



Cisco CallManager Setup for Q-SYS

CallManager 8.x

Issue date: 12 May 2016

For CallManager version 8.x only

Preliminary

Log into the CallManager system and go to **System > Licensing > License User Report** to verify that you have enough Cisco CallManager licenses available. The Q-SYS Core is a third-party SIP endpoint in the CallManager system, and each extension requires three available licenses.

Purchase any needed licenses from Cisco.

NOTE: QSC Softphone requires *SIP V2 early offer* for proper functionality.

Security Profile

You must first have a Security Profile set up. To create one or to verify that you have an existing one, go to **System > Security Profile > Phone Security Profile**. The **Find and List Phone Security Profile** window will open.

- To find an existing profile, enter the search parameters, patterns, and text, if there are any. Click **Find**. Click on the record that you need to view.
- To add a new profile, click **Add New**. Select the **Phone Security Profile Type** (Figure 1):
 - If you plan to use Q-SYS for a single extension, select **Third-party SIP Device (Basic)**.

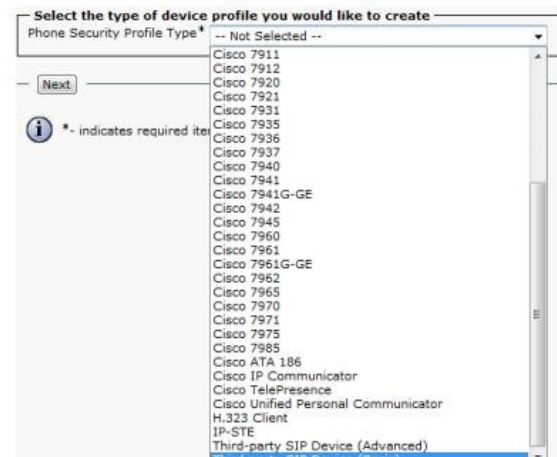


Figure 1

If you plan to use Q-SYS for multiple separate extensions, select **Third-party SIP Device (Advanced)**.

3. Click **Next**. The **Phone Security Profile Information** window (Figure 2) opens.
4. Enter a **Name** and a **Description** for the security profile. (Cisco suggests putting the device model and protocol in the name to aid in finding the correct profile if you need to search for or update the profile.)
5. The **Nonce Validity Time** should be **600**, which is also its default value.
6. Set **Transport Type** to **UDP**.
7. Select the **Enable Digest Authentication** check box. Leave **SIP Phone Port** at its default value of 5060 unless your situation requires transmission of SIP traffic on a different port.
8. Click **Save**.

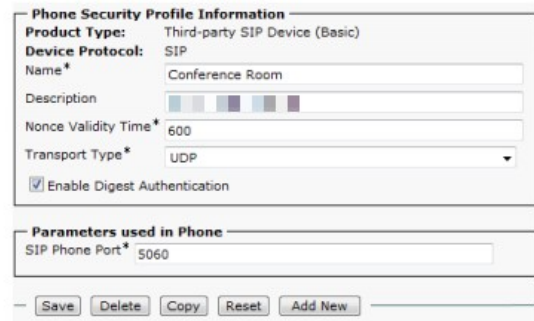


Figure 2

Add a new user

Next, add a new user. Follow these steps:

1. Go to **User Management > End User**.
2. Click **Add New**. The **User Information** window will open (Figure 3).
3. In **User ID**, enter a user name. This same user name will serve as the *Username* in Q-SYS.
4. **Password** and **PIN** are not required. Leave them blank.
5. The **Last name** box serves only as an internal descriptor; you may enter the end user's last name or some descriptive term, as shown.
6. In **Digest Credentials**, type a string of alphanumeric characters that will serve as the *Proxy Password* in Q-SYS. Enter the same string in **Confirm Digest Credentials**.
7. Leave the other boxes blank or at their default values.
8. Click **Save**.

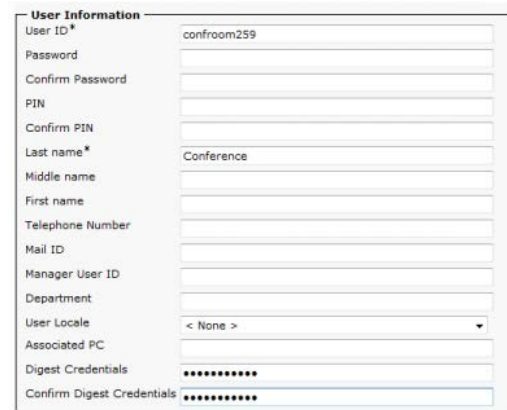
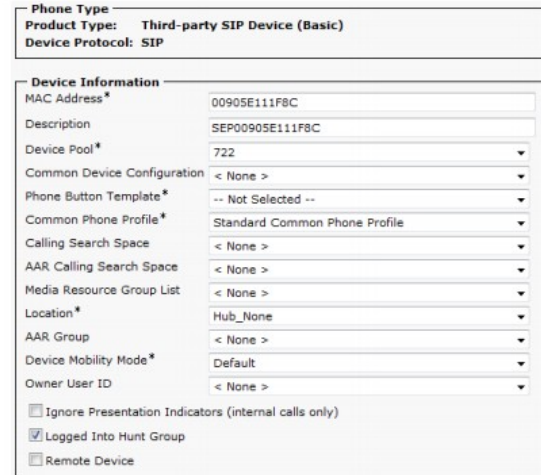


Figure 3

Add a new device

The new device will link to both the Security Profile created or configured earlier and the New User created in the previous steps.

1. Go to **Device > Phone**. The **Find and List Phones** window will open.
2. Click **Add New**.
3. In the **Add a New Phone** window, select the **Phone Type** from the list.
 - a. If you plan to use Q-SYS for a single extension, select **Third-party SIP Device (Basic)**.
 - b. If you plan to use Q-SYS for multiple separate extensions, select **Third-party SIP Device (Advanced)**.



The screenshot shows the 'Device Information' pane of the 'Phone Configuration' window. At the top, it indicates 'Phone Type: Third-party SIP Device (Basic)' and 'Device Protocol: SIP'. The 'Device Information' section contains the following fields and values:

MAC Address*	00905E111F8C
Description	SEP00905E111F8C
Device Pool*	722
Common Device Configuration	< None >
Phone Button Template*	-- Not Selected --
Common Phone Profile*	Standard Common Phone Profile
Calling Search Space	< None >
AAR Calling Search Space	< None >
Media Resource Group List	< None >
Location*	Hub_None
AAR Group	< None >
Device Mobility Mode*	Default
Owner User ID	< None >

Below these fields are three checkboxes: 'Ignore Presentation Indicators (internal calls only)' (unchecked), 'Logged Into Hunt Group' (checked), and 'Remote Device' (unchecked).

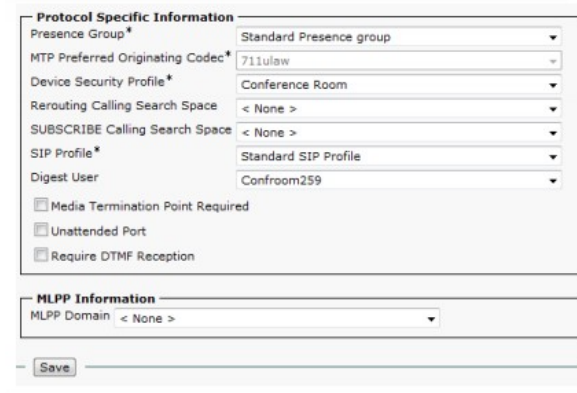
Figure 4

Click **Next**. The **Phone Configuration** window will open.

4. Go to the **Device Information** pane (Figure 4). In the **MAC Address** box, type the 12-digit MAC address of the Q-SYS Core. Use only alphanumeric characters, with no colons or other separators.

The **Description** box will populate automatically after the complete MAC address has been entered.

5. In the **Device Pool** list, select the one in which this device will operate. Ensure that Q-SYS supports the codec used by the pool.
6. Leave the remaining **Device Information** boxes as they are, at their default values.
7. Go to the **Protocol Specific Information** pane (Figure 5). In the **Device Security Profile** list, select the Security Profile created earlier in this procedure.
8. In the **SIP Profile** list, select the User ID created earlier.
9. Leave the remaining **Protocol Specific Information** and **MLPP Information** boxes as they are, at their default values.



The screenshot shows the 'Protocol Specific Information' pane of the 'Phone Configuration' window. It contains the following fields and values:

Presence Group*	Standard Presence group
MTP Preferred Originating Codec*	711ulaw
Device Security Profile*	Conference Room
Retrouting Calling Search Space	< None >
SUBSCRIBE Calling Search Space	< None >
SIP Profile*	Standard SIP Profile
Digest User	Confroom259

Below these fields are three checkboxes: 'Media Termination Point Required' (unchecked), 'Unattended Port' (unchecked), and 'Require DTMF Reception' (unchecked).

The 'MLPP Information' section contains one field: 'MLPP Domain' with a value of '< None >'.

At the bottom of the pane is a 'Save' button.

Figure 5

10. Click **Save**.

11. A new pane called **Association Information** (Figure 6) will appear in the upper left of the **Phone Configuration** window.



Figure 6

If you have set up a single extension (i.e., basic), only one line will appear. If you have set up multiple extensions (i.e., advanced), as many as eight lines will appear.

12. Click **Line [1] – Add a new DN**. The **Directory Number Configuration** window will open.

13. In the **Directory Number Information** pane, type the directory number of the extension in the **Directory Number** box. This number will serve as the *User Name* in Q-SYS.

14. Leave the remaining boxes as they are, at their default values.

15. Click **Save**.

16. If you are setting up a two-line configuration, click **Line [2] – Add a new DN** and repeat steps 13 through 15, using a new Directory Number.

CallManager setup is complete.

Set up Softphone in Q-SYS

Figure 7 shows an example of a Softphone configuration in Q-SYS. Use the values that you have set up in your system.

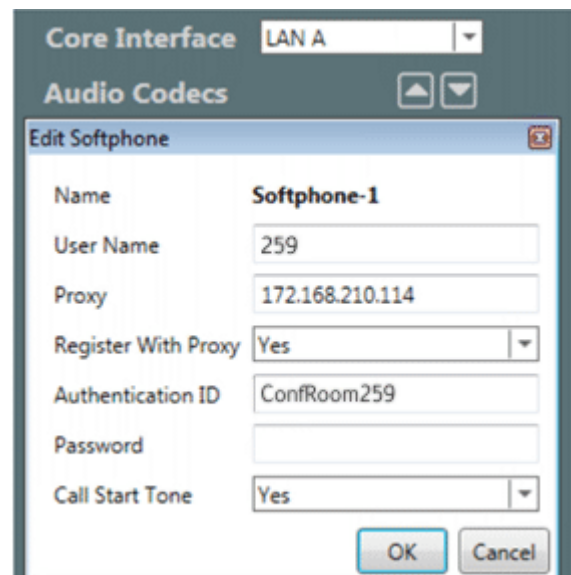


Figure 7

1. In the **User Name** box, enter the *Directory Number* assigned earlier in CallManager.
2. In the **Proxy** box, enter the IP address of the proxy.
3. In **Authentication ID**, enter the *User ID* assigned earlier in CallManager.
4. Leave the **Password** box blank.
5. Click **OK**.