QSC™

Technical **Notes**
Q-SYS Core 110f

Interfacing VoIP with a Conference Room via Core 110f

Overview

The Q-SYS Core 110f has softphone capability for that can serve as an interface to a VoIP system. This tech note describes how to make and set up this connection.

Configuration

Use Q-SYS Designer 5.0 or higher to build your design. Click the + sign in the Inventory panel. Select the **Streaming I/O** tab and then click **Softphone**. A SoftPhone will appear in the Inventory. Drag the **SoftPhone In**, **Out**, and **Controller** components into the design and place them where you want them to be. They do not need to be on the same page.
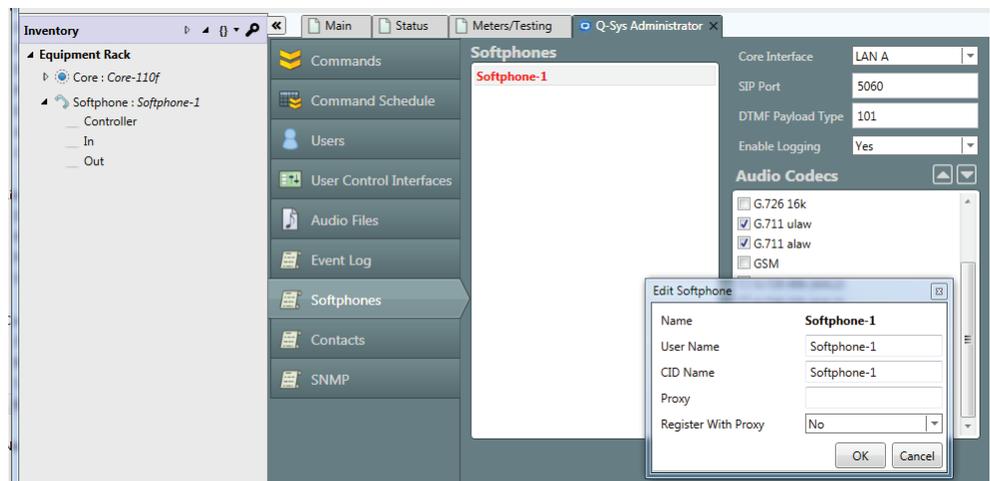

Figure 1. Configure the individual softphone.

Build the rest of your design. When you are ready to configure the SoftPhone, run the design either in **Emulate** mode (**F6** or **File>Emulate**) or as an actual running design in the core (**F5** or **File>Save to Core & Run**). Open Q-Sys Administrator (**Tools>Show Q-Sys Administrator**).

Configure one or more individual softphones

1. Click **Softphones**. A list of available softphones will appear. Double-click the one to be configured. **User Name** is where you enter the extension number, if the softphone will be registering with a proxy or a SIP server; if not, the User Name may be any other alphanumeric name (special characters are not allowed).

2. In **CID Name**, enter the caller ID name that is to be displayed at the far end of a call.

3. In **Proxy**, enter the IPv4 value or DNS searchable name for the SIP server or FXO gateway used to make calls.

4. In **Register With Proxy**, the choice is **Yes** or **No**. If yes, more options appear, and an appropriate value for **Proxy** becomes mandatory.

5. **Authentication ID** and **Password**, which are only used if **Register With Proxy** is **Yes**, are the account or login provided for the SIP server and the password for this account or login.
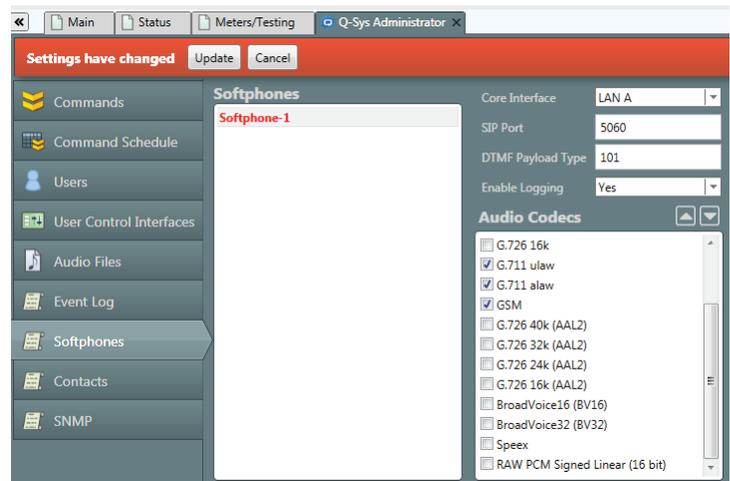

Figure 2. Configure the settings common to all the softphones.

6. Click **OK**.

Repeat this process for any additional softphones that will be used.

Configure the overall softphone parameters

1. In **Core Interface**, select the port—**LAN A** or **LAN B**—that will be the path for the softphone.

2. In **SIP Port**, 5060 is a default value for SIP. If necessary, it may be changed to match the SIP server or the organization's network policy.

3. In **DTMF Payload Type**, 101 is a default for SIP out-of-band data such as digits or RTP events. This value may be changed to match the SIP server.

4. Select the appropriate **Audio Codecs** in the list. You can change their proprities by dragging or by using the up and down arrow buttons. This will change their order of priority when the softphone negotiates with the SIP server or FXO.

5. In **Enable Logging**, select **Yes** or **No**. (If enabled, the log may be found in a file located in the core's onboard storage. To access it, address your browser to *Core IP address*/**sip.txt**)

6. To put these settings in effect, click **Update** at the red bar that says **Settings have changed**. To discard the settings, click **Cancel**.

The softphone functions are now configured in Q-SYS.

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