





Softphone Setup Procedure for Q-SYS[™] Platform Core 110f with Cisco Unified Communication Manager (CUCM)

This document applies to this Cisco product: Cisco Unified Call Manager (CUCM)

Introduction

This setup guide is intended to aid an installer or system administrator in configuring Cisco Unified Call Manager (CUCM) and the Q-SYS Softphones set up in a Core 110f Processor to work together. The procedure involves these steps:

- 1. Cisco CUCM setup
 - Phone Security Profile configuration
 - End User configuration
 - SIP Profile configuration
 - Add new phone
- 2. Q-SYS Softphone setup
 - Softphone configuration
 - Checking registration status

The Q-SYS Core 110f Processor has up to four Softphones. When you add users and extensions to the Cisco Unified Communications Management (CUCM) system, make sure you have adequate licensing to proceed. The Q-SYS Core is a third-party SIP endpoint in the CUCM system, and therefore each extension may require available licenses. Purchase any needed licenses from Cisco.

Procedure

To start, you must configure a Security Profile, End Users, and SIP Profile in CUCM. See the procedure detailed in the QSC third-party setup guide *Setup for Q-SYS Softphone—Cisco Unified Communication Manager (CUCM) 10.5*, which is available on the QSC web site **www.qsc.com**.



Add and configure up to four softphones. See Figure 1 for an example of Authentication ID and Password configuration for them.



Figures 2 through 15 show configuration steps to take; some are in **Q-SYS Administrator** and the others are in CUCM. Each diagram indicates which app to use.

Figure 1 — Overview: The Softphones set up in Q-SYS (as many as four in a Core 110f Processor) are each associated with lines in the Cisco Third-party SIP Device (Advanced). Use Q-SYS Administrator to configure **Authentication ID** and **Password** on the Softphones.



Figure 2 — Add the Softphones in Q-SYS Administrator.





Figure 3 — Configure the Softphones in Q-SYS Administrator.



Figure 4 — After the Q-SYS Softphones are set up, the Cisco Third-party SIP Device (Advanced) may appear in CUCM with a status of **Partial Registered**.





Figure 5 – Configure the Phone Button Template and Common Phone Profile in CUCM.



Figure 6 — Also configure the **Owner User ID** in CUCM.











Figure 8 – In CUCM, select Media Termination Point Required. If there are problems making outbound PSTN calls after dialing 9, try selecting Require DTMF Reception. Click Save.







Figure 9 - In CUCM, go to End User Configuration to configure the User ID.

| QSC Q-SYS Core 110f LAN A 192.168.1.9 255.255.255.0 Softphone-1 (2020) Softphone-1 (2021) Softphone-1 (2022) Softphone-1 (2023) | LAN 192.168.1.0/24 | Cisco CUCM 10.5 192.168.1.227 255.255.255.0 3rd-Party SIP Device (Advanced) Line [1] 2020 Line [2] 2021 Line [3] 2022 Line [4] 2023 | | |
|---|---------------------------------|---|--|--|
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| End User Configuration | | Related Links: Back to Find List Users V Go | | |
| Seve 🗙 Delete 🚽 Add New | | | | |
| Home Number Mobile Number Pager Number Pager Number Nal ID Manager User ID Department User Locale Opest Credentals Confirm Digest Credentals User System Default ("Standard (Factory D | ▼ efault) U ▼ Vien Details | | | |
| Home Cluster Enable User for Unified CH IM and Presence (Configure IM and Presence in the associated UC Service Profile) Include meeting information in presence(Requires Exchange Presence Gateway to be configured on CUCM IM and Presence server) UC Service Profile Use System Default View Details | | | | |
| Povice Information | | | | |
| Controlled Devices | Device Association | transmin v | | |

Figure 10 – Continue with setting up **Digest Credentials**, then confirm them on the next line.





| QSC Q-SYS Core 110f | | Cisco CUCM 10.5 | | |
|---|---|--|--|--|
| AN A 192.168.1.9 | • | 1 92.168.1.227 255.255.255.0 | | |
| 255.255.255.0 | | 3rd-Party SIP Device (Advanced) | | |
| Softphone-1 (2020) | | Line [1] 2020 | | |
| Softphone 1 (2021) | | Line [2] 2021 | | |
| $\sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i$ | | | | |
| soπphone-1 (2022) | | Line [3] 2022 | | |
| Softphone-1 (2023) | LAN | Line [4] 2023 | | |
| | ¹ 192 168 1 0/24 | | | |
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| System - Cal Routing - Media Resources - Advanced Features - D | Device 👻 Application 👻 User Management 👻 Bulk Administration 👻 Help 👻 | | | |
| End User Configuration | | Related Links: Back to Find List Users V Go | | |
| 🔜 Save 🗶 Delete 🕂 Add New | | | | |
| Device Information | | ^ | | |
| | Device Association | | | |
| | Line Appearance Association for Presence | | | |
| Available Profiles | * | | | |
| | | | | |
| ~ | * | | | |
| CTI Controlled Device Profiles | ^ | | | |
| | × | | | |
| | * | | | |
| Extension Mobility Available Profiles | | | | |
| | | | | |
| | * | | | |
| Controlled Profiles | | | | |
| | × | | | |
| | * | | | |
| Default Profile Not Selected BLE Precence Group* | • | | | |
| SUBSCRIBE Calling Search Space < None > | | | | |
| Allow Control of Device from CTI | | | | |
| table Extension Mobility Cross Cluster | | | | |
| Directory Number Associations | | | | |
| Future A French (< MOUE > | | | | |
| - Mobility Information | | | | |
| Enable Mobile Voice Access | | | | |
| Maximum Wait Time for Desk Pickup* 10000 | | | | |
| Remote Destination Profiles | • | | | |
| | | | | |
| | * View Details | | | |
| Mutilevel Precedence and Preemption Authorization | | | | |
| MLPP Password | | | | |
| Confirm MLPP Password | | | | |
| MLPP Precedence Authorization Level Default | ¥ | | | |
| CAPF Information | | | | |
| Associated CAPF Profiles | * | | | |
| | View Details | | | |
| CPermissions Information | | | | |
| Groups | | | | |
| | Add to Access Control Group Remove from Access Control Group | | | |
| View Detail | | | | |
| Korts | | | | |
| - View Details | | | | |
| | | | | |
| Save Delete Add New | | | | |

Figure 11 — Scroll down and click **Save**.



Softphone Setup Procedure for Q-SYS Platform Core 110f with Cisco Unified Communication Manager (CUCM)



Figure 12 - In CUCM. go to Phone Security Profile Configuration and set up Transport Type, select Enable Digest Authentication, and designate the SIP Phone Port. Click Save.



After this step, the Q-SYS Softphones will be fully configured with CUCM.

Application Engineering Team

Figure 13 – Go to Service Activation and select these services for activation. Click Save.



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