CCS-UC-1
Crestron Mercury®
Tabletop Conference System

Supplemental Guide

Crestron Electronics, Inc.

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CCS-UC-1:
Crestron Mercury Tabletop Conference System

Introduction

The CCS-UC-1 Crestron Mercury® Conference Room System provides a single tabletop device that allows for room scheduling, presenting, conference calling, and video calling. For more information on features, capabilities, and specifications on the CCS-UC-1 and its accessories, visit www.crestron.com/mercury.

This supplemental guide discusses the requirements, configuration instructions, and operating instructions for the CCS-UC-1 in a variety of environments and applications. For information on installing the CCS-UC-1, refer to the CCS-UC-1 DO Guide (Doc. 7843) at www.crestron.com/manuals.

Requirements

Administrator

This document is written for use by a facility's Information Technology (IT) administrator. The IT administrator should have the following knowledge and skills:

- General Skills
  - IP Networking
  - Basic PC Operation and Administration
  - Basic Smartphone and Tablet Operation
  - VoIP system administration (including SIP device management)
  - Calendaring system administration (for Exchange connectivity)
- Crestron-specific skills
  - Crestron Fusion® software (if applicable)
  - Crestron XiO Cloud™ service

Operating Environment

NOTE: If the CCS-UC-1 is powered with PoE+ (IEEE 820.3at), PoE+ switches that utilize Link Layer Discovery Protocol (LLDP) must have LLDP enabled. Please coordinate with the IT Administrator who manages network infrastructure at the customer site to make sure the PoE+ ports have LLDP enabled. For more information, refer to "Troubleshooting" on page 83.

The CCS-UC-1 requires the following to make the most of its capabilities.

- Crestron Fusion software
- SIP Server
- Microsoft Exchange Server® software

Accessories

The CCS-UC-1 offers a variety of accessories for a custom installation. Refer to the following websites for specifications and other information.

Accessories for CCS-UC-1

PRODUCT	PART NUMBER	WEBSITE
Camera	CCS-CAM-USB-F-100	http://www.crestron.com/products/model/CCS-CAM-USB-F-100
IR Emitter Probe	STIRP	http://www.crestron.com/products/model/STIRP
Microphone Pod	CCS-UCA-MIC	http://www.crestron.com/products/model/CCS-UCA-MIC
Power Pack	PW-2420RU	http://www.crestron.com/products/model/PW-2420RU

Configuration

Requirements

Configuration requires a computer with web browser software. The CCS-UC-1 and computer must be connected to a commonly accessible network.

Connect to the Device

To connect to the device, follow this procedure:

1. On the device, tap ⌂.
2. Press and hold **Help** for approximately 10 seconds to display the **System Info** screen.

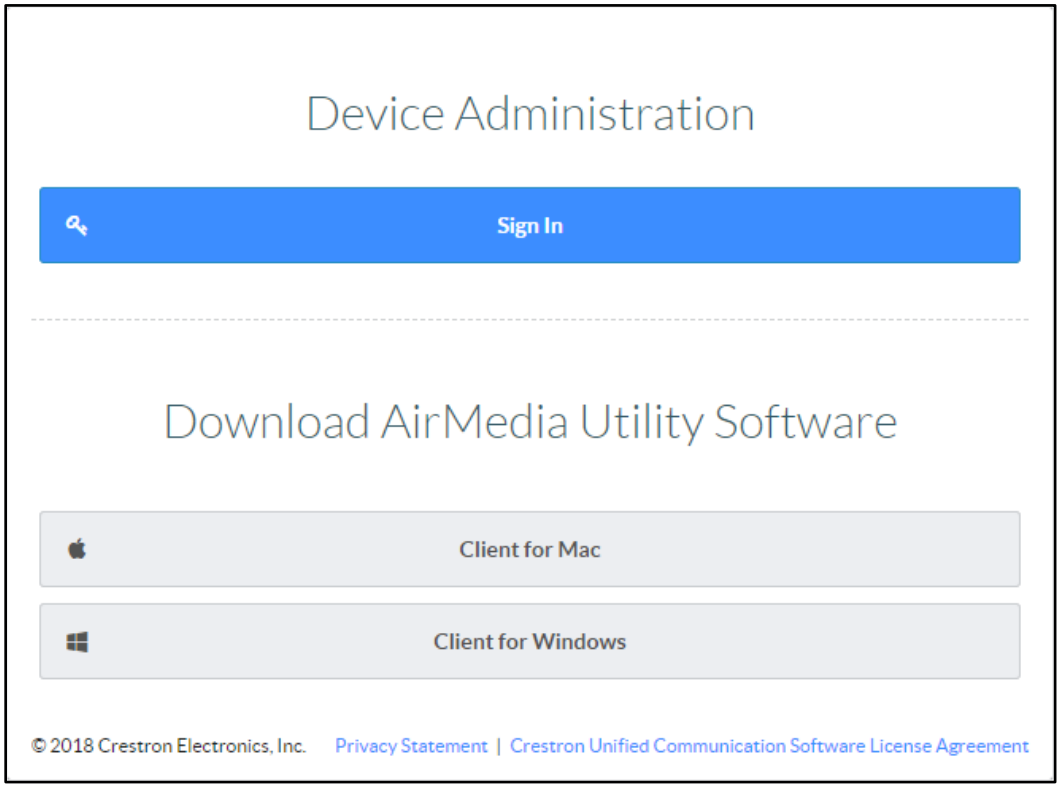
System Info Screen

The **System Info** screen lists the IP address, host name, and other system information.

3. Note the IP address or host name and tap **X** to close the **System Info** screen.

4. On the computer, open a web browser and navigate to the IP address or host name that was displayed on the **System Info** screen. The welcome screen is displayed.

Welcome Screen

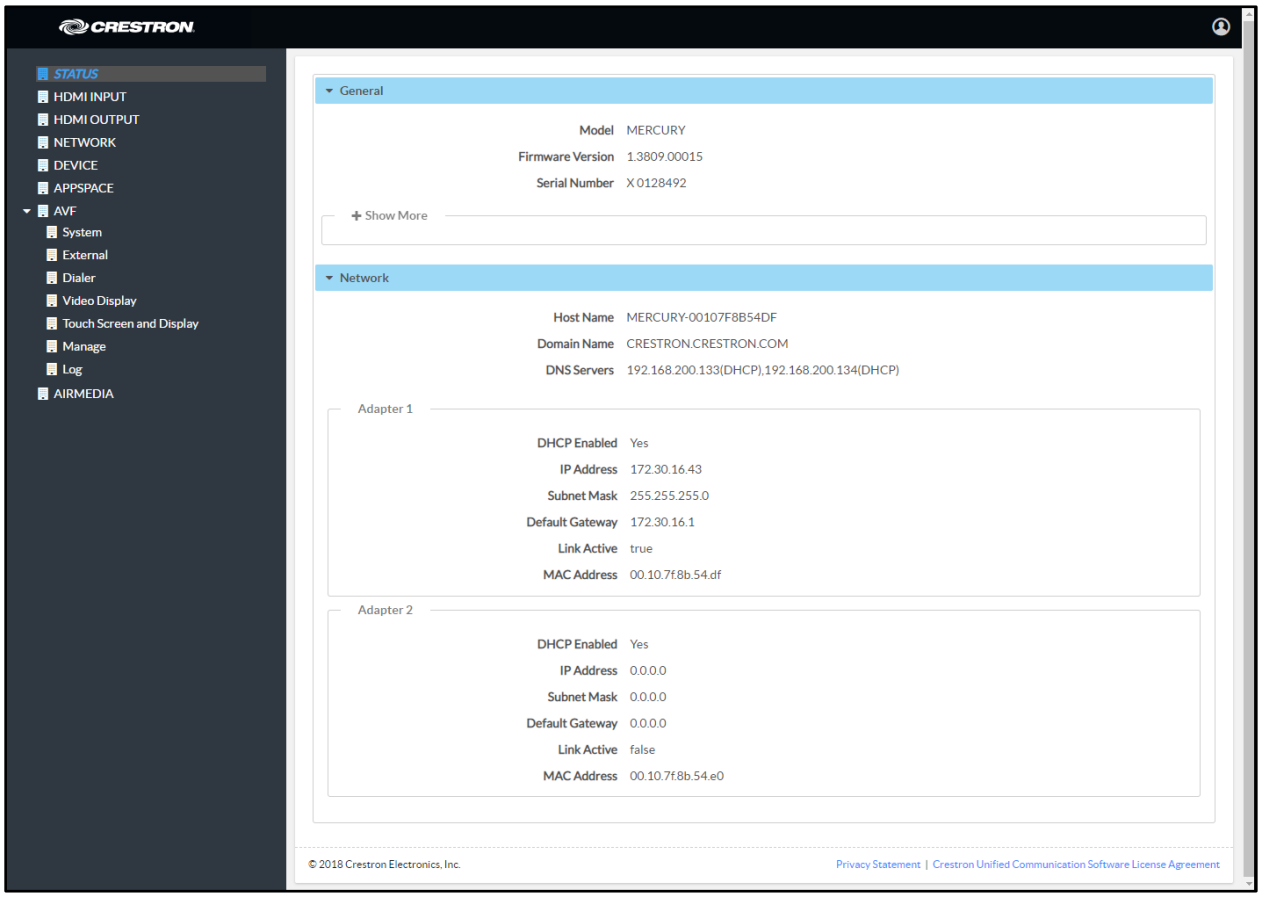


5. Click **Sign In** to continue. A prompt for the user name and password is displayed.

   NOTE: Prior to displaying the prompt for login credentials, the web browser may display a security warning message about the security certificate. It is safe to ignore this warning as long as the user verifies that the browser's address bar indicates the correct IP address or host name of the device.

6. Enter the default user name ("admin") and password ("admin"), and press **Enter** to continue. The device's **Status** screen is displayed.

Status Screen



The **Status** screen displays information about the device and allows configuration of the device's operating parameters:

- **STATUS** contains general information about the device and network information. Click **Network** to view network information. Click **+ Show More Details** to view more details. Click **- Show Less** to view fewer details.
- **HDMI INPUT** configures the HDMI® input.
- **HDMI OUTPUT** displays information about the HDMI output.
- **NETWORK** configures the device for operation in a network environment.

- **DEVICE** is used to upload firmware, reboot the device, view the system log, enable connection to Crestron XiO Cloud service, configure SIP calling parameters, set the date and time, configure for use with Skype® for Business software, authentication management, and setting the device to work with Zoom Rooms™ software.
- **APPSPACE** is used to configure the device to work with the Appspace® content management application for digital signage.
- **AVF** configures the settings for Crestron Fusion integration, power management, dialing features, video display, touch screen and display functionality, and system logs.
- **AIRMEDIA** configures the device's AirMedia® presentation gateway functionality.

Log Out from the Device

To log out from the device and return to the welcome screen, click .

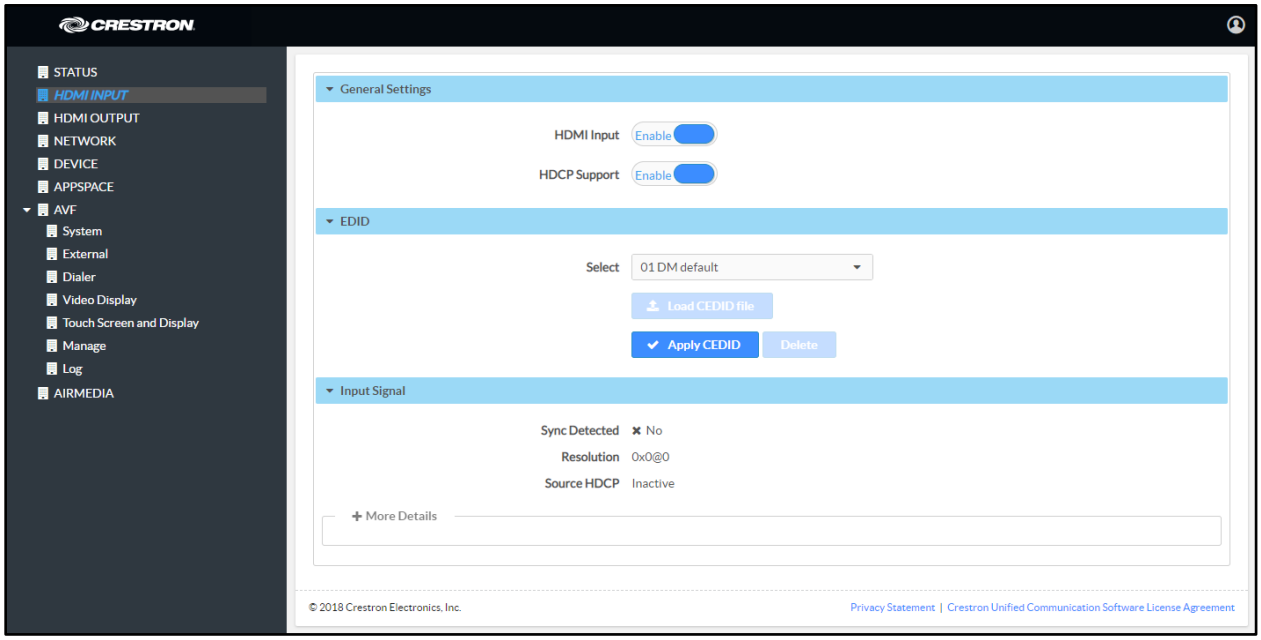
Configure the Device

Configure the device as required for the installation.

HDMI INPUT

Click **HDMI INPUT** to configure the HDMI input. The screen displays a selector for HDCP support, Extended Display Identification Data (EDID) profile selection, and information about the input signal (if present).

HDMI INPUT Screen



General Settings

HDMI Input

Set **HDMI Input** to **Enable** to allow a user to connect their device to the device's HDMI IN port. The default setting is **Enable**.

Set **HDMI Input** to **Disable** to prevent a user from using an HDMI connection from their device to the CCS-UC-1.

HDCP Support

Select whether **HDCP Support** should be set to **Enable** or **Disable**. When HDCP support is enabled, source signals that require HDCP compliance are allowed to pass through to the display that is connected to the HDMI output. When HDCP support is disabled, source signals that require HDCP compliance are not allowed to pass through to the connected display.

NOTE: When HDCP is enabled, the connected display must be HDCP compliant as well.

EDID

EDID is a data structure provided by a digital display to describe its capabilities to a video source (for example, graphics card or set-top box). It is what enables a computer to know what kinds of monitors are connected to it.

The EDID section of the **HDMI INPUT** screen specifies the EDID profile that is selected for use. Only source devices that use the selected EDID profile are allowed to send signals through the CCS-UC-1.

To select an EDID profile to support, select one of the profiles from the drop-down list, and click **Apply EDID**.

If a profile is not listed in the menu, a custom profile can be loaded onto the device. To load a custom EDID profile, follow this procedure:

1. From the **Select** drop-down list, select **Custom**.
2. Click **Load CEDID** file.
3. Click **Browse** and navigate to the location of the custom CEDID file.
4. Select the file to use and click **Open**.
5. Click **Send EDID**.

Input Signal

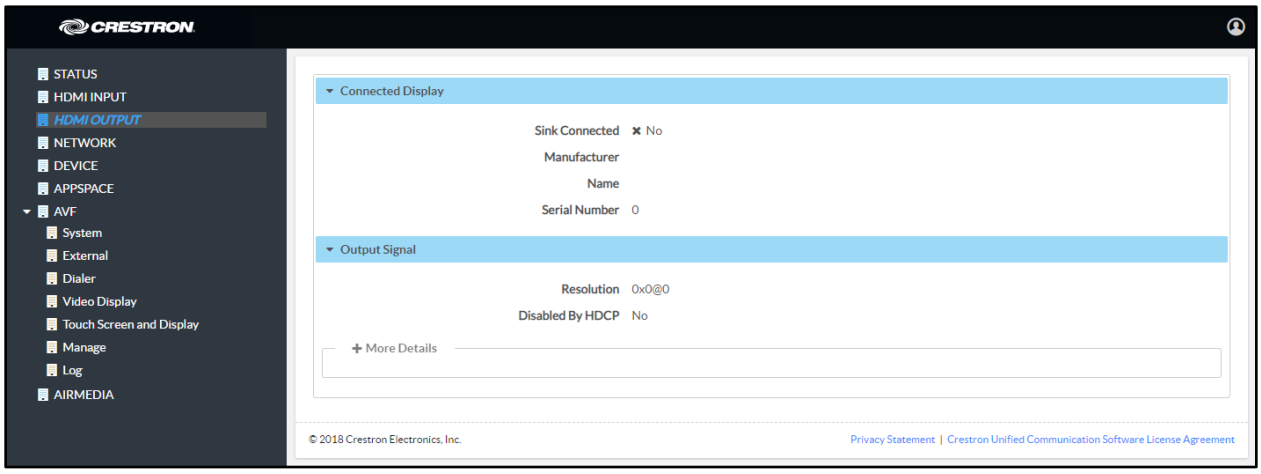
Click **More Details** to view details about the input signal connected to the HDMI input port.

HDMI OUTPUT

Click **HDMI OUTPUT** to display information about the connected display and output signal.

Click **More Details** to view details about the output signal sent to the HDMI output port.

HDMI OUTPUT Screen



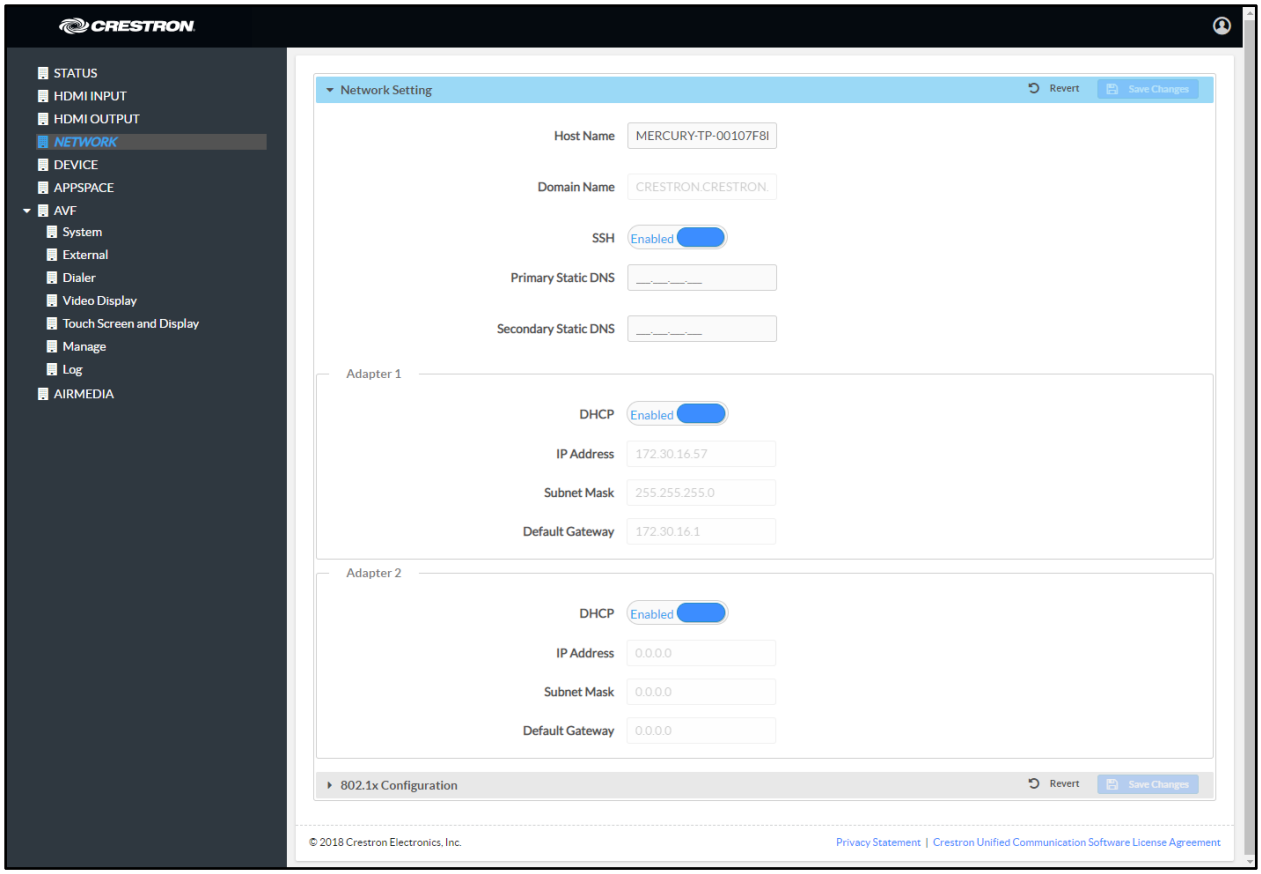
NETWORK

Click **NETWORK** to configure the device for operating in a network environment. The screen displays controls for configuring the network settings and 802.1x authentication.

Network Setting

To configure the network settings follow this procedure:

NETWORK Screen - Network Setting



1. Enter a host name in the **Host Name** field and a domain name (optional) in the **Domain Name** field.

   NOTE: Use a host name and domain name as an alternative to IP addressing when connecting client computers to the device.

2. The CCS-UC-1 has two network adapters, **Adapter 1** and **Adapter 2**. **Adapter 1** is the name assigned to the LAN port and **Adapter 2** is the name assigned to the AUX port. Each network adapter can be set to have their IP address, subnet mask, default gateway, and DNS servers set manually, or obtain the settings from a DHCP server. Choose one of the following options for each network adapter.

   – Set **DHCP** to **Enabled** to use a DHCP server to provide the IP address, subnet

mask, default gateway, and DNS server.

– Set **DHCP** to **Disabled** to manually enter the Ethernet parameters. When set to **Off**, the IP address, subnet mask, default gateway, and DNS servers must be manually entered.

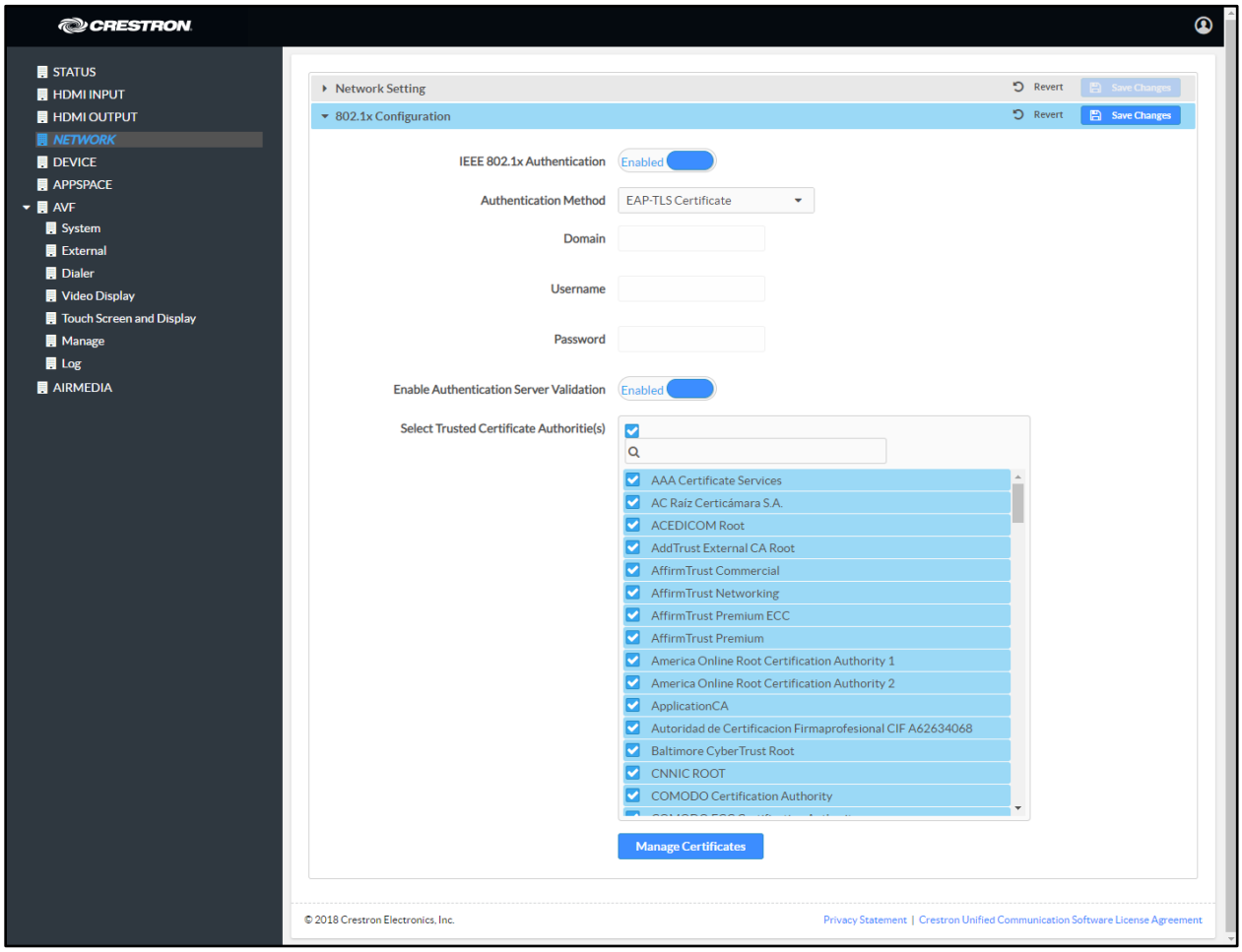
3. Click **Save Changes** when done or **Revert** to return to the previous setting.

NOTE: Any changes made to the network settings will require the device to reboot.

802.1x Configuration

Some networks require devices to use 802.1x port-based network access control for access to the network.

NETWORK Screen - 802.1x Configuration



To use 802.1x, set **IEEE 802.1x Authentication** to **Enabled** and select the desired method of authentication.

- Certificate Authentication

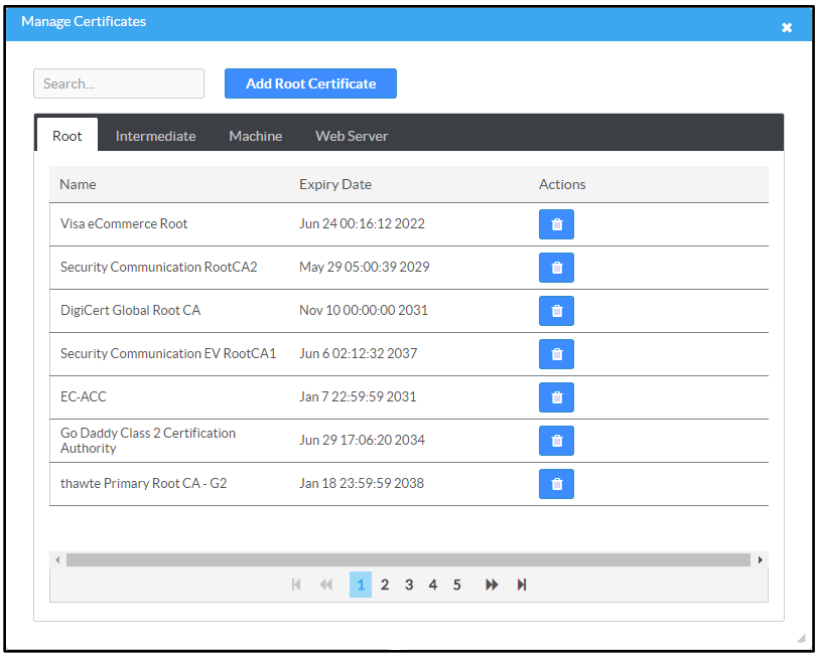
1. In the **Authentication Method** field, select **EAP-TLS Certificate**.

2. Enter the domain name of the authentication server.

3. Upload a machine certificate.

   a. Click **Manage Certificates** to manage certificates for 802.1x authentication. A list of certificates is displayed.

   Manage Certificates Dialog Box

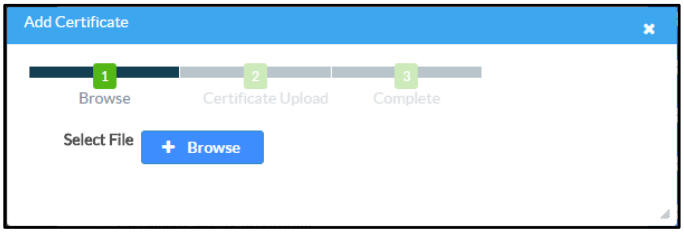


   b. Click the **Machine** tab. The current machine certificate is displayed.

   c. Click to delete the certificate from the list of certificates.

   d. Click **Add Machine Certificate**. The Add Certificate dialog box is displayed.

   Add Certificate Dialog Box



   e. Click **Browse**, select the certificate file, and click **Open**.

   f. When prompted, enter the password used to encrypt the file.

   g. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

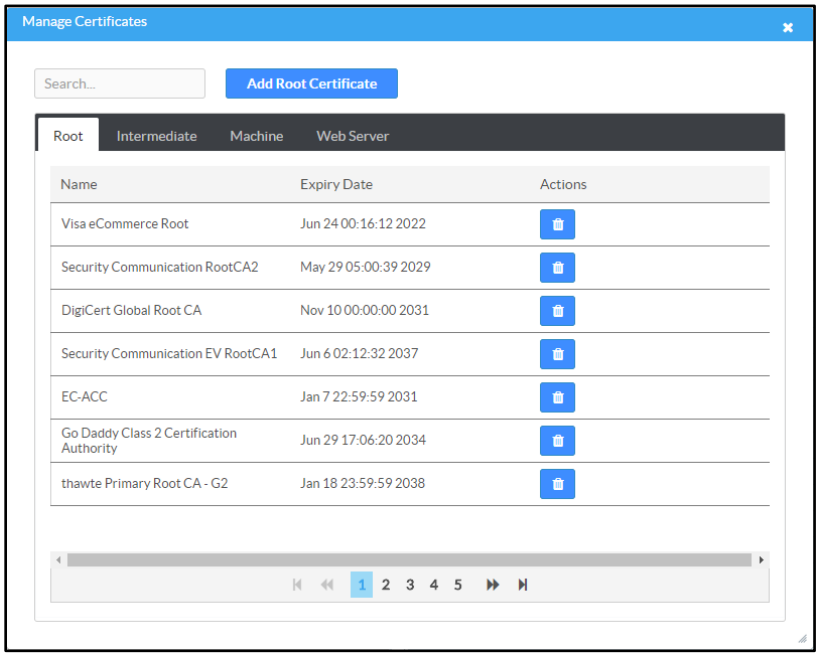
h. Click **OK** to close the **Add Certificate** dialog box.

4. If authentication server validation is not used, set **Enable Server Validation** to **Disabled** and continue to step 6. Otherwise, set **Enable Server Validation** to **Enabled** and select the trusted certificate authorities to use.

   - To select all of the authorities, click the check box next to the search box. To unselect all of the authorities, click the check box again.
   - To search for a specific authority, start typing the name of the authority in the search box and check the box next to the desired authority.

5. Click **Manage Certificates** to manage certificates for 802.1x authentication. A list of certificates is displayed.

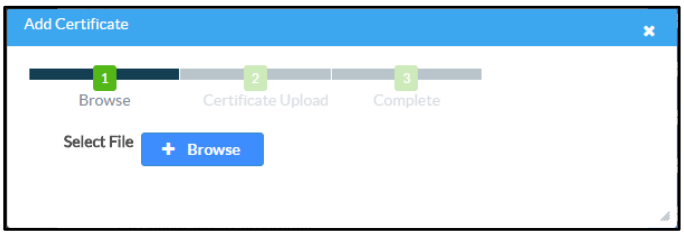
Manage Certificate Dialog Box



a. Click to delete a certificate from the list of certificates.

b. Click **Add Root Certificate**. The Add Certificate dialog box is displayed.

Add Certificate Dialog Box



c. Click **Browse**, select the certificate file, and click **Open**.

d. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

e. Click **OK** to close the **Add Certificate** dialog box.

6. Click **Save Changes** when done or **Revert** to return to the previous setting.

- Password Authentication

1. In the **Authentication Method** field, select **EAP-MSCHAP V2-password**.

2. Enter the domain name of the authentication server, the user name, and the password in their respective fields.

3. Set **Enable Server Validation** to **Enabled** and select the trusted certificate authorities to use.

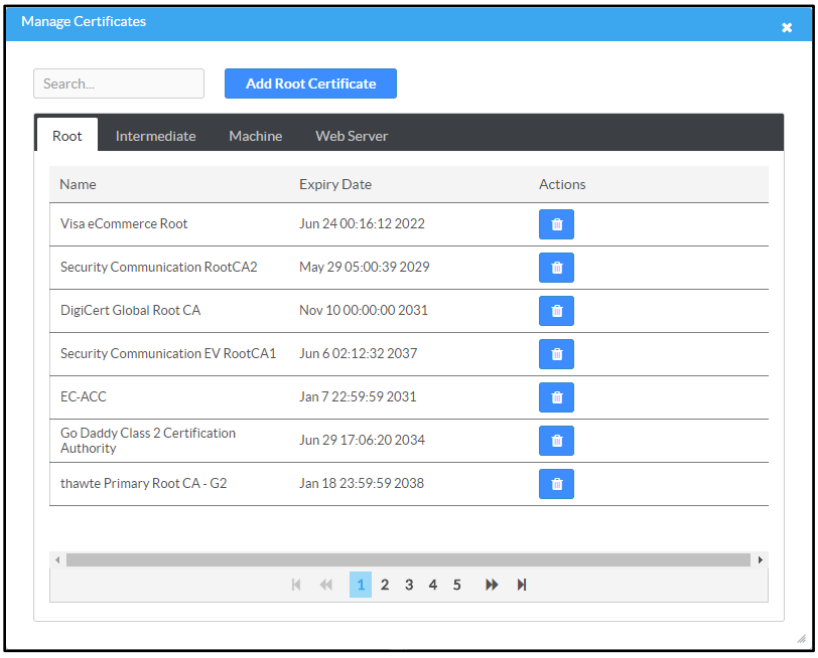
   - To select all of the authorities, click the check box next to the search box. To unselect all of the authorities, click the check box again.

   - To search for a specific authority, start typing the name of the authority in the search box and check the boxes next to the desired authorities.

4. To load a custom certificate, click **Manage Certificates** and follow this procedure:

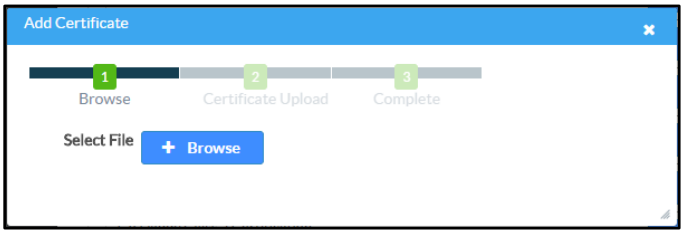
   a. Click the **Root** tab to manage certificates for 802.1x authentication.

Manage Certificates Dialog Box: Root Tab



b. Click **Add Root Certificate**. The Add Certificate dialog box is displayed.

Add Certificate Dialog Box



c. Click **Browse**, select the certificate file, and click **Open**.

d. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

e. Click **OK** to close the **Add Certificate** dialog box.

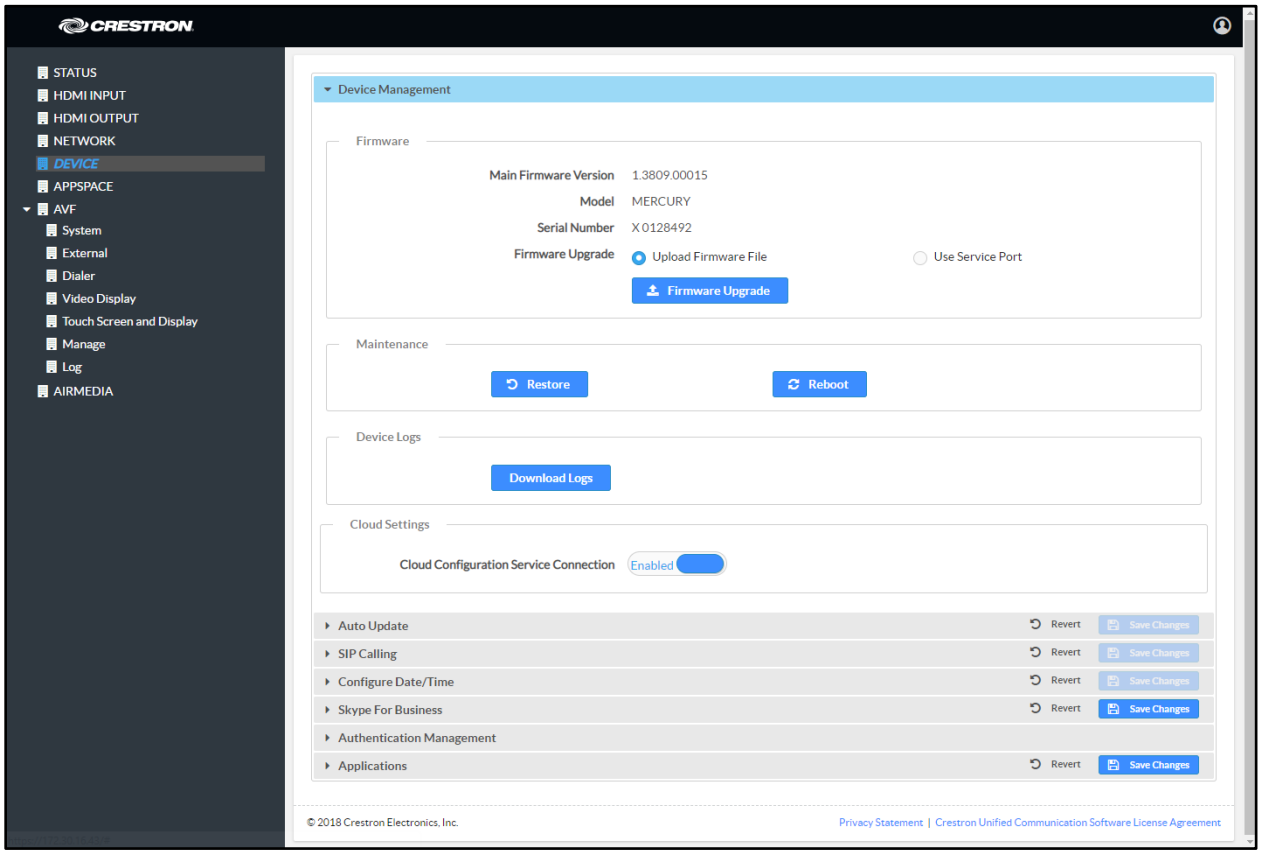
5. Click **Save Changes** when done, or **Revert** to return to the previous setting.

DEVICE

Click **DEVICE** to upload firmware, restore factory settings, download system logs, manage cloud settings, manage auto update settings, configure the device for SIP calling, configure the date and time, configure the device for Skype for Business, authentication management, and set the device's application.

Device Management

DEVICE Screen - Device Management



Firmware

To upload device firmware, follow this procedure:

1. Click **Firmware Upgrade**.
2. Click **Browse** and navigate to the location of the firmware file.
3. Select the file to use and click **Open**.
4. Click **Load** to load the firmware.

Maintenance

Click **Restore** to restore the factory settings. Click **Reboot** to reboot the device.

Device Logs

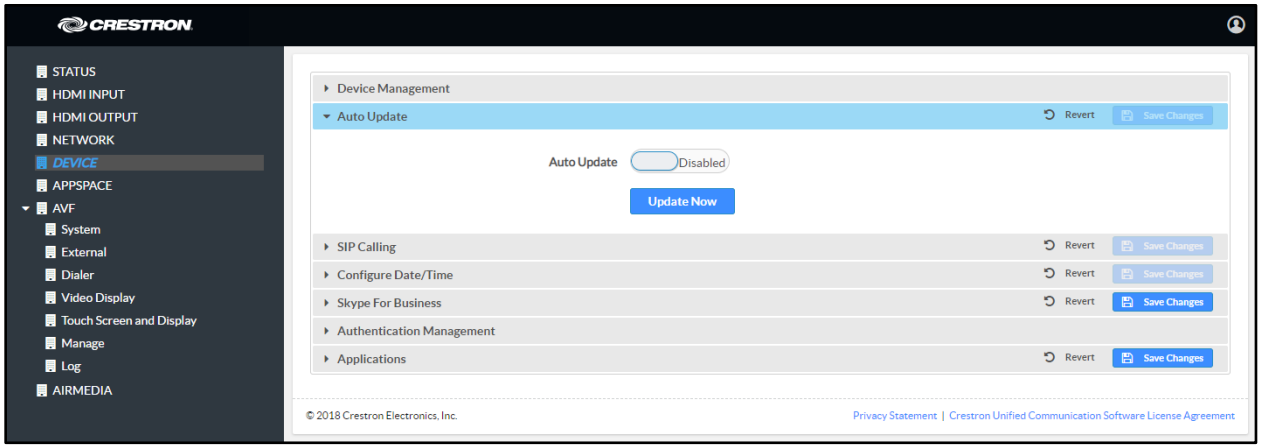
Click **Download Logs** to download the device's system logs to the PC.

Cloud Settings

By default, the **Cloud Configuration Service Connection** is set to **Enabled**. To disable the connection, set **Cloud Configuration Service Connection** to **Disabled**. For more information, refer to "Crestron XiO Cloud Service" on page 49.

Auto Update

DEVICE Screen - Auto Update

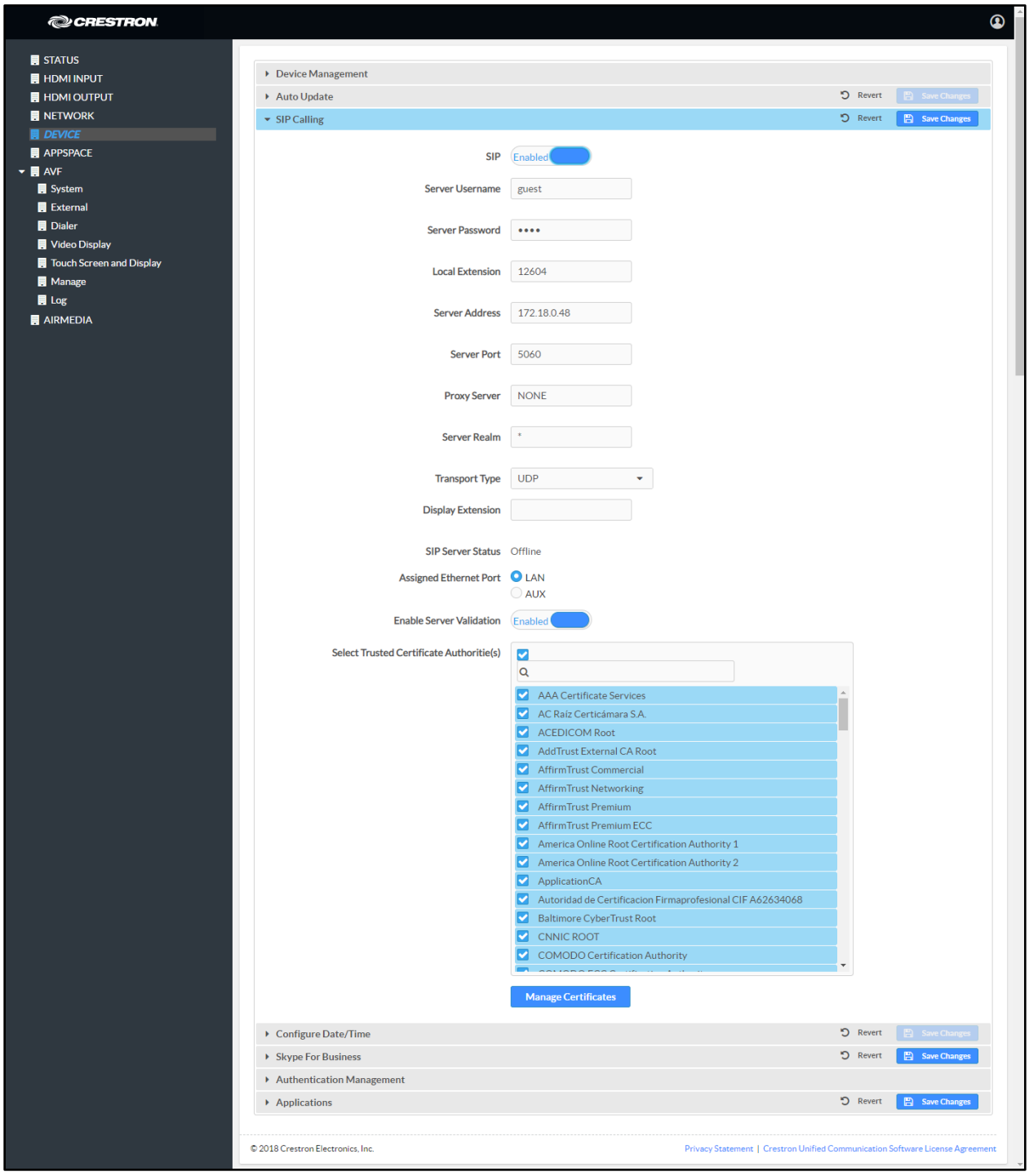


The device can automatically check for firmware updates and update as needed. To allow auto updating, set **Auto Update** to **Enabled**. To turn off auto updating, set **Auto Update** to **Disabled**.

NOTE: To check for available updates, click **Update Now**.

Session Initiation Protocol (SIP) Calling

DEVICE Screen - SIP Calling



To configure the device to make phone calls using a SIP server, follow this procedure:

1. Set **SIP** to Enabled.

2. Select the transport protocol to use for SIP calling from the **Transport Type** drop-down list. Consult with the VoIP administrator for the proper setting.

3. Enter the IP address of the SIP server in the **Server Address** field.

4. Enter the port number to be used within the SIP network in the **Server Port** field.

   NOTE: Port 5060 is the default port used by most SIP servers. Check with the VoIP network administrator for port availability.

5. Enter the user name and password in the **Server Username** and **Server Password** fields.

6. Enter the name of the SIP server realm in the **Server Realm** field.

   NOTE: Many SIP servers do not require a realm and the default value "*" can be used.

7. Enter the local extension number in the **Local Extension** field.

8. Enter the SIP proxy server's IP address or host name in the **Proxy Server** field.

   NOTE: A proxy IP address is not always required. When a proxy IP address is not required, the default value "NONE" can be used.

9. Select the Ethernet port on the CCS-UC-1 to use for SIP calling. Select **LAN** if the LAN port on the CCS-UC-1 connects to the SIP server. Select **AUX** if the AUX port on the CCS-UC-1 connects to the SIP server.

10. If server validation is not used, set **Enable Server Validation** to **Disabled**. Otherwise, set **Enable Server Validation** to **Enabled** and select the trusted certificate authorities to use.

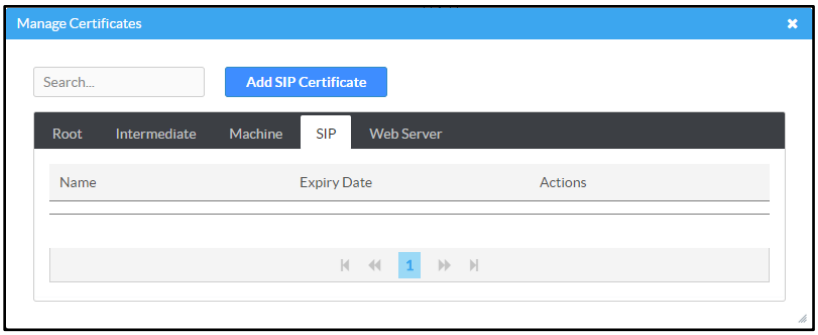
    – To select all of the authorities, click the check box next to the search box. To unselect all of the authorities, click the check box again.

    – To search for a specific authority, start typing the name of the authority in the search box and check the boxes next to the desired authorities.

– To load a custom certificate, click **Manage Certificates** and follow this procedure:

a. Click the **SIP** tab to manage certificates for use with a SIP server. If present, the current SIP certificate is displayed.

Manage Certificates Dialog Box: SIP Tab



b. Click **Add SIP Certificate**.

c. Click **Browse**, select the certificate file, and click **Open**.

d. When prompted, enter the password used to encrypt the file.

e. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

f. Click **OK** to close the **Add Certificate** dialog box.

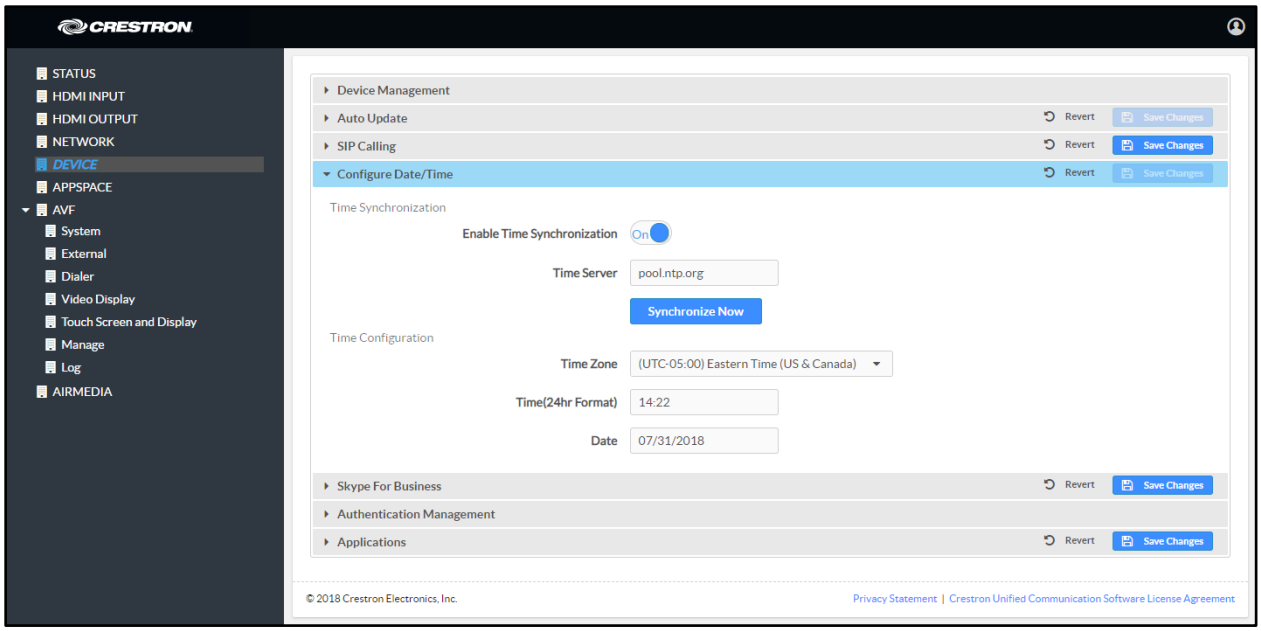
11. Click **Save Changes** when done or **Revert** to return to the previous setting. The device will reboot.

12. Verify the status of the connection to the SIP server in the **Status** field.

For additional details on configuring the CCS-UC-1 to operate with specific SIP servers, refer to the DOCUMENTATION tab at www.crestron.com/mercury.

Configure the Date and Time

DEVICE Screen - Configure Date/Time



The device's internal clock can be synchronized with a time server or set manually.

NOTE: When connected to Crestron Fusion, the time is automatically set from Crestron Fusion. Any settings made here do not apply.

- Use Time Server Synchronization

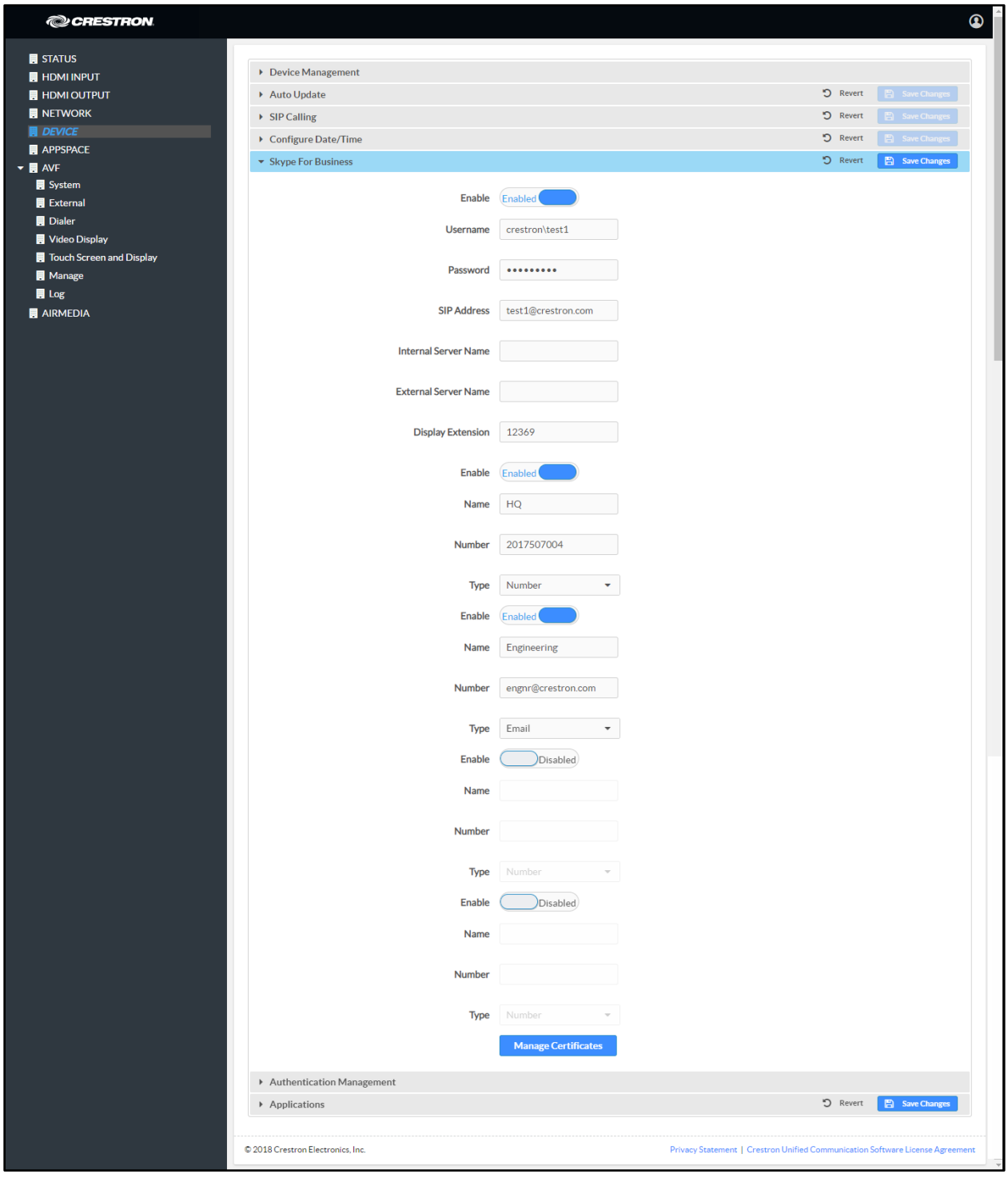
  1. Set **Enable Time Synchronization** to **On**.
  2. Enter the time server's IP address or host name in the **Time Server** field.
  3. Click **Synchronize Now** to sync Crestron Mercury with the specified time server.

- Set the Time Manually

  1. Set **Enable Time Synchronization** to **Off**.
  2. Select the time zone from the **Time Zones** list.
  3. Enter the time (in 24 hour format) in the **Time(24hr Format)** field.
  4. Select the date from the **Date** field.
  5. Click **Save Changes** when done or **Revert** to return to the previous setting.

Skype for Business

DEVICE Screen – Skype for Business



The CCS-UC-1 can be configured to operate as a Skype® for Business client that can host meetings, make phone calls, and perform other Skype for Business functions.

For information on supported versions of Skype for Business, refer to Answer ID 5829 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

Use the following table and procedure to configure the device for Skype for Business.

Required Fields

USER is HOSTED BY	SIP ADDRESS and USER PRINCIPAL NAME (UPN)	REQUIRED FIELDS
On-premises Skype for Business Server	SIP address and UPN may be the same	**Username:** UPN or domain\username **Password**: Password **SIP Address**: SIP address
Office 365® Application	SIP address and UPN are traditionally the characters before "@onmicrosoft.com"	**Username**: UPN **Password**: Password **SIP Address**: SIP address

1. Set **Enable** to **Enabled**.
2. Refer to the table above to determine the required fields and configure the **Username**, **Password**, and **SIP Address** fields as required.

   NOTE: If the Office 365 account uses modern authentication, the login's password must be entered on the touch screen after the parameters have been saved in step 6.

3. If automatic discovery for mobile clients hasn't been configured, enter the following information:

   – **Internal Server Name**: https://webdir.online.lync.com/Autodiscover/autodiscoverservice.svc/Root

   – **External Server Name**: https://webdir.online.lync.com/Autodiscover/autodiscoverservice.svc/Root

   NOTE: If these fields are left blank, the client uses autodiscovery. If the Skype for Business deployment does not use autodiscovery, these fields should be filled with the appropriate information. These addresses are valid only for Office 365 users and are different for On-premises Skype for Business Server deployments.

4. The device can provide up to four speed dial entries. To configure a speed dial entry, perform the following procedure:

   a. Set **Enable** to **Enabled**.

   b. Enter the "friendly" name of the speed dial entry in the **Name** field.

c. Enter the email address, phone number, or meeting URL in the **Number** field.

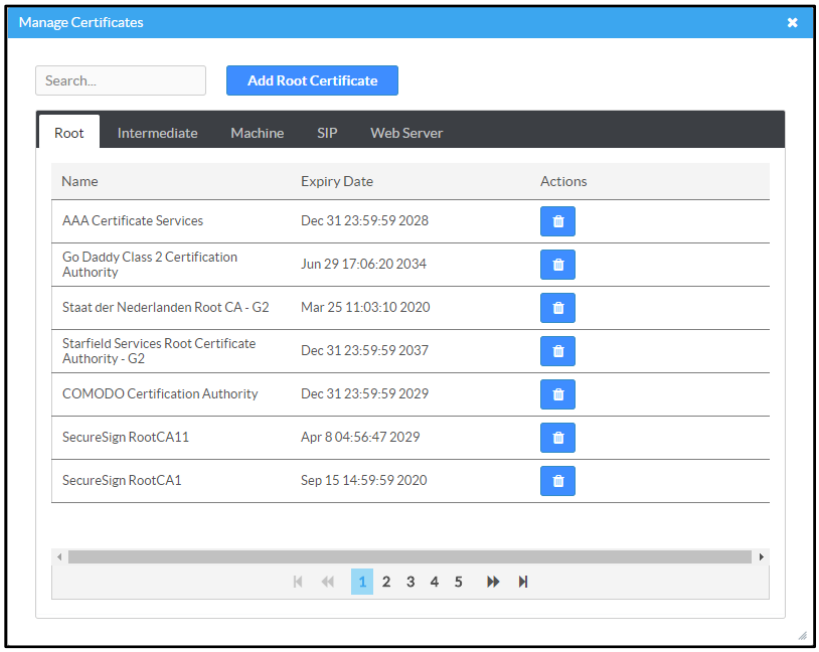
NOTE: The information entered in the **Number** field must be formatted for the selected **Type** in step d below.

d. Select the type of entry to be assigned from the **Type** drop-down list.

- **Number:** Select **Number** to have the speed dial button dial a phone number.
- **Email:** Select **Email** to have the speed dial button create an ad hoc meeting with a Skype for Business contact's email address.
- **URL:** Select URL to have the speed dial button automatically join a Skype for Business meeting.

5. If the installation uses an on-premises Skype for Business deployment that requires a private root certificate, click **Manage Certificates** to manage certificates for authentication. A list of certificates is displayed.

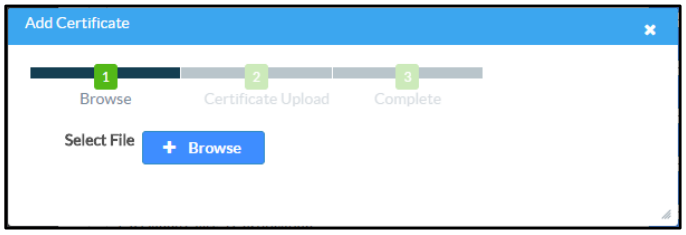
Manage Certificates Dialog Box



a. Click to delete a certificate from the list of certificates.

b. Click **Add Root Certificate**. The Add Certificate dialog box is displayed.

Add Certificate Dialog Box



c. Click **Browse**, select the certificate file, and click **Open**.

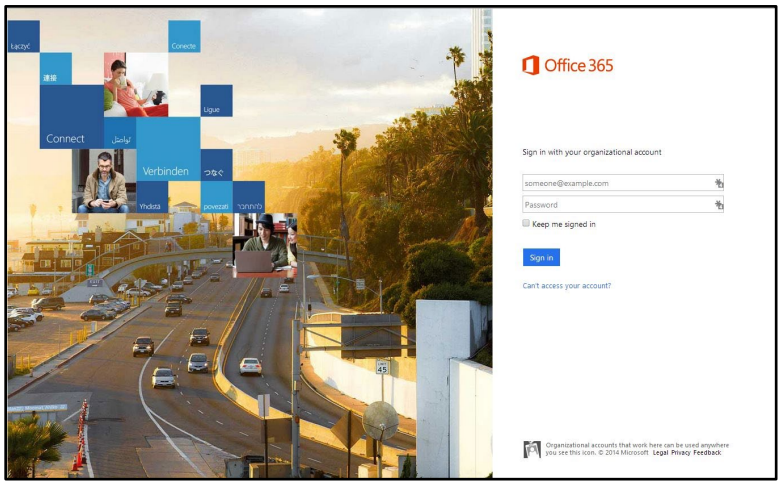
d. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

e. Click **OK** to close the **Add Certificate** dialog box.

6. Click **Save Changes** when done or **Revert** to return to the previous setting.

If the Office 365 account uses modern authentication, a login screen is displayed on the touch screen as shown below.

Office 365 Login Screen

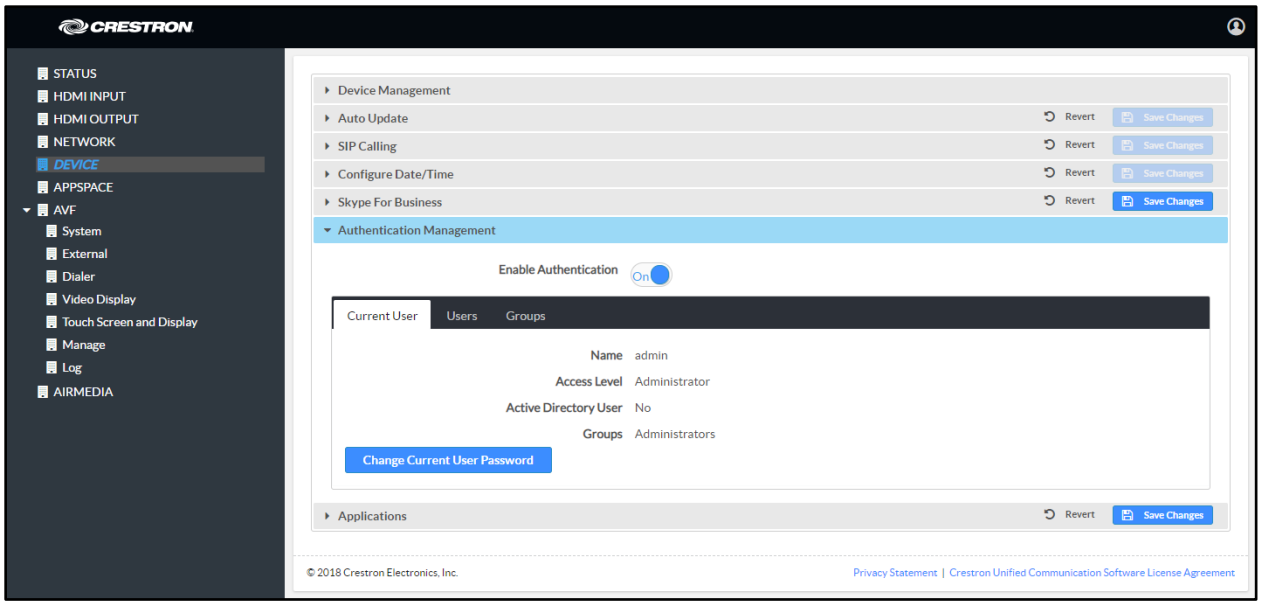


1. Tap inside the password field. A keyboard is displayed.

2. Enter the account password associated with the displayed user name and tap **Go**.

Authentication Management

DEVICE Screen - Authentication Management



This section is used to set the password for the current user, and manage authorized users and user groups. By default, **Enable Authentication** is set to **On**.

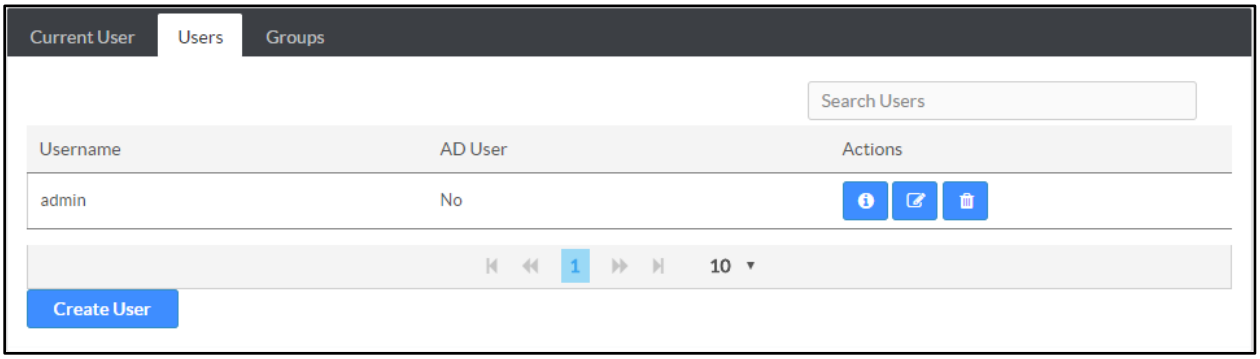
- Current User

  1. Click the **Current User** tab to set the current user's password.
  2. Click **Change Current User Password** to change the current user's password.
  3. Enter the new password in the **Password** field.
  4. Confirm the new password in the **Confirm Password** field.
  5. Click **OK** to set the new password or click **Cancel** to cancel.

- Users

  Click the **Users** tab to manage authorized users. A list of authorized users is displayed.

DEVICE Screen - Authentication Management: Users Tab



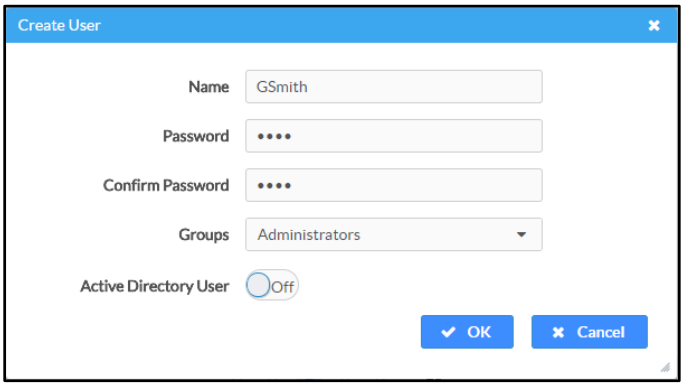
  – Click to view details about a user.

  – Click to update a user's information.

  – Click to delete the user from the list of authorized users.

  – Click **Create User** to add a user. The **Create User** dialog box is displayed.

Create User Dialog Box

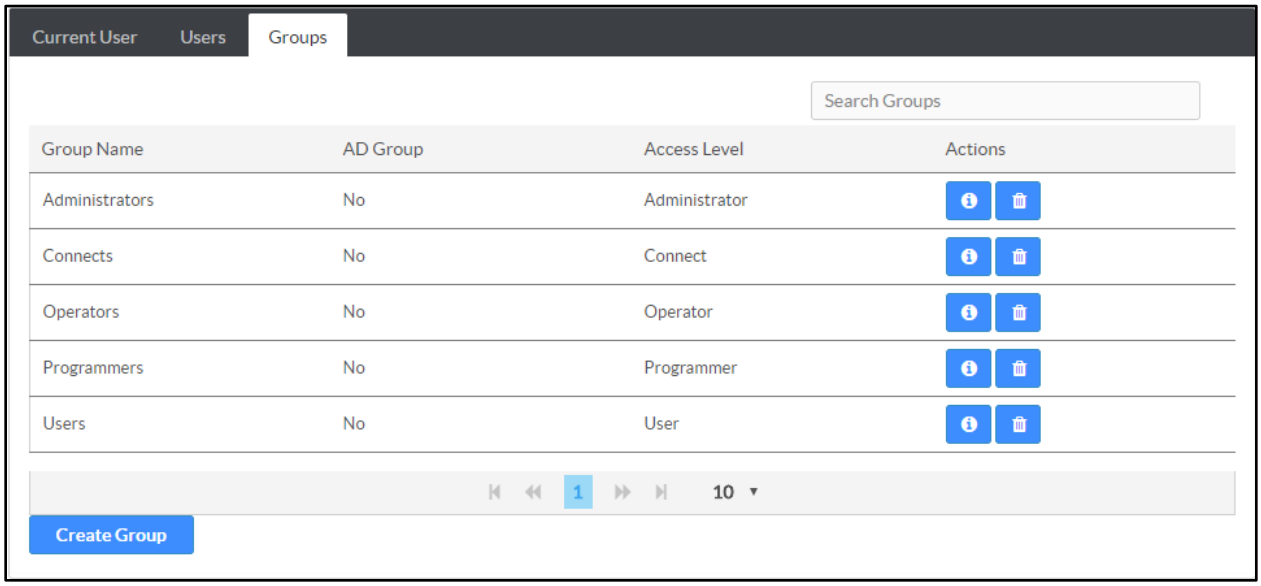


1. Enter the user name in the **Name** field.
2. Enter the user password in the **Password** field.
3. Confirm the password in the **Confirm Password** field.
4. Select the user's group memberships from the **Groups** drop-down list.
5. Select whether the user is a member of the Active Directory® credential management group with the **Active Directory Group** switch.
6. Click **OK** to save the user or click **Cancel** to cancel.

- Groups

  Click the **Groups** tab to configure user groups. A list of user groups is displayed.

DEVICE Screen - Authentication Management: Groups Tab

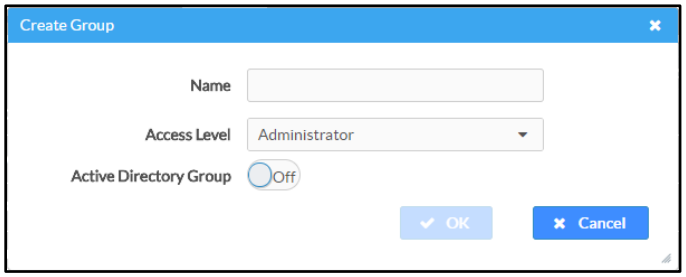


  – Click to view details about a group.

  – Click to delete the group from the list of groups.

  – Click **Create Group** to add a group to the list of user groups. The **Create Group** dialog box is displayed.

Create Group Dialog Box



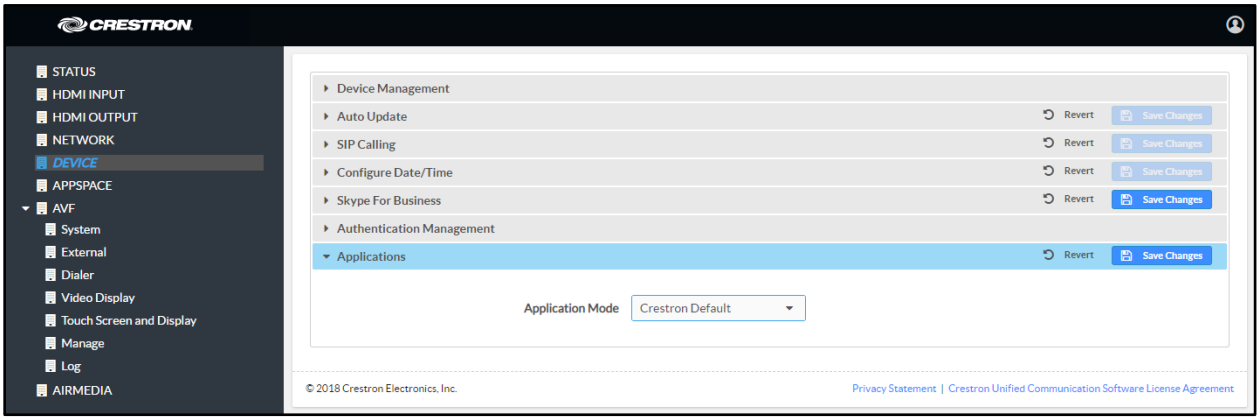
1. Enter the group name in the **Name** field.
2. Select the group's access level from the **Access Level** drop-down list.
   - **Administrator** grants full access to the system settings and device functions
   - **Connect** grants access to the device functions
   - **Operator** grants read access to the system settings and full access to the device functions

- **Programmer** grants access to program/project specific settings/ReadOnly to the rest, read/write access to the file system, no access to the setup project
- **User** grants access to the device functions

3. Click **OK** to save the group or click **Cancel** to cancel.

Applications

DEVICE Screen - Applications



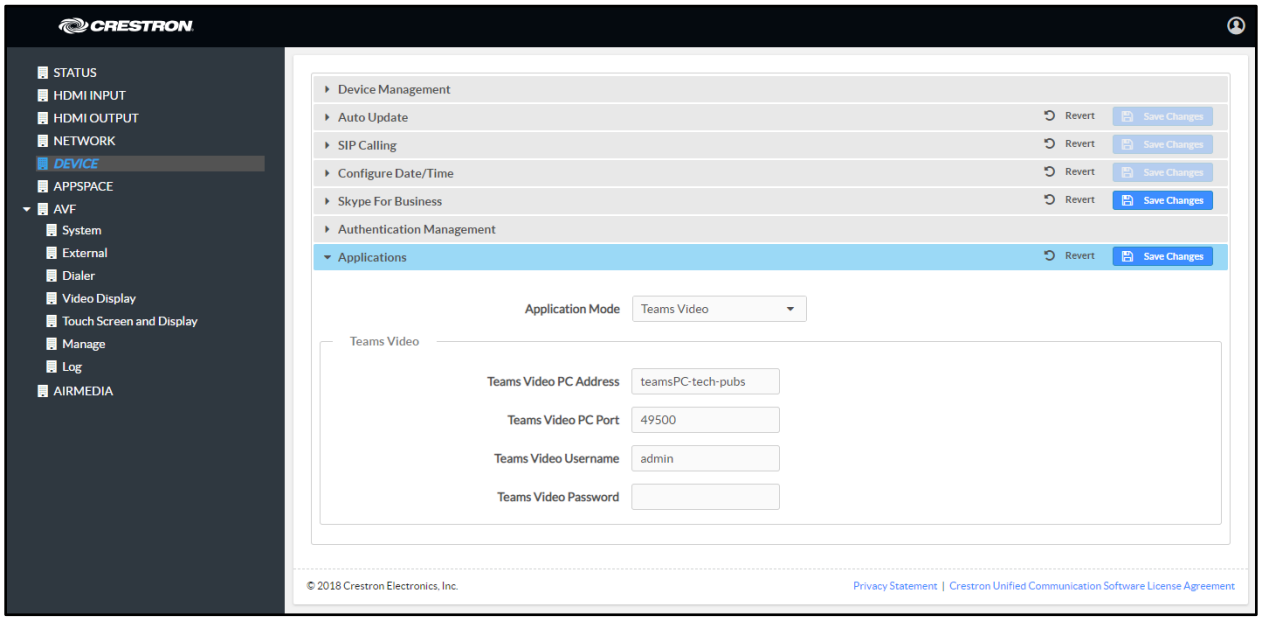
This section is used to select the application to run. The device can run one of three application modes:

- Select **Crestron Default** to have the device work as described in this document.
- Select **Zoom Rooms** to have the device work as a Zoom room controller used to control a Zoom room conference system.

  For more information on using the CCS-UC-1 as a Zoom room controller, refer to https://www.crestron.com/Products/Featured-Solutions/Zoom-Room-Solutions and https://support.crestron.com/app/answers/answer_view/a_id/5829#MercuryZoom.
- Select **Teams Video** to have the device work as a controller for a Crestron Flex UC system with Microsoft Teams™ software. Settings for using the device as part of a Crestron Flex UC system are displayed.

NOTE: After selecting **Teams Video**, click **Save Changes** and allow the device to reboot. After the reboot is complete, the Teams Video settings can be specified.

DEVICE Screen – Applications (Teams Video Settings Shown)



To configure the device for use with a Crestron Flex Microsoft Teams UC system, enter the following information:

- **Teams Video PC Address**: Enter the IP address or host name of the UC-ENGINE running Microsoft Teams software.

  NOTE: The host name is printed on a label on the UC-ENGINE (mounted on the UC-BRKT-100-ASSY). For more information, refer to the UC-M150-T Quick Start (Doc. 8366) at www.crestron.com/manuals.

- **Teams Video Port:** By default, port number 49500 is used. If a different port number has been configured on the PC running Microsoft Teams software, enter it here.

- **Teams Video Username:** Enter the login username for the Microsoft Teams software host PC.

- **Teams Video Password:** Enter the login password for the Microsoft Teams software host PC.

For more information on configuring a Crestron Mercury UC system with Microsoft Teams software, refer to the UC-M150-T/-B150-T/-B160-T/-C150-T UC Video Conference Systems for Microsoft Teams Supplemental Guide (Doc. 8360) at www.crestron.com/manuals.

Click **Save Changes** when done or **Revert** to return to the previous setting. The device will reboot.

APPSPACE

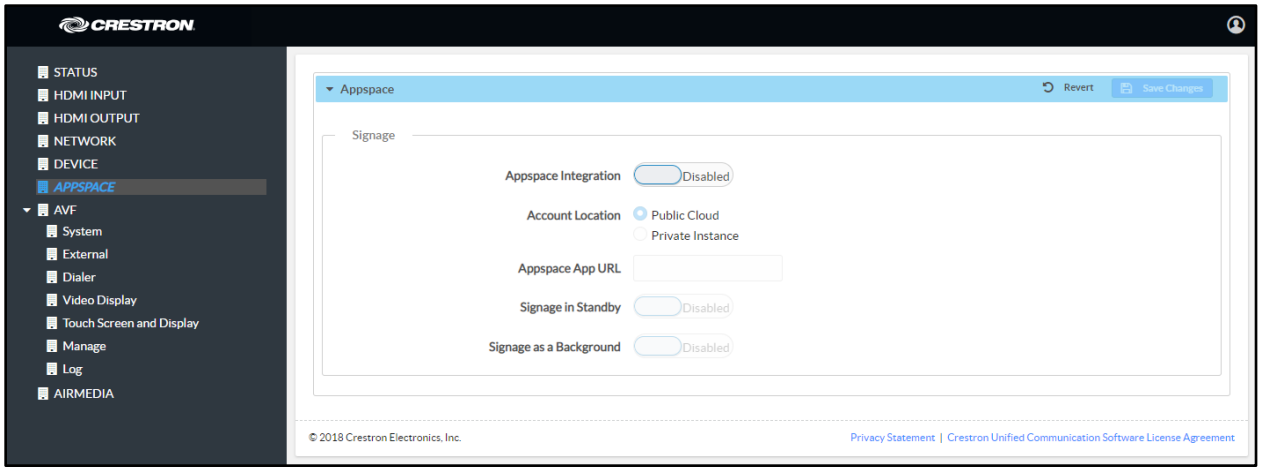
The CCS-UC-1 can display content from an Appspace account when the device is not in use (determined by the built-in occupancy sensor).

NOTES:

- An active Appspace account is required.
- Appspace video service is not supported.
- To use Appspace when the device is in Standby, the Power Settings must be set to "**Occupancy Based With Signage**" as described in "Power Settings" on page 32.

Click **APPSPACE** to configure the device's operation with the Appspace platform.

APPSPACE Screen



To configure the device for use with Appspace:

1. Set **Appspace Integration** to **Enabled** to enable Appspace when the CCS-UC-1 goes to sleep based on occupancy (Standby). When enabled, the display on the CCS-UC-1 turns off and the connected display will show Appspace content.

   NOTE: To use Appspace when the device is in Standby, the Power Settings must be set to "**Occupancy Based With Signage**" as described in "Power Settings" on page 32.

2. Choose the **Account Location**.
   - **Public Cloud**: Select this option to use the Appspace public web app.
   - **Private Instance**: Select this option to use a privately hosted instance of the Appspace web app.
3. Enter the **Appspace App URL**. This is the URL where a privately hosted instance of the Appspace web app can be found. Leave blank if the **Public Cloud** account location is selected.

4. Set **Signage in Standby** to **Enabled** to display Appspace content when the CCS-UC-1 goes to sleep based on occupancy. Set to **Disabled** to turn off the feature.

5. Set **Signage as a Background** to **Enabled** to display Appspace content on the connected display behind the calendar, date/time, system name, connection info and branding portions of the display.

   NOTE: When set to **Enabled**, the **Enable Custom Backgrounds** and **Interval Between Backgrounds** options on the Room Schedule screen (described in "Display Customization" on page 45) are disabled.

6. Click **Save Changes** when done or **Revert** to return to the previous setting.

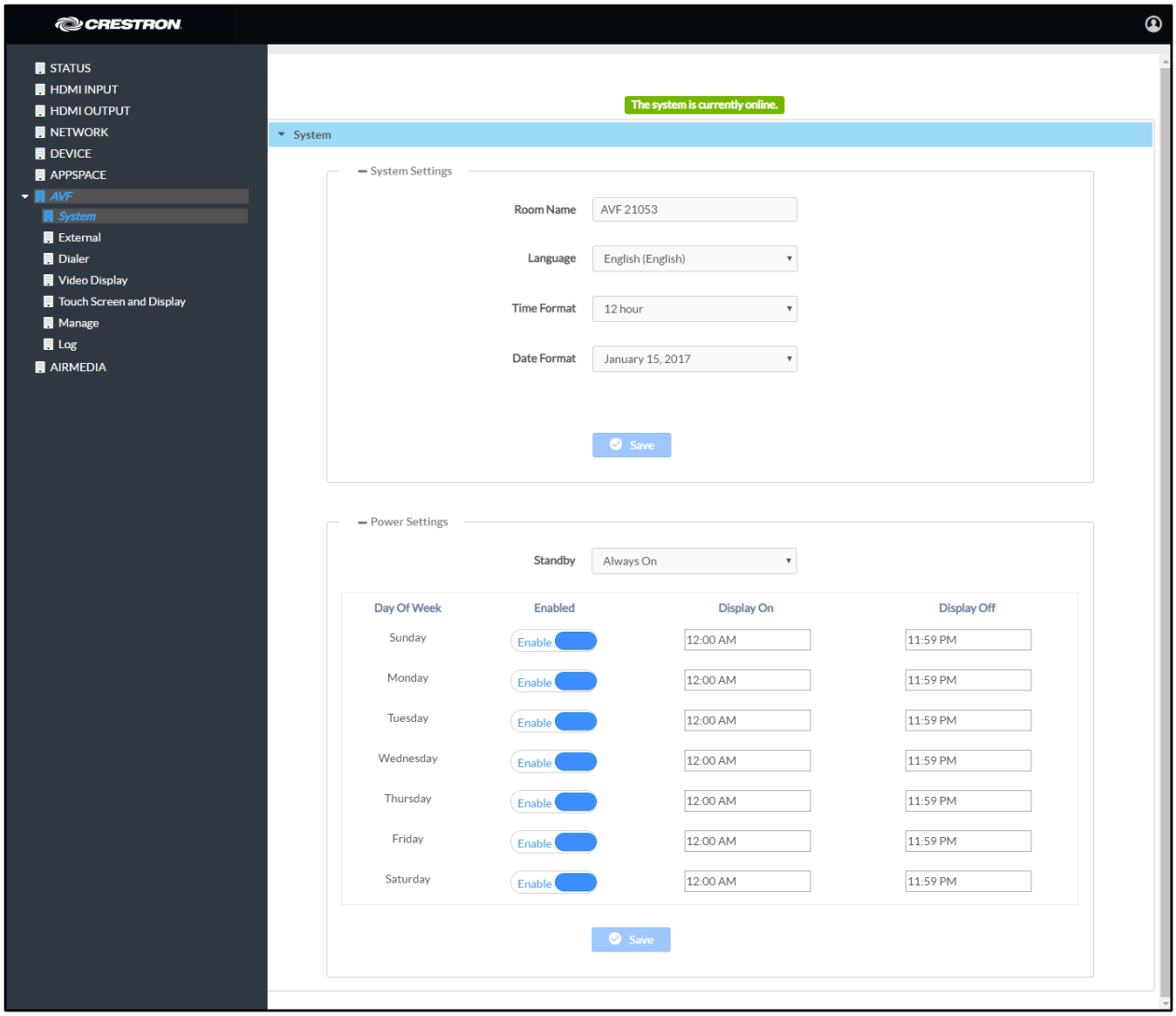
.AV Framework (AVF)

Click **AVF** to configure the device's .AV Framework™ platform functionality. Click ▶ to display links for configuring system settings, controlling Crestron Fusion® and calendar settings, configuring the dialer, configuring the connected video display, configuring touch screen and connected display operation, managing the system's configuration, and viewing activity logs.

System

The **System** screen specifies the room name, the local language setting, the time format, the date format, and manages the power settings.

AVF Screen - System



System Settings

To configure the system settings, follow this procedure:

1. Click **System** to display the **AVF** (System) screen.
2. In the **Room Name** field, enter the name of the room where the device is installed.
3. In the **Language** field, select the local language from the drop-down list.
4. In the **Time Format** field, select the time format from the drop-down list (**12 hour** or **24 hour**).
5. In the **Date Format** field, select the date format from the drop-down list.

Power Settings

Configure power settings to manage the system's power usage. To configure the power settings, follow this procedure:

1. Select one of the following modes from the **Standby** drop-down list.
   - **Always On** sets the following:
     - The connected display will be on during business hours (defined in step 2).
     - The system will wake up based on occupancy outside of business hours.
     - The touch screen will always be on.
     - Changes reported by the built-in occupancy sensor will be ignored.
   - **Based on Occupancy** sets the following:
     - The built-in occupancy sensor will be used to determine when the room is occupied or vacant.
     - When the room is occupied the system will be on.
     - When the room is vacant the system will be off.
     - The connected display will be on when the room is occupied and off when the room is vacant.
     - The touch screen will be on when the room is occupied and off when the room is vacant.
     - Crestron Fusion power events will be ignored.
     - Connecting an active HDMI input source will not turn on the room.
     - Connecting to the device by an AirMedia connection will not turn on the room.

- **Occupancy Based With Signage** sets the following:
  - The built-in occupancy sensor will be used to determine when the room is occupied or vacant.
  - When the room is occupied the system will be on.
  - When the room is vacant, the system will be operating in standby mode during defined business hours and off outside of business hours (defined in step 2).
  - The connected display will be on when the system is in standby mode, and off when the system is off.
  - The touch screen will be on when the room is occupied, and off when the room is vacant.
  - When in the standby mode, digital signage that is configured to run during standby mode will be displayed.
  - Crestron Fusion power events will be ignored.
  - Connecting an active HDMI input source will not turn on the room.
  - Connecting to the device by an AirMedia connection will not turn on the room.

NOTE: This setting must be selected if Appspace is to be used.

2. For each day of the week, define business hours:
   - **Enabled** sets whether the day is part of the business hours schedule. Set the switch to **Enabled** to have the day included in the business hours schedule. Set the switch to **Disabled** to remove the day from the business hours schedule.
   - **Display on** sets the time the connected display will turn on. To set the on time, click the hour, then click the exact time.
   - **Display Off** sets the time the connected display will turn off. To set the off time, click the hour, then click the exact time.
3. Click **Save** to save the settings.

The following table shows each power option's ability for each **Standby** setting.

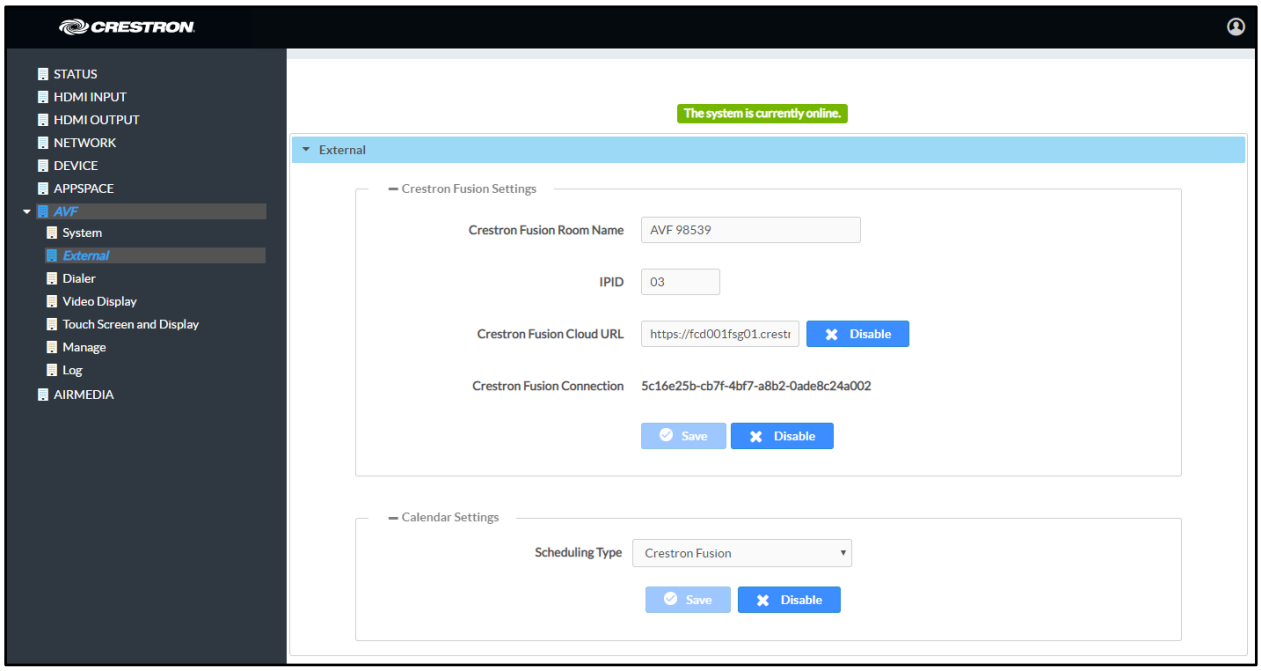
Operation versus Standby Setting

	Standby Setting		
OPERATION	**Always On**	**Occupancy Based**	**Occupancy Based With Signage**
Always On	✓	✗	✗
Front Display Content During Standby	✗	✗	✓
Allow Fixed Schedule Power Control	✗	✗	✓
Allow Occupancy Power Control	✗	✓	✓

External

The **External** screen displays the settings for operating with Crestron Fusion.

AVF Screen - External



Crestron Fusion Settings

To configure the Crestron Fusion settings, follow this procedure:

1. In the **Crestron Fusion Room Name** field, enter the name to be used by the Crestron Fusion server.
2. In the **IPID** field, enter the IP ID number to be used by the Crestron Fusion server.
3. In the **Crestron Fusion Cloud URL** field, click **Enable** to allow autodiscovery by the Crestron Fusion server.
4. Click **Save** to save the settings or click **Disable** to disable the settings.

Upon completion, the device should be brought into Crestron Fusion software as a processor. For details, refer to the Crestron Fusion help file.

Calendar Settings

To configure the calendar settings, follow this procedure:

1. Select the scheduling type from the drop-down list.
   - Select **SchedulingType Fusion** to use Crestron Fusion for calendar functions.
   - Select **SchedulingType Exchange** to use Microsoft Exchange Server for

calendar functions.

a. Enter the URL of the Exchange server in the **Exchange EWS URL** field.

b. Enter the domain name used by the Exchange server in the **Domain** field.

c. Enter the name of the conference room in the **Username** field.

d. Enter the password of the conference room in the **Password** field.

e. Enter the Calendar email address in the **Calendar email address** field.

NOTE: The Calendar email address is required only for accounts using Impersonation.

f. (Optional) Check the **Outlook Use Certificate** box to use an Outlook® certificate. Click **Upload** and follow the instructions to upload a certificate.

For more information, refer to Answer IDs 5829 and 5830 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

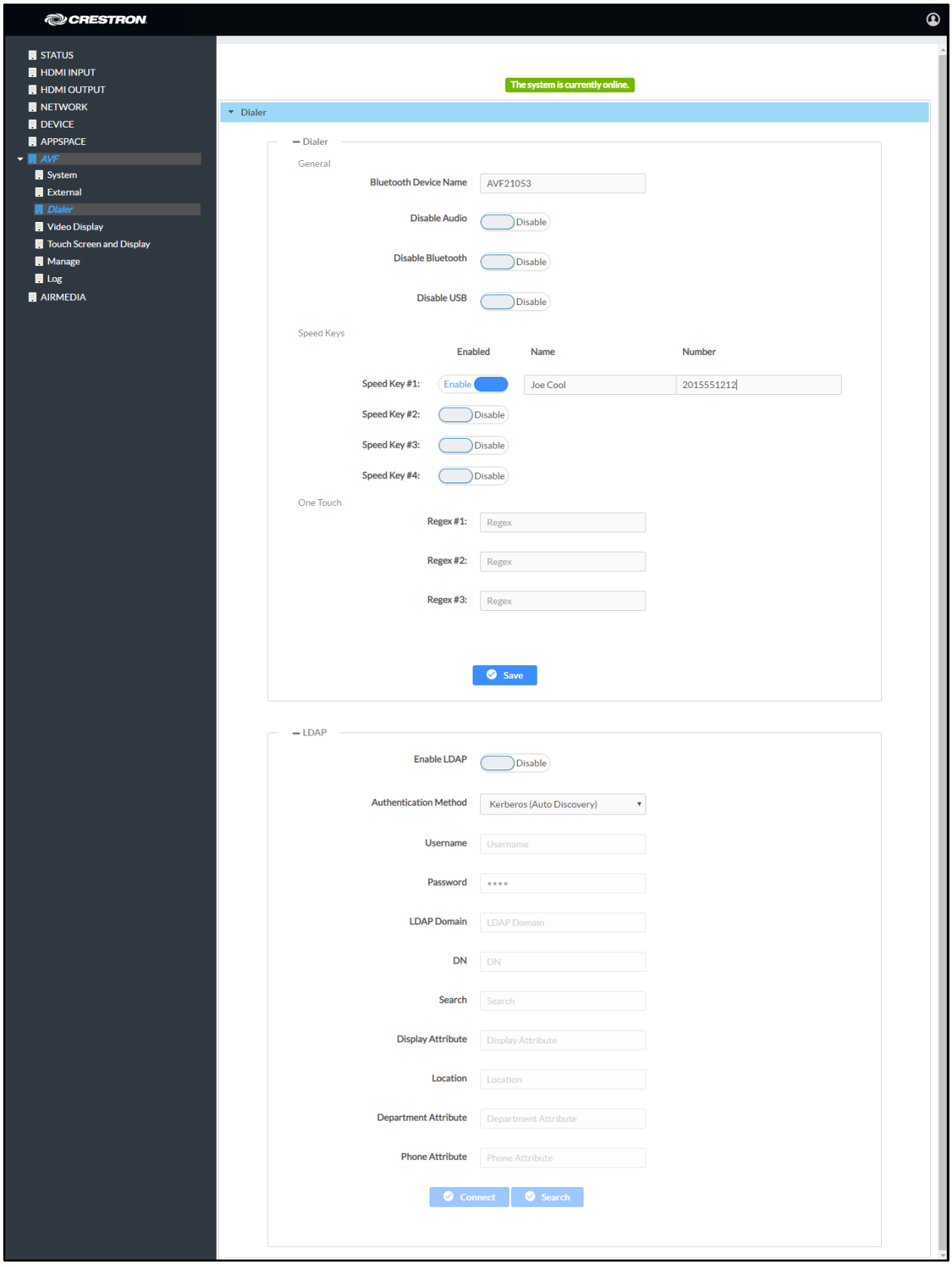
2. Click **Save** to save the settings or click **Disable** to disable the settings.

For additional information on configuring Exchange or Office 365 with the CCS-UC-1, refer to "Appendix: Configure Exchange for Use with CCS-UC-1" on page 84.

Dialer

The **Dialer** screen configures the Bluetooth® connectivity settings, the speed keys for quick dialing via SIP, one-touch keys for initiating phone calls for a meeting, and configures the device to use Lightweight Directory Access Protocol (LDAP) to look up names in an LDAP directory.

AVF Screen - Dialer



See below for configuration instructions. When done, click **Save** to save the settings.

Dialer

- **General**

  The **General** section specifies the device's Bluetooth name, and controls audio, Bluetooth, and USB functionality.

  – In the **Bluetooth Device Name** field, enter the device's Bluetooth broadcast name. This is the name that is displayed on a list of Bluetooth connections when a user attempts to connect their Bluetooth device to the CCS-UC-1.

  – Select the appropriate settings to disable audio, Bluetooth connectivity, or USB connectivity.

  NOTE: Disabling Bluetooth or USB connectivity removes the respective connection options from the user interface.

- **Speed Keys**

  Configure **Speed Keys** for use when dialing from the "Audio" function. Refer to "Make a Call with an Office Session Initiation Protocol (SIP) System" on page 68 for details.

  1. Select **Enabled** for the speed key to be displayed on the device. The **Name** and **Number** fields are displayed.
  2. In the **Name** field, enter the name to be displayed on the device.
  3. In the **Number** field, enter the phone number to be dialed when the speed key is pressed. Enter any required dialing codes.

     NOTE: If supported by the SIP server, special characters can be entered as well.

  4. Repeat steps 1 through 3 for each speed key.
  5. Click **Save** to save the changes.

- **One Touch**

  To configure a button that initiates a specified phone call for a meeting, enter a Regular Expression pattern that will search for phone numbers within the schedule body. For example, if the scheduled event contains a section with a phone number, such as "MeetingId:NNNNNNNNNN" (where NNNNNNNNNN is the conference call's phone number), a pattern of "MeetingId:(\d+,*\d*)" can be used.

  NOTES:

  - The scheduling software must make use of the expression "MeetingId:NNNNNNNNNN" (where NNNNNNNNNN is the conference call's phone number) and place it in the body of the email message that schedules the meeting.
  - If none of the Regex fields are filled, the **JOIN** button does not appear on the CCS-UC-1 home screen.

  Click **Save** to save the changes.

Lightweight Directory Access Protocol (LDAP)

LDAP is an Internet protocol that the CCS-UC-1 can use to look up contacts from a server. The CCS-UC-1 can be configured to search for telephone contacts in an LDAP directory. The amount of search results can be controlled by using filters, allowing for searches within departments, locations, etc.. For more information, refer to Answer ID 5852 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

NOTE: Knowledge of the LDAP server and its directory information tree are required to configure the CCS-UC-1 for use with the LDAP server.

To configure the CCS-UC-1 to access and look up members in an LDAP directory, perform the following procedure:

1. Set **Enable LDAP** to **Enable**.
2. Select the **Authentication Method** from the drop-down list.
3. Configure the fields highlighted in red. Fields that are not highlighted are optional and are not required for operation.
   - **Kerberos Auto Discovery**
     - **Username:** Enter the user name for logging the device into the LDAP server.
     - **Password** (required)**:** Enter the password associated with the **Username**.
     - **LDAP Domain**: Enter the fully qualified domain associated with the login credentials supplied in the **Username** and **Password** fields. For example, MyCompany.MyCompany.com.

- **DN:** Enter the path in the directory information tree to start the search. For example, dc=Mycompany,dc=MyCompany,dc=com.
- **Search:** Enter the LDAP search string to use. Add search filters as necessary to narrow the search.

  Sample: (&(**XX**=%QUERY%)(objectCategory=person)(objectClass=user))

  Where **XX** is the name of the Display Attribute, and the subsequent terms are search filters.

  %QUERY% will be replaced with the search string.

  NOTE: Must contain "%QUERY%" and must start with "(" and end with ")".

- **Display Attribute:** Enter the name of the LDAP field associated with the attribute used for displaying a user name.
- **Location** (optional): Enter the name of the LDAP field associated with the attribute used for listing a location.
- **Department Attribute** (optional): Enter the name of the LDAP field associated with the attribute used for listing a department.
- **Phone Attribute**: Enter the name of the LDAP field associated with the attribute used for listing a phone number.

– **Kerberos Server**

- **Username:** Enter the user name for logging the device into the LDAP server.
- **Password:** Enter the password associated with the **Username**.
- **LDAP Domain**: Enter the fully qualified domain associated with the login credentials supplied in the **Username** and **Password** fields. For example, MyCompany.MyCompany.com.
- **Host**: Enter the fully qualified host name or the IP address of the LDAP server.
- **Port**: Enter the port number used by the LDAP server to listen for LDAP queries. The default value is 389.
- **DN:** Enter the path in the Directory Information Tree to start the search. for example dc=Mycompany,dc=MyCompany,dc=com.

- **Search:** Enter the LDAP search string to use. Add search filters as necessary to narrow the search.

  Sample: (&(**XX**=%QUERY%)(objectCategory=person)(objectClass=user))

  Where **XX** is the name of the Display Attribute, and the subsequent terms are search filters.

  %QUERY% will be replaced with the search string.

  NOTE: Must contain "%QUERY%" and must start with "(" and end with ")".

- **Display Attribute:** Enter the name of the LDAP field associated with the attribute used for displaying a user name.
- **Location** (optional): Enter the name of the LDAP field associated with the with the attribute used for listing a location.
- **Department Attribute** (optional): Enter the name of the LDAP field associated with the attribute used for listing a department.
- **Phone Attribute**: Enter the name of the LDAP field associated with the attribute used for listing a phone number.

– **Server**

- **Username:** Enter the user name for logging the device into the LDAP server.
- **Password:** Enter the password associated with the **Username**.
- **Host**: Enter the host name or the IP address of the LDAP server.
- **Port**: Enter the port number used by the LDAP server to listen for LDAP queries.
- **DN:** Enter the path in the Directory Information Tree to start the search. for example dc=Mycompany,dc=MyCompany,dc=com.
- **Search:** Enter the LDAP search string to use. Add search filters as necessary to narrow the search.

  Sample: (&(**XX**=%QUERY%)(objectCategory=person)(objectClass=user))

  Where **XX** is the name of the Display Attribute, and the subsequent terms are search filters.

  %QUERY% will be replaced with the search string.

  NOTE: Must contain "%QUERY%" and must start with "(" and end with ")".

- **Display Attribute:** Enter the name of the LDAP field associated with the attribute used for displaying a user name.

- **Location** (optional): Enter the name of the LDAP field associated with the with the attribute used for listing a location.
- **Department Attribute** (optional): Enter the name of the LDAP field associated with the attribute used for listing a department.
- **Phone Attribute**: Enter the name of the LDAP field associated with the attribute used for listing a phone number.

4. Click **Connect** to connect to the LDAP server. If a connection to the LDAP server is made, the **Search** button becomes active and a test query can be performed. If a connection to the LDAP server cannot be made, the **Search** button is inactive and does not work.

5. Click **Search** to run a test search. The **Search LDAP** dialog box is displayed.

Search LDAP Dialog Box

   a. Enter the search term in the **Query** field.

   b. Click **General Search**. Search results are displayed in the lower half of the dialog box.

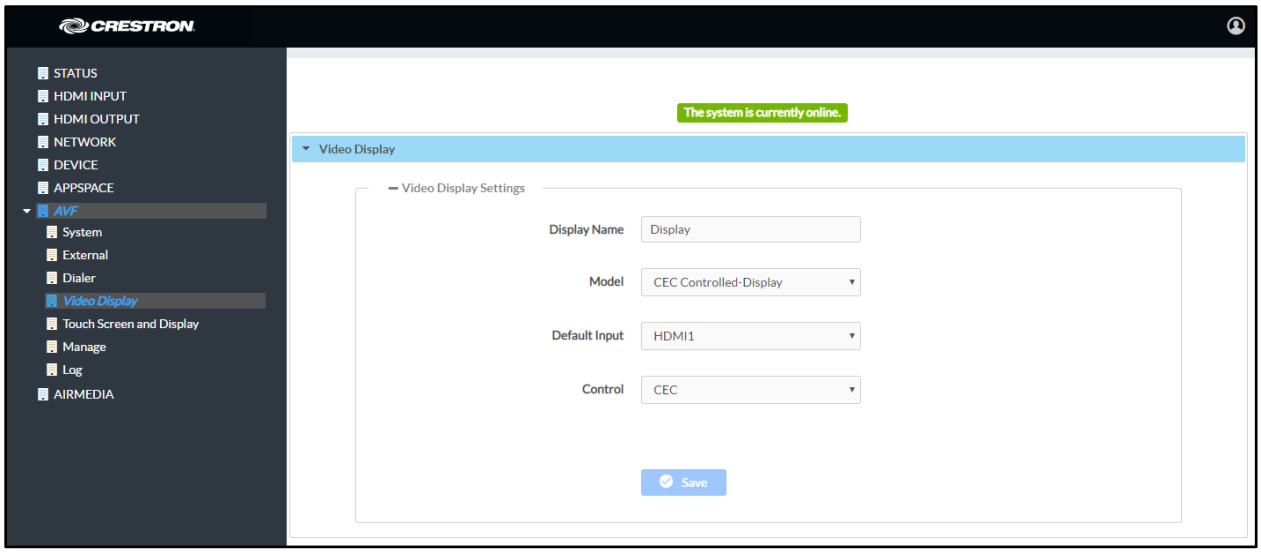
   c. Click **x** to close the **Search LDAP** dialog box.

For more information, refer to Answer ID 5852 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

Video Display

The **Video Display** screen configures the device for operation with the connected display. Support for CEC, Crestron Connected®, IP, serial, and infrared profiles are built-in.

AVF Screen - Video Display



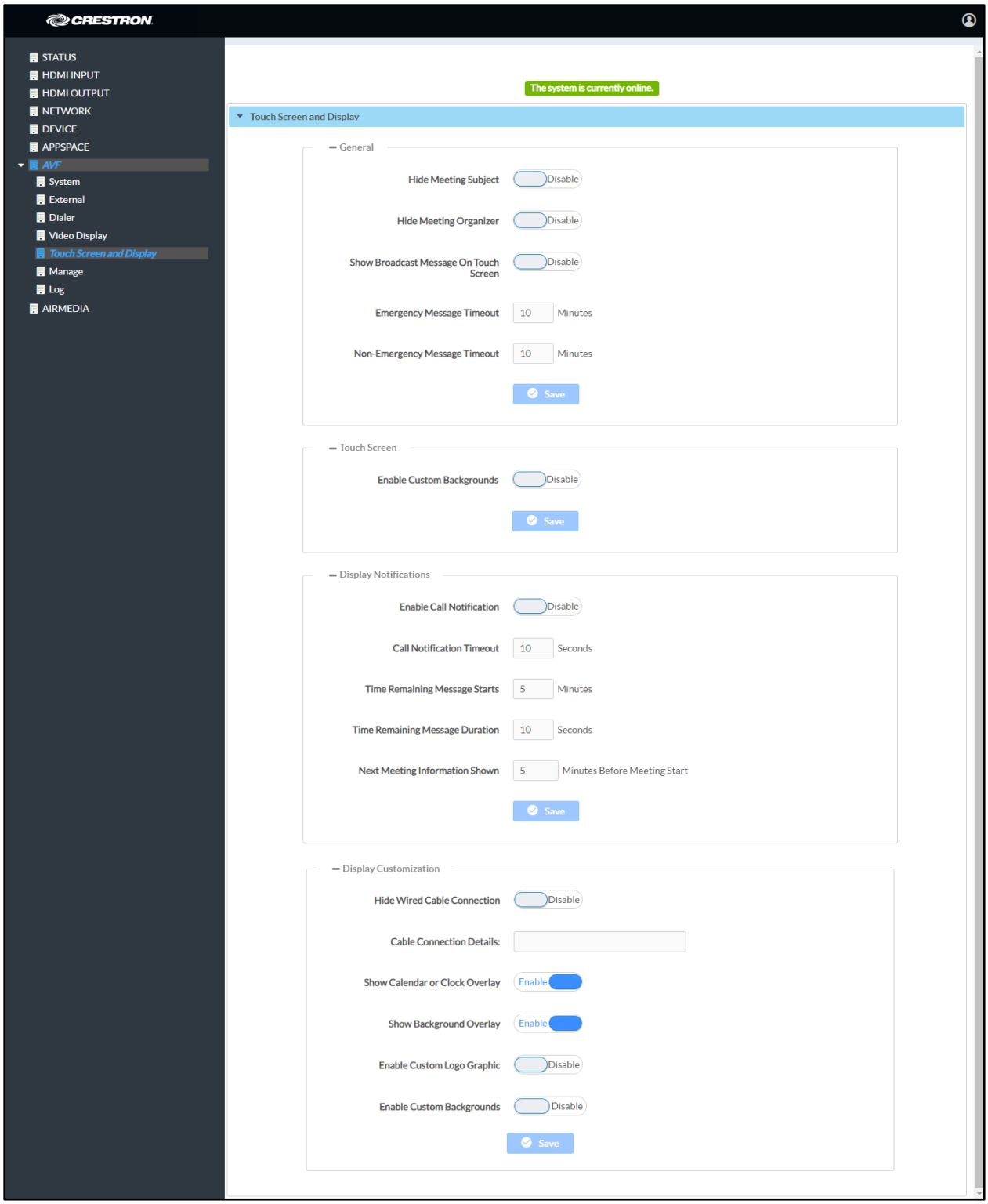
To configure the device to work with a connected display, follow this procedure:

1. In the **Display Name** field, enter a name for the connected display.
2. In the **Model** drop-down list, select the display that is connected to the device.
3. Depending on the model selected, different controls are displayed. Complete the required fields to use the selected display device.
4. Click **Save** to save the settings.

Touch Screen and Display

Click **Touch Screen and Display** to customize the function and appearance of the touch screen and the connected display.

AVF Screen – Touch Screen and Display



General

The General section specifies what information is displayed on the touch screen and connected display.

- Set **Hide Meeting Subject** to **Disable** to have the meeting's subject shown. To hide the meeting's subject, set **Hide Meeting Subject** to **Enable**.
- Select **Hide Meeting Organizer** to **Disable** to have the meeting's organizer shown. To hide the meeting's organizer, set **Hide Meeting Organizer** to **Enable**.
- Set **Show Broadcast Message on Touch Screen** to **Enable** to show broadcast messages on the device's touch screen (broadcast messages are automatically displayed on the connected display). To prevent broadcast messages from showing on the device's touch screen, set **Show Broadcast Message on Touch Screen** to **Disable**.
- Enter the amount of minutes an emergency broadcast message is displayed in the **Emergency Broadcast Timeout** field.

  NOTE: Emergency broadcasts are sent from Crestron Fusion. For more information on emergency broadcasts, refer to the Crestron Fusion® Software SSI Module Programming for SW-FUSION Reference Guide (Doc. 7898) at www.crestron.com/manuals.

- Enter the amount of minutes a non-emergency broadcast message is displayed in the **Non Emergency Broadcast Timeout** field.

When all changes are made, click **Save** to save the settings.

Touch Screen

Preloaded background images can be displayed on the device's touch screen. To select a background image for display:

1. Set **Enable Custom Backgrounds** to **Enable**. The Background drop-down list displays.
2. Select an image from the **Background** drop-down list.
3. Click **Save** to set the image as the background image on the CCS-UC-1's touch screen display.

Display Notifications

The **Display Notifications** section configures how notifications are displayed while the device is in use.

- Set **Enable Call Notification** to **Enable** to allow call notifications to be displayed while presenting. Set **Enable Call Notification** to **Disable** to disable notifications for incoming calls.
- Enter the amount of time (in seconds) a call notification message is displayed in the **Call Notification Timeout** field.

- Enter the amount of time before the meeting's remaining time is displayed in the **Time Remaining Message Starts** field.
- Enter the amount of time the meeting's time remaining message is displayed in the **Time Remaining Message Duration** field.
- Enter the amount of time before the next meeting's information is displayed in the **Next Meeting Information Shown** field.

When all changes are made, click **Save** to save the settings.

Display Customization

The **Display Customization** section configures what is shown on the display device when not in use.

- Set **Hide Wired Cable Connection** to **Disable** and enter information in **Cable Connection Details** to display instructions for using cable connections. To hide information on cable connections, set **Hide Wired Cable Connection** to **Enable**.
- To show the clock and calendared events on the center of the display device, set **Show Calendar or Clock Overlay** to **Enable**. To remove the clock and calendared events from the center of the display device, **Show Calendar or Clock Overlay** to **Disable**.
- Set **Show Background Overlay** to **Enable** to place a monochrome filter over the background images. Set **Show Background Overlay** to **Disable** the filter and show background images in full color.
- A custom logo can be displayed in the lower right corner of the display device when the system is not in use. To use a logo or other graphic, set **Enable Custom Logo Graphic** to **Enable**, and enter the URL where the graphic is located in the **Custom Logo Graphic URL** field. When set to **Disable**, the Crestron logo is displayed.

  NOTE: The optimal image size is 480 x 94 pixels. Custom graphics that are larger than 480 x 94 pixels are scaled down while maintaining their aspect ratio. Custom graphics that are smaller than 480 x 94 pixels are not scaled up and should be resized for optimal image display.

- A slideshow of custom backgrounds can be shown on the display device when the system is not in use. To use custom backgrounds, select Enable Custom Backgrounds and enter the URL where the background images are stored in the **Add Custom Background Url** field. To specify the length of time that each background image is displayed, enter a time (in seconds) in the **Interval Between Backgrounds** field.

NOTES:

- When Appspace is enabled, custom backgrounds cannot be used. For information on using Appspace, refer to "APPSPACE" on page 29.
- The interface has been designed to use most of the screen area for informational purposes. This feature is intended to for use with corporate colors, branding, and aesthetics to the particular organization and should not be used to add custom instructions for room users.

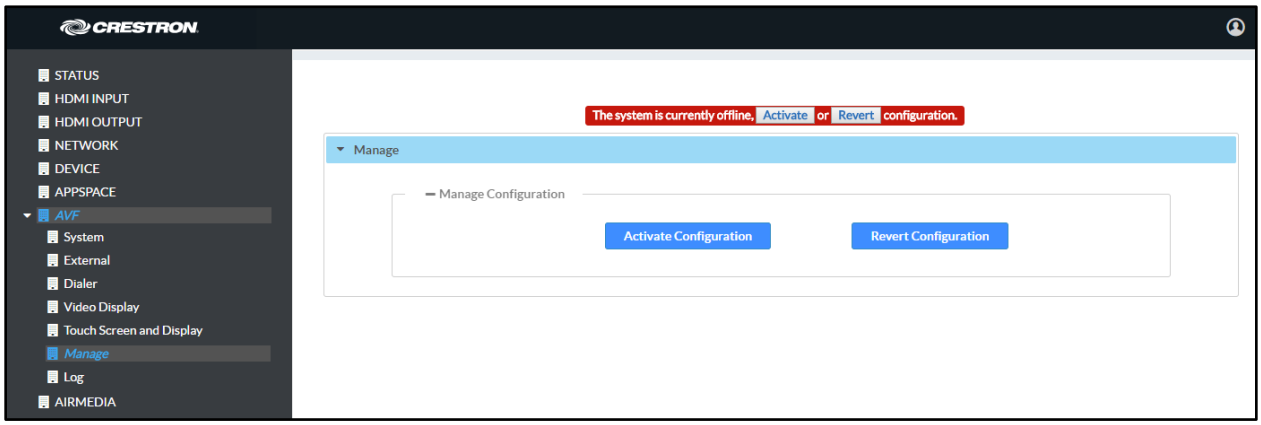
When all changes are made, click **Save** to save the settings.

Manage

The **Manage** screen is used to enact the changes made in the web pages or revert to the previous settings.

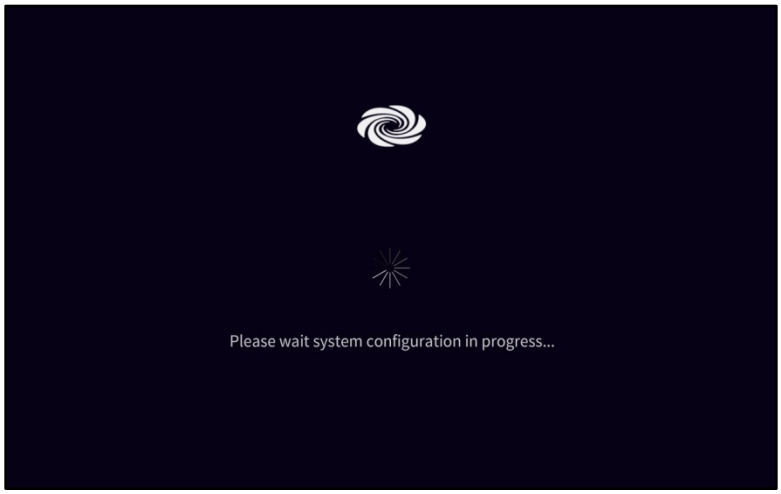
When changes are made to the AVF settings, the device goes offline and the screen below is shown.

AVF Screen - Manage - System Offline



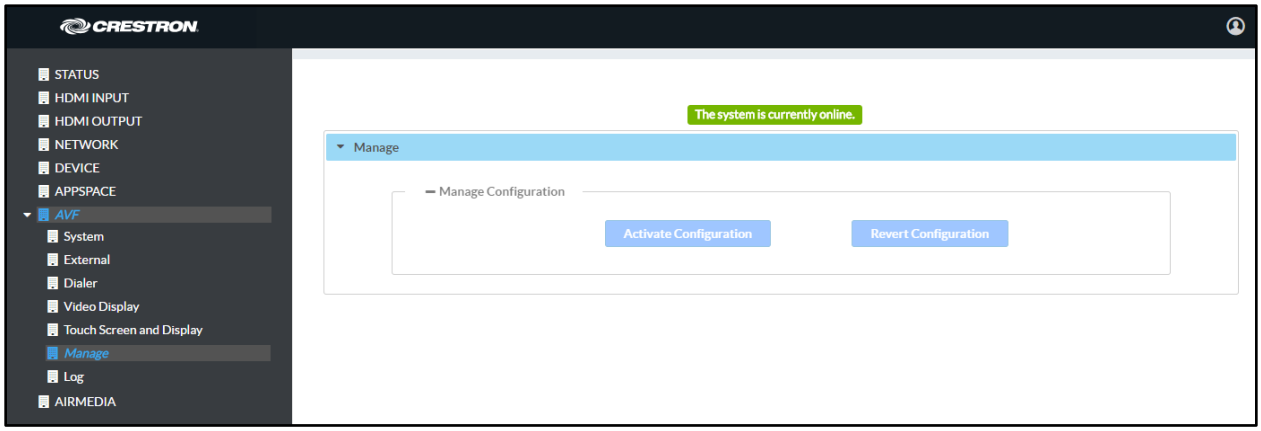
Additionally, the device shows the following screen.

Front Panel, System Configuration in Progress



Click **Activate Configuration** to carry out the changes that were made, or click **Revert Configuration** to revert back to the previously saved settings. The screen below is shown.

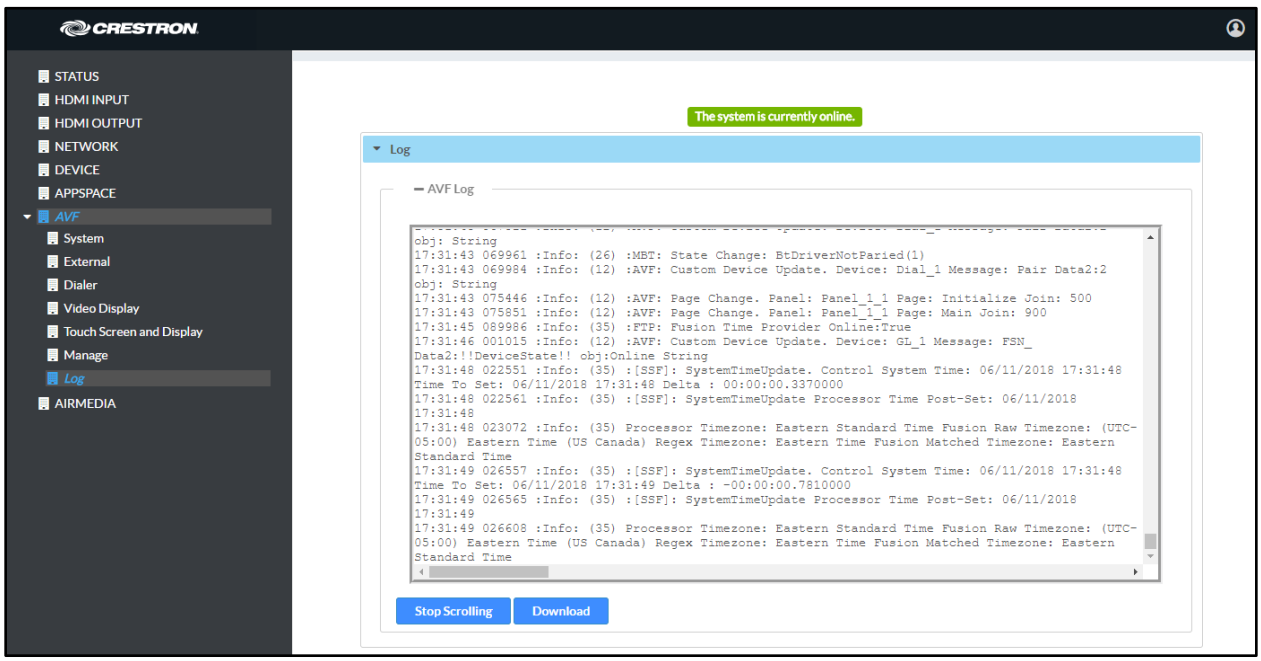
AVF Screen - Manage - System Online



Log

The **Log** screen is used to view and download the device's message logs for analysis.

AVF Screen - Log



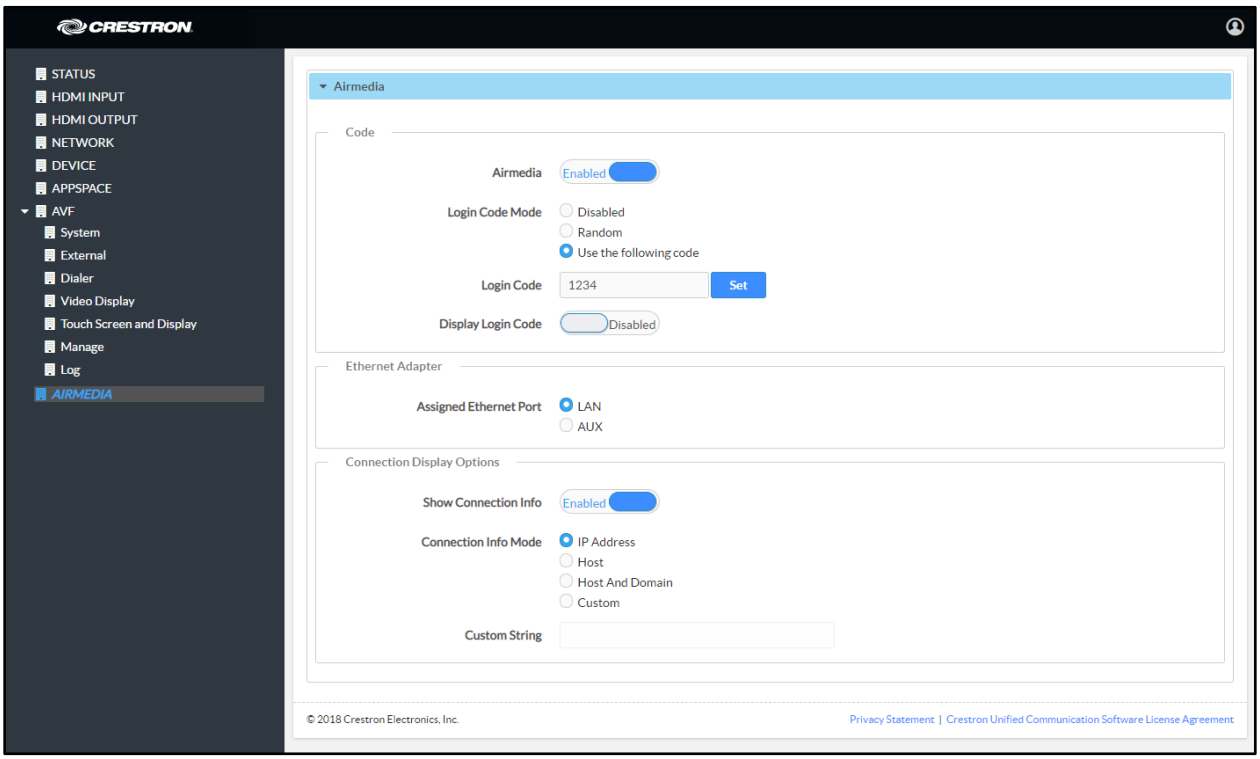
- Click the up or down arrows to scroll through the message log.
- Click **Stop Scrolling** to pause the message log. Click **Scrolling** to resume.
- Click **Download** to download the message log.

AirMedia

Click **AIRMEDIA** to configure the device's AirMedia functionality. The **AIRMEDIA** screen is displayed.

NOTE: For additional details on deploying AirMedia, refer to the AirMedia Deployment Guide (Doc 7693) at www.crestron.com/manuals.

AIRMEDIA Screen



Code

To enable AirMedia for wireless presentation, set **AirMedia** to **Enabled**. To turn off **AirMedia**, set **AirMedia** to **Disabled**.

A code can be used to limit access to the device. The code feature can be disabled, randomly generated, or fixed to a specific value. Select one of the following Login Code Modes to specify how the access code is used:

- **Disabled** allows any user with the device's IP address or host name to open a client connection without entering an access code.
- **Random** sets the device to randomly generate an access code. A new code is generated when the last connected presenter disconnects from the device. The access code is displayed on the device's screen when AirMedia is selected.
- **Use the following code** sets the device to display a user-specified, four-digit access code. Enter a code in the **Login Code** field and click **Set**.

To show the access code on the device's screen when AirMedia is selected, set **Display Login Code** to **Enabled**. To hide the login code, set **Display Login Code** to **Disabled**.

Ethernet Adapter

Select which of the CCS-UC-1's Ethernet port connections (**LAN** for the LAN port or **AUX** for the AUX port) is to be used for presenting by AirMedia.

Connection Display Options

Select whether connection information is displayed on the connected display device as well as what connection information is displayed.

- Set **Show Connection Info** to **Enabled** to display connection information on the display device. Set **Show Connection Info** to **Disabled** to hide connection information.
- If **Show Connection Info** to **Enabled**, select the **Connection Info Mode** to determine what connection information is presented to room visitors.
  - Select **IP Address** to show the IP address to use for connecting to the system.
  - Select **Host** to show the host name to use for connecting to the system.
  - Select **Host And Domain** to show the host name and domain name to use for connecting to the device.
  - Select **Custom** to a custom string to use for connecting to the system. If a custom string is to be used, enter it in the **Custom String** field.

Enterprise Deployment Options

Crestron has two options for deploying multiple CCS-UC-1 devices across an enterprise. These tools can assist in deploying any number of CCS-UC-1 devices that an organization may need to deploy.

For more information, refer to Answer ID 5719 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

Crestron XiO Cloud Service

The Crestron XiO Cloud™ service requires devices to be claimed so they can be managed by the service. To claim a single device or multiple devices, perform one of the following procedures.

Claim a Single Device

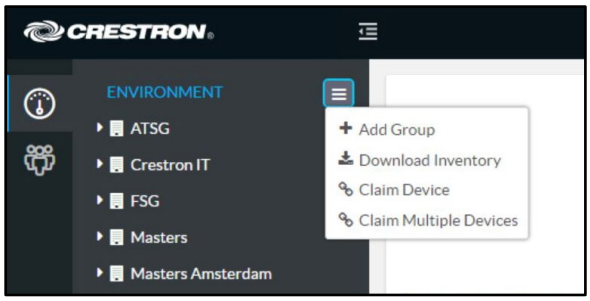
1. Record the MAC address and serial number that are labeled on the shipping box or on a sticker attached to the device. The MAC address and serial number are required to add the device to the Crestron XiO Cloud environment.

   NOTE: Use the MAC address labelled "MAC Address."

2. Open a web browser, and log in to the Crestron XiO Cloud service at https://portal.crestron.io.

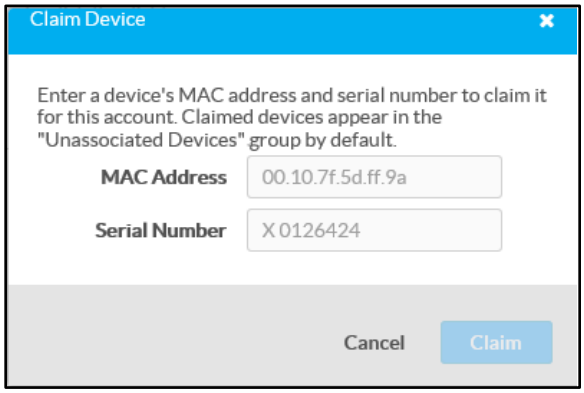
3. Click the **ENVIRONMENT** menu button ( ) to display the Environment menu.

   Environment Menu

4. Click **Claim Device**. The **Claim Device** dialog box is displayed.

   Claim Device Dialog Box

5. Enter the MAC address and serial number recorded in step 1 in the **MAC Address** and **Serial Number** fields, respectively.

6. Click **Claim**. A message indicating a successful claiming displays.

   NOTE: If an error message displays stating the device does not exist, connect the device to a network that has access to the Internet, wait 15 minutes, and then try again.

7. Click **X** to close the dialog box. The host name of the claimed device appears in the device tree under the group **Unassociated Devices**.

The device can now be managed or assigned to a group. For information on creating environments, managing devices, and managing users with the Crestron XiO Cloud service, refer to the Crestron XiO Cloud Service User Guide Guide (Doc. 8214) at www.crestron.com/manuals.

Claim Multiple Devices

1. Record all of the MAC addresses and respective serial numbers in a comma delimited, CSV file, and then save it to a location that is accessible to the computer used to access the Crestron XiO Cloud service. The CSV file should be formatted as shown below:

   CSV File Format

   ```
   MAC Address,Serial Number
   00.10.7e.8b.81.b6,17284712
   00.10.7e.8b.8c.87,17284570
   00.10.7e.96.83.93,1716JBG01207
   00.10.7e.96.92.0a,1716JBG01550
   00.10.7e.8b.87.c1,17284670
   ```

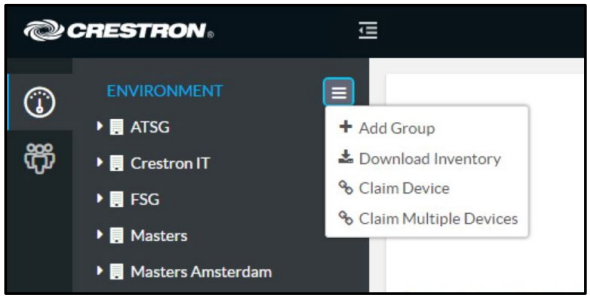
   NOTES:

   - MAC addresses and serial numbers are labeled on the shipping box or on a sticker attached to the device.
   - Use the MAC address labelled "MAC Address."

2. Open a web browser, and log in to the Crestron XiO Cloud service at https://portal.crestron.io.

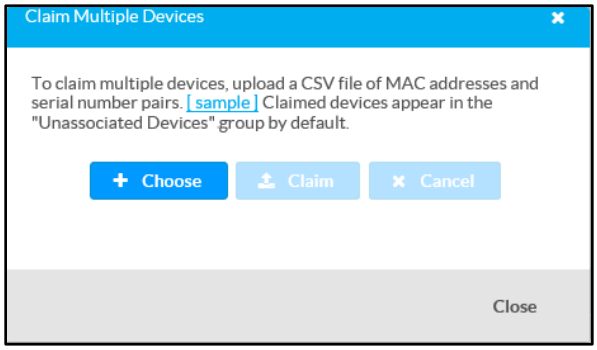
3. Click the **ENVIRONMENT** menu icon ( ) to display the Environment menu.

   Environment Menu

4. Click **Claim Multiple Devices** from the drop-down menu. The **Claim Multiple Devices** dialog box is displayed.

Claim Multiple Devices Dialog Box



5. Click **Choose** and select the CSV file created in step 1.

6. Click **Claim** to claim all of the devices listed in the file. A message indicating the claim status of each device is displayed.

   NOTE: If an error message displays stating the device does not exist, connect the device to a network that has access to the Internet, wait 15 minutes, and then try again.

7. Click **X** to close the dialog box. The host names of the claimed devices appear in the device tree under the group **Unassociated Devices**.

The devices can now be managed or assigned to a group. For information on creating environments, managing devices, and managing users with the Crestron XiO Cloud service, refer to the Crestron XiO Cloud User Guide (Doc. 8214) at www.crestron.com/manuals.

Crestron Deployment Tool for PowerShell® Software

Crestron has developed a tool for customers without Crestron XiO Cloud service to allow deployment of multiple devices without the need to configure each device individually. With this tool, an administrator may input all the configuration settings in a single data file, and then use PowerShell® task-based command-line shell and scripting language to configure multiple devices across an enterprise.

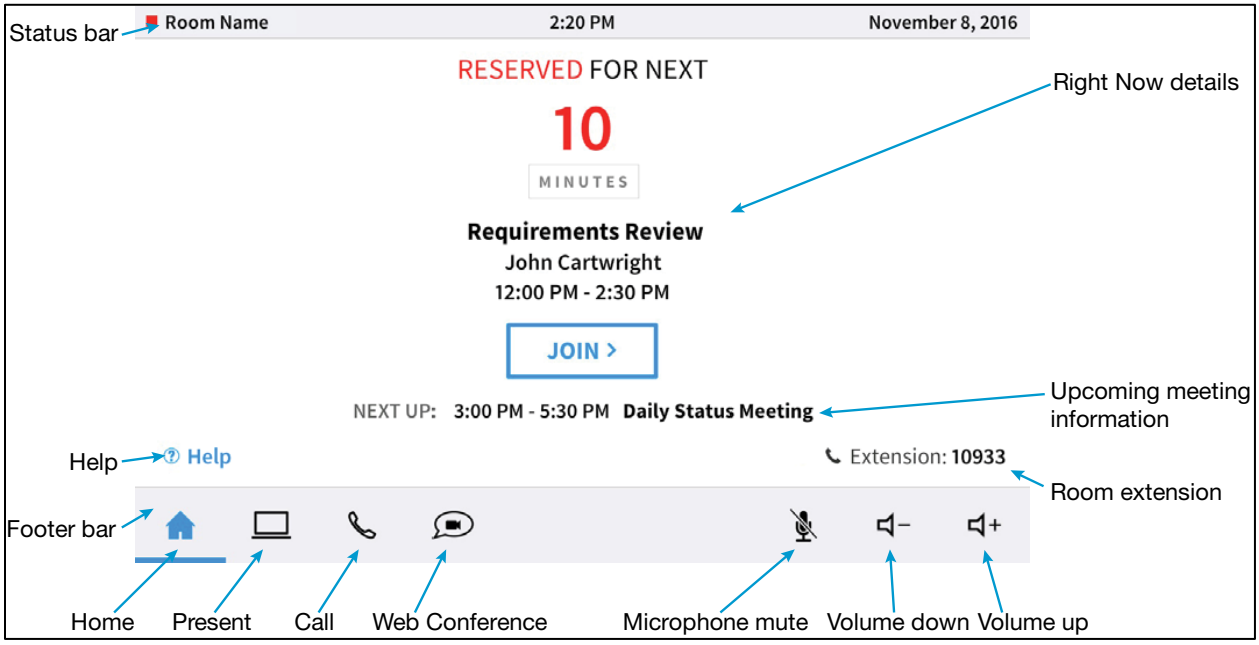
Operation

This section provides instructions for using the device.

All user interaction is done through the CCS-UC-1's touch screen. Refer to the following diagram for functions that are available at all times.

NOTE: Depending on the device's configuration, some functions described here may not be available.

The User Interface (Home Screen Shown)



Tap ? **Help** to view information about the user interface. If the room where the device is installed has a calling option, the Room Extension is displayed.

The following elements are shown on every screen:

- The Status bar indicates whether the room is currently free or occupied. If occupied, the status icon next to the room name (on the top left) is red. If the room is free, the status icon is blue. The time and date are also displayed in the Status bar.
- The Footer bar contains controls that are always available.
  - Tap ⌂ to return to the Home screen to join or schedule a meeting. For details on joining or scheduling a meeting, refer to "Join or Schedule a Meeting" on page 54.
  - Tap ▭ to view presentation options. For details, refer to "Present " on page 60.

    NOTE: Presentation options are only present on CCS-UC-1 AV W/PS KIT.

- Tap to view phone call options. For details, refer to "Answer a Phone Call" on page 66 and "Make a Phone Call" on page 67.
- Tap to run a web conference. For details, refer to "Run a Web Conference" on page 80.

NOTE: Presentation options are only present on CCS-UC-1 AV W/PS KIT.

- Tap the mute bar on top of the device or on the screen to mute the built-in microphone and connected CCS-UCA-MIC microphone pods. When muted, the screen is framed in red and the microphone icons on the tops of the CCS-UC-1 and connected CCS-UCA-MIC microphone pods turn red. To unmute, tap the mute bar on top of the device or on the screen.
- Tap + or – to raise or lower the volume.

Join or Schedule a Meeting

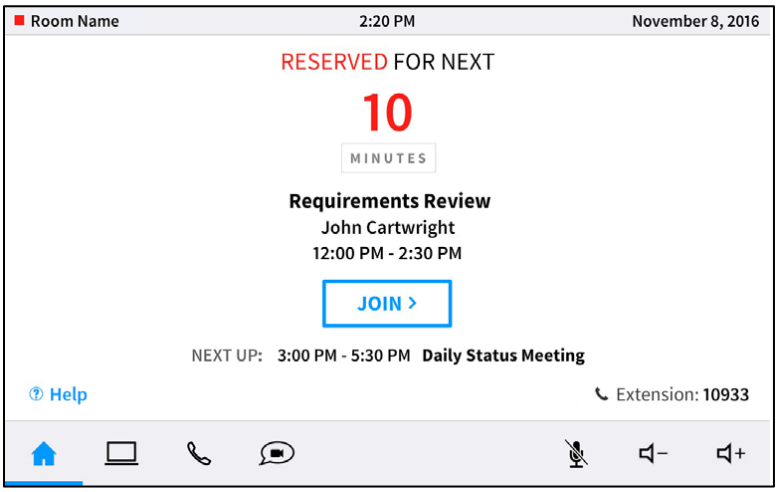
The Home screen is used to join a scheduled event or to reserve the conference room.

Tap to display the Home screen. The Home screen displays the current status of the room.

Reserved (Join a Meeting)

If the room is reserved for use, the display on the device indicates as such.

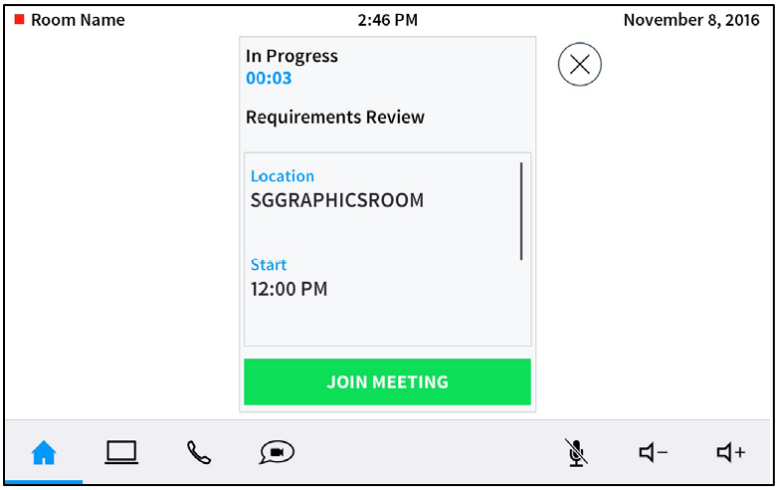
Home Screen - Reserved Room



The user can join the meeting that is currently in session.

1. Tap **JOIN >** to join the scheduled event. The display shows the event's details.

Event Details



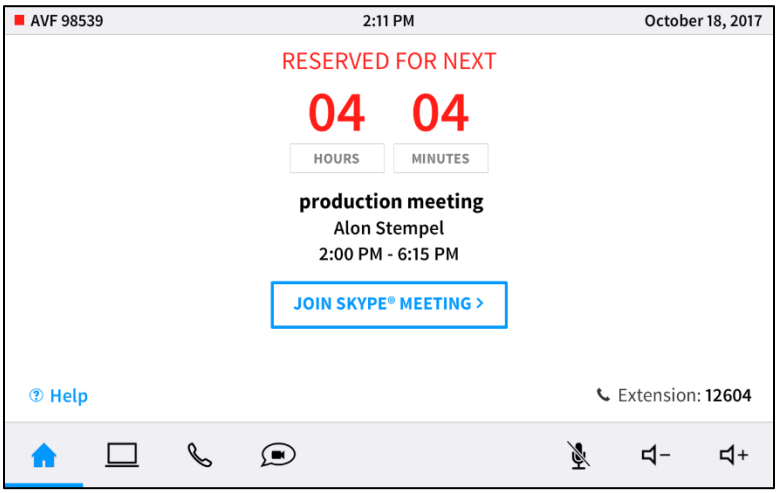
2. Tap **JOIN MEETING** to join the meeting.

3. Tap for conference call events or for web conference events. The appropriate destination information (phone number, meeting space, etc.) is automatically filled and ready for connection to the event.

Reserved (Join a Skype for Business Meeting)

If the room is reserved for use as a Skype for Business meeting, the display on the device indicates as such.

Home Screen - Reserved Room



The user can join the meeting that is currently in session.

1. Tap **JOIN SKYPE® MEETING** to join the Skype for Business meeting. The device joins the Skype for Business meeting.

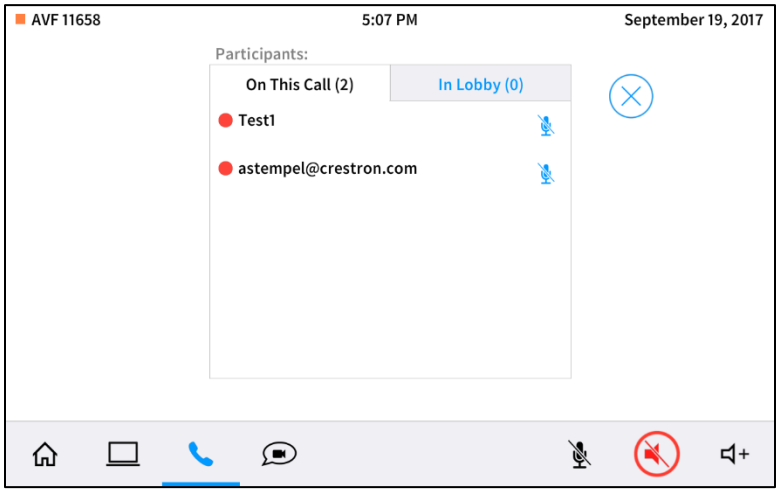
In Skype Call Screen

The following functions are available during a Skype for Business meeting.

– View participants

Tap to view members of the Skype for Business call. The **Participants** screen is displayed.

Participants Screen



- Tap **On This Call** to view current call participants.
- Tap next to a participant name to mute their microphone.
- Tap **In Lobby** to view waiting invitees.
- Tap **X** to exit the **Participants** screen.

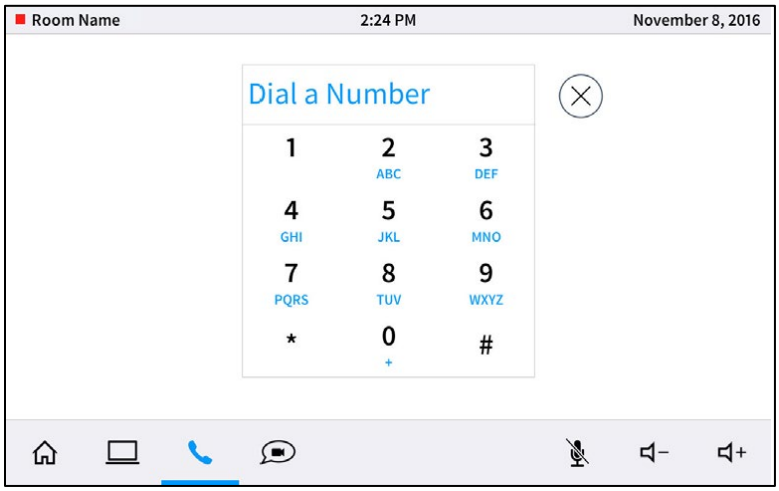
– End the call

  Tap to end the call.

– Use the Numeric Keypad

  Tap to display the numeric keypad and send dual tone multi frequency (DTMF) tones (to enter extensions, check voicemail, etc.). The keypad screen is displayed.

  Keypad Screen



  - Tap numbers to send DTMF tones.
  - Tap **X** to exit the keypad screen.

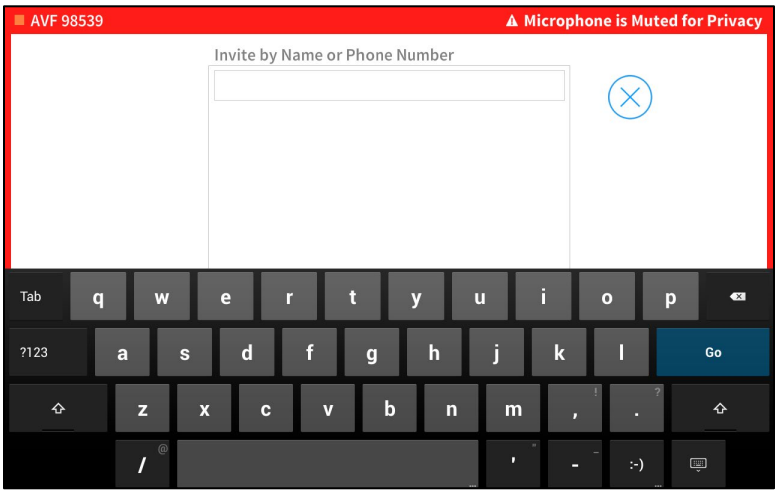
– Place a Call on Hold

  Tap place the call on hold. Tap to resume.

– Add a Participant

2. Tap . The invitation screen is displayed.

  Invitation Screen



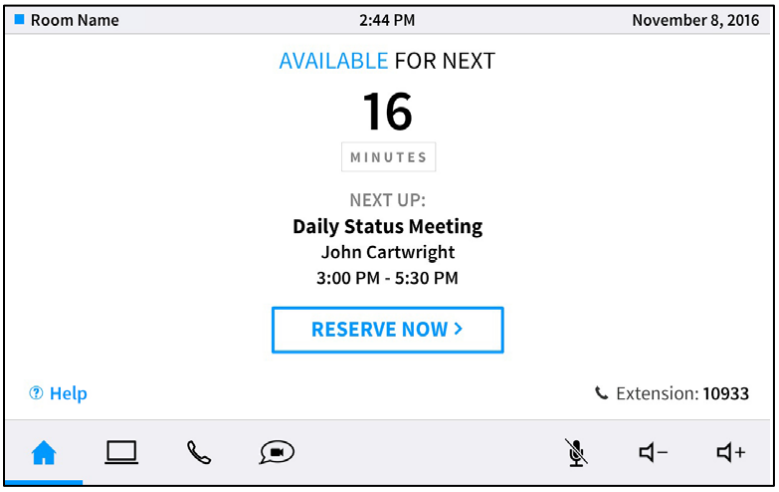
3. Enter the name or telephone number of the participant to be added.

4. Tap the name or phone number that is displayed. The participant is dialed and added to the call when they answer.

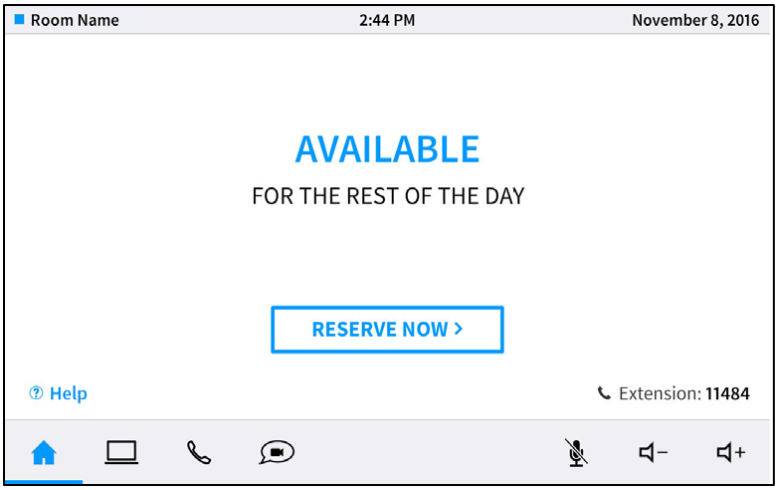
Available (Create a New Meeting)

If the room is available for use, the display on the device indicates as such.

Home Screen - Available Room - Limited Time



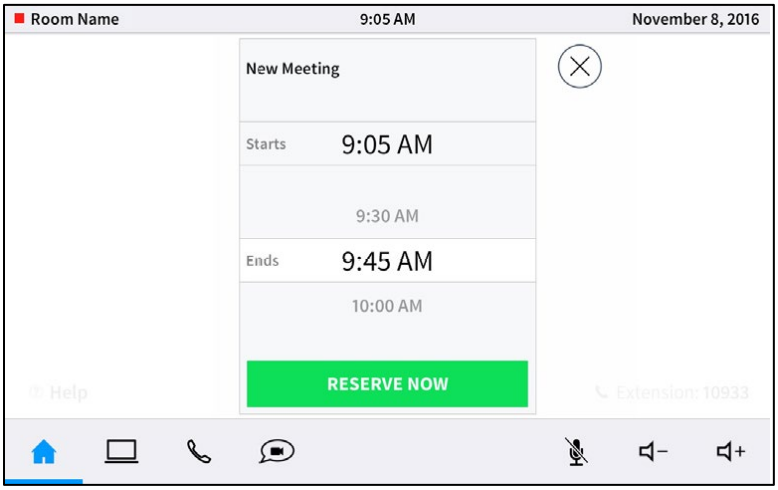
Home Screen - Available Room - Remainder of Day



The user can either use the room for the remaining time available or create a new meeting for another time. To create a new meeting, follow this procedure:

1. Tap **RESERVE NOW >** to reserve the room. The **New Meeting** screen is displayed.

   New Meeting Screen

   The meeting start and end times are automatically populated for the next available 30-minute block (for example, 5:30 to 6:00, 5:45 to 6:15, 6:00 to 6:30, *etc.*). When reserving a meeting space within a current 30-minute block, the start time is rounded down to the nearest 5-minute increment. For example, tapping **RESERVE NOW** at 5:44 pm creates a meeting with a start time of 5:40. If **RESERVE NOW** is tapped at 5:46 pm, the meeting start time would be 5:45 pm. The meeting end time may be set by the user.

   NOTE: RESERVE NOW Meetings may only be scheduled for the current day from the device.

2. Scroll through the available end times to select the duration of the meeting. The user can reserve the room for three different amounts of time.

   - Until the current half hour interval ends (If the current time is 5:44 pm, the end time for this option is 6:00 pm.) This is the default setting.
   - Until the current half hour interval ends plus 30 minutes (If the current time is 5:44 pm, the end time for this option is 6:30 pm.)
   - Until the current half hour interval ends plus 60 minutes (If the current time is 5:44 pm, the end time for this option is 7:00 pm.)

   NOTE: These options are available only if a meeting is not already scheduled during that timeframe.

3. Tap **RESERVE NOW** to book the room.

Present Content

Depending on the configuration, the CCS-UC-1 can present to a room over HDMI or via AirMedia. To view the different presentation options, tap ▭. The **Present a Source** screen is displayed.

Present a Source Screen

Tap **HDMI** to present via a wired HDMI connection or tap **AirMedia** to present wirelessly using AirMedia technology. Alternatively, connect a source to the HDMI cable or connect to the AirMedia address to present automatically.

Sources that have a signal present are indicated with •. Sources that do not have a signal present are indicated with •.

NOTES:

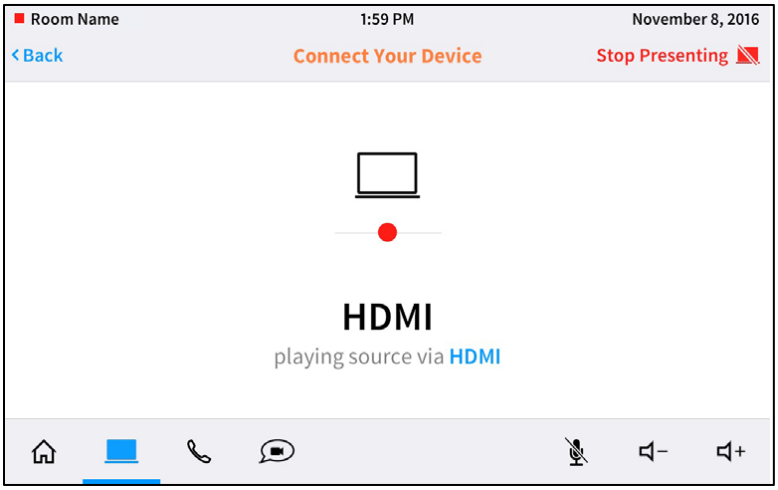
- The HDMI option is only shown when an HDMI source is connected.
- To present with full motion video, select HDMI.

Present via HDMI

To present to a room using a wired HDMI connection:

1. Tap **HDMI**. The **Connect Your Device** screen is displayed.

   Connect Your Device Screen

2. Connect the presentation source to the HDMI cable that is connected to the CCS-UC-1.

3. When done presenting, tap **Stop Presenting**. To return to the previous screen, tap **< Back**.

Present via AirMedia

The CCS-UC-1 uses a client application to share a Windows® or Mac® (hereafter referred to as "computer") desktop. The computer should be able to access the CCS-UC-1 over the network.

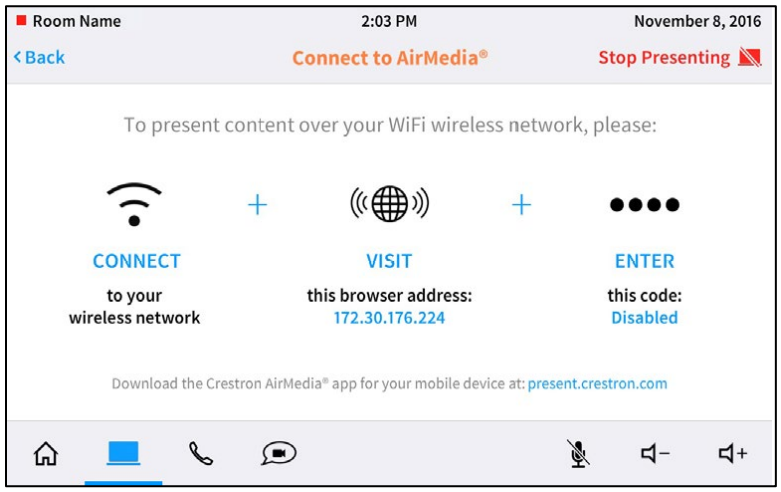
Crestron offers a stand-alone application for enterprise deployments. This application features additional connection methods and device management. For details, visit present.crestron.com.

Mobile devices can share their content using the Crestron AirMedia app or the Crestron PinPoint™ mobile app, which are available for iOS® and Android™ devices. Both apps may be used for full screen sharing on devices running Android 5.0 Lollipop and above or iOS 8 and above. Download the latest version of these apps from the App Store® app or Google Play™ store.

NOTE: For additional details on using AirMedia, refer to the AirMedia Deployment Guide (Doc 7693) at www.crestron.com/manuals.

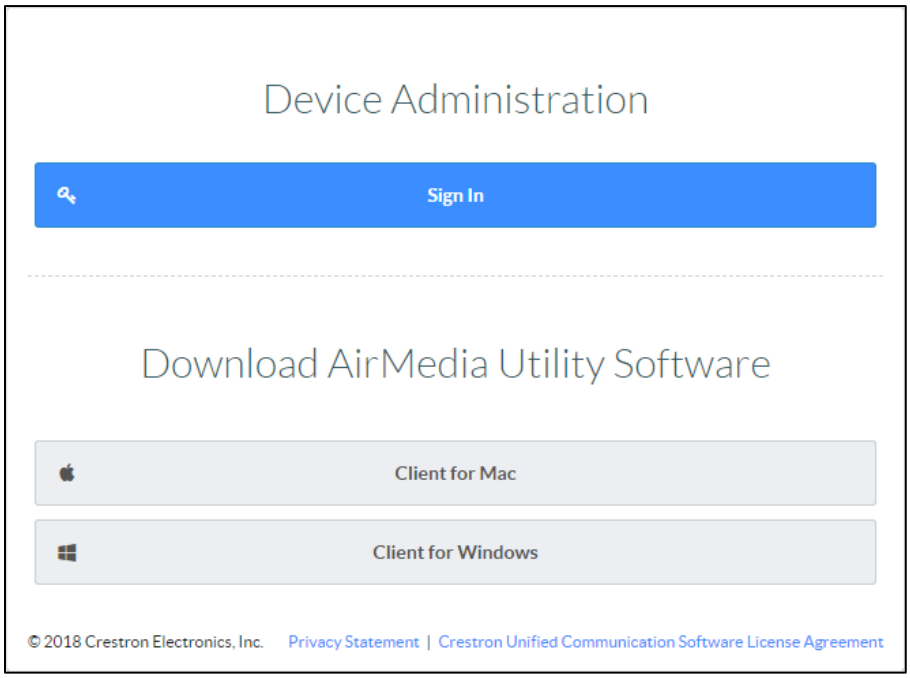
1. Tap **AirMedia**. The **Connect to AirMedia®** screen is displayed.

Connect to AirMedia® Screen



2. Connect the computer or mobile device to the local wireless network.
3. Establish a connection to the Crestron Mercury device.
   - From a Computer
     a. Open a web browser on the computer, and navigate to the web address or IP address displayed on CCS-UC-1. The welcome screen is displayed.

Welcome Screen



b. Click the icon for the computer's operating system to download the client application. The client application requires no installation. The application will be downloaded and run locally.

NOTE: When used on a Mac, the AirMedia client application must be run from within the disk image file. Do not drag the application out of the disk image file.

– From a Wireless Device

a. Start the Crestron AirMedia app or the Crestron Pinpoint app.

b. Follow the onscreen instructions for connecting to a CCS-UC-1.

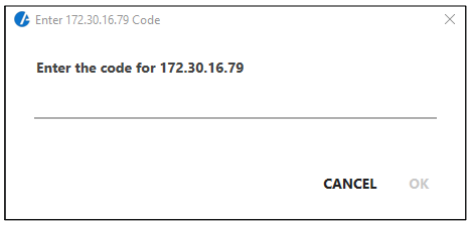
4. Share content.

– From a Windows® Computer

Once the client application is downloaded, content can be shared.

a. Run the client application. The **Enter Code** dialog box is displayed.

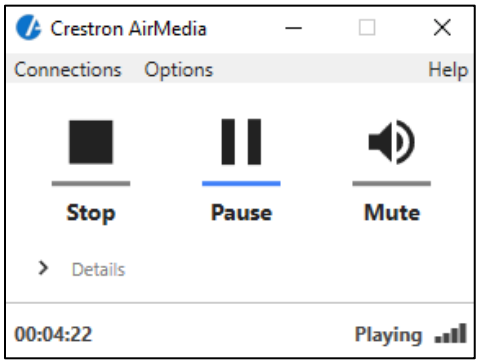
Enter Code Dialog Box



NOTE: If a code is not displayed, the presentation controls are displayed.

b. Enter the code displayed on the CCS-UC-1 and click **OK**. The client establishes a connection between the computer and the CCS-UC-1. The client also displays the presentation controls on the computer while the contents of the computer screen are shown on the display connected to the CCS-UC-1.

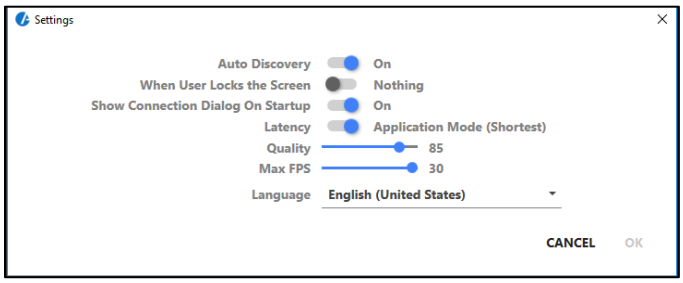
Presentation Controls



c. Direct the presentation with the following controls:

- ■ Stop showing the computer's screen.
- ▶ Start showing the computer's screen.
- ❚❚ Freeze the computer's screen.
- Mute the audio output to the CCS-UC-1.
- **-** Minimize the presentation control screen.
- **X** Close the client application and the connection between the computer and the CCS-UC-1.
- Click **Details** for additional controls and information.
  - The **Video Source** control allows the user to select between the primary video source and the extended video source.
  - Information about the connected user, the name of the receiver, the IP address, and access code are displayed.
  - Click **Options** > **Settings** to customize AirMedia settings. Adjust the settings below and click **OK** to save the changes or click **Cancel** to cancel.

AirMedia Settings Dialog Box



  - **Auto Discovery** should be set to **On**.
  - **When User Locks the Screen** sets the operation of the client software when the connected computer is locked. Choose from **Stop** (the client stops sharing), **Pause** (the client pauses sharing), and **Nothing** (nothing happens).
  - **Show Connection Dialog on Startup** selects whether connection information is displayed when the client starts.
  - **Latency** selects the amount of latency in transmitting the signal from the computer to the CCS-UC-1. Select **Application Mode (shortest)** for the least amount of latency (best for slides) or **Video Mode (Pre-Buffer)** for a longer amount of latency, but suitable for buffering shared video.
  - Set the **Quality** of the projected signal (**0** to **100** percent).
  - Set the **Max FPS** (frames per second) refresh rate (**1** to **30**).

        - Select the **Language** displayed by the client application.

    - From a Mac

      Once the client application is downloaded, content can be shared.

      a. Run the client application.

      b. Follow the on-screen instructions.

    - From a wireless device, follow the instructions for sharing content.

5. When done presenting, tap **Stop Presenting**. To return to the previous screen, tap **< Back**.

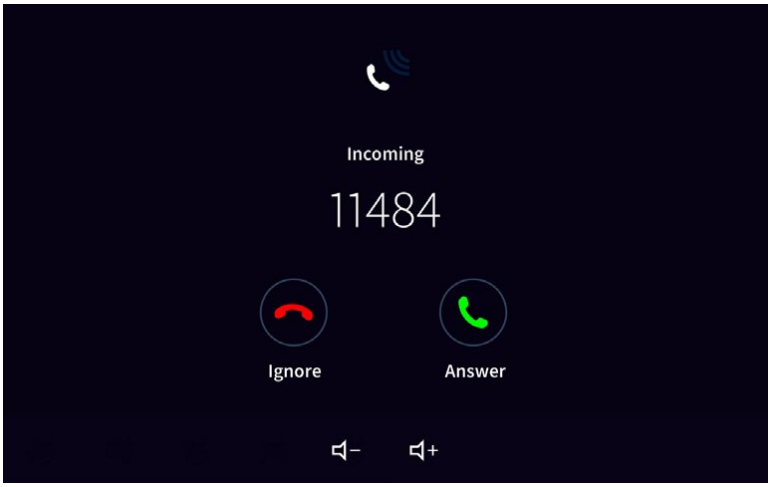
Answer a Phone Call

Depending on the configuration, a CCS-UC-1 can receive a call from another extension or an outside number. To answer a call, follow either of these procedures:

Not in Use

When a call is received, the **Incoming** screen with caller ID information (if available) is displayed.

Incoming Screen



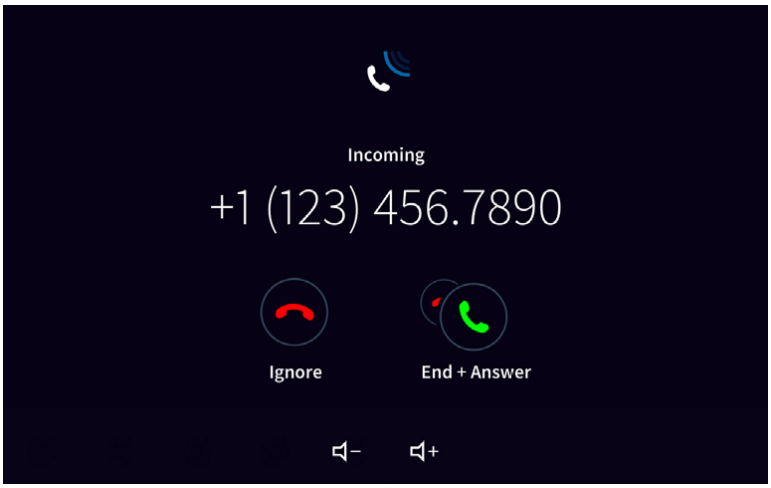
Tap to answer the call or to ignore the call.

During a Call

When a call is received in the midst of another call, the **Incoming** screen with caller ID information (if available) showing is displayed.

NOTE: Incoming call information is only displayed during Bluetooth and SIP phone calls.

Incoming Screen

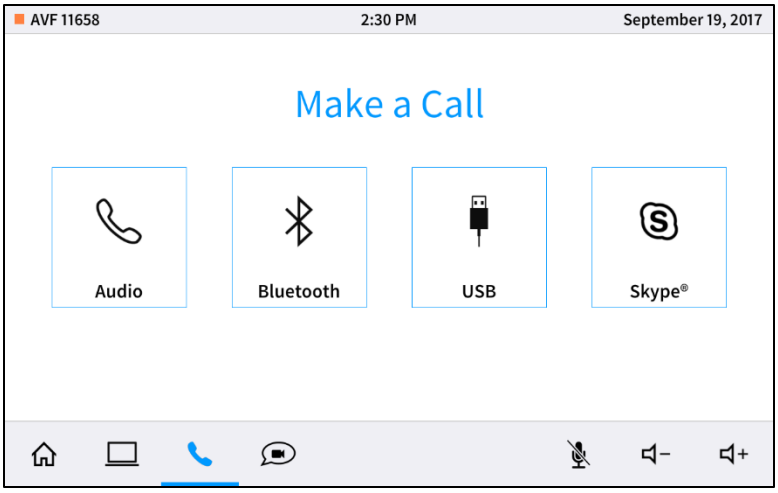


Tap to ignore the call or tap to end the current call and answer the new call.

Make a Phone Call

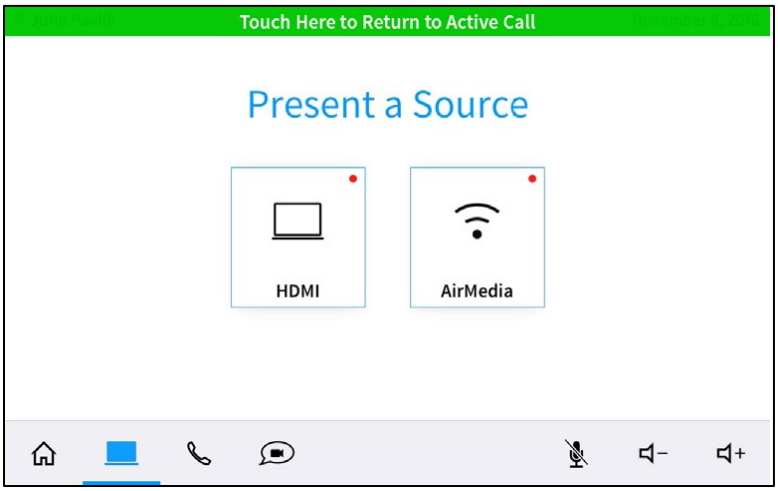
Depending on how it is configured, the CCS-UC-1 can make phone calls using an office phone system, a Bluetooth enabled phone, a connected computer running an audio call application, or the built-in Skype for Business application. To view the different calling options, tap . The **Make a Call** screen is displayed.

Make a Call Screen



During a call, a user has the ability to navigate to other screens (for example **Present**). While using another function, the status bar of the screen will change to a green button that the user can tap to quickly navigate back to the call controls.

Return to Active Call Control



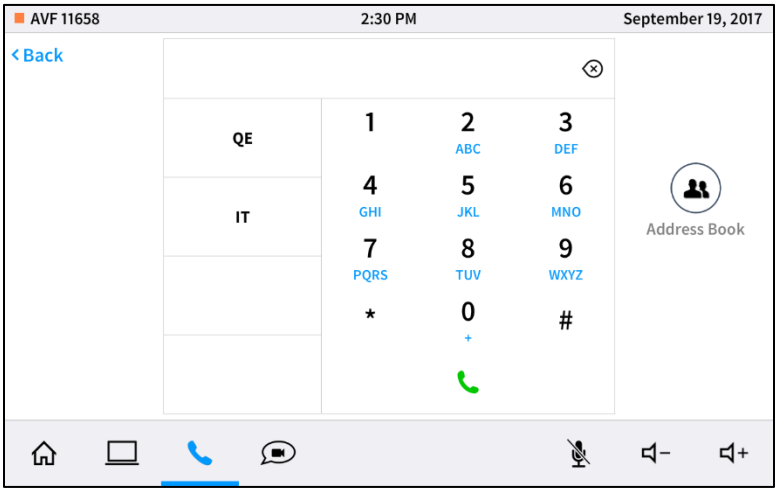
Make a Call with an Office Session Initiation Protocol (SIP) System

When configured, the CCS-UC-1 can make phone calls using an office's SIP system. For information on compatible SIP systems, visit www.crestron.com/mercury.

To make a call with the office SIP system, follow this procedure:

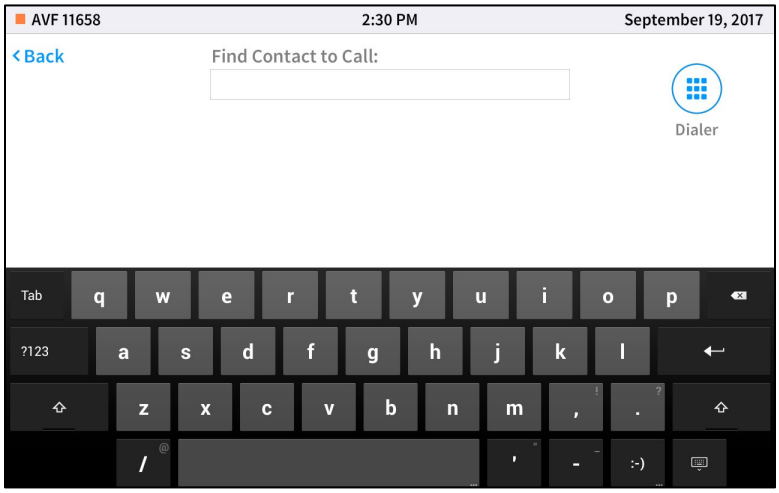
1. Tap **Audio**. The dialing screen is displayed.

Dialing Screen



2. Calls can be dialed from the speed dial listings, the numeric keypad, or searching an address book. Choose one of the following options to make a call:
   - **Speed Dial:** Tap a speed dial button to call. The device calls the number stored for the speed dial button.
   - **Numeric Keypad:** Tap the number to call with the numeric keypad, and then tap .
   - **Address Book:** Tap **Address Book** to search the local address book for a specific contact. The **Find Contact to Call** screen is displayed.

Find Contact to Call Screen



a. Use the on-screen keyboard to enter the contact name. The CCS-UC-1 shows the search results on the display. Otherwise, tap **Dialer** to cancel and return to the previous screen.

b. Tap the name of the contact to call them.

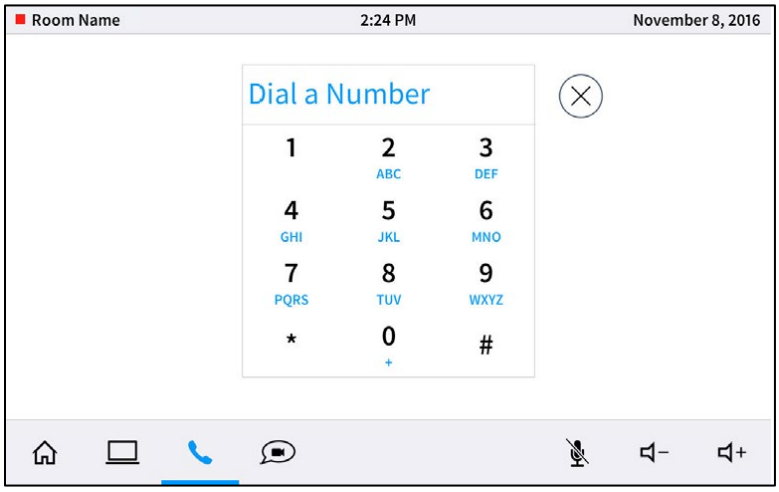
The **In Audio Call** screen is displayed.

In Audio Call Screen

– Tap to end the call.

– Tap to use a keypad to send dual tone multi frequency (DTMF) tones (to enter extensions, check voicemail, etc.). The keypad screen is displayed.

Keypad Screen



- Tap numbers to send DTMF tones.
- Tap **X** to exit the keypad screen.

Make a Call with a Bluetooth Phone

When configured, the CCS-UC-1 can make phone calls using a Bluetooth-enabled phone to carry the call while using the CCS-UC-1 as a speakerphone.

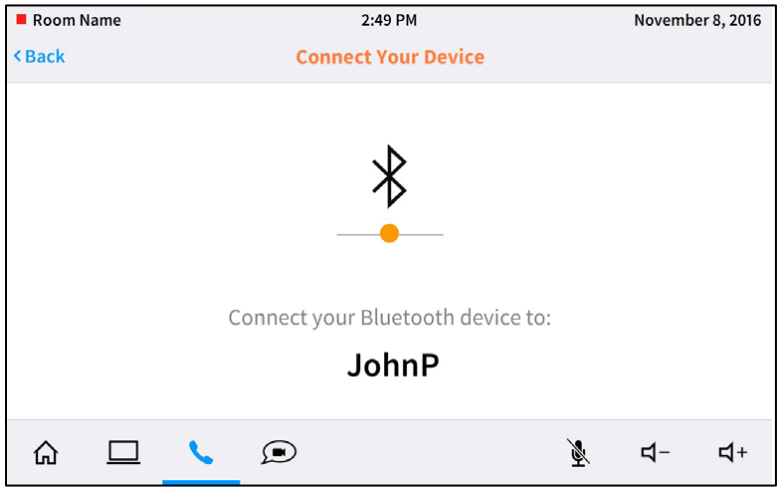
Note the following when connecting a Bluetooth phone to the CCS-UC-1.

- The CCS-UC-1 cannot access the Bluetooth phone's contacts or other information.
- The CCS-UC-1 automatically drops and forgets the connection to the Bluetooth phone when a call ends. To make another call, the phone must be reconnected to the CCS-UC-1.
- If a call is not made within five minutes of connecting to a Bluetooth phone, the CCS-UC-1 automatically drops and forgets the connection to the Bluetooth phone. To make a call, the phone must be reconnected to the CCS-UC-1.

To make a call with a Bluetooth phone:

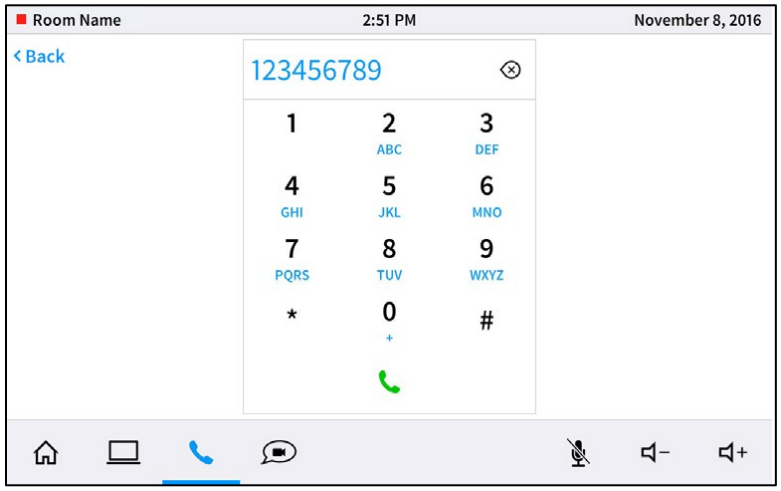
1. Tap **Bluetooth**. The **Connect Your Device** screen is displayed, indicating the Bluetooth name of the CCS-UC-1.

Connect Your Device Screen



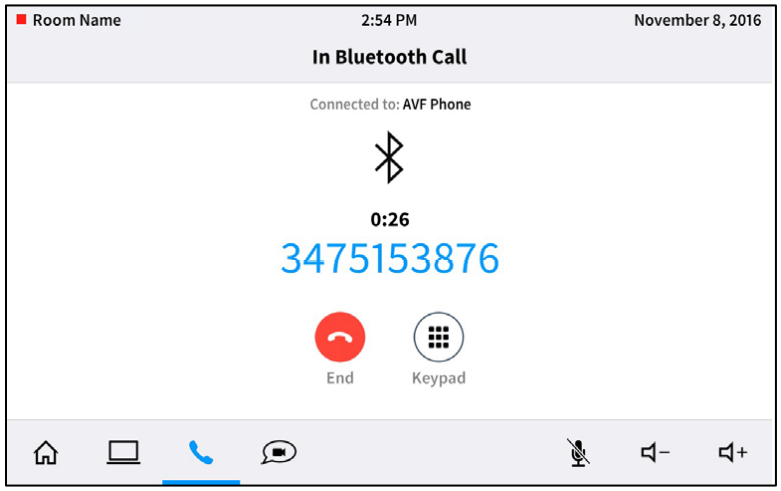
2. On the Bluetooth phone, connect to the device matching the Bluetooth name of the CCS-UC-1. The CCS-UC-1 indicates that it is connecting with a Bluetooth device and then displays the dialing screen.

Dialing Screen



3. Tap the number to call and tap . The **In Bluetooth Call** screen is displayed.

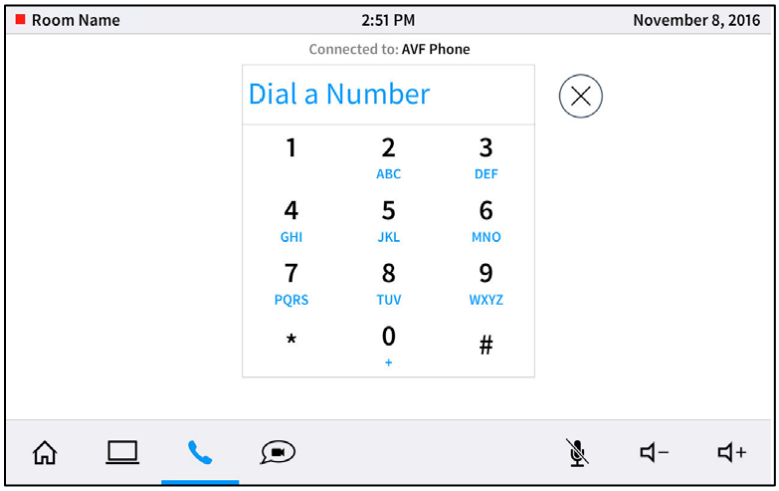
In Bluetooth Call Screen



– Tap to end the call.

– Tap to use a keypad to send DTMF tones (to enter extensions, check voicemail, etc.). The keypad screen is displayed.

Keypad Screen



- Tap numbers to send DTMF tones.
- Tap **X** to exit the keypad screen.

Make a Call with a Connected Computer

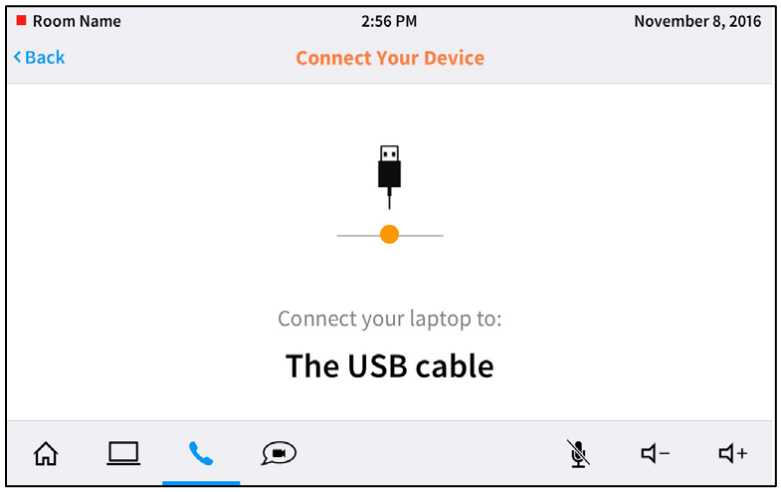
When configured, the CCS-UC-1 can make phone calls using a connected computer that is running audio calling software while using the CCS-UC-1 as a speakerphone.

NOTE: The CCS-UC-1 does not provide an Internet connection to the computer to make a call. The computer must have its own Internet connection.

To make a call with a connected computer, follow this procedure:

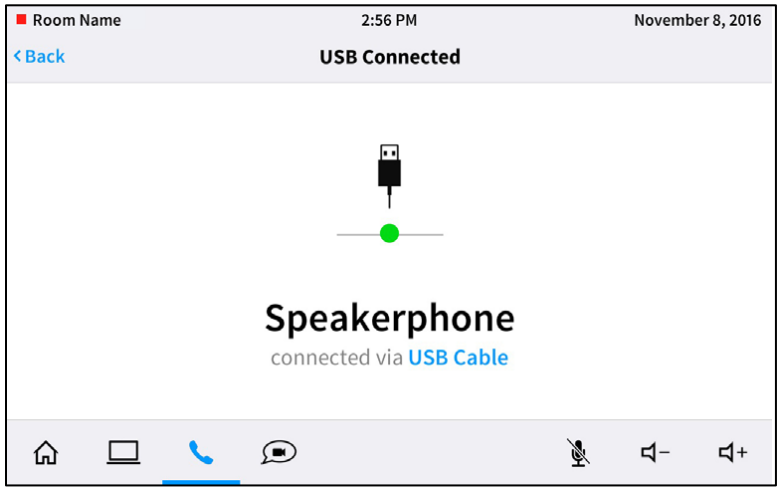
1. Tap **USB**. The **Connect Your Device** screen is displayed.

Connect Your Device Screen



2. Connect the USB cable from the CCS-UC-1 to the computer that is running the audio call software. The **USB Connected** screen is displayed.

USB Connected Screen



3. On the computer, use the audio call software to make and end the phone call.

4. When done, disconnect the computer.

Skype for Business

When configured, the CCS-UC-1 can make Skype for Business calls using the built-in Skype for Business application.

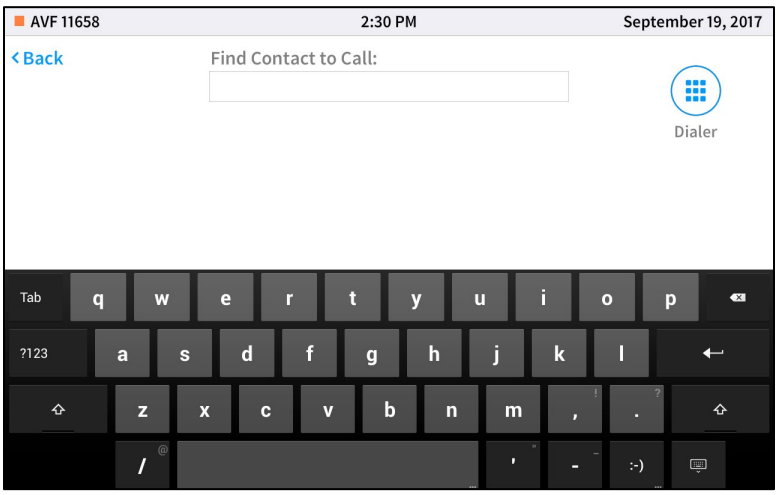
Make a Skype for Business Call

Skype for Business calls can be made to a Skype for Business user, a speed dial entry, or a phone number. Choose one of the following options to make a Skype for Business call:

Call Skype for Business Users

1. Tap **Skype**. The **Find Contact to Call** screen is displayed.

Find Contact to Call Screen



2. Use the on-screen keyboard to enter the contact name or email address. The CCS-UC-1 shows the search results on the display.

3. Tap the name of the contact to be called. When the call is answered, the **In Skype Call** screen is displayed.

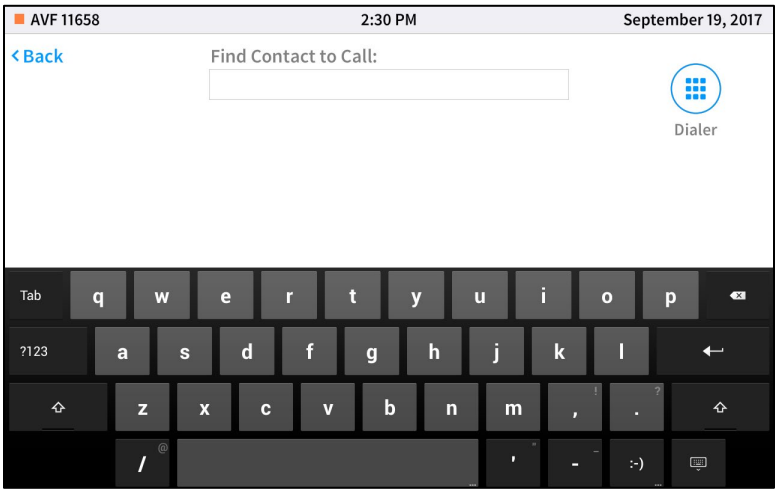
In Skype Call Screen

Call Using Speed Dial

When configured, the Skype for Business application can use a speed dial button to make a call. To use a speed dial button, follow this procedure:

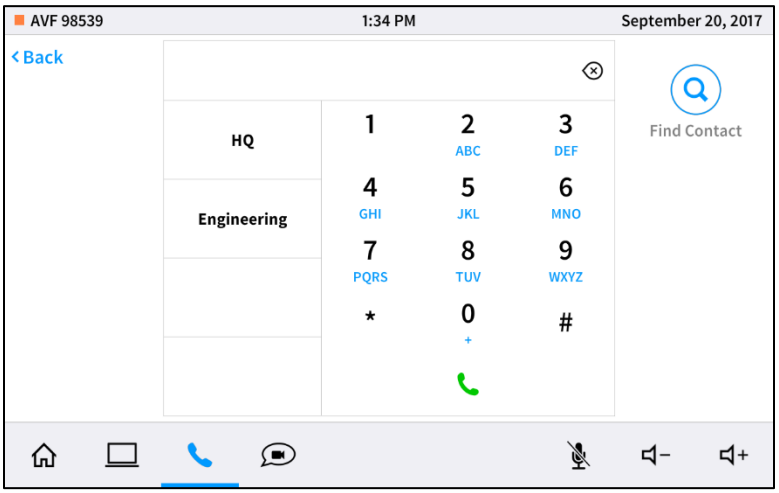
1. Tap **Skype**. The **Find Contact to Call** screen is displayed.

Find Contact to Call Screen



2. Tap . The keypad screen is displayed.

Keypad Screen



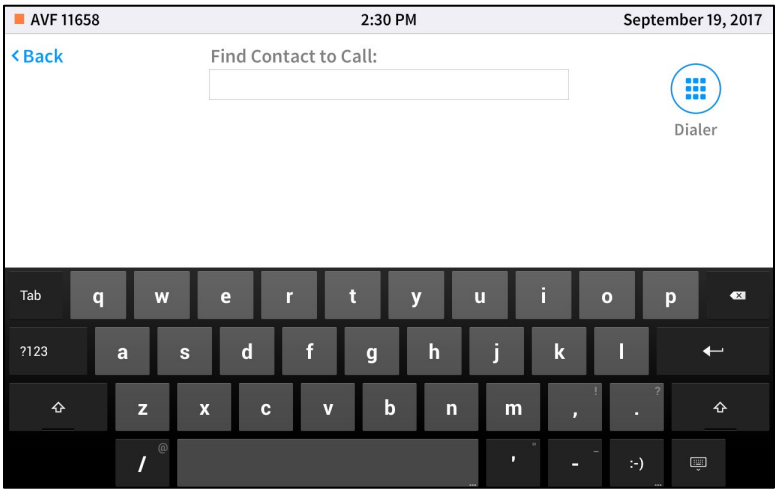
3. Tap a speed dial button to call. The device calls the number stored for the speed dial button.

Call a Phone Number

Use the numeric keypad to dial a phone number.

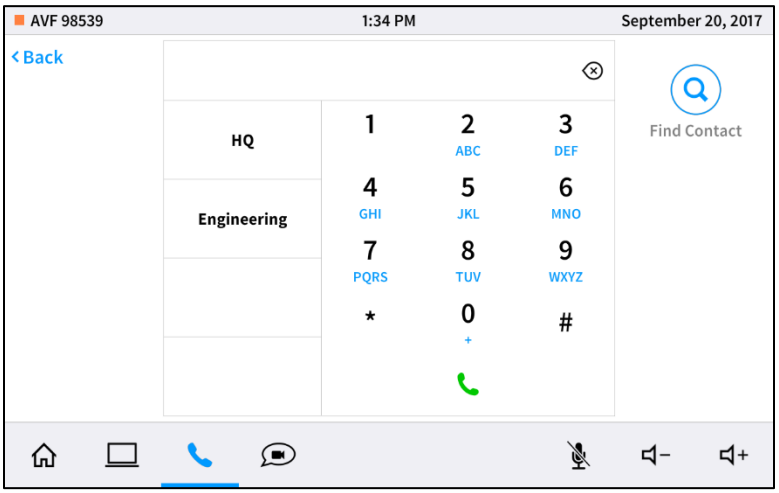
1. Tap **Skype**. The **Find Contact to Call** screen is displayed.

Find Contact to Call Screen



2. Tap . The keypad screen is displayed.

Keypad Screen



3. Tap the number to call with the numeric keypad, and then tap .

Skype for Business In-Call Functions

During a Skype for Business call, the **In Skype Call** screen is displayed.

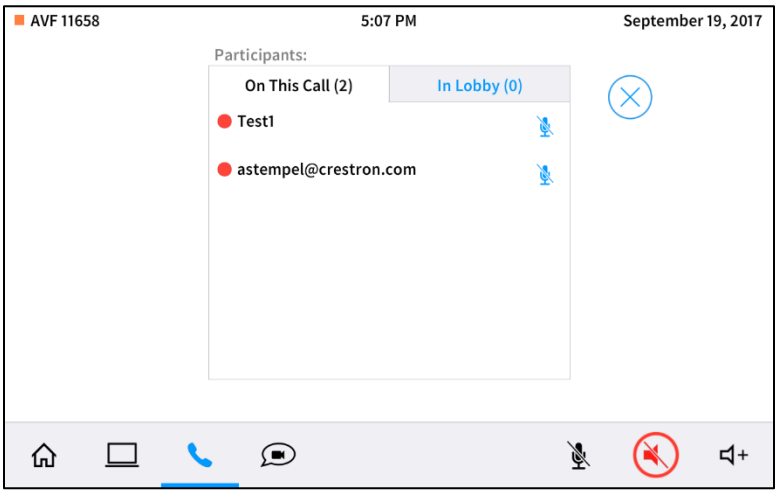
In Skype Call Screen

The following functions are available during a Skype for Business call.

- View participants

  Tap to view members of the Skype for Business call. The **Participants** screen is displayed.

  Participants Screen

  - Tap **On This Call** to view current call participants.
  - Tap next to a participant name to mute their microphone.
  - Tap **In Lobby** to view waiting invitees.
  - Tap **X** to exit the **Participants** screen.

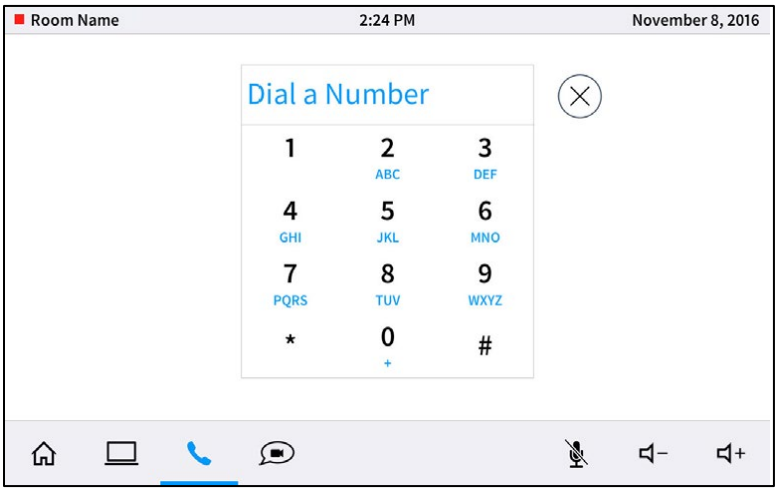
- End the call

  Tap to end the call.

- Use the Numeric Keypad

  Tap to display the numeric keypad and send dual tone multi frequency (DTMF) tones (to enter extensions, check voicemail, etc.). The keypad screen is displayed.

  Keypad Screen



  – Tap numbers to send DTMF tones.

  – Tap **X** to exit the keypad screen.

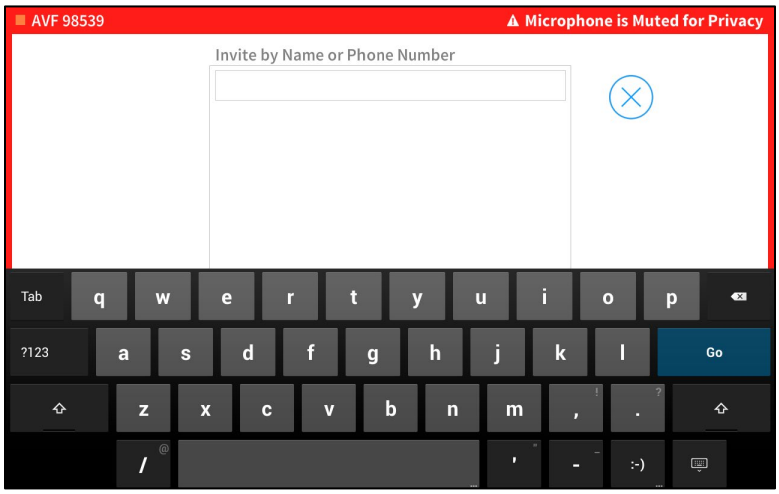
- Place a Call on Hold

  Tap place the call on hold. Tap to resume.

- Add a Participant

  a. Tap . The invitation screen is displayed.

  Invitation Screen



  b. Enter the name or telephone number of the participant to be added.

c. Tap the name or phone number that is displayed. The participant is dialed and added to the call when they answer.

Run a Web Conference

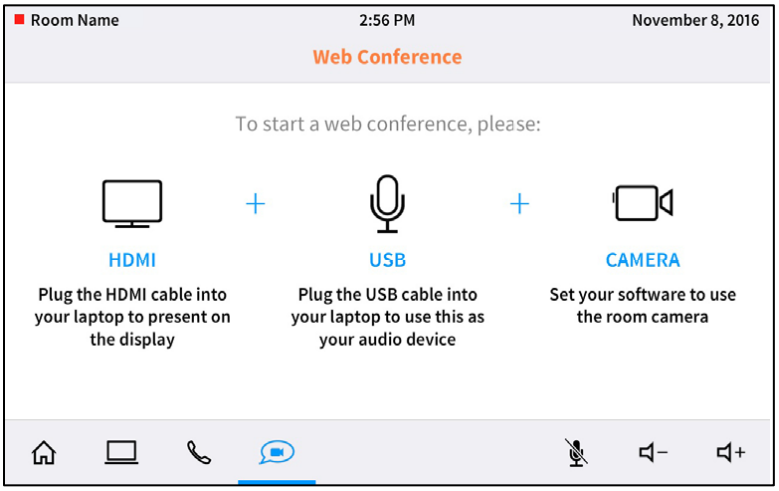
When configured, the CCS-UC-1 can run a web conference using a connected computer that is running web conferencing software. The CCS-UC-1 provides the speakerphone, video display, and camera capabilities (when equipped).

NOTE: The CCS-UC-1 does not provide an Internet connection to the computer to run a web conference. The computer must have its own Internet connection.

To run a web conference, follow this procedure:

1. Tap . The **Web Conference** screen is displayed.

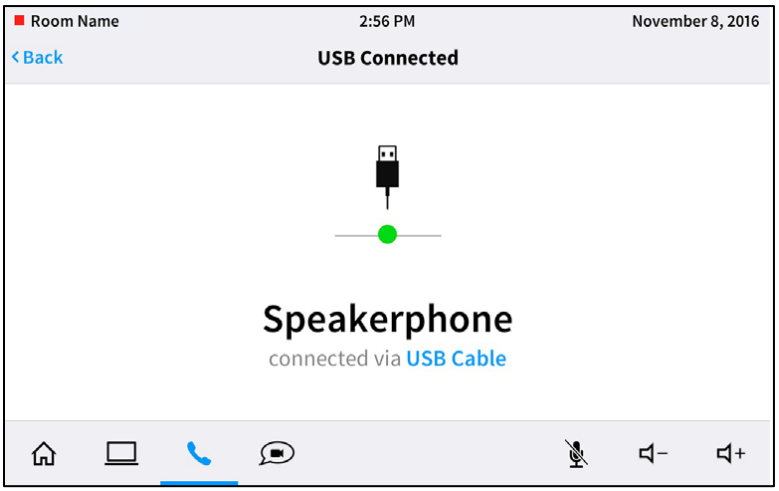
Web Conference Screen



2. Connect the HDMI cable from the CCS-UC-1 to the computer that is running the web conference.

3. Connect the USB cable from the CCS-UC-1 to the computer that is running the web conference software. The **USB Connected** screen is displayed.

USB Connected Screen



4. On the computer, set the web conference software to use the room camera attached to the CCS-UC-1.

5. Start the web conference.

6. When the conference is over, end the conference.

7. Disconnect the USB and HDMI cables from the computer.

Invite the CCS-UC-1 to a Meeting (Schedule the Room)

The CCS-UC-1 can be reserved using either the Skype for Business program or Microsoft® Outlook® software.

Reserve from Skype for Business Program

To add the room from the Skype for Business program, perform the following procedure:

1. Join the meeting from a computer or mobile device.
2. Click **Invite More People**.
3. Search for the room name (the room name is on the CCS-UC-1's display) and click **OK**.
4. Answer the call from the CCS-UC-1.

Reserve from Microsoft Outlook

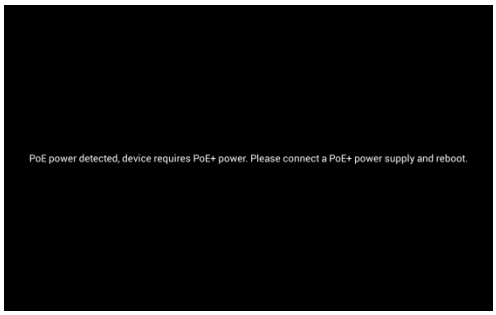
To add the room from Microsoft Outlook, perform the following procedure:

1. Open the calendar item in Outlook on the computer or mobile device.
2. Add the CCS-UC-1 in the **To:** field, and send the update. If the meeting is accepted, it will appear on the room calendar shortly.
3. Join the meeting from the CCS-UC-1.

Troubleshooting

The following table provides troubleshooting information. If further assistance is required, contact a Crestron customer service representative.

CCS-UC-1 Troubleshooting

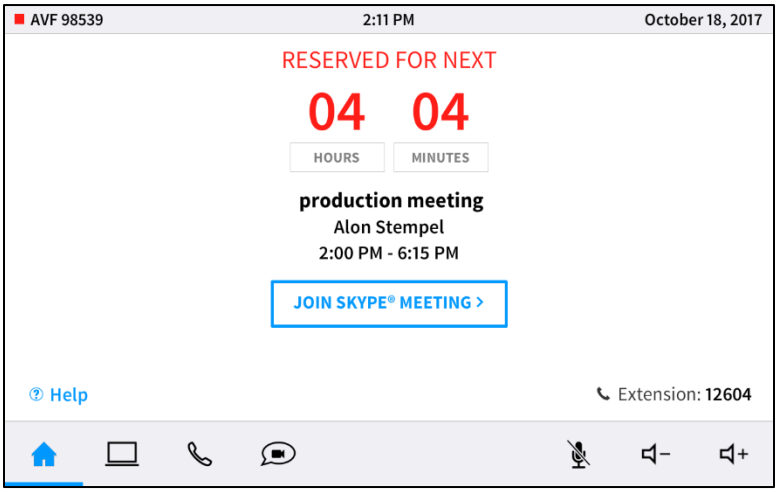
TROUBLE	CAUSE	CORRECTIVE ACTION
The microphone mute LED on top of the CCS-UC-1 is lit blue.	The CCS-UC-1 is not receiving sufficient power for standard PoE+ (IEEE 820.3at) operation (for example, only receiving power from a standard PoE source).	Connect a PoE+ source or connect the PW-2420RU power pack (sold separately and included with the CCS-UC-1 W/PS KIT or CCS-UC-1-AV W/PS KIT).
The CCS-UC-1 displays the screen below, with the message "PoE power detected, device requires PoE+ power. Please connect a PoE+ power supply and reboot." 	The CCS-UC-1 is not receiving sufficient power for standard PoE+ (IEEE 820.3at) operation (for example, only receiving power from a standard PoE source).	Connect a PoE+ source or connect the PW-2420RU power pack (sold separately and included with the CCS-UC-1 W/PS KIT or CCS-UC-1-AV W/PS KIT).
The CCS-UC-1 is not receiving PoE+ power from a Cisco® PoE+ switch.	The Cisco switch's Link Layer Discovery Protocol (LLDP) is disabled.	Configure the Cisco switch to enable LLDP. For example, to enable LLDP on some Cisco switches, use the following console commands: Switch# configure terminal Switch(config)# lldp run Switch(config)# end

Appendix: Configure Exchange for Use with CCS-UC-1

Skype for Business can provide single touch join functionality on its client devices. The image below shows a reserved Skype for Business meeting where the CCS-UC-1 is able to read the join information from the body of the scheduling service. Tapping **JOIN SKYPE® MEETING** causes the CCS-UC-1 to join the Skype for Business call.

For information on supported versions of Skype for Business and Exchange, refer to Answer ID 5829 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

Home Screen - Reserved Room



There are several reasons the **JOIN SKYPE® MEETING** button may not display:

- The calendar body is not available to the CCS-UC-1
- The CCS-UC-1 is not logged in to Skype for Business
- The meeting was not scheduled as a Skype for Business meeting
- The join information in the body of the scheduled meeting was not available to the CCS-UC-1

Enable Resource Account Body for One Touch Join

By default, resource accounts do not include a body for their invitations. To have resource accounts that are used with the CCS-UC-1 include a body in their invitations, perform the following procedure.

NOTES:

- Change data within the chevrons before executing commands.
- Both on-premises and Office 365 deployments are affected.

1. Access PowerShell on the domain and enter the following command for the account.

   ```
   Set-CalendarProcessing <account name> –DeleteComments $false –
   DeleteSubject $false
   ```

2. Run the following script:

   ```
   ////Provisioning O365 Lync/Skype Account////

   //Open Powershell - Make connection to O365

   //Change Data in carrots before executing commands.

   Set-ExecutionPolicy Unrestricted

   $org="<cloudaccount>.onmicrosoft.com"

   $cred=Get-Credential <useraccount>@$org

   $sess=New-PSSession -ConfigurationName microsoft.exchange -
   Credential $cred -AllowRedirection -Authentication basic -
   ConnectionUri https://ps.outlook.com/powershell

   Import-PSSession $sess

   //Send Whatever commands you want.
   ```

Refer to https://technet.microsoft.com/en-us/library/dn975125.aspx for more information.

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Specifications subject to
change without notice.