



## Video

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WebEx Meeting Center, Training Center, and Support Center have high-definition video capability. WebEx Meeting Center, Event Center, Training Center, and Support Center continue to support high-quality video.

For detailed instructions on using WebEx video, see the user guide on the Support page of your WebEx service site.

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## What's New

### WBS29.11

#### Video enhancements

- New Video panel layout default settings and consolidated controls allow users to view video and switch between layouts more easily:
  - New video layout options at top of video window on the participant list when a video is being sent.
  - When one user sends video, the default meeting window view changes to 50% video view (unless sharing is going on).
  - When two or more people send video, the video panel automatically changes to video thumbnail view.
  - If a web camera is detected, users are asked whether they want to start their video. In the same prompt, users can also choose to start their video in all meetings. This setting can be changed in video settings by selecting the gear-shaped **Settings** icon on top of the video window.

- The starting frame rate for thumbnails and active video has increased to 15 fps, improving the video experience in good bandwidth environments.
- In case of low bandwidth when video cannot be sent, the user receives a descriptive error message after 5 seconds that indicates that the user has bandwidth or local computer issues that may affect video display.
- In case video stops due to the above low bandwidth error in CMR Hybrid meetings, it starts sending video again automatically when the bandwidth improves or the local computer issues are remedied.

## High-Definition Video Features

Feature	Description	Meeting Center	Event Center	Training Center	Support Center
Up to high-definition resolution (720p)	Video resolution can go up to high-definition 720p resolution (1280x720).	Yes	No	Yes	No
Up to high-quality resolution (360p)	Video resolution can go up to high-quality 360p resolution (640x360).	Yes	Yes	Yes	Yes
Full-screen video view	Full-screen video view with high-definition or high-quality video display (depending on monitor size) and five video thumbnails.	Yes	Yes	Yes	Yes (but does not include video thumbnails)
Expanded full-screen video view	Expand the active speaker to the whole screen, which also allows high-definition video to be received.	Yes	Yes (Expanded full-screen view without high-definition video)	Yes	No

Feature	Description	Meeting Center	Event Center	Training Center	Support Center
Active speaker video display in full-screen sharing view	Floating active speaker video display when sharing in full-screen view.	Yes	Yes	Yes	In full-screen view, the CSR views video in a separate panel; the customer views video in an embedded area of the customer console.
Video self-view in full-screen sharing view	View self-view video in the main video display when sharing in full-screen view. Start or stop sending video from the self-view video window.	Yes	Yes	Yes	No
Active speaker switching	Automatic video switching to the loudest active speaker.	Yes	Yes	Yes	No
Video thumbnails	Video-based participant list with video thumbnails.	Yes	Yes	Yes	No
Auto-adjust Video	Automatic configuration of participants' video quality according to available network bandwidth.	Yes	Yes	Yes	Yes
Camera hot plug-in	Attendees can connect and switch web cams while in a meeting.	Yes	Yes	Yes	Yes

Feature	Description	Meeting Center	Event Center	Training Center	Support Center
Lock video	Presenter can determine whose video will be displayed to all participants.	Yes	Yes	Yes	No
High-definition video decode offloading to GPU	Supported GPU chipsets can offload decode processing from the host CPU.	Yes	No	No	No

## Requirements

WebEx video works with any computer that complies with the standard Meeting Center, Training Center, or Support Center requirements. To be able to reach the video resolution of 360p, PCs must meet the following minimum requirements:

- CPU: Dual-core processor
- RAM: 1 GB RAM
- Camera: a high-quality video supported USB-based web camera (see list in [High-Quality Video Supported Cameras.](#))

To be able to send high-definition video (720p), PCs must meet the following minimum requirements:

- CPU: Quad-core processor (three or more meeting participants), Dual-core processor (two meeting participants).
- RAM: 2 GB RAM
- Camera: a high-definition video supported USB-based web camera (see list in [High-Definition Video Supported Cameras.](#))

To be able to receive high-definition video (720p), PCs must meet the following minimum requirements:

- CPU: Dual-core processor
- RAM: 2 GB RAM

To offload video decoding processing to the client's GPU for 720p, any of the following GPU chipsets are required:

- Windows(DXVA):
  - NVIDIA GeForce 9800GT
  - NVIDIA GeForce GT 430
  - NVIDIA GeForce GTS 450

- NVIDIA GeForce GTX 275
- NVIDIA GeForce GTX460
- NVIDIA GeForce GTX560
- NVIDIA GeForce GTX560Ti
- NVIDIA GeForce GT520
- ATI Radeon HD 6950
  
- Mac OS X(VDA):
  - NVIDIA GeForce9400M
  - NVIDIA GeForce320M
  
- NVIDIA GeForce330M

## High-Quality Video Supported Cameras

Most PC-compatible cameras should work with WebEx. The following cameras were tested by WebEx for high-quality video:

- Cisco VT Camera II
- Cisco VT Camera III
- Cisco Precision HD
- Logitech HD Webcam C920
- Logitech Quick Cam Pro 9000
- Logitech QuickCam Orbit AF
- Logitech QuickCam C905
- Logitech QuickCam S7500
- Logitech HD Pro Webcam C910
- Microsoft LifeCam HD
- Microsoft LifeCam VX-1000
- Microsoft LifeCam Cinema
- Microsoft LifeCam VX-6000
- Microsoft LifeCam NX-6000
- Microsoft LifeCam VX-3000

## High-Definition Video Supported Cameras

The following cameras were tested by WebEx for high-definition video:

- Logitech HD Webcam C310
- Logitech HD Webcam C500
- Logitech HD Webcam C510
- Logitech HD Webcam C905/B905
- Logitech HD Pro Webcam C910/B910
- Logitech HD Webcam C920
- Microsoft LifeCam HD-5000/HD-5001
- Microsoft LifeCam HD-6000
- Microsoft LifeCam Cinema
- Microsoft LifeCam Studio
- Cisco Precision HD
- Cisco TelePresence SX10
- Cisco VT Camera III
- Apple iSight HD

## Known Issues and Limitations

This section contains known issues and limitations that affect WebEx integrated video. For more information about the browsers, operating systems, supported by WebEx, and known issues that affect other WebEx services, see [Cross-platform Features and Known Issues](#).

### High-definition video

High-definition video is automatically turned off during application, desktop, and streaming media sharing. It is automatically turned on again when those functions end.

### Streaming media in Event Center stops presenter's video

In Event Center, playing video from a file and sharing it with all participants requires stopping the presenter's video camera. The presenter can send only one video stream at a time. The presenter's video camera can be turned back on again once he or she has finished streaming the file or media.

This limitation has been added to protect subscribers from bandwidth issues that could result from a spike in video traffic if multiple non-thumbnail video streams are sent to a large group of participants. The limitation is expected to be removed in the future.

### Collaboration Meeting Rooms (CMR) common issues

The following issues are common for both CMR Cloud meetings and CMR Hybrid (WebEx-enabled TelePresence) meetings:

- **Sending video from WebEx applications to video conferencing systems or applications**

A CMR Cloud or CMR Hybrid meeting will always start at the best video resolution between TelePresence (or other video conferencing systems or applications) and WebEx. If high-definition video is available, it will be available to all participants. If any participant on the WebEx side experiences poor network conditions, the resolution between TelePresence and WebEx will downgrade to accommodate that participant. As a result, video resolution will also be poor for all other participants. The minimum bit

rate a WebEx application must process from the WebEx Cloud to be able to receive both video and application or screen sharing (formerly called "desktop sharing") content is 1.2 Mbps. Less than that will result in the WebEx application showing only the shared application or screen.

Starting with WBS29.11, if, for reasons of low network bandwidth or conditions (such as CPU or RAM use) that are local to the WebEx application, the WebEx application is not able to maintain the 1.2 Mbps bit rate per the above, users will see a "low-bandwidth" warning message instead of receiving TelePresence video. In WBS29.11 and later, WebEx application users will automatically periodically retest their connection to the WebEx Cloud to assess whether any network or local conditions have been remedied. If they are able to send and receive video at a bit rate of 1.2 Mbps or greater, they will be able to resume sending and receiving video.

For information about recommended bandwidth configuration settings for CMR Cloud meetings, see *Prerequisites* in Cisco WebEx Meeting Center with Collaboration Meeting Rooms Enterprise Deployment Guide on the [Cisco WebEx Meeting Center Configuration Guides](#) page.

For information about recommended bandwidth configuration settings for CMR Hybrid meetings, see *Prerequisites* in the *Cisco WebEx Features and Important Notes* chapter and *Tips for Troubleshooting Low Bandwidth with the WebEx Meeting Center Client on Windows or Mac* in the *Troubleshooting* chapter of the *Cisco Collaboration Meeting Rooms (CMR) Hybrid Configuration Guide* on the [Cisco TelePresence Management Suite \(TMS\) Configuration Guides](#) page. For information about recommended site administration options to reduce bandwidth issues, see [Site Administration Release Notes](#).

- **In-meeting video experience**

WebEx users can only see the active speaker or the most recently active speaker's video endpoint in the WebEx application. Video endpoint users who are not talking will not show up in the WebEx application.

Video endpoint users can only see the active speaker or the most recently active speaker from WebEx on their screens. WebEx users who are not talking will not show up on their screens.

If there is background noise in a TelePresence room, it can cause the video for that TelePresence room to appear as the active speaker in the WebEx meeting. If needed, the host can use the **Lock Video** command to lock the video display on another participant's video.

In a CMR Cloud or CMR Hybrid meeting, the participant videos of participants who have joined from Apple iPads or iPhones over 4G LTE will not be visible on TelePresence systems, although audio will still be available. This problem occurs because 180 p video is required to send video to TelePresence systems, but sending 180 p video over mobile networks is not supported due to the Apple iTunes store requirements for applications.

- **Full-screen video view**

When the presenter switches to full-screen video view while sharing his or her screen, application, or document, sharing is paused on the attendee side (the last-shared screen freezes). When the presenter exits full-screen video view, sharing will automatically resume.

Attendees will stay in full-screen video view when the presenter stops sharing and will automatically exit full-screen video view when the presenter starts sharing again.

If the Mac or PC WebEx application has two monitors, users can view full-screen view on one monitor and full-screen or application sharing on the other monitor by dragging the video window to the other monitor and selecting the "View all participants in full-screen view" icon.

