Webex Device Deployment Journey

Content

Deployment scenarios

Find the right path to deploy Cisco Webex Room devices in your organization.

Whether you are just getting started with the Cisco Webex cloud, migrating your on-premises video endpoints, or wanting a hybrid deployment to link your on-premises devices to the Cisco Webex cloud service, this deployment guide provides the information you need to implement and roll out enterprise-grade video and a transformed workplace seamlessly.

The following sections will help you navigate your video deployment journey.

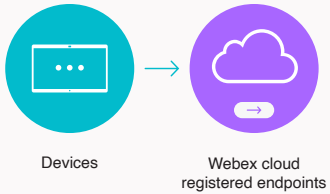
- Getting started with Webex cloud
- Migrating to the Webex cloud
- Leverage On-Premises Services with Webex Edge for Devices

Journey

Getting started with Webex cloud

Cisco Webex cloud is a secure cloud team collaboration platform that works with Cisco devices, including video and calling endpoints, as well as applications to enable better teamwork for every worker.

Visit the *Migration, maintenance, and monitoring* section to learn more about Webex cloud registered endpoints and how to get the most from your Webex cloud services.



To leverage video endpoints with Webex cloud, you will need the following:

- Endpoints
- Webex cloud subscription

Resources

Get Started with Your Webex Room Device

Journey

Migrating to the Webex cloud

Transition registered video endpoints from on-premises call control (CUCM/VCS) to the Cisco Webex cloud to access cloud features and functionality that enable organizations to move faster and collaborate more efficiently.

Visit the *Migration, maintenance, and monitoring* section to learn more about Webex cloud registered endpoints and how to best migrate to Webex cloud services.

To migrate endpoints to the Webex cloud, you will need to complete the following:

- Validate on-premises endpoints are supported by Webex cloud, or replace with supported models
- Webex cloud subscription
- Plan ahead to migrate your calendar

Resources

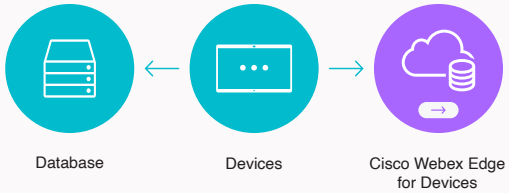
Get started with the devices transition map

Journey

Leverage On-Premises Services with Webex Edge for Devices

As your company transitions from an on-premises deployment to a fully cloud-based environment, Webex Edge for Devices allows you to maximize your on-premises investment, while still gaining the benefits of cloud-based services, to meet your company's collaboration needs. Webex Edge for devices is a great first step to a full cloud deployment.

Visit the *Migration, maintenance, and monitoring* section to learn more about Webex Edge and how to properly integrate Webex Edge solutions with on-premises services.

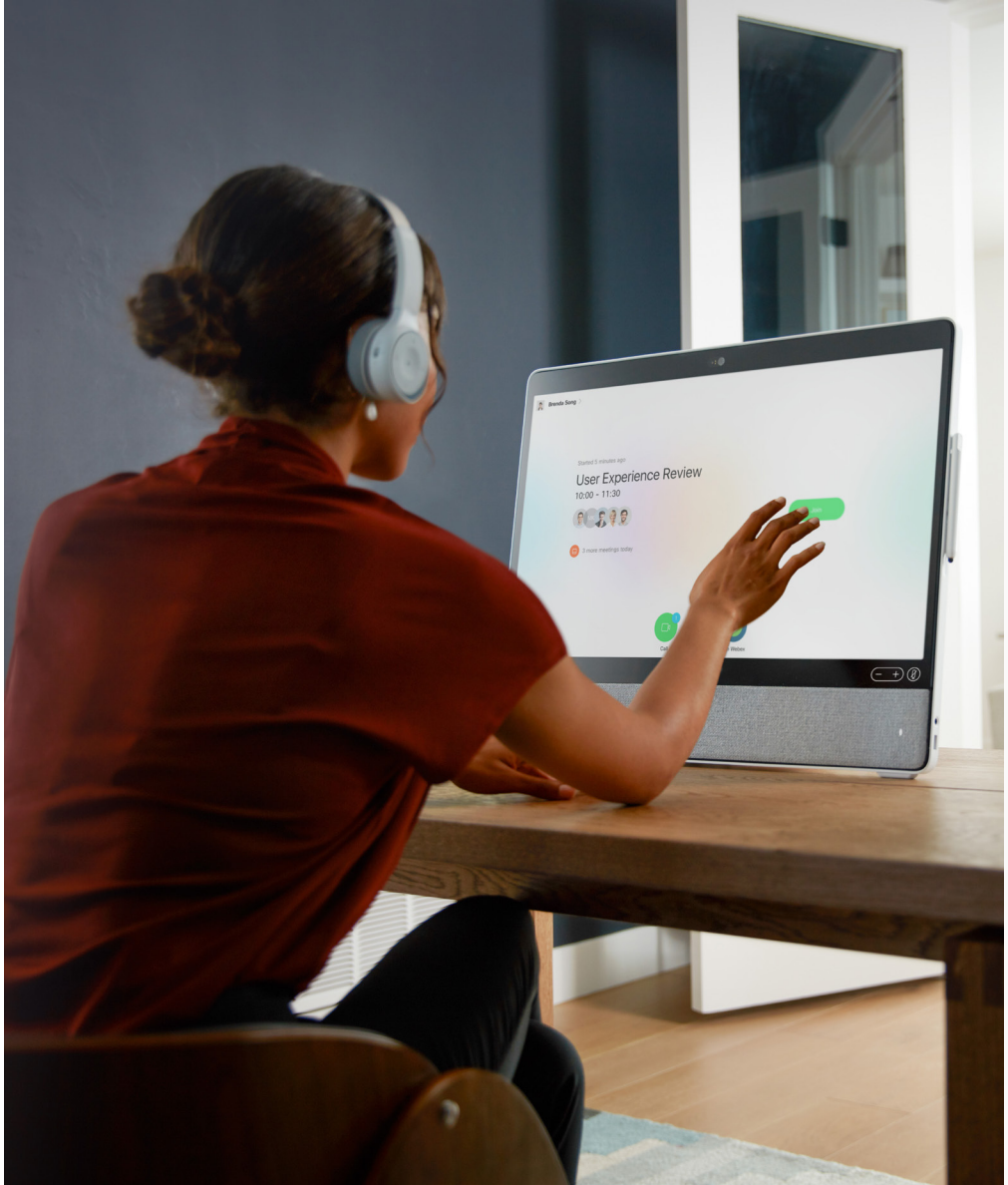


By leveraging Webex Edge for Devices services with your on-premises endpoints, you can access:

- Device Diagnostics with the ability to set admin alerts
- Device Historical Analytics available directly in Control Hub
- Cloud xAPI Access (the ability to send command and read status)
- Troubleshooting Webex Meeting calls
- View configurations directly in Control Hub
- Cloud feature: Webex Assistant

Resources

Get started with Webex Edge for Devices



Network readiness

Many of the problems encountered during video deployment are often network related. The performance of your video deployment relies upon bandwidth, firewall, media flow, and QoS. These factors can impact user-experience and must be properly evaluated and addressed to ensure a successful deployment.

Areas for consideration

Network configuration requirements for video services can be grouped into the following categories:

- Connection must support the Webex service
  - Use the Media test link to check the status of your network, specifically for the speed of the network using TCP and UDP, as well as port connectivity
  - Allow UDP vs. TCP traffic
- Availability of bandwidth
  - Validate sufficient bandwidth
  - Before deploying Webex Video Mesh Nodes, consider the available bandwidth per site
  - Check your QoS policy, and review Cisco Webex's guidance on QoS best practice
- Network configuration
  - Check the whitelisting of Webex domain services
  - If using a proxy, configure to allow access to Webex cloud services
  - If sending media to the Webex cloud, review the firewall policy
    - Webex Edge for Devices requires https and does not require additional ports or infrastructure

Through proper planning and design before deploying your video system, you can reduce the amount of effort required to maintain high-quality experiences.

Resources

Cisco Webex network bandwidth white paper

Network requirements for Cisco Webex

Connect your Cisco Webex Board, Room, or Desk device to a proxy server

Migration, maintenance, and monitoring

Use key tools and best practices to assist in the migration, maintenance, and monitoring of your Webex cloud implementation.

- Webex cloud-registered endpoints
- Cisco Webex Edge for Devices
- Directory Connector
- Single sign-on
- Hybrid calendar enabling One Button to Push

Webex cloud-registered endpoints

Simplify your network and get the latest features automatically when cloud-registering your Webex-enabled video endpoints.

Areas for consideration

To leverage video endpoints with the Webex cloud, you will need the following:

- Cisco endpoints
- Webex cloud subscription

You will need the following information to set up your Webex cloud environment via Control Hub:

- Email address of your Webex admin who will receive order confirmation
- Legal name of your company
- Webex site name (if using Webex)
- Domain you would prefer to use in your SIP URI

Note: Webex Teams client has a SIP URI. This means you can make/receive direct SIP calls between Webex-registered video endpoints and Webex Teams clients (free or paid).

To best leverage Webex cloud services, you may opt for:

- Webex Teams and/or Webex Meetings
- Integration with existing Cisco collaboration products
- Integration with existing productivity tools, such as Microsoft Office 365 or Google's G-Suite, to provide:
  - Email integration
  - Scheduling, calendar integration, and OBTP
  - Directory sync
- Implement single sign-on for increased user adoption

Resources

Get details on how your personal information is managed and stored in the Webex cloud

Cisco Webex Teams security and privacy white paper

Cisco Webex Edge for Devices

Webex Edge for Devices enables your on-premises devices to consume a subset of cloud services, such as access to Webex Control Hub, to monitor and administer your devices.

Areas for consideration

To leverage video endpoints with Webex cloud, you will need the following:

- Administrator access in Control Hub
- Cisco Webex Edge Device Connector
  - To onboard and link on-premises devices to the Webex cloud, start by downloading the Cisco Webex Device Connector desktop application from the Webex Control Hub
  - If Cisco Webex Devices is running CE 9.12.3 or higher, linking to Webex cloud can be done easily with the Device Connector
  - You can onboard devices directly from CUCM, CSV/TMS export file
    - Move devices in bulk or one by one
- Enabling Webex Edge for Devices does not change the media paths that your on-premises video devices use today, and no additional IP subnets for voice, video, and content sharing need to be whitelisted in your enterprise firewall

Resources

Cisco Webex Edge for Devices white paper

Directory Connector

With Cisco Directory Connector, you can maintain your user accounts and data in Active Directory. When you make a change in Active Directory, this change is reflected in the Webex cloud.

Areas for consideration

Identity maintenance of the Webex cloud environment is simplified with synchronization between the Enterprise directory and Webex Control Hub. Items for enabling the directory sync are:

- Directory Connector software downloaded via Control Hub
- Install one instance of the Directory Connector for each domain
- Active Directory Service/Microsoft 365 Directory Service

Resources

Ways to add and manage users in Cisco Webex Control Hub

Single sign-on

Single sign-on (SSO) is a session or user authentication process that permits a user to provide credentials to access one or more applications.

Areas for consideration

Single sign-on (SSO) is highly recommended for the best user experience in a Webex-enabled environment. Take into consideration the below items.

- Enabling SSO will allow for the administrative control of what emails users receive from Control Hub
- When you enable SSO, you can take a phased approach to control which Webex services users can access
- Determine the Identity Provider (IdP) that will be used for the SSO service

Resources

Single sign-on (SSO) integration in Cisco Webex Control Hub

Hybrid Calendar: One Button To Push

One Button To Push (OBTP) is a meeting capability that can be enabled via Hybrid Calendar for Webex Room devices. It enables a simple experience to join meetings. For attendees, a big green button is displayed on their device.

Areas for consideration

- Exchange Administrator/Office 365 Admin/Google Admin needs to assign devices a resource account, then you can assign that email account to the Workspace in Control Hub
- Invite your conference room as a participant or resource to your Video Meetings, and OBTP will show up at the time of the scheduled meeting
- If the originator of the meeting is in the same organization and they invite a room as a participant or resource, OBTP will function

Resources

Overview of One Button to Push (OBTP)

Deployment guide for Cisco Webex Hybrid Calendar Service

Enabling telephony

Calling configuration

Audio (PSTN) calling to individuals or audio bridges is possible from your video room devices.

Areas for consideration

- Choose your cloud calling solution: Cisco Webex calling
  - Choose from a list of cloud-connected service providers, or
  - Bring your own gateway and leverage your existing PSTN infrastructure
- Use existing call controls and provide cloud capabilities with Webex Edge for Devices via the device connector tool

Resources

Utilize your existing PSTN provider to put a telephone number on your video endpoints

Requirements for business-to-business (B2B) SIP calls to and from the Cisco Webex cloud

Supported devices for calling

Deployment checklist

Leverage this deployment checklist of key activities to take before, during, and after deployment.

Deployment checklist

Readiness

Design > Readiness > Proof of concept

Key activities

- [ ] Ensure you have Webex cloud subscription
- [ ] Review and plan for your network consideration such bandwidth, firewall, media flow
- [ ] Map your transition (enabling meetings and enabling telephony)
- [ ] Review Room OS release for any updates regarding component/feature requirements
- [ ] Take appropriate training/learning for new area

Key tools

Media test
Video deployment content
Control Hub

Deployment

Develop > Test > Validate > Tune > Validate > Production

Key activities

- [ ] Register on-premises devices to Webex cloud
- [ ] Set up Hybrid calendar service to enable One Button To Push
- [ ] Sync your users
- [ ] Set up your on-premises devices URIs (if applicable)
- [ ] Set up single sign-on

Key tools

Control Hub
Directory Connector
Webex Edge Device connector

Post-deployment

Feedback and assessment > Tune

Key activities

- [ ] Allow for periodic assessments and reviews
- [ ] Periodically review Room OS release
- [ ] Exploring Early Field Trial

Key tools

Control Hub

Additional resources

Community

Project Workplace

What’s new in RoomOS

Webex Devices - YouTube