Deployment

Deployment Overview

You can easily deploy and set up the Cisco Webex Room Phone. Connect the phone to your network, wait for the device to power up, and enter your information when you see the prompts. If the activation process doesn't start by itself, then you enter your information manually.

Note We recommend that you connect the phone to a HDMI display screen so you get the full benefits of the device. Only use the included HDMI cables when you connect to an HDMI screen or a computer. Don't use any other cables or adapters.

The Cisco Webex Room Phone supports these call control options:

- Cisco Unified Communications Manager (Unified CM) Calling—You use Unified CM for call control and device management. You add the phone to Unified CM, and activate your features and services.

- Unified CM Calling with Control Hub—You use Unified CM for call control and Cisco Webex Control Hub for device management. You add the phone to Unified CM, create a Place in Cisco Webex Control Hub, and generate your activation code.

- Cisco Webex Calling with Control Hub—You use Control Hub to manage your device and to provision Webex Calling for call control. You create a Place in Cisco Webex Control Hub and generate your activation code.

Use the Cisco Webex Device Connector for bulk deployment to Cisco Webex Control Hub. Use the Bulk Administration Tool (BAT) for bulk deployment to Cisco Unified Communications Manager (Unified CM).

The following table lists the features available with each option.

Table 1: Cisco Webex Room Phone Features

Features	Unified CM Calling	Cisco Webex Calling with Control Hub	Unified CM Calling with Control Hub	Description
Cable sharing—In call or meeting	No	Yes	Yes	Allows users to share content from a laptop screen to the phone with during HDMI cable during a meeting.
Cable sharing—Outside of call or meeting	Yes	Yes	Yes	Allows users to share content from a laptop screen with the HDMI cable.
Calendar and One Button to Push	No	Yes	Yes	Allows users to view scheduled Webex Meetings and join with a single tap.
Call history and Predictive dialing	Yes	Yes	Yes	Allows users to easily make a call. Call history—Lists your last 25 calls; select from the list. Predictive dialing—As you enter a phone number or search the directory, the results change to match your query.
Enhanced Cisco Webex Meetings experience	No	Yes	Yes	Allows users to participate in an enhanced Cisco Webex Meetings experience with the following features: • Meeting notifications—User receives a notification before the meeting starts. • Lobby—Participants wait in a virtual lobby for the meeting to start. • Participant list—A list of people in attendance. • Active speaker—When an attendee speaks, then their icon lights up.

Features	Unified CM Calling	Cisco Webex Calling with Control Hub	Unified CM Calling with Control Hub	Description
Digital signage	No	Yes	Yes	Allows user to see custom content on a HDMI display screen such as company announcements.
Directory	No	Yes	Yes	Allows user to call a coworker from a company directory.
Guest share	No	Yes	Yes	Allows user to share content without a Cisco Webex account.
Hold and resume	Yes	No	No	Allows user to put an active call on hold and then resume the call when ready.
Proximity pairing	No	Yes	Yes	Allows user to connect a phone to a Cisco Webex app.
Wireless sharing with your Cisco Webex app	No	Yes	Yes	Allows user to collaborate with coworkers by sharing information without your HDMI cable.

Related Topics

Install Your Phone

Network Requirements

Before you deploy your Cisco Webex Room Phone, confirm that your network meets the minimum hardware criteria and configuration requirements.

Cisco Unified Communications Manager Network Requirements

Before you deploy the Cisco Webex Room Phone, confirm that the phone can access your Cisco Unified Communications Manager (Unified CM). For information and a checklist for setting up and configuring your network, see the documentation for your particular Unified CM release.

Cisco Webex Room Phone require a minimum 2-Mbps of bandwidth to register with Unified CM. Consider this bandwidth requirement when you configure your Quality of Service (QoS). For more information, refer to *Cisco Collaboration System 12.x Solution Reference Network Designs (SRND)* or later (https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/srnd/collab12/collab12.html).

Cisco Webex Teams Services Network Requirements

Before you deploy the Cisco Webex Room Phone to Cisco Webex Control Hub, make sure that your environment meets the minimum hardware criteria and configuration. For information setting up and configuring

your network, see *Network Requirements for Webex Teams Services* (https://help.webex.com/en-us/
WBX000028782/Network-Requirements-for-Webex-Teams-Services).

Cisco Webex Network Test

You can use the Cisco Webex Network Test tool to test your network connection. The tool is located at
https://mediatest.webex.com. It tests the following network attributes:

- TCP Connectivity
- TCP Delay
- TCP Download speed
- TCP Upload speed
- UDP Connectivity
- UDP Delay
- UDP Loss Rate

Install Your Phone

When you connect the Cisco Webex Room Phone to your network, you begin the phone startup process. The
phone powers up and the startup screen displays.

If you use a Power Injector, then monitor the injector indicator light for the network status. A solid green light
means a valid IEEE802.3 connection at the required power load. A flashing yellow light means an invalid
power supply device. A flashing green light means that the injector doesn't detect the power load.

For additional information, see the *Cisco Webex Room Phone Getting Started* document that ships with your
phone.

Before you begin

Choose the power source that suits your needs:

- Power over Ethernet (PoE)—For administrators who require a consistent power source but only want a
  single cable. Confirm that your RJ-45 port supports PoE.
- Ethernet with a Cisco Aironet Power Injector or Non-PoE—For administrators who require an efficient
  power source and who have space for another cable.

Locate the screen HDMI cables that came with your device. The cables are color coded for easy identification
and match the color tabs on the phone ports. The 26-foot (8-meter) screen cable has a red tab on the end. The
9.8-foot (3-meter) computer cable has a blue tab on the end.

Procedure

Step 1 Connect the phone to the network.

- If you use PoE:

    a. Plug the Ethernet cable to the LAN port.

    b. Plug the other end of the Ethernet cable to the RJ-45 port on the rear side of the phone.

  • If you do not use PoE:

    a. Plug the power cord of the Cisco Aironet Power Injector into an electrical outlet.

    b. Connect the other end of the power cord to the injector.

    c. Plug one end of the Ethernet cable to the LAN port and the other end to the **DATA IN** port of the injector.

    d. Connect the RJ-45 port on the rear side of the phone to the **DATA & POWER OUT** port of the injector.

Step 2   Connect the screen HDMI cable to the **Screen** port on your phone.

Step 3   Connect the screen HDMI cable to the HDMI port on your display screen.

Step 4   Connect the computer HDMI cable to the **Computer** port of your phone.

Step 5   Connect the computer HDMI cable to the HDMI port on your computer.

Deploy to Cisco Webex Control Hub

Deploy Cisco Webex Room Phone to Cisco Webex Control Hub for Cisco Webex Calling with Control Hub or for Unified CM Calling with Control Hub.

Before you begin

If you use a firewall, then confirm that the phone can reach Cisco Webex Control Hub. If the firewall blocks the phone, then the device cannot activate and a red dot ⬤ displays on the phone home screen. This type of connection error doesn't appear in the status messages log.

Procedure

	Command or Action	Purpose
Step 1	(Optional) Add your phone to your Cisco Unified Communications Manager (Unified CM). Configure your features and services.	Configures Unified CM for phone registration and adds features and services. This step is only for Unified CM Calling with Control Hub deployment.
Step 2	Create a Workspaces, add your calendar, and add your call service. Generate the activation code.	Configures your Control Hub Workspaces for your phone and allows your phone to register after it connects to the network.
		Select the Call Service option that matches your deployment model:
		• Free Calling—Select this option for Unified CM Calling with Control Hub.

	Command or Action	**Purpose**
		• Cisco Webex Calling with Control Hub—Select this option for Webex Calling. You can also add your Calendar service. This is an optional step but many users find this feature useful.
Step 3	Install and power up the phone.	Allows your phone to power up and to start the registration process.
Step 4	(Optional) Configure your network settings.	If you deploy manually, then you can set the IPv4, DNS, VLAN, or Proxy settings.
Step 5	Select your call service.	Your call service is your calling option. Tap **Cisco Webex**.
Step 6	Enter your activation code.	Confirms that your phone has permission to register to the server.
Step 7	Customize your display.	Allows you to set your time zone on the phone. If your phone connects to a display screen, then adjust the image so it's clear.
Step 8	Select your call service.	This is only for deployment to Unified CM Calling with Control Hub. Tap **Cisco UCM**.

Related Topics

Deploy to Cisco Unified Communications Manager

Deploy Cisco Webex Room Phone to Cisco Unified Communications Manager (Unified CM) if you want Unified CM to handle call control and processing.

Before you begin

Install the appropriate device pack and a current firmware release before you deploy the phone. If you do not install the device pack, then the device fails registration.

Procedure

	Command or Action	**Purpose**
Step 1	Add and configure the phone on Unified CM.	Configures Unified CM for phone registration and adds your features and services.
Step 2	Connect the phone to your network.	Allows the phone to power up and begins the phone configuration steps for deployment.
Step 3	Configure your Ethernet settings.	This is an optional step. Some administrators deploy manually and can set the IPv4, DNS, VLAN, or Proxy settings if needed.
Step 4	Select your Call Service.	The call service for Unified CM deployment is **UCM Calling**. This step configures your phone for the Unified CM.
Step 5	Configure your server address.	Allows the phone to register with your Unified CM. Enter your Unified CM TFTP IP address.

Related Topics

Add a Call Service

Change your call service or add a second service if you selected the wrong call control option during deployment.

A red dot ⬤ next to a call service indicates an error. A green dot ⬤ indicates a functional call service.

Before you begin

Depending upon your deployment, you may need one of the following:

- Your activation code—To register with Cisco Webex Control Hub.

- Your TFTP server IP address—For manual deployment to a Cisco Unified Communications Manager.

Procedure

Step 1	Tap the top-left corner of your phone screen.
Step 2	Tap **Settings** > **Device activation**.
Step 3	Tap a call service.

• Cisco Webex—Select this option for Cisco Webex Calling with Control Hub.
• Cisco UCM—Select this option for Cisco Unified Communications Manager (Unified CM) Calling or for Unified CM Calling with Control Hub.

Related Topics

Configure the Network Settings

You can configure the phone network settings from the start-up menu when you deploy the device. If you require it, then you can configure the IPv4, DNS, VLAN, or Proxy settings after deployment. For example, you can configure a static IP address or a proxy host.

The following table describes the fields in the Network settings menu.

Table 2: Network Setup Menu

Entry	Type	Description
Using DHCP	Off On (Default)	Allows you to enable or disable DHCP. With DHCP set to **On**, the DHCP server assigns the IP address. With DHCP set to **Off**, you assign the IP address.
IPv4 address	String	The Internet Protocol (IP) address for the phone. If you assign an IP address with this option, you must also assign a subnet mask, Domain Name System (DNS), and default router. See the **Subnet Mask** and **Default Router** options in this table.
Subnet Mask	String	The IP addresses for the subnet mask, if your network has a subnet and uses a bitmask to identify the routing prefix.
Gateway	String	The IP address for the router that acts as the forwarding host to other networks.
DNS Domain Name	String	The name of the Domain Name System (DNS) in which the phone resides.
DNS address 1	String	The IP address of the DNS Server 1.
DNS address 2	String	The IP address of the DNS Server 2.
DNS address 3	String	The IP address of the DNS Server 3.

Entry	Type	Description
VLAN	Auto (Default) Manual Off	The Virtual Local Area Network (VLAN) configured on a Cisco Catalyst switch.
Proxy	Off (Default)	The IP address for the proxy server. Configure the proxy server before you configure the device settings.
Proxy port	String	The assigned port on the proxy host.
Username	String	The administrative username required for authentication on the proxy host.
Passphrase	String	The administrative password required for authentication on the proxy host.
Use IEEE 802.1X	Toggle	When **On**, the phone uses 802.1X authentication to request and gain access to the network.

Procedure

Step 1	Tap the top-left corner of the phone screen.
Step 2	Tap **Settings** from the list of menu options.
Step 3	Scroll down and tap **Network connection**.
Step 4	Tap **Open Ethernet settings** and review or change the network settings.
Step 5	Reboot the phone after you configure your settings.

Related Topics

Network Status

The network status displays at the top of the Network connection screen on the phone and it shows if your device can connect to the network. Use the following table to troubleshoot your network connection.

Table 3: Network Status

Status	Meaning	Notes
Network connected.	The phone has an IP address.	Your phone is connected to your network.
Network disconnected.	The phone doesn't have an IP address.	Network or connectivity issues do not display in the status messages log.

Status	Meaning	Notes
Network reconnecting.	The phone retrieves the IP address.	—
DNS not configured.	The phone is missing a Domain Name System (DNS) address. If available, the phone uses the first available DNS and domain name.	If you have a DNS error, then you see a red dot ● on the home screen. DNS errors don't display in the status messages log.
802.1x authentication failed.	The phone fails 802.1x authentication.	The status messages log shows 802.1x as enabled or disabled.
Duplicated IPv4 address.	The configured IPv4 address is not unique or the IPv4 address from DHCP server is not unique.	—

Related Topics

Access the Device Logs In AP Mode

If your device loses the IP address or fails to connect to the network, then it enters Hosted Access Point (AP) mode. This mode allows you to download the device logs from the device web page. Use the logs to troubleshoot your network issue.

Procedure

Step 1 Tap the top-left corner of the phone screen.

Step 2 Tap **Settings** from the list of menu options.

Step 3 Navigate **Issues and diagnostics**. Note the URL and log-in information.

Step 4 Open a web browser and enter your URL and log-in information.

Related Topics

Install the Wired Expansion Microphones

The phone supports an optional kit with two wired expansion microphones. You can extend the microphones up to 7 feet (2.13m) from the phone. For best results, place the microphones between 3 feet (0.91 m) and 7 feet (2.1 m) away from the phone.
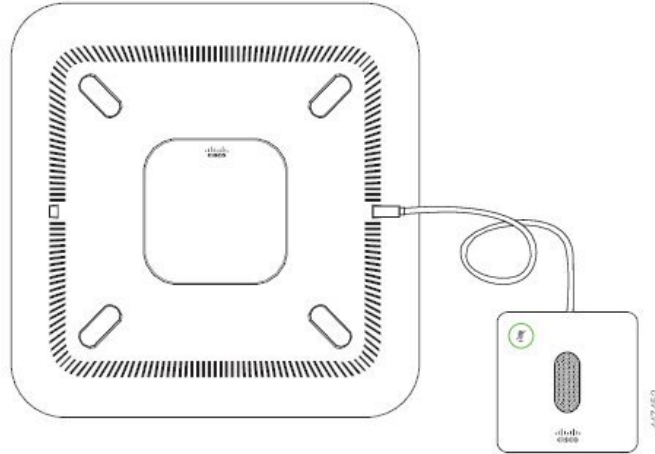
Procedure

Step 1   Plug the end of the microphone cable into the port on the side of the phone.

Step 2   Extend the microphone cable to the desired position.

The following figure shows installation of a wired expansion microphone.

Figure 1: Wired Expansion Microphone Installation

Troubleshoot Your Deployment

You can easily deploy and set up the Cisco Webex Room Phone. But if you have trouble with device activation, then use the information in the following table to assist you.

Table 4: Potential Deployment Issues

Scenario	Reason	Solution	Notes
A red dot ● displays in the top-left corner of the phone home screen.	A red dot indicates an issue with the call service.	Tap the red dot and configure a call service.	—
A red dot ● displays in the top-left corner of the phone home screen.	If you deploy for Cisco Webex Calling with Control Hub or Unified CM Calling with Control Hub, then a firewall can block your connection to Cisco Webex Control Hub.	Confirm that your device connects to an open port on the router.	This type of connection error doesn't appear in the status messages log.

Scenario	Reason	Solution	Notes
A red dot 🔴 displays in the top-left corner of the home screen.	The phone requires a Domain Name System (DNS) address.	Enter a DNS address in the Network Settings.	This type of connection error doesn't appear in the status messages log.
The following status message displays in Status messages: `UTC dhclient-script: W: eth0 => received reason: STOP`	The device requires an IP address from DHCP.	Enter a DNS address in the Network Settings.	—

Related Topics