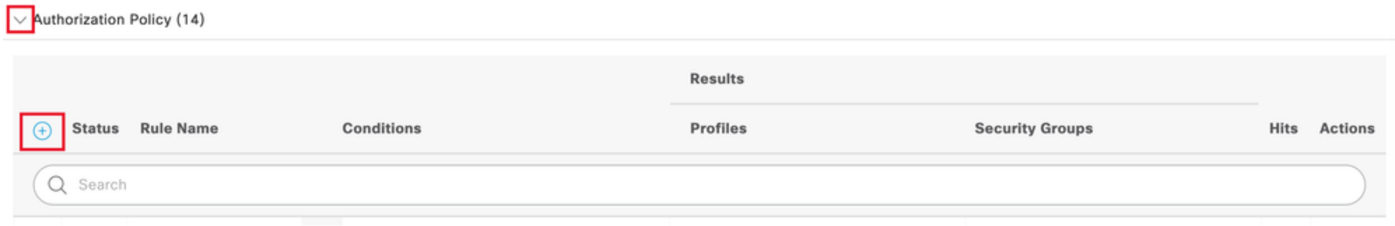
Select the default authorization policy by clicking the **arrow**on the right side of the screen:



Status	Policy Set Name	Description	Conditions	Allowed Protocols / Server Sequence	Hits	Actions	View
✓	Default	Default policy set		Default Network Access	35	⚙	>

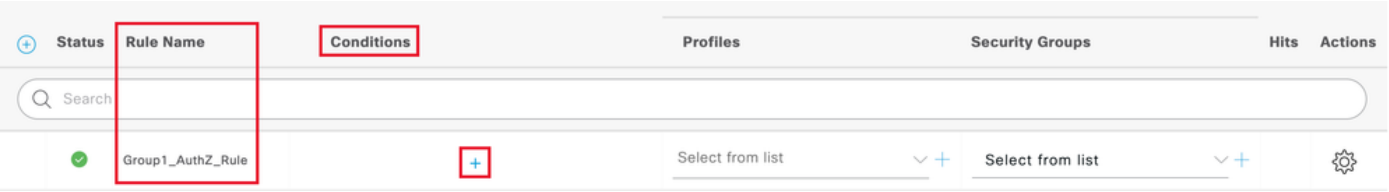
Select the Authorization Policy

Step 8. Click the drop-down menu arrow next to**Authorization Policy** to expand it. Then, Click the ***add* (+)**icon in order to add a new rule:



Add a New Authorization Rule

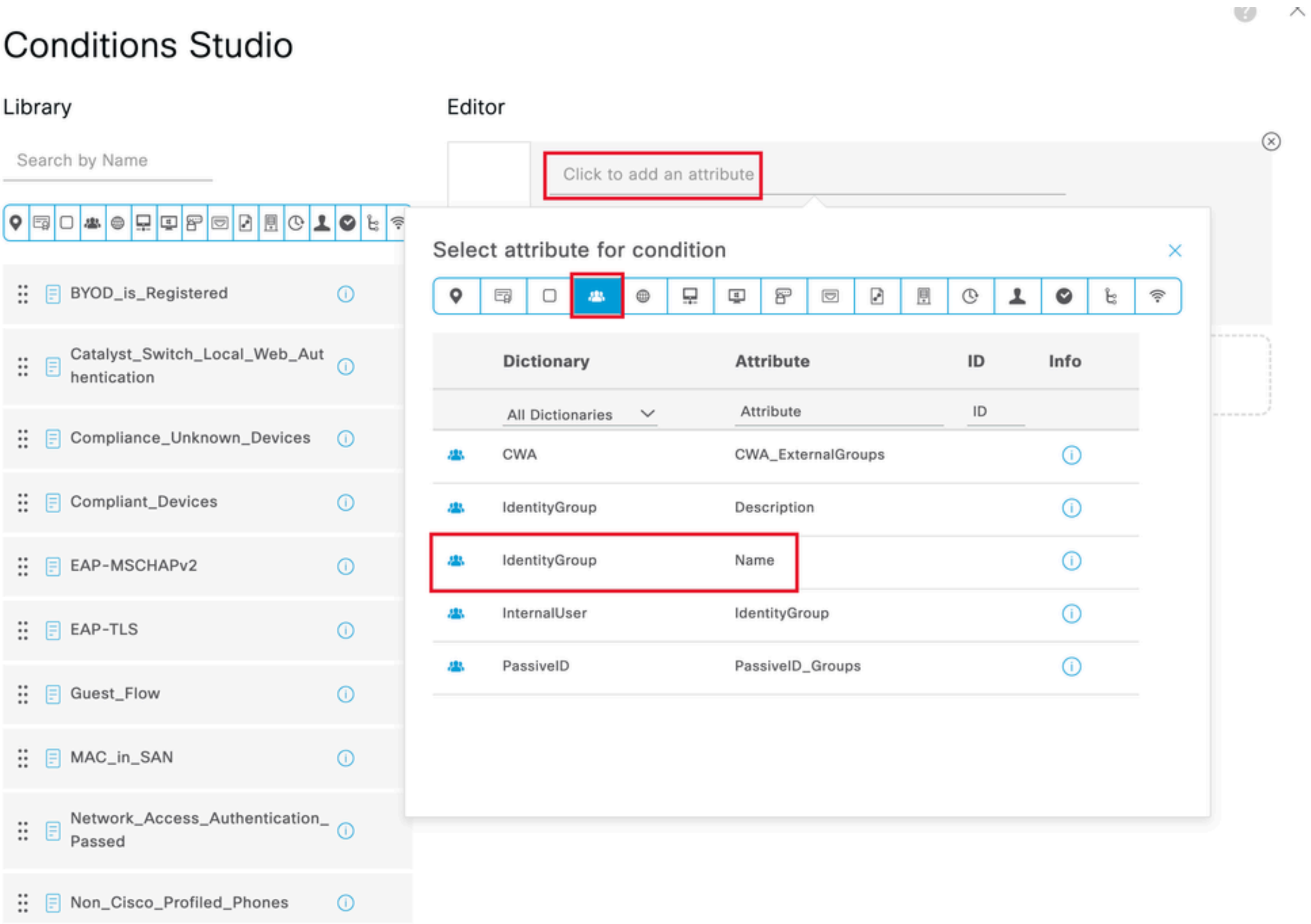
Enter the name for the rule an select the ***add* (+)** icon under **Conditions** column:



Status	Rule Name	Conditions	Profiles	Security Groups	Hits	Actions
●	Group1_AuthZ_Rule	+	Select from list	Select from list		⚙

Add a Condition

Step 9. Click in the Attribute Editor textbox and click the**Identity group**icon. Select the **Identity group - Name** attribute:



BYOD_is_Registered

Catalyst_Switch_Local_Web_Authentication

Compliance_Unknown_Devices

Compliant_Devices

EAP-MSCHAPv2

EAP-TLS

Guest_Flow

MAC_in_SAN

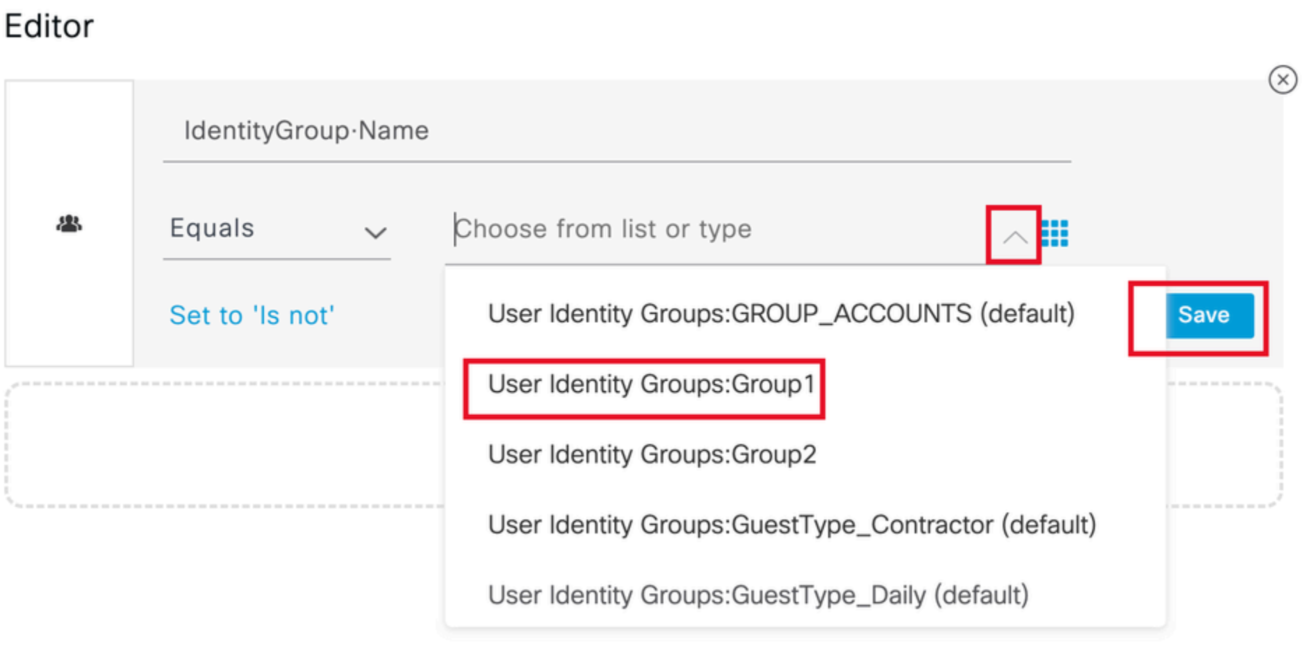
Network_Access_Authentication_Passed

Non_Cisco_Profiled_Phones

Dictionary	Attribute	ID	Info
All Dictionaries	Attribute	ID	
CWA	CWA_ExternalGroups		ⓘ
IdentityGroup	Description		ⓘ
IdentityGroup	Name		ⓘ
InternalUser	IdentityGroup		ⓘ
PassiveID	PassiveID_Groups		ⓘ

Select the Condition

Select**Equals**as the operator then, click the drop-down menu arrow to show the available options and select **User Identity Groups:<GROUP_NAME>**.



Editor

IdentityGroup·Name

Equals

Choose from list or type

Set to 'Is not'

User Identity Groups:GROUP_ACCOUNTS (default)

User Identity Groups:Group1

User Identity Groups:Group2

User Identity Groups:GuestType_Contractor (default)

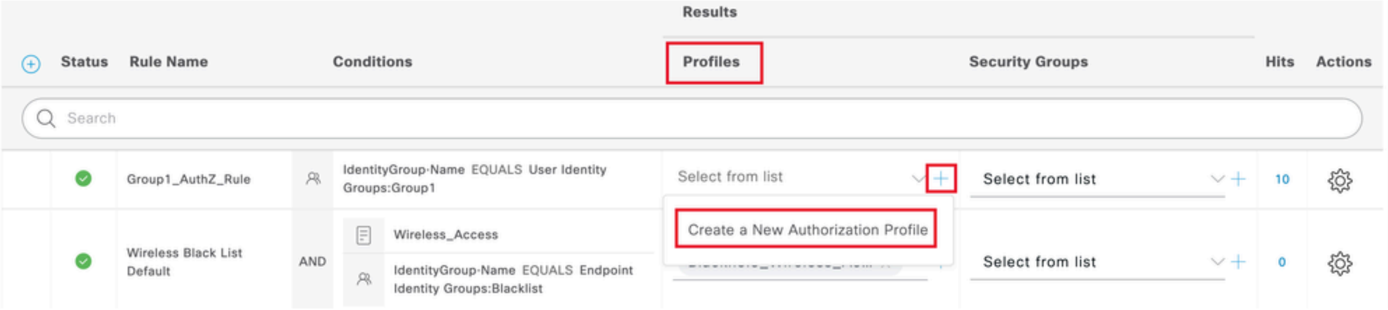
User Identity Groups:GuestType_Daily (default)

Save

Select the Group

Click **Save.**

Step 10. In the **Profiles** column, click the **add (+)** icon and choose **Create a New Authorization Profile**:

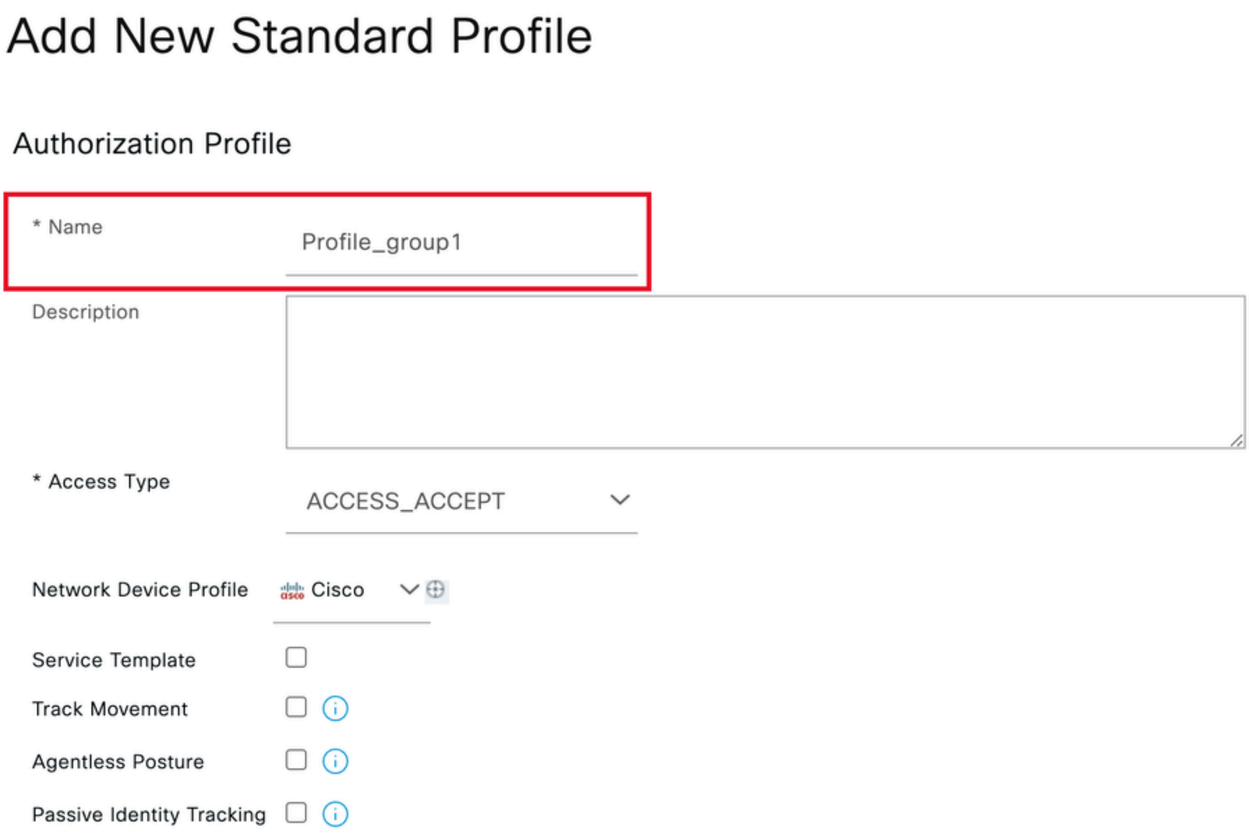


Results

Status	Rule Name		Conditions	Profiles	Security Groups	Hits	Actions
✓	Group1_AuthZ_Rule		IdentityGroup·Name EQUALS User Identity Groups:Group1	Select from list +	Select from list +	10	⚙
✓	Wireless Black List Default	AND	Wireless_Access IdentityGroup·Name EQUALS Endpoint Identity Groups:Blacklist	Create a New Authorization Profile	Select from list +	0	⚙

Create the Authorization Profile

Enter the profile **Name**



Add New Standard Profile

Authorization Profile

* Name: Profile_group1

Description:

* Access Type: ACCESS_ACCEPT

Network Device Profile: Cisco

Service Template □

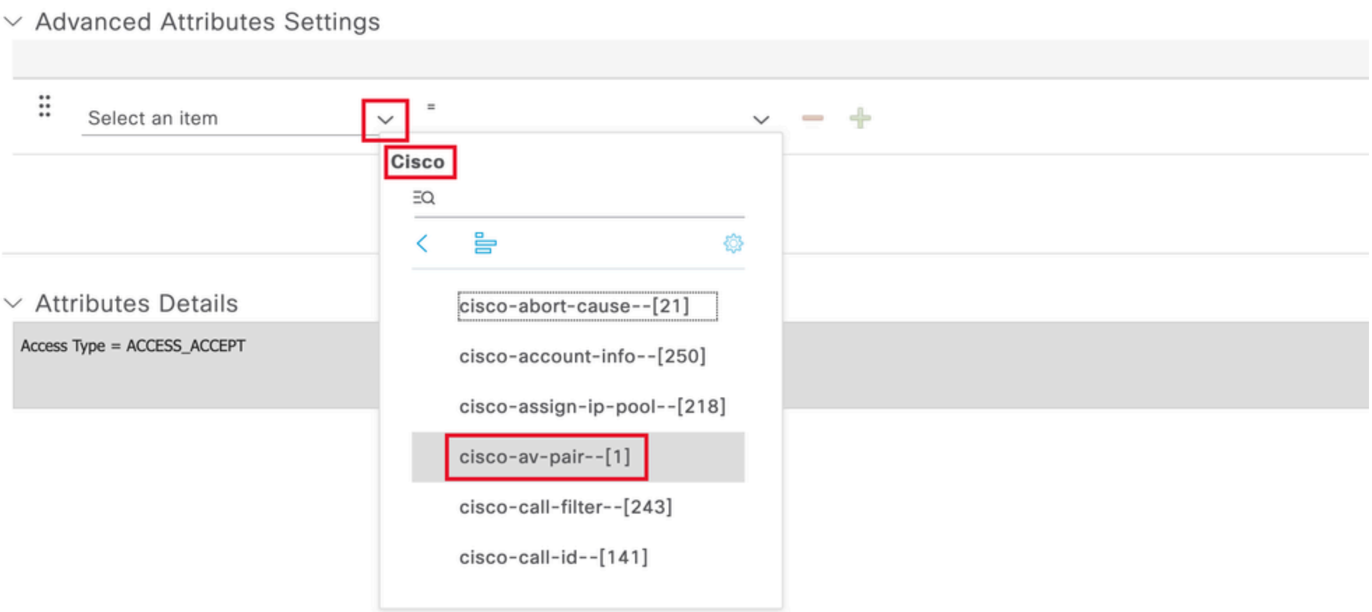
Track Movement □

Agentless Posture □

Passive Identity Tracking □

Profile Information

Navigate to the end of this page to **Advanced Attribute Settings** and click on the drop-down menu arrow. Then click on **Cisco** and select **cisco-av-pair--[1]**:



Advanced Attributes Settings

Select an item =

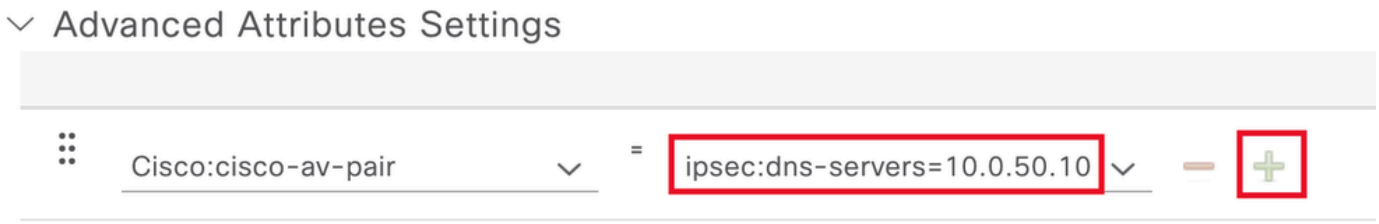
Attributes Details

Access Type = ACCESS_ACCEPT

Select the Attribute Type

.

Add the cisco-av-pair attribute that you want to configure and click the **add (+)** icon to add another attribute:



Advanced Attributes Settings

Cisco:cisco-av-pair = ipsec:dns-servers=10.0.50.10

Configure the Attribute

Note: For attribute specifications (name, syntax, description, example, etc), please consult the FlexVPN RADIUS Attributes configuration guide:

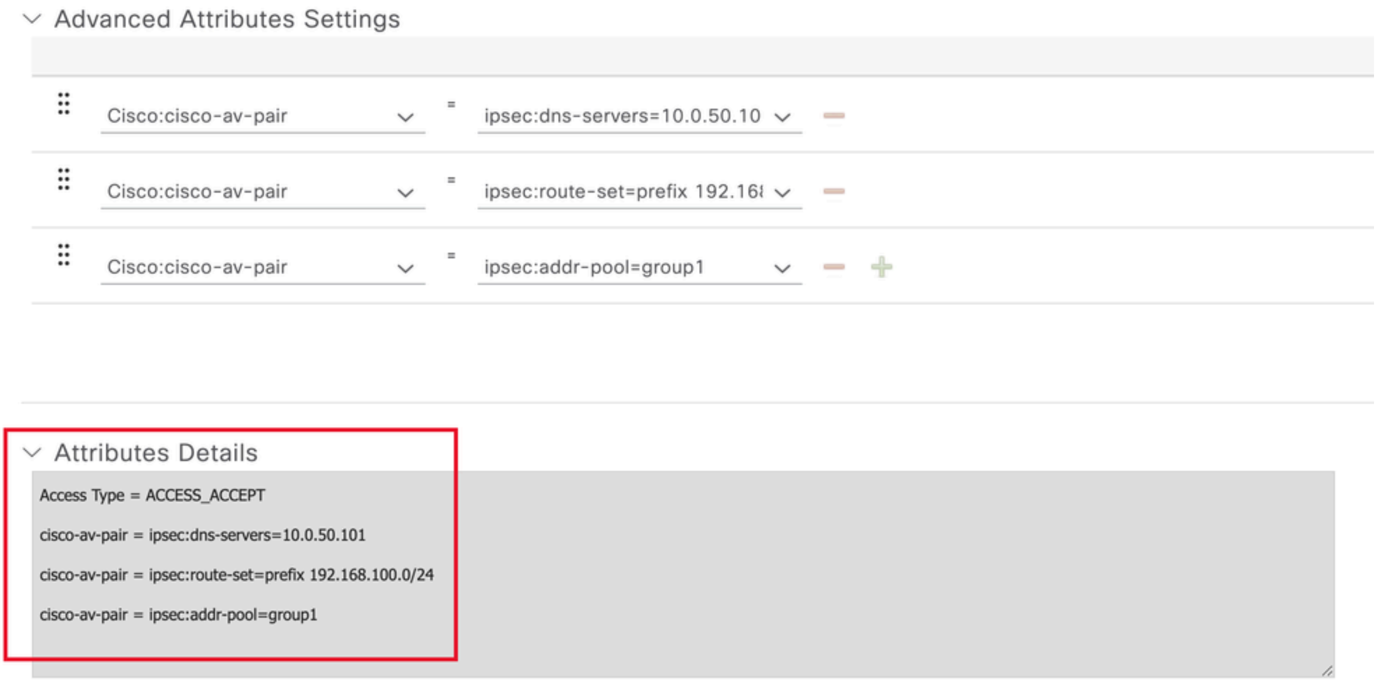
[FlexVPN and Internet Key Exchange Version 2 Configuration Guide, Cisco IOS XE Fuji 16.9.x - Supported RADIUS Attributes]

Note: Repeat the previous step to create the necessary attributes.

Click **Save**.

The attributes that come next were assigned to each group:

- Group 1 attributes:



Advanced Attributes Settings

Cisco:cisco-av-pair = ipsec:dns-servers=10.0.50.10

Cisco:cisco-av-pair = ipsec:route-set=prefix 192.16

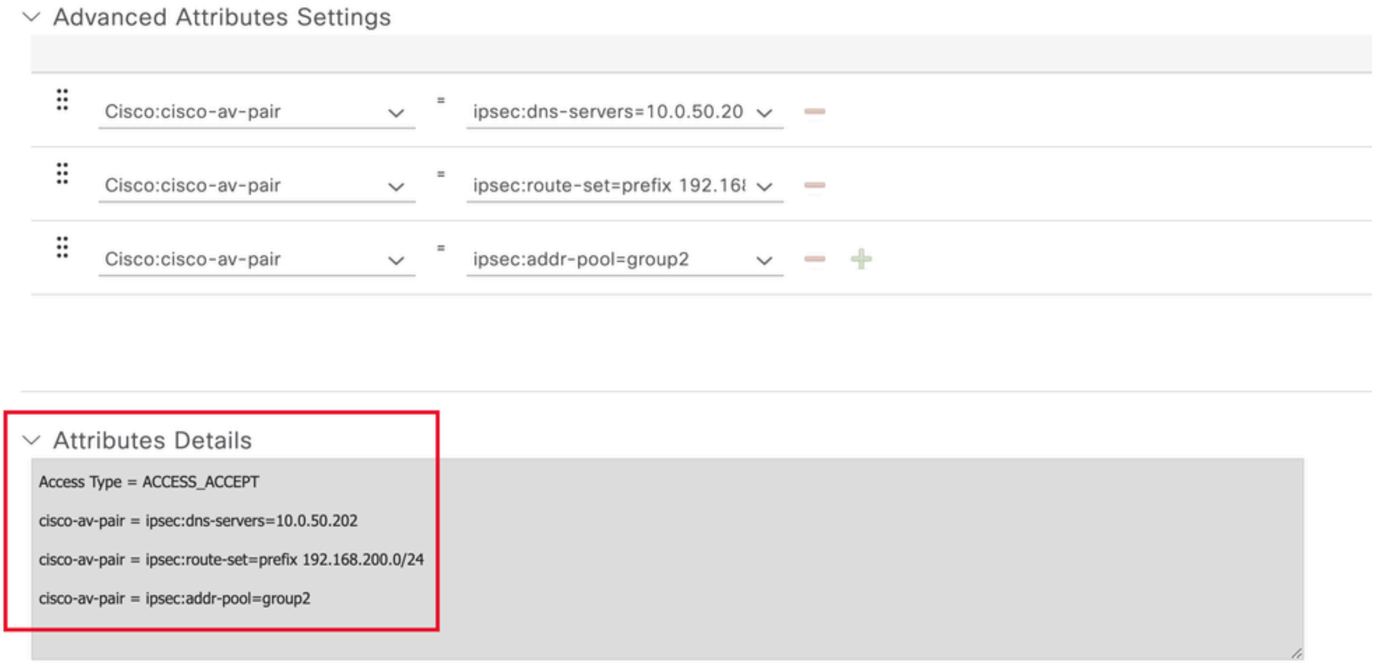
Cisco:cisco-av-pair = ipsec:addr-pool=group1

Attributes Details

```
Access Type = ACCESS_ACCEPT
cisco-av-pair = ipsec:dns-servers=10.0.50.101
cisco-av-pair = ipsec:route-set=prefix 192.168.100.0/24
cisco-av-pair = ipsec:addr-pool=group1
```

Group1 Attribute

- Group 2 attributes:



Advanced Attributes Settings

Cisco:cisco-av-pair = ipsec:dns-servers=10.0.50.20

Cisco:cisco-av-pair = ipsec:route-set=prefix 192.16

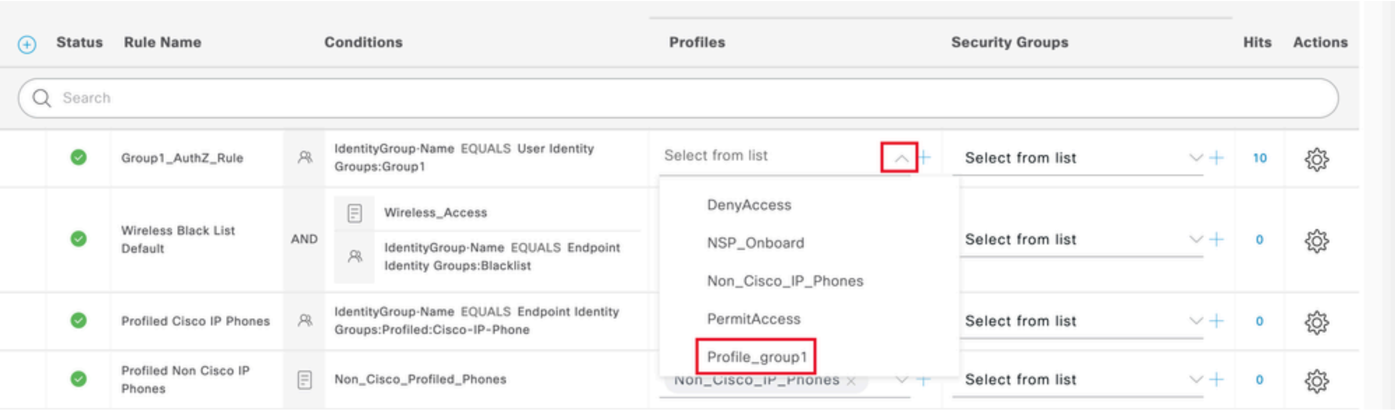
Cisco:cisco-av-pair = ipsec:addr-pool=group2

Attributes Details

```
Access Type = ACCESS_ACCEPT
cisco-av-pair = ipsec:dns-servers=10.0.50.202
cisco-av-pair = ipsec:route-set=prefix 192.168.200.0/24
cisco-av-pair = ipsec:addr-pool=group2
```

Group2 Attributes

Step 11. Click on the drop-down menu arrow and select the authorization profile created on Step 10:



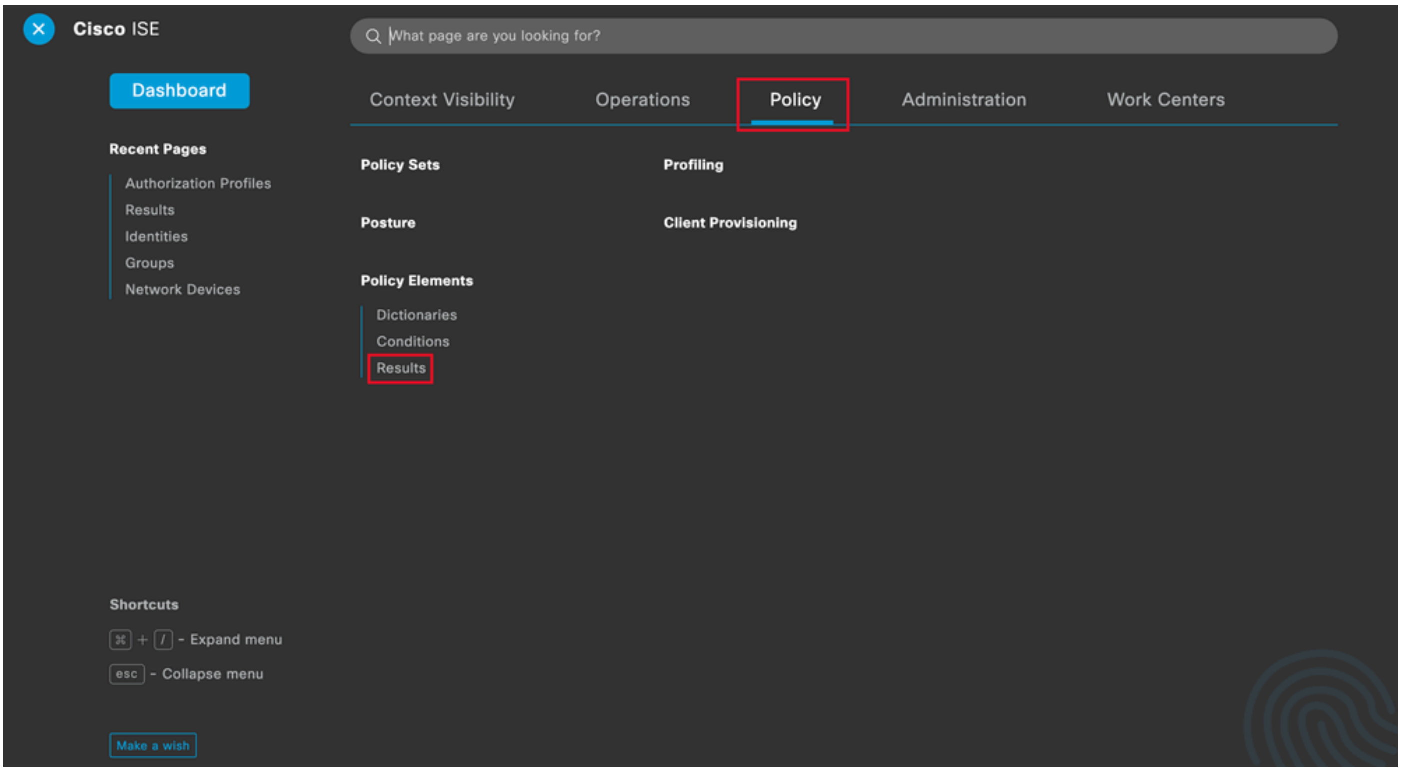
Status	Rule Name	Conditions	Profiles	Security Groups	Hits	Actions
✓	Group1_AuthZ_Rule	IdentityGroup·Name EQUALS User Identity Groups:Group1	Select from list	Select from list	10	⚙
✓	Wireless Black List Default	AND Wireless_Access IdentityGroup·Name EQUALS Endpoint Identity Groups:Blacklist		Select from list	0	⚙
✓	Profiled Cisco IP Phones	IdentityGroup·Name EQUALS Endpoint Identity Groups:Profiled:Cisco-IP-Phone		Select from list	0	⚙
✓	Profiled Non Cisco IP Phones	Non_Cisco_Profiled_Phones	Non_Cisco_IP_Phones	Select from list	0	⚙

Assign Authorization Profile

Click **Save**.

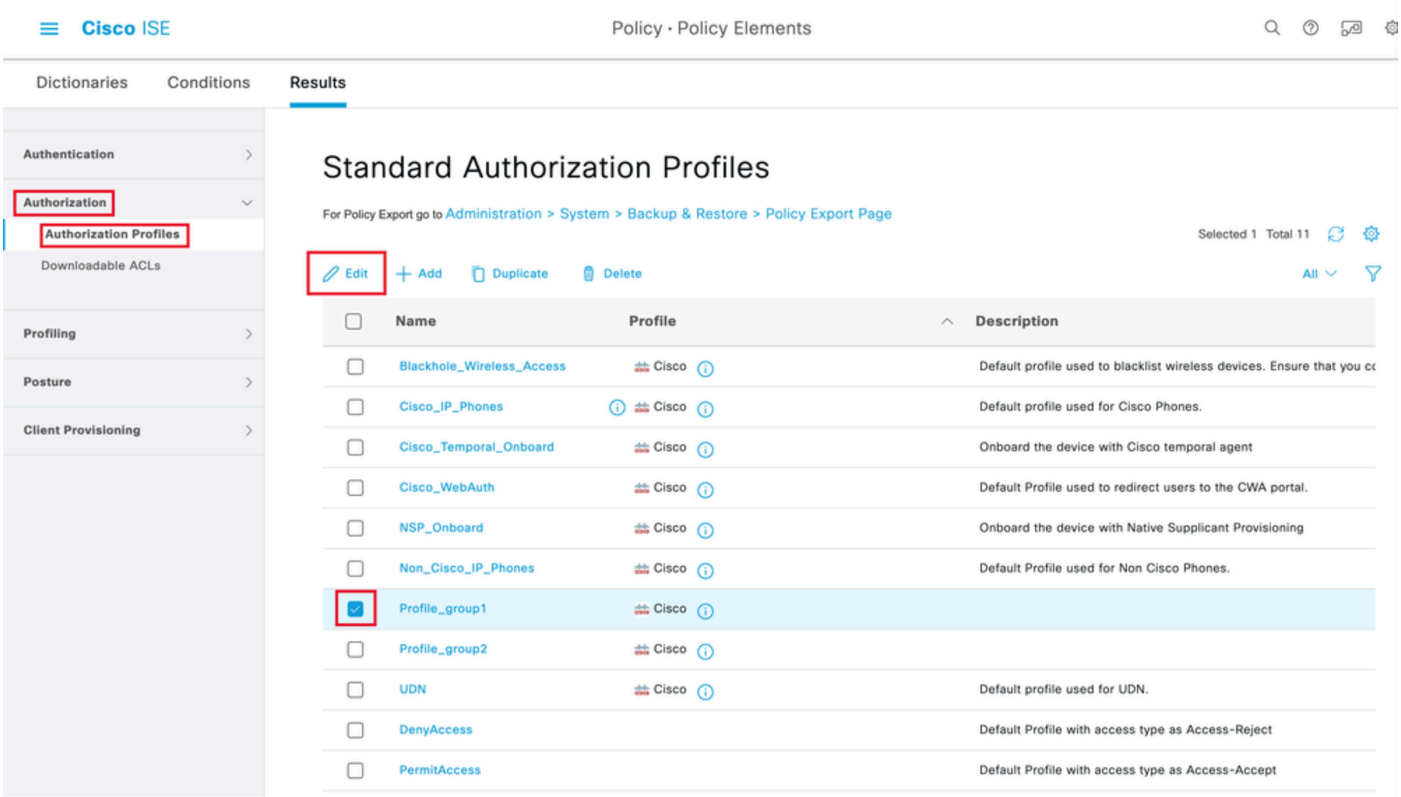
Note: Repeat steps 8 to 11 to create the necessary authorization rules for each group.

Step 12 (optional). If you need to edit the authorization profile navigate to **Policy** > **Results**:



ISE General Menu

Navigate to **Authorization > Authorization Profiles**. Click on the **check box** of the profile you want to modify and then click **Edit**:



Standard Authorization Profiles

For Policy Export go to Administration > System > Backup & Restore > Policy Export Page

Selected 1 Total 11

□	Name	Profile	Description
□	Blackhole_Wireless_Access	Cisco	Default profile used to blacklist wireless devices. Ensure that you c
□	Cisco_IP_Phones	Cisco	Default profile used for Cisco Phones.
□	Cisco_Temporal_Onboard	Cisco	Onboard the device with Cisco temporal agent
□	Cisco_WebAuth	Cisco	Default Profile used to redirect users to the CWA portal.
□	NSP_Onboard	Cisco	Onboard the device with Native Supplicant Provisioning
□	Non_Cisco_IP_Phones	Cisco	Default Profile used for Non Cisco Phones.
☑	Profile_group1	Cisco	
□	Profile_group2	Cisco	
□	UDN	Cisco	Default profile used for UDN.
□	DenyAccess		Default Profile with access type as Access-Reject
□	PermitAccess		Default Profile with access type as Access-Accept

Edit the Authorization Profile

Client Configuration

Step 1. Create an XML profile using the XML profile editor. This example is the one used for the creation of this document:

<#root>

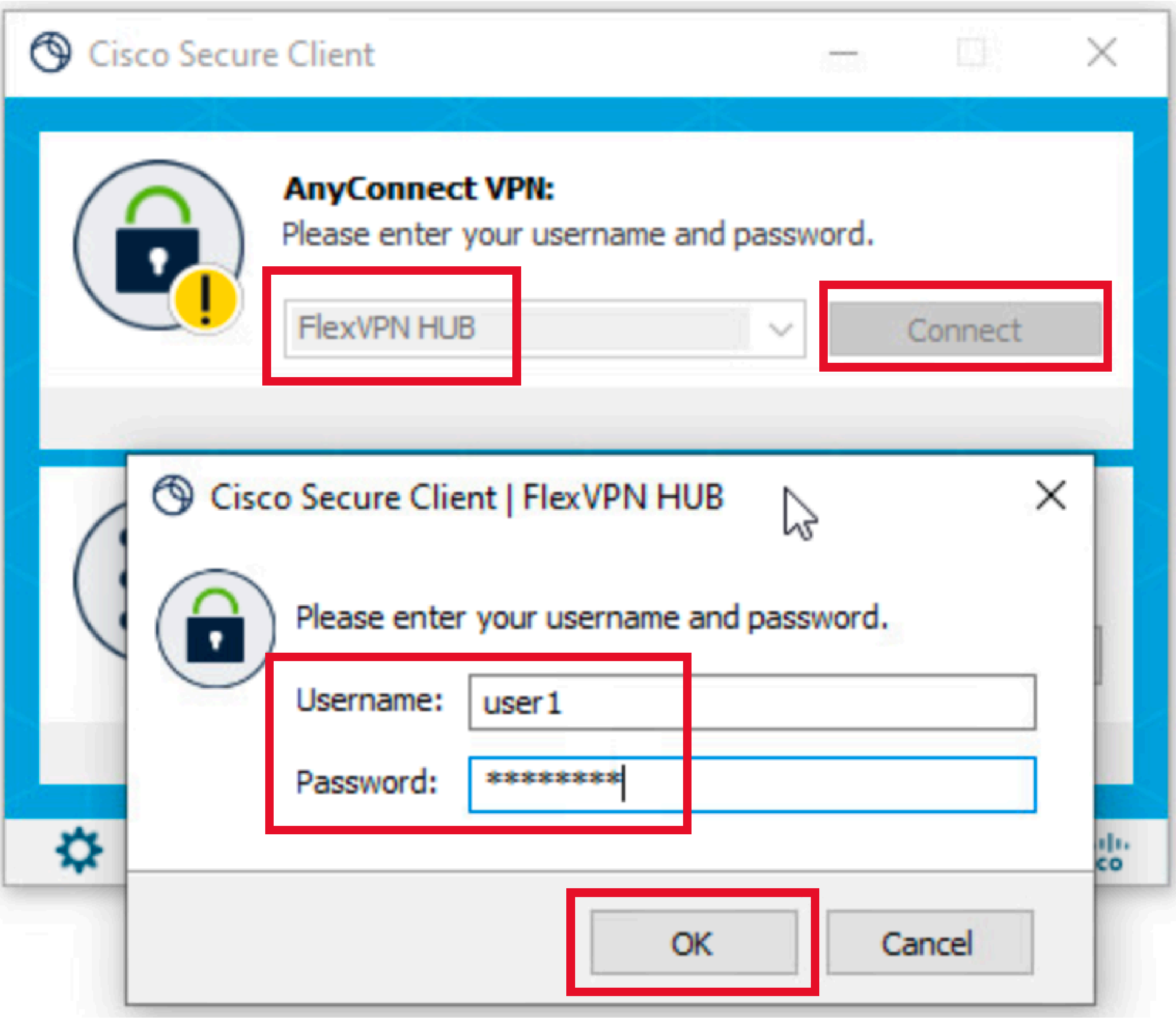
```
<AnyConnectProfile xmlns="http://schemas.xmlsoap.org/encoding/" xmlns:xsi="http://www.w3.org/2001/XMLSc
<ClientInitialization>
<UseStartBeforeLogon UserControllable="true">true</UseStartBeforeLogon>
<AutomaticCertSelection UserControllable="false">true</AutomaticCertSelection>
<ShowPreConnectMessage>false</ShowPreConnectMessage>
<CertificateStore>All</CertificateStore>
<CertificateStoreMac>All</CertificateStoreMac>
<CertificateStoreLinux>All</CertificateStoreLinux>
<CertificateStoreOverride>true</CertificateStoreOverride>
<ProxySettings>Native</ProxySettings>
<AllowLocalProxyConnections>true</AllowLocalProxyConnections>
<AuthenticationTimeout>30</AuthenticationTimeout>
<AutoConnectOnStart UserControllable="true">false</AutoConnectOnStart>
<MinimizeOnConnect UserControllable="true">true</MinimizeOnConnect>
<LocalLanAccess UserControllable="true">false</LocalLanAccess>
<DisableCaptivePortalDetection UserControllable="true">false</DisableCaptivePortalDetection>
<ClearSmartcardPin UserControllable="false">true</ClearSmartcardPin>
<IPProtocolSupport>IPv4,IPv6</IPProtocolSupport>
<AutoReconnect UserControllable="false">
true
<AutoReconnectBehavior UserControllable="false">ReconnectAfterResume</AutoReconnectBehavior>
</AutoReconnect>
<SuspendOnConnectedStandby>false</SuspendOnConnectedStandby>
<AutoUpdate UserControllable="false">true</AutoUpdate>
<RSASecurIDIntegration UserControllable="false">Automatic</RSASecurIDIntegration>
<WindowsLogonEnforcement>SingleLocalLogon</WindowsLogonEnforcement>
<LinuxLogonEnforcement>SingleLocalLogon</LinuxLogonEnforcement>
<WindowsVPNEstablishment>AllowRemoteUsers</WindowsVPNEstablishment>
<LinuxVPNEstablishment>LocalUsersOnly</LinuxVPNEstablishment>
<AutomaticVPNPolicy>false</AutomaticVPNPolicy>
<PPPExclusion UserControllable="false">
Disable
<PPPExclusionServerIP UserControllable="false"/>
</PPPExclusion>
<EnableScripting UserControllable="false">false</EnableScripting>
<EnableAutomaticServerSelection UserControllable="false">
false
<AutoServerSelectionImprovement>20</AutoServerSelectionImprovement>
<AutoServerSelectionSuspendTime>4</AutoServerSelectionSuspendTime>
</EnableAutomaticServerSelection>
<RetainVpnOnLogoff>false </RetainVpnOnLogoff>
<CaptivePortalRemediationBrowserFailover>false</CaptivePortalRemediationBrowserFailover>
<AllowManualHostInput>true</AllowManualHostInput>
</ClientInitialization>
<ServerList>
<HostEntry>
<HostName>

FlexVPN HUB

</HostName>
<HostAddress>

192.168.50.225

</HostAddress>
<PrimaryProtocol>
```

```
IPsec


<StandardAuthenticationOnly>
true
<AuthMethodDuringIKENegotiation>

EAP-MD5

</AuthMethodDuringIKENegotiation>
<IKEIdentity>

cisco.example

</IKEIdentity>
</StandardAuthenticationOnly>
</PrimaryProtocol>
</HostEntry>
</ServerList>
</AnyConnectProfile>
```

- **<HostName>** - The alias used to refer to the host, IP address, or Full-Qualified Domain Name (FQDN). This is displayed in the CSC box.
- **<HostAddress>** - IP address or FQDN of the FlexVPN hub.
- **<PrimaryProtocol>** - Must be set to IPsec to force the client to use IKEv2/IPsec instead of SSL.
- **<AuthMethodDuringIKENegotiation>** - Must be set to use EAP-MD5 within EAP. This is required for authentication against the ISE server.
- **<IKEIdentity>** - This string is sent by the client as the ID_GROUP type ID payload. This can be used to match the client to a specific IKEv2 profile on the hub.

Verify

Step 1. Navigate to the client machine where CSC is installed. Connect to the FlexVPN hub and enter the user1 credentials:



Cisco Secure Client

AnyConnect VPN:

Please enter your username and password.

FlexVPN HUB

Cisco Secure Client | FlexVPN HUB

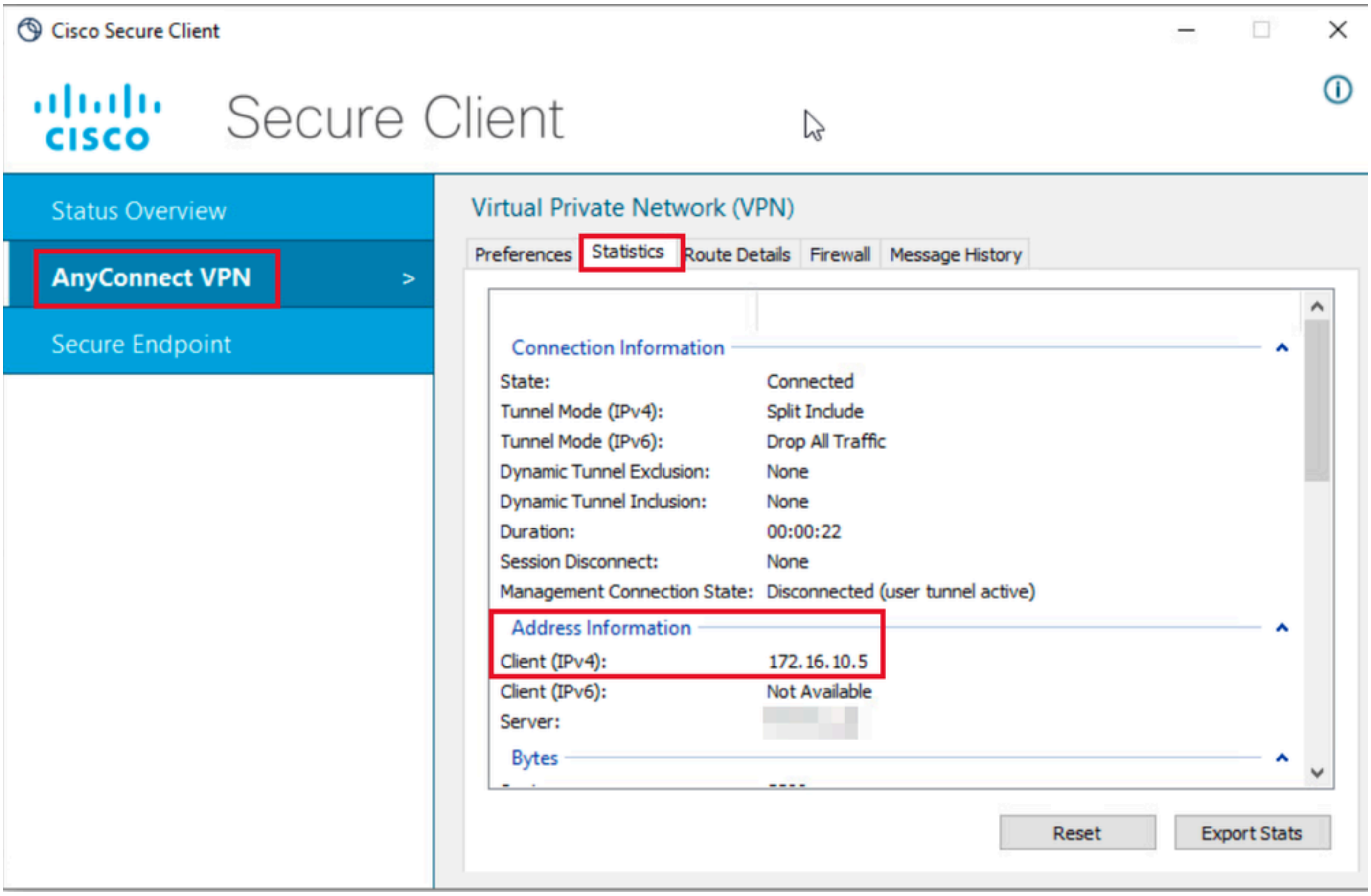
Please enter your username and password.

Username: user1

Password: *********

User1 Credentials

Step 2. Once the connection is established, click the gear icon (lower left corner) and navigate to **AnyConnectVPN** > **Statistics**. Confirm in the **Address Information** section that the IP address assigned belongs to the pool configured for group1:



Connection Information

State: Connected

Tunnel Mode (IPv4): Split Include

Tunnel Mode (IPv6): Drop All Traffic

Dynamic Tunnel Exclusion: None

Dynamic Tunnel Inclusion: None

Duration: 00:00:22

Session Disconnect: None

Management Connection State: Disconnected (user tunnel active)

Address Information

Client (IPv4): 172.16.10.5

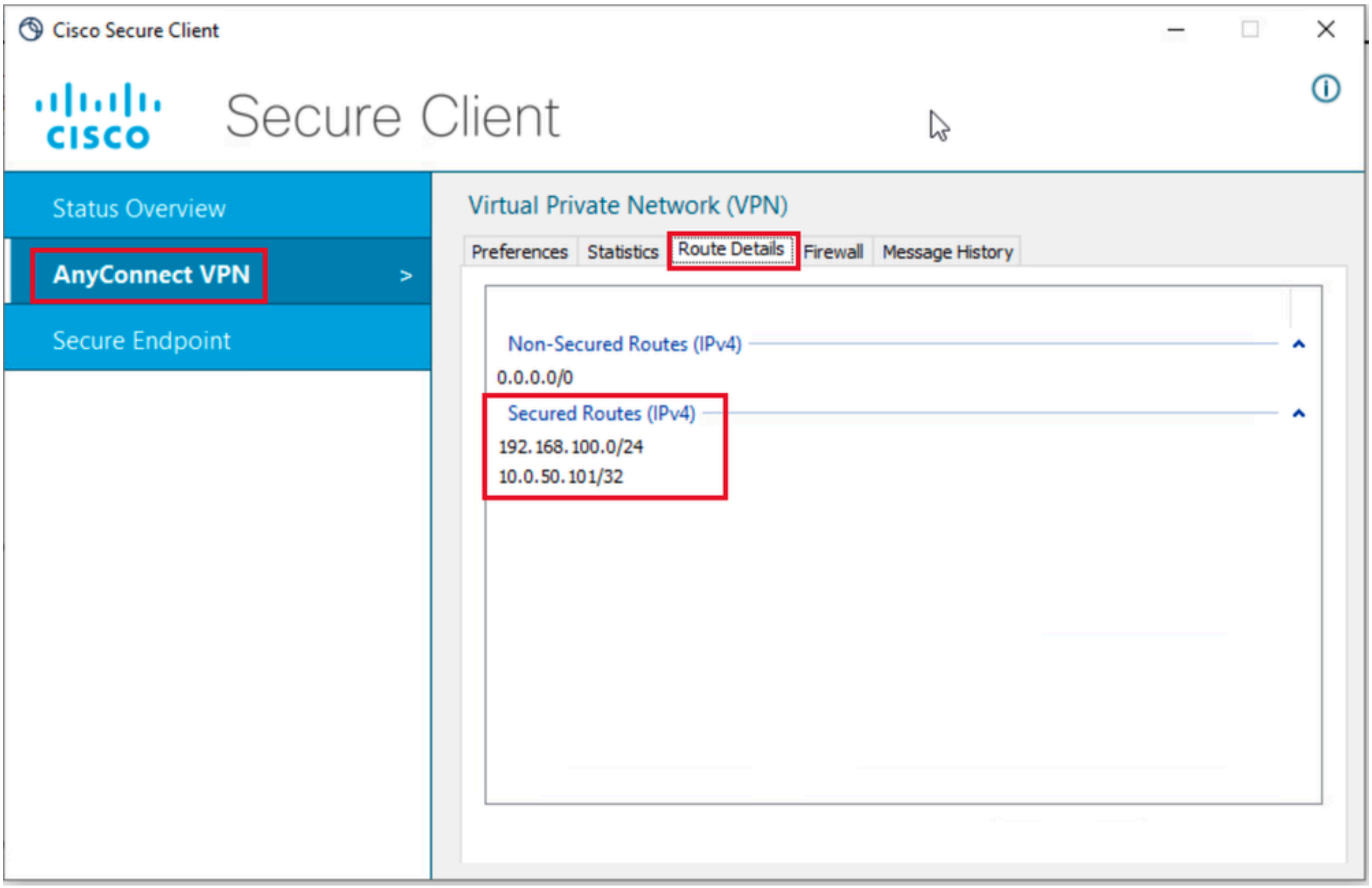
Client (IPv6): Not Available

Server: [redacted]

Bytes

User1 Statistics

Navigate to **AnyConnectVPN > Route details** and confirm the information displayed corresponds to the secure routes and DNS configured for group1:

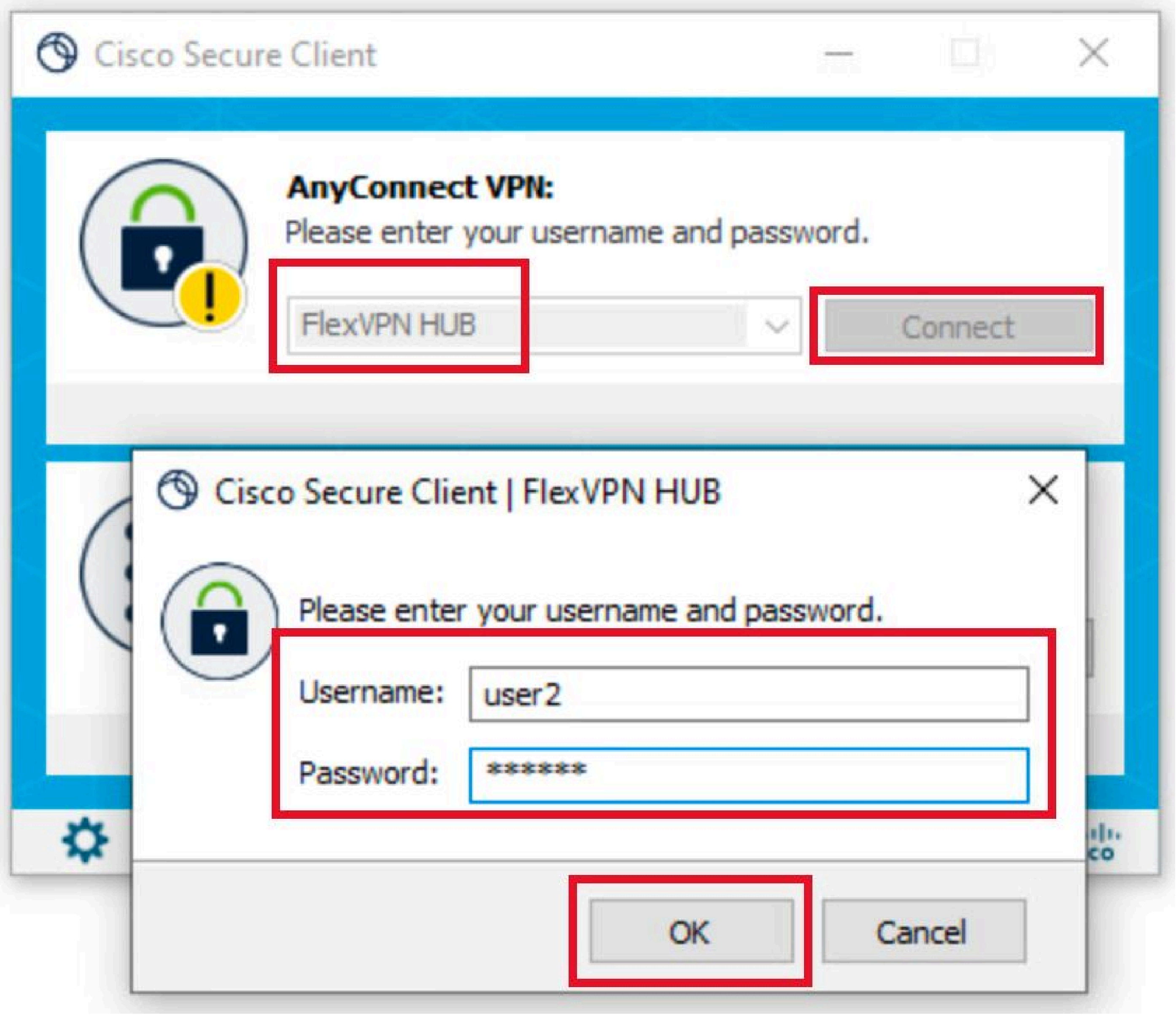


Non-Secured Routes (IPv4)
0.0.0.0/0

Secured Routes (IPv4)
192.168.100.0/24
10.0.50.101/32

User1 Route Details

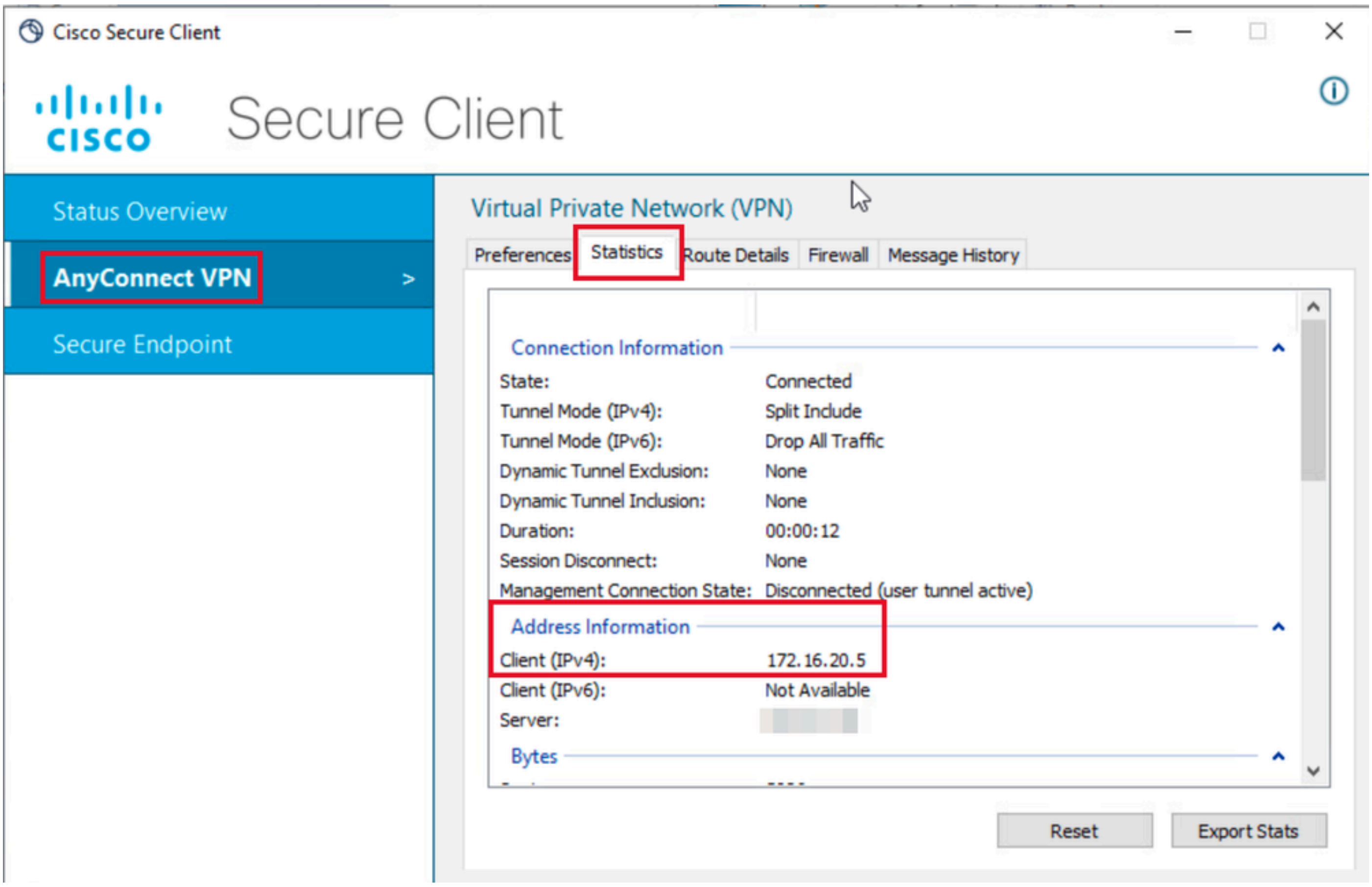
Step 3. Repeat step 1 and 2 with user2 credentials to check the information matches the values configured on ISE Authorization policy for this group:


Cisco Secure Client
AnyConnect VPN:
Please enter your username and password.
FlexVPN HUB
Connect
Cisco Secure Client | FlexVPN HUB
Please enter your username and password.
Username:
Password:
OK
Cancel

Username: user2

Password: ******

User2 Credentials



Connection Information

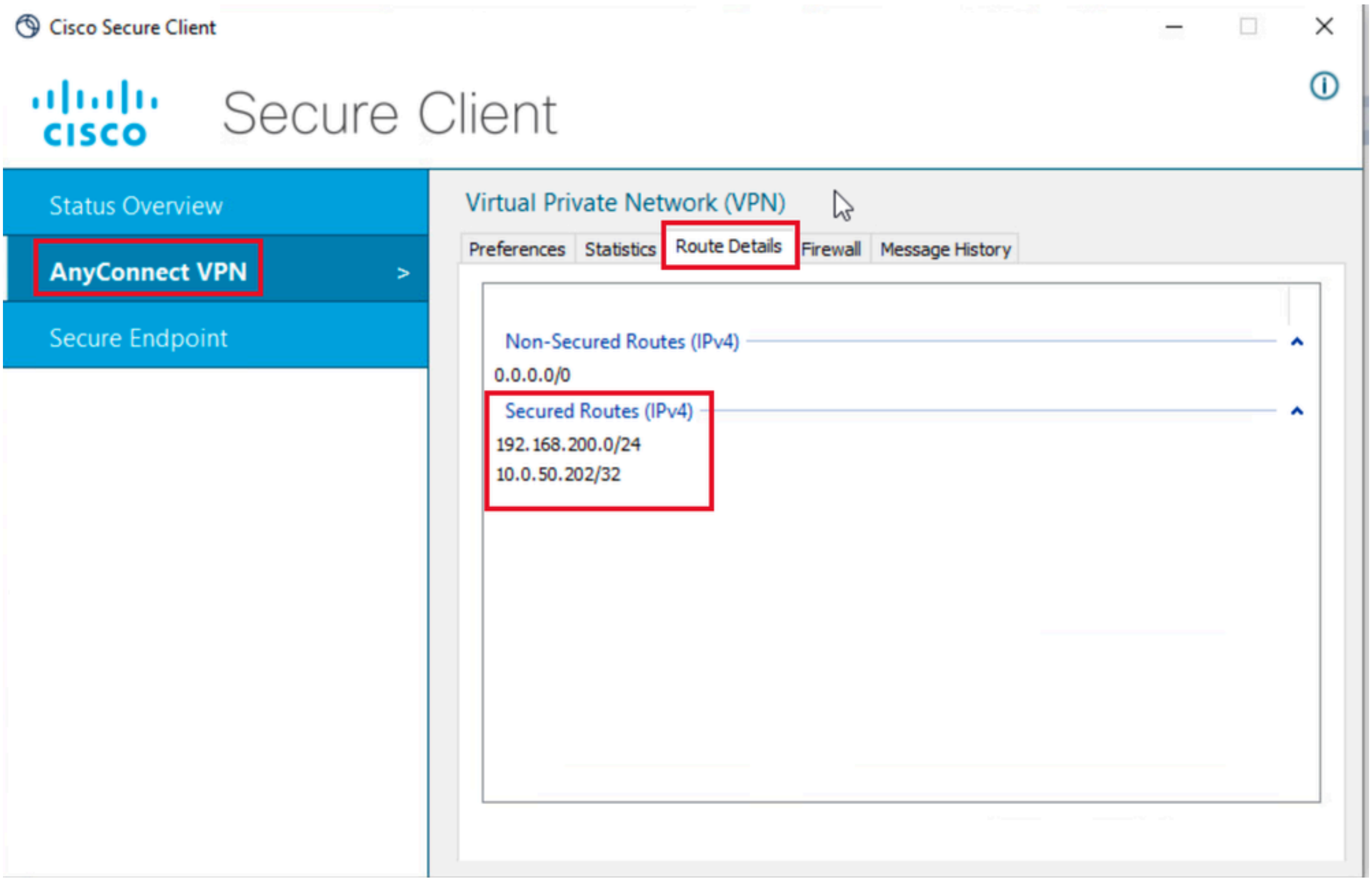
State: Connected
Tunnel Mode (IPv4): Split Include
Tunnel Mode (IPv6): Drop All Traffic
Dynamic Tunnel Exclusion: None
Dynamic Tunnel Inclusion: None
Duration: 00:00:12
Session Disconnect: None
Management Connection State: Disconnected (user tunnel active)

Address Information

Client (IPv4): 172.16.20.5
Client (IPv6): Not Available
Server: [redacted]

Bytes

User2 Statistics



Non-Secured Routes (IPv4)

0.0.0.0/0

Secured Routes (IPv4)

192.168.200.0/24
10.0.50.202/32

User2 Route Details

Troubleshoot

Debugs and Logs

On Cisco router:

1. Use the IKEv2 and IPSec debugs to verify the negotiation between the headend and the client:

```
debug crypto ikev2
debug crypto ikev2 packet
debug crypto ikev2 error
debug crypto ikev2 internal
debug crypto ipsec
debug crypto ipsec error
```

2. Use AAA debugs to verify the assignment of local and/or remote attributes:

```
debug aaa authorization
debug aaa authentication
debug radius authentication
```

On ISE:

- RADIUS live logs

Working Scenario

The next outputs are examples of the successful connections:

- User1 debug output:

<#root>

```
Jan 30 02:57:21.088: AAA/BIND(000000FF): Bind i/f
Jan 30 02:57:21.088: AAA/AUTHEN/LOGIN (000000FF):

Pick method list 'FlexVPN-Authentication-List'


Jan 30 02:57:21.088: RADIUS/ENCODE(000000FF):Orig. component type = VPN IPSEC
Jan 30 02:57:21.088: RADIUS/ENCODE(000000FF): dropping service type, "radius-server attribute 6 on-for-
Jan 30 02:57:21.088: RADIUS(000000FF): Config NAS IP: 0.0.0.0
Jan 30 02:57:21.088: vrfid: [65535] ipv6 tableid : [0]
Jan 30 02:57:21.088: idb is NULL
Jan 30 02:57:21.088: RADIUS(000000FF): Config NAS IPv6: ::
Jan 30 02:57:21.089: RADIUS/ENCODE(000000FF): acct_session_id: 4245
Jan 30 02:57:21.089: RADIUS(000000FF): sending
Jan 30 02:57:21.089: RADIUS/ENCODE: Best Local IP-Address 192.168.30.100 for Radius-Server 192.168.30.1
Jan 30 02:57:21.089: RADIUS: Message Authenticator encoded
Jan 30 02:57:21.089: RADIUS(000000FF):
```

Send Access-Request to 192.168.30.110:1645 id 1645/85, len 229

```
RADIUS: authenticator C9 82 15 29 AF 4B 17 61 - 27 F4 5C 27 C2 C3 50 34
Jan 30 02:57:21.089: RADIUS: Service-Type [6] 6 Login [1]
Jan 30 02:57:21.089: RADIUS: Vendor, Cisco [26] 26
Jan 30 02:57:21.089: RADIUS: Cisco AVpair [1] 20 "service-type=Login"
Jan 30 02:57:21.089: RADIUS: Vendor, Cisco [26] 36
Jan 30 02:57:21.089: RADIUS: Cisco AVpair [1] 30
```

"isakmp-phase1-id=cisco.example"

```
Jan 30 02:57:21.089: RADIUS: Calling-Station-Id [31] 13 "192.168.50.130"
Jan 30 02:57:21.089: RADIUS: Vendor, Cisco [26] 64
Jan 30 02:57:21.089: RADIUS: Cisco AVpair [1] 58 "audit-session-id=L2L42F2F0116ZO2L42F2F016FZH1194CAE2Z
Jan 30 02:57:21.089: RADIUS: User-Name [1] 7
```

"user1"

```
Jan 30 02:57:21.089: RADIUS: Vendor, Cisco [26] 21
Jan 30 02:57:21.089: RADIUS: Cisco AVpair [1] 15 "coa-push=true"
Jan 30 02:57:21.089: RADIUS: EAP-Message [79] 12
RADIUS: 02 3B 00 0A 01 75 73 65 72 31 [ ;user1]
Jan 30 02:57:21.089: RADIUS: Message-Authenticato[80] 18
RADIUS: E7 22 65 E0 DC 03 3A 49 0B 01 49 2A D5 3F AD 4F [ "e:II*?O]
Jan 30 02:57:21.089: RADIUS: NAS-IP-Address [4] 6 192.168.30.100
Jan 30 02:57:21.089: RADIUS(000000FF): Sending a IPv4 Radius Packet
Jan 30 02:57:21.090: RADIUS(000000FF): Started 5 sec timeout
Jan 30 02:57:21.094: RADIUS:
```

Received from id 1645/85 192.168.30.110:1645, Access-Challenge, len 137

```
RADIUS: authenticator 67 2B 9D 9C 4D 1F F3 E8 - F6 EC 9B EB 8E 49 C8 A5
Jan 30 02:57:21.094: RADIUS: State [24] 91
RADIUS: 35 32 43 50 4D 53 65 73 73 69 6F 6E 49 44 3D 4C [52CPMSessionID=L]
RADIUS: 32 4C 34 32 46 32 46 30 31 31 36 5A 4F 32 4C 34 [2L42F2F0116ZO2L4]
RADIUS: 32 46 32 46 30 31 36 46 5A 48 31 31 39 34 43 41 [2F2F016FZH1194CA]
RADIUS: 45 32 5A 4E 31 46 3B 33 31 53 65 73 73 69 6F 6E [E2ZN1F;31Session]
RADIUS: 49 44 3D 49 53 45 2D 44 49 41 4E 2F 34 39 33 30 [ID=ISE-SERVER/4930]
RADIUS: 38 30 30 31 38 2F 32 39 3B [ 80018/29;]
Jan 30 02:57:21.094: RADIUS: EAP-Message [79] 8
RADIUS: 01 52 00 06 0D 20 [ R ]
Jan 30 02:57:21.094: RADIUS: Message-Authenticato[80] 18
RADIUS: 38 8A B1 31 72 62 06 40 4F D4 58 48 E8 36 E7 80 [ 81rb@OXH6]
Jan 30 02:57:21.094: RADIUS(000000FF): Received from id 1645/85
RADIUS/DECODE: EAP-Message fragments, 6, total 6 bytes
Jan 30 02:57:21.097: AAA/AUTHEN/LOGIN (000000FF):
```

Pick method list 'FlexVPN-Authentication-List'

```
Jan 30 02:57:21.097: RADIUS/ENCODE(000000FF):Orig. component type = VPN IPSEC
Jan 30 02:57:21.097: RADIUS/ENCODE(000000FF): dropping service type, "radius-server attribute 6 on-for-
Jan 30 02:57:21.097: RADIUS(000000FF): Config NAS IP: 0.0.0.0
Jan 30 02:57:21.097: vrfid: [65535] ipv6 tableid : [0]
Jan 30 02:57:21.097: idb is NULL
Jan 30 02:57:21.097: RADIUS(000000FF): Config NAS IPv6: ::
Jan 30 02:57:21.097: RADIUS/ENCODE(000000FF): acct_session_id: 4245
Jan 30 02:57:21.097: RADIUS(000000FF): sending
Jan 30 02:57:21.097: RADIUS/ENCODE: Best Local IP-Address 192.168.30.100 for Radius-Server 192.168.30.1
Jan 30 02:57:21.097: RADIUS: Message Authenticator encoded
Jan 30 02:57:21.097: RADIUS(000000FF):
```

Send Access-Request to 192.168.30.110:1645 id 1645/86, len 316

```
RADIUS: authenticator 93 07 42 CC D1 90 31 68 - 56 D0 D0 5A 35 C3 67 BC
Jan 30 02:57:21.097: RADIUS: Service-Type [6] 6 Login [1]
Jan 30 02:57:21.097: RADIUS: Vendor, Cisco [26] 26
Jan 30 02:57:21.098: RADIUS: Cisco AVpair [1] 20 "service-type=Login"
Jan 30 02:57:21.098: RADIUS: Vendor, Cisco [26] 36
Jan 30 02:57:21.098: RADIUS: Cisco AVpair [1] 30
```

"isakmp-phase1-id=cisco.example"

```
Jan 30 02:57:21.098: RADIUS: Calling-Station-Id [31] 13 "192.168.50.130"
Jan 30 02:57:21.098: RADIUS: Vendor, Cisco [26] 64
Jan 30 02:57:21.098: RADIUS: Cisco AVpair [1] 58 "audit-session-id=L2L42F2F0116ZO2L42F2F016FZH1194CAE2Z
Jan 30 02:57:21.098: RADIUS: User-Name [1] 7
```

"user1"

```
Jan 30 02:57:21.098: RADIUS: Vendor, Cisco [26] 21
Jan 30 02:57:21.098: RADIUS: Cisco AVpair [1] 15 "coa-push=true"
Jan 30 02:57:21.098: RADIUS: EAP-Message [79] 8
RADIUS: 02 52 00 06 03 04 [ R]
Jan 30 02:57:21.098: RADIUS: Message-Authenticato[80] 18
RADIUS: E0 67 24 D3 BB CF D9 E0 EE 44 98 8A 26 64 AC C9 [ g$D&d]
Jan 30 02:57:21.098: RADIUS: State [24] 91
RADIUS: 35 32 43 50 4D 53 65 73 73 69 6F 6E 49 44 3D 4C [52CPMSessionID=L]
RADIUS: 32 4C 34 32 46 32 46 30 31 31 36 5A 4F 32 4C 34 [2L42F2F0116ZO2L4]
RADIUS: 32 46 32 46 30 31 36 46 5A 48 31 31 39 34 43 41 [2F2F016FZH1194CA]
RADIUS: 45 32 5A 4E 31 46 3B 33 31 53 65 73 73 69 6F 6E [E2ZN1F;31Session]
RADIUS: 49 44 3D 49 53 45 2D 44 49 41 4E 2F 34 39 33 30 [ID=ISE-SERVER/4930]
RADIUS: 38 30 30 31 38 2F 32 39 3B [ 80018/29;]
Jan 30 02:57:21.098: RADIUS: NAS-IP-Address [4] 6 192.168.30.100
Jan 30 02:57:21.098: RADIUS(000000FF): Sending a IPv4 Radius Packet
Jan 30 02:57:21.099: RADIUS(000000FF): Started 5 sec timeout
Jan 30 02:57:21.101: RADIUS:
```

Received from id 1645/86 192.168.30.110:1645, Access-Challenge, len 161

```
RADIUS: authenticator 42 A3 5F E0 92 13 51 13 - B2 80 56 A3 91 36 BD A1
Jan 30 02:57:21.101: RADIUS: State [24] 91
RADIUS: 35 32 43 50 4D 53 65 73 73 69 6F 6E 49 44 3D 4C [52CPMSessionID=L]
RADIUS: 32 4C 34 32 46 32 46 30 31 31 36 5A 4F 32 4C 34 [2L42F2F0116ZO2L4]
RADIUS: 32 46 32 46 30 31 36 46 5A 48 31 31 39 34 43 41 [2F2F016FZH1194CA]
RADIUS: 45 32 5A 4E 31 46 3B 33 31 53 65 73 73 69 6F 6E [E2ZN1F;31Session]
RADIUS: 49 44 3D 49 53 45 2D 44 49 41 4E 2F 34 39 33 30 [ID=ISE-SERVER/4930]
RADIUS: 38 30 30 31 38 2F 32 39 3B [ 80018/29;]
Jan 30 02:57:21.101: RADIUS: EAP-Message [79] 32
RADIUS: 01 53 00 1E 04 10 D7 61 AE 69 3B 88 A1 83 E4 EC 0F B6 EF 68 58 16 49 53 45 2D 44 49 41 4E [ Sai
Jan 30 02:57:21.101: RADIUS: Message-Authenticato[80] 18
RADIUS: 3E C9 C1 E1 F2 3B 4E 4C DF CF AC 21 AA E9 C3 F0 [ >;NL!]
Jan 30 02:57:21.101: RADIUS(000000FF): Received from id 1645/86
RADIUS/DECODE: EAP-Message fragments, 30, total 30 bytes
Jan 30 02:57:21.103: AAA/AUTHEN/LOGIN (000000FF):
```

Pick method list 'FlexVPN-Authentication-List'

```
Jan 30 02:57:21.103: RADIUS/ENCODE(000000FF):Orig. component type = VPN IPSEC
Jan 30 02:57:21.103: RADIUS/ENCODE(000000FF): dropping service type, "radius-server attribute 6 on-for-
Jan 30 02:57:21.103: RADIUS(000000FF): Config NAS IP: 0.0.0.0
Jan 30 02:57:21.103: vrfid: [65535] ipv6 tableid : [0]
Jan 30 02:57:21.104: idb is NULL
Jan 30 02:57:21.104: RADIUS(000000FF): Config NAS IPv6: ::
Jan 30 02:57:21.104: RADIUS/ENCODE(000000FF): acct_session_id: 4245
Jan 30 02:57:21.104: RADIUS(000000FF): sending
Jan 30 02:57:21.104: RADIUS/ENCODE: Best Local IP-Address 192.168.30.100 for Radius-Server 192.168.30.1
Jan 30 02:57:21.104: RADIUS: Message Authenticator encoded
Jan 30 02:57:21.104: RADIUS(000000FF):
```

Send Access-Request to 192.168.30.110:1645 id 1645/87, len 332

```
RADIUS: authenticator 89 35 9C C5 06 FB 04 B7 - 4E A3 B2 5F 2B 15 4F 46
Jan 30 02:57:21.104: RADIUS: Service-Type [6] 6 Login [1]
Jan 30 02:57:21.104: RADIUS: Vendor, Cisco [26] 26
Jan 30 02:57:21.104: RADIUS: Cisco AVpair [1] 20 "service-type=Login"
Jan 30 02:57:21.104: RADIUS: Vendor, Cisco [26] 36
Jan 30 02:57:21.104: RADIUS: Cisco AVpair [1] 30
```

"isakmp-phase1-id=cisco.example"

```
Jan 30 02:57:21.104: RADIUS: Calling-Station-Id [31] 13 "192.168.50.130"
Jan 30 02:57:21.104: RADIUS: Vendor, Cisco [26] 64
Jan 30 02:57:21.104: RADIUS: Cisco AVpair [1] 58 "audit-session-id=L2L42F2F0116ZO2L42F2F016FZH1194CAE2Z
Jan 30 02:57:21.104: RADIUS: User-Name [1] 7
```

"user1"

```
Jan 30 02:57:21.104: RADIUS: Vendor, Cisco [26] 21
Jan 30 02:57:21.104: RADIUS: Cisco AVpair [1] 15 "coa-push=true"
Jan 30 02:57:21.104: RADIUS: EAP-Message [79] 24
RADIUS: 02 53 00 16 04 10 B0 BB 3E D5 B1 D6 01 FC 9A B7 4A DB AB F7 2F B6 [ S>J/]
Jan 30 02:57:21.104: RADIUS: Message-Authenticato[80] 18
RADIUS: 79 43 97 A7 26 17 3E 3B 54 B4 90 D4 76 0F E0 14 [ yC&>;Tv]
Jan 30 02:57:21.104: RADIUS: State [24] 91
RADIUS: 35 32 43 50 4D 53 65 73 73 69 6F 6E 49 44 3D 4C [52CPMSessionID=L]
RADIUS: 32 4C 34 32 46 32 46 30 31 31 36 5A 4F 32 4C 34 [2L42F2F0116ZO2L4]
RADIUS: 32 46 32 46 30 31 36 46 5A 48 31 31 39 34 43 41 [2F2F016FZH1194CA]
RADIUS: 45 32 5A 4E 31 46 3B 33 31 53 65 73 73 69 6F 6E [E2ZN1F;31Session]
RADIUS: 49 44 3D 49 53 45 2D 44 49 41 4E 2F 34 39 33 30 [ID=ISE-SERVER/4930]
RADIUS: 38 30 30 31 38 2F 32 39 3B [ 80018/29;]
Jan 30 02:57:21.104: RADIUS: NAS-IP-Address [4] 6 192.168.30.100
Jan 30 02:57:21.105: RADIUS(000000FF): Sending a IPv4 Radius Packet
Jan 30 02:57:21.105: RADIUS(000000FF): Started 5 sec timeout
Jan 30 02:57:21.170: RADIUS:
```

Received from id 1645/87 192.168.30.110:1645, Access-Accept, len 233

```
RADIUS: authenticator 75 F6 05 85 1D A0 C3 EE - F8 81 F9 02 38 AC C1 B6
Jan 30 02:57:21.170: RADIUS: User-Name [1] 7
```

"user1"

```
Jan 30 02:57:21.170: RADIUS: Class [25] 68
RADIUS: 43 41 43 53 3A 4C 32 4C 34 32 46 32 46 30 31 31 [CACS:L2L42F2F011]
RADIUS: 36 5A 4F 32 4C 34 32 46 32 46 30 31 36 46 5A 48 [6ZO2L42F2F016FZH]
RADIUS: 31 31 39 34 43 41 45 32 5A 4E 31 46 3A 49 53 45 [1194CAE2ZN1F:ISE]
RADIUS: 2D 44 49 41 4E 2F 34 39 33 30 38 30 30 31 38 2F [-DIAN/493080018/]
RADIUS: 32 39 [ 29]
Jan 30 02:57:21.170: RADIUS: EAP-Message [79] 6
RADIUS: 03 53 00 04 [ S]
Jan 30 02:57:21.170: RADIUS: Message-Authenticato[80] 18
```

```
RADIUS: 8A A9 CC 07 61 A2 6D BA E4 EB B5 B7 73 0E EC 28 [ ams(]
Jan 30 02:57:21.170: RADIUS: Vendor, Cisco [26] 37
Jan 30 02:57:21.170: RADIUS: Cisco AVpair [1] 31
```

"ipsec:dns-servers=10.0.50.101"

```
Jan 30 02:57:21.170: RADIUS: Vendor, Cisco [26] 47
Jan 30 02:57:21.170: RADIUS: Cisco AVpair [1] 41
```

"ipsec:route-set=prefix 192.168.100.0/24"

```
Jan 30 02:57:21.170: RADIUS: Vendor, Cisco [26] 30
Jan 30 02:57:21.170: RADIUS: Cisco AVpair [1] 24
```

"ipsec:addr-pool=group1"

```
Jan 30 02:57:21.171: RADIUS(000000FF): Received from id 1645/87
RADIUS/DECODE: EAP-Message fragments, 4, total 4 bytes
Jan 30 02:57:21.175: AAA/BIND(00000100): Bind i/f
Jan 30 02:57:21.175: AAA/AUTHOR (0x100):
```

Pick method list 'FlexVPN-Authorization-List'

```
Jan 30 02:57:21.176: %LINEPROTO-5-UPDOWN: Line protocol on Interface Virtual-Access1, changed state to
Jan 30 02:57:21.192: %SYS-5-CONFIG_P: Configured programmatically by process Crypto INT from console as
Jan 30 02:57:21.376: %LINEPROTO-5-UPDOWN:
```

Line protocol on Interface Virtual-Access1, changed state to up

- User2 debug output:

<#root>

```
Jan 30 03:28:58.102: AAA/BIND(00000103): Bind i/f
Jan 30 03:28:58.102: AAA/AUTHEN/LOGIN (00000103):
```

Pick method list 'FlexVPN-Authentication-List'

```
Jan 30 03:28:58.103: RADIUS/ENCODE(00000103):Orig. component type = VPN IPSEC
Jan 30 03:28:58.103: RADIUS/ENCODE(00000103): dropping service type, "radius-server attribute 6 on-for-
Jan 30 03:28:58.103: RADIUS(00000103): Config NAS IP: 0.0.0.0
Jan 30 03:28:58.103: vrfid: [65535] ipv6 tableid : [0]
Jan 30 03:28:58.103: idb is NULL
Jan 30 03:28:58.103: RADIUS(00000103): Config NAS IPv6: ::
Jan 30 03:28:58.103: RADIUS/ENCODE(00000103): acct_session_id: 4249
Jan 30 03:28:58.103: RADIUS(00000103): sending
Jan 30 03:28:58.103: RADIUS/ENCODE: Best Local IP-Address 192.168.30.100 for Radius-Server 192.168.30.1
Jan 30 03:28:58.103: RADIUS: Message Authenticator encoded
Jan 30 03:28:58.103: RADIUS(00000103):
```

Send Access-Request to 192.168.30.110:1645 id 1645/88, len 229

```
RADIUS: authenticator 71 99 09 63 19 F7 D7 0B - 1D A9 4E 64 28 6F A5 64
Jan 30 03:28:58.103: RADIUS: Service-Type [6] 6 Login [1]
Jan 30 03:28:58.103: RADIUS: Vendor, Cisco [26] 26
Jan 30 03:28:58.103: RADIUS: Cisco AVpair [1] 20 "service-type=Login"
Jan 30 03:28:58.103: RADIUS: Vendor, Cisco [26] 36
Jan 30 03:28:58.104: RADIUS: Cisco AVpair [1] 30
```

"isakmp-phase1-id=cisco.example"

```
Jan 30 03:28:58.104: RADIUS: Calling-Station-Id [31] 13 "192.168.50.130"
Jan 30 03:28:58.104: RADIUS: Vendor, Cisco [26] 64
Jan 30 03:28:58.104: RADIUS: Cisco AVpair [1] 58 "audit-session-id=L2L42F2F0116ZO2L42F2F016FZH1194E444Z
Jan 30 03:28:58.104: RADIUS: User-Name [1] 7
```

"user2"

```
Jan 30 03:28:58.104: RADIUS: Vendor, Cisco [26] 21
Jan 30 03:28:58.104: RADIUS: Cisco AVpair [1] 15 "coa-push=true"
Jan 30 03:28:58.104: RADIUS: EAP-Message [79] 12
RADIUS: 02 3B 00 0A 01 75 73 65 72 32 [ ;user2]
Jan 30 03:28:58.104: RADIUS: Message-Authenticato[80] 18
RADIUS: 12 62 2F 51 12 FC F7 EC F0 87 E0 34 1E F1 AD E5 [ b/Q4]
Jan 30 03:28:58.104: RADIUS: NAS-IP-Address [4] 6 192.168.30.100
Jan 30 03:28:58.104: RADIUS(00000103): Sending a IPv4 Radius Packet
Jan 30 03:28:58.105: RADIUS(00000103): Started 5 sec timeout
Jan 30 03:28:58.109: RADIUS:
```

Received from id 1645/88 192.168.30.110:1645, Access-Challenge, len 137

```
RADIUS: authenticator 98 04 01 EA CD 9B 1E A9 - DC 6F 2F 17 1F 2A 5F 43
Jan 30 03:28:58.109: RADIUS: State [24] 91
RADIUS: 35 32 43 50 4D 53 65 73 73 69 6F 6E 49 44 3D 4C [52CPMSessionID=L]
RADIUS: 32 4C 34 32 46 32 46 30 31 31 36 5A 4F 32 4C 34 [2L42F2F0116ZO2L4]
RADIUS: 32 46 32 46 30 31 36 46 5A 48 31 31 39 34 45 34 [2F2F016FZH1194E4]
RADIUS: 34 34 5A 4E 32 30 3B 33 31 53 65 73 73 69 6F 6E [44ZN20;31Session]
RADIUS: 49 44 3D 49 53 45 2D 44 49 41 4E 2F 34 39 33 30 [ID=ISE-SERVER/4930]
RADIUS: 38 30 30 31 38 2F 33 30 3B [ 80018/30;]
Jan 30 03:28:58.110: RADIUS: EAP-Message [79] 8
RADIUS: 01 35 00 06 0D 20 [ 5 ]
Jan 30 03:28:58.110: RADIUS: Message-Authenticato[80] 18
RADIUS: E3 A6 88 B1 B6 3D 93 1F 39 B3 AE 9E EA 1D BB 15 [ =9]
Jan 30 03:28:58.110: RADIUS(00000103): Received from id 1645/88
RADIUS/DECODE: EAP-Message fragments, 6, total 6 bytes
Jan 30 03:28:58.112: AAA/AUTHEN/LOGIN (00000103):
```

Pick method list 'FlexVPN-Authentication-List'

```
Jan 30 03:28:58.112: RADIUS/ENCODE(00000103):Orig. component type = VPN IPSEC
Jan 30 03:28:58.112: RADIUS/ENCODE(00000103): dropping service type, "radius-server attribute 6 on-for-
Jan 30 03:28:58.112: RADIUS(00000103): Config NAS IP: 0.0.0.0
Jan 30 03:28:58.112: vrfid: [65535] ipv6 tableid : [0]
Jan 30 03:28:58.113: idb is NULL
Jan 30 03:28:58.113: RADIUS(00000103): Config NAS IPv6: ::
Jan 30 03:28:58.113: RADIUS/ENCODE(00000103): acct_session_id: 4249
Jan 30 03:28:58.113: RADIUS(00000103): sending
Jan 30 03:28:58.113: RADIUS/ENCODE: Best Local IP-Address 192.168.30.100 for Radius-Server 192.168.30.1
Jan 30 03:28:58.113: RADIUS: Message Authenticator encoded
Jan 30 03:28:58.113: RADIUS(00000103):
```

Send Access-Request to 192.168.30.110:1645 id 1645/89, len 316

```
RADIUS: authenticator 56 BD F0 9A 4B 16 5C 6C - 4E 41 00 56 8D C0 3A 8C
Jan 30 03:28:58.113: RADIUS: Service-Type [6] 6 Login [1]
Jan 30 03:28:58.113: RADIUS: Vendor, Cisco [26] 26
Jan 30 03:28:58.113: RADIUS: Cisco AVpair [1] 20 "service-type=Login"
Jan 30 03:28:58.113: RADIUS: Vendor, Cisco [26] 36
Jan 30 03:28:58.113: RADIUS: Cisco AVpair [1] 30
```

"isakmp-phase1-id=cisco.example"

```
Jan 30 03:28:58.113: RADIUS: Calling-Station-Id [31] 13 "192.168.50.130"
Jan 30 03:28:58.113: RADIUS: Vendor, Cisco [26] 64
Jan 30 03:28:58.113: RADIUS: Cisco AVpair [1] 58 "audit-session-id=L2L42F2F0116ZO2L42F2F016FZH1194E444Z
Jan 30 03:28:58.113: RADIUS: User-Name [1] 7
```

"user2"

```
Jan 30 03:28:58.113: RADIUS: Vendor, Cisco [26] 21
Jan 30 03:28:58.113: RADIUS: Cisco AVpair [1] 15 "coa-push=true"
Jan 30 03:28:58.113: RADIUS: EAP-Message [79] 8
RADIUS: 02 35 00 06 03 04 [ 5]
Jan 30 03:28:58.113: RADIUS: Message-Authenticato[80] 18
RADIUS: 47 1F 36 A7 C3 9B 90 6E 03 2C B8 D7 FE A7 13 44 [ G6n,D]
Jan 30 03:28:58.113: RADIUS: State [24] 91
RADIUS: 35 32 43 50 4D 53 65 73 73 69 6F 6E 49 44 3D 4C [52CPMSessionID=L]
RADIUS: 32 4C 34 32 46 32 46 30 31 31 36 5A 4F 32 4C 34 [2L42F2F0116ZO2L4]
RADIUS: 32 46 32 46 30 31 36 46 5A 48 31 31 39 34 45 34 [2F2F016FZH1194E4]
RADIUS: 34 34 5A 4E 32 30 3B 33 31 53 65 73 73 69 6F 6E [44ZN20;31Session]
RADIUS: 49 44 3D 49 53 45 2D 44 49 41 4E 2F 34 39 33 30 [ID=ISE-SERVER/4930]
RADIUS: 38 30 30 31 38 2F 33 30 3B [ 80018/30;]
Jan 30 03:28:58.114: RADIUS: NAS-IP-Address [4] 6 192.168.30.100
Jan 30 03:28:58.114: RADIUS(00000103): Sending a IPv4 Radius Packet
Jan 30 03:28:58.114: RADIUS(00000103): Started 5 sec timeout
Jan 30 03:28:58.116: RADIUS:
```

Received from id 1645/89 192.168.30.110:1645, Access-Challenge, len 161

```
RADIUS: authenticator 84 A3 30 3D 80 BC 71 42 - 1B 9B 49 EF 0B 1B 02 02
Jan 30 03:28:58.116: RADIUS: State [24] 91
RADIUS: 35 32 43 50 4D 53 65 73 73 69 6F 6E 49 44 3D 4C [52CPMSessionID=L]
RADIUS: 32 4C 34 32 46 32 46 30 31 31 36 5A 4F 32 4C 34 [2L42F2F0116ZO2L4]
RADIUS: 32 46 32 46 30 31 36 46 5A 48 31 31 39 34 45 34 [2F2F016FZH1194E4]
RADIUS: 34 34 5A 4E 32 30 3B 33 31 53 65 73 73 69 6F 6E [44ZN20;31Session]
RADIUS: 49 44 3D 49 53 45 2D 44 49 41 4E 2F 34 39 33 30 [ID=ISE-SERVER/4930]
RADIUS: 38 30 30 31 38 2F 33 30 3B [ 80018/30;]
Jan 30 03:28:58.116: RADIUS: EAP-Message [79] 32
RADIUS: 01 36 00 1E 04 10 EB 9F A5 AC 70 1F 4D D6 48 05 9D EC 1F 29 67 AE 49 53 45 2D 44 49 41 4E [ 6pM
Jan 30 03:28:58.116: RADIUS: Message-Authenticato[80] 18
RADIUS: 08 5E BC EF E5 38 50 CD FB 3C B3 E9 99 0A 51 B3 [ ^8P<Q]
Jan 30 03:28:58.116: RADIUS(00000103): Received from id 1645/89
RADIUS/DECODE: EAP-Message fragments, 30, total 30 bytes
Jan 30 03:28:58.118: AAA/AUTHEN/LOGIN (00000103):
```

Pick method list 'FlexVPN-Authentication-List'

```
Jan 30 03:28:58.118: RADIUS/ENCODE(00000103):Orig. component type = VPN IPSEC
Jan 30 03:28:58.118: RADIUS/ENCODE(00000103): dropping service type, "radius-server attribute 6 on-for-
Jan 30 03:28:58.118: RADIUS(00000103): Config NAS IP: 0.0.0.0
Jan 30 03:28:58.118: vrfid: [65535] ipv6 tableid : [0]
Jan 30 03:28:58.118: idb is NULL
Jan 30 03:28:58.118: RADIUS(00000103): Config NAS IPv6: ::
Jan 30 03:28:58.118: RADIUS/ENCODE(00000103): acct_session_id: 4249
Jan 30 03:28:58.118: RADIUS(00000103): sending
Jan 30 03:28:58.118: RADIUS/ENCODE: Best Local IP-Address 192.168.30.100 for Radius-Server 192.168.30.1
Jan 30 03:28:58.119: RADIUS: Message Authenticator encoded
Jan 30 03:28:58.119: RADIUS(00000103):
```

Send Access-Request to 192.168.30.110:1645 id 1645/90, len 332

```
RADIUS: authenticator A1 62 1A FB 18 58 7B 47 - 5C 8A 64 FA B7 23 9B BE
Jan 30 03:28:58.119: RADIUS: Service-Type [6] 6 Login [1]
Jan 30 03:28:58.119: RADIUS: Vendor, Cisco [26] 26
Jan 30 03:28:58.119: RADIUS: Cisco AVpair [1] 20 "service-type=Login"
Jan 30 03:28:58.119: RADIUS: Vendor, Cisco [26] 36
Jan 30 03:28:58.119: RADIUS: Cisco AVpair [1] 30
```

"isakmp-phase1-id=cisco.example"

```
Jan 30 03:28:58.119: RADIUS: Calling-Station-Id [31] 13 "192.168.50.130"
Jan 30 03:28:58.119: RADIUS: Vendor, Cisco [26] 64
Jan 30 03:28:58.119: RADIUS: Cisco AVpair [1] 58 "audit-session-id=L2L42F2F0116ZO2L42F2F016FZH1194E444Z
Jan 30 03:28:58.119: RADIUS: User-Name [1] 7
```

"user2"

```
Jan 30 03:28:58.119: RADIUS: Vendor, Cisco [26] 21
Jan 30 03:28:58.119: RADIUS: Cisco AVpair [1] 15 "coa-push=true"
Jan 30 03:28:58.119: RADIUS: EAP-Message [79] 24
RADIUS: 02 36 00 16 04 10 73 B7 F2 42 09 5B AB 21 D8 77 96 A2 F7 C7 83 AD [ 6sB[!w]
Jan 30 03:28:58.119: RADIUS: Message-Authenticato[80] 18
RADIUS: B1 68 3C 25 9E FE 52 13 10 69 E6 BB 17 67 6F 18 [ h<?Rigo]
Jan 30 03:28:58.119: RADIUS: State [24] 91
RADIUS: 35 32 43 50 4D 53 65 73 73 69 6F 6E 49 44 3D 4C [52CPMSessionID=L]
RADIUS: 32 4C 34 32 46 32 46 30 31 31 36 5A 4F 32 4C 34 [2L42F2F0116ZO2L4]
RADIUS: 32 46 32 46 30 31 36 46 5A 48 31 31 39 34 45 34 [2F2F016FZH1194E4]
RADIUS: 34 34 5A 4E 32 30 3B 33 31 53 65 73 73 69 6F 6E [44ZN20;31Session]
RADIUS: 49 44 3D 49 53 45 2D 44 49 41 4E 2F 34 39 33 30 [ID=ISE-SERVER/4930]
RADIUS: 38 30 30 31 38 2F 33 30 3B [ 80018/30;]
Jan 30 03:28:58.119: RADIUS: NAS-IP-Address [4] 6 192.168.30.100
Jan 30 03:28:58.119: RADIUS(00000103): Sending a IPv4 Radius Packet
Jan 30 03:28:58.119: RADIUS(00000103): Started 5 sec timeout
Jan 30 03:28:58.186: RADIUS: Received from id 1645/90 192.168.30.110:1645, Access-Accept, len 233
RADIUS: authenticator 48 A5 A0 11 ED B8 C2 87 - 35 30 17 D5 6D D7 B4 FD
Jan 30 03:28:58.186: RADIUS: User-Name [1] 7
```

"user2"

```
Jan 30 03:28:58.186: RADIUS: Class [25] 68
RADIUS: 43 41 43 53 3A 4C 32 4C 34 32 46 32 46 30 31 31 [CACS:L2L42F2F011]
RADIUS: 36 5A 4F 32 4C 34 32 46 32 46 30 31 36 46 5A 48 [6ZO2L42F2F016FZH]
RADIUS: 31 31 39 34 45 34 34 34 5A 4E 32 30 3A 49 53 45 [1194E444ZN20:ISE]
RADIUS: 2D 44 49 41 4E 2F 34 39 33 30 38 30 30 31 38 2F [-DIAN/493080018/]
RADIUS: 33 30 [ 30]
Jan 30 03:28:58.186: RADIUS: EAP-Message [79] 6
RADIUS: 03 36 00 04 [ 6]
Jan 30 03:28:58.186: RADIUS: Message-Authenticato[80] 18
RADIUS: 9E A6 D9 56 40 C8 EB 08 69 8C E1 35 35 53 18 83 [ V@i55S]
Jan 30 03:28:58.187: RADIUS: Vendor, Cisco [26] 37
Jan 30 03:28:58.187: RADIUS: Cisco AVpair [1] 31
```

"ipsec:dns-servers=10.0.50.202"

```
Jan 30 03:28:58.187: RADIUS: Vendor, Cisco [26] 47
Jan 30 03:28:58.187: RADIUS: Cisco AVpair [1] 41
```

```
"ipsec:route-set=prefix 192.168.200.0/24"


Jan 30 03:28:58.187: RADIUS: Vendor, Cisco [26] 30
Jan 30 03:28:58.187: RADIUS: Cisco AVpair [1] 24

"ipsec:addr-pool=group2"


Jan 30 03:28:58.187: RADIUS(00000103): Received from id 1645/90
RADIUS/DECODE: EAP-Message fragments, 4, total 4 bytes
Jan 30 03:28:58.190: AAA/BIND(00000104): Bind i/f
Jan 30 03:28:58.190: AAA/AUTHOR (0x104):

Pick method list 'FlexVPN-Authorization-List'


Jan 30 03:28:58.192: %LINEPROTO-5-UPDOWN: Line protocol on Interface Virtual-Access2, changed state to
Jan 30 03:28:58.209: %SYS-5-CONFIG_P: Configured programmatically by process Crypto INT from console as
Jan 30 03:28:58.398: %LINEPROTO-5-UPDOWN:

Line protocol on Interface Virtual-Access2, changed state to up
```

Related Information

- Cisco Technical Support & Downloads