

# Cisco Webex Video Mesh (formerly Cisco Spark Hybrid Media Service)

Cisco Webex Video Mesh is a revolutionary capability that can ensure your users enjoy high quality audio, video and content by bridging on-premises and cloud resources.

Now you can utilize Cisco Webex meetings service not only from the cloud, but also using your on-premises infrastructure. Get on-premises video quality with the simplicity, flexibility, and rapid iteration of new functionality that the cloud offers. All together in one service.

Benefits of Cisco Webex Video Mesh:

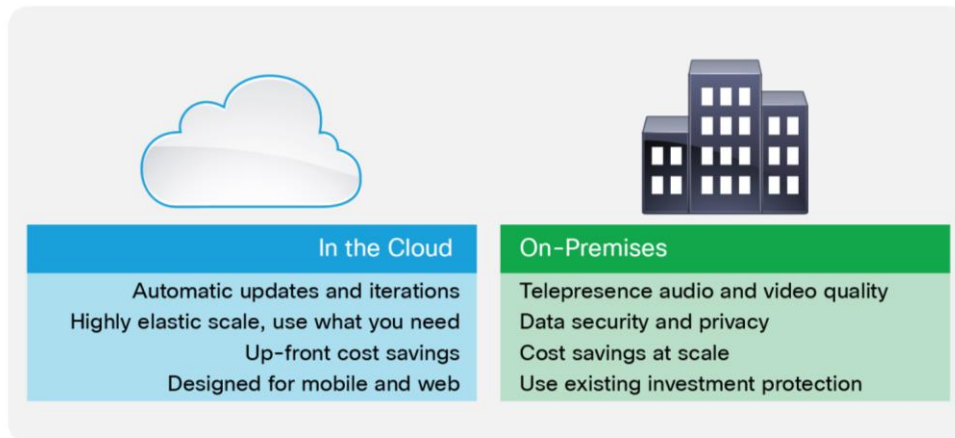
- **Quality and privacy:** Local media processing improves the quality of audio, video, and data sharing and reduces Internet bandwidth consumption.
- **Simplified resource planning:** Transparent overflow to the cloud simplifies resource planning and solution sizing. Best of all, users get one seamless meeting experience, regardless of whether they are joining from devices or apps registered to cloud or on-premises call control.
- **Reduced operational overhead:** Cisco Webex Video Mesh enables on-premises meetings without the operational overhead. It offers a single management system across all Cisco Webex meetings deployment types. Additionally, it provides cloud-based provisioning, usage metrics, and automated delivery of software updates right to your premises – just as if it was in the cloud.

## Product overview

End users are looking for outstanding meeting experiences with rich audio, video, and content sharing. They want to join a meeting from whatever device they choose, and enjoy a great, consistent experience on each one.

Providing this experience to users is not always simple. IT has to deliver scalability, reliability, and reduce costs, along with these great experiences to all their users. One of the most complex decisions can be whether or not to deploy cloud-based or premises-based meetings. Each meeting deployment model has its own benefits, and IT must choose between them (Figure 1).

**Figure 1.** Benefits of meetings deployed On-Premises and in the cloud



But why should IT have to choose between those benefits? What if they could buy and deploy the right mix of premises-based and cloud meetings? That is what Cisco Webex Video Mesh does for Cisco Webex meetings.

Cisco Webex Video Mesh is a simple, secure way to create unique value by enabling Cisco Webex meetings to be deployed not just from the cloud, but also on-premises.

The service determines the best way to deliver the meeting for each user – from the premises if users are local or on-net, and from the cloud if users are remote or off-net. If local resources are full, additional attendees can use resources from the cloud so that everyone can join.

#### **How it works**

Cisco Webex Video Mesh uses a Webex Video Mesh Node, software that is installed on a Cisco UCS<sup>®</sup> server and managed by Cisco Webex Control Hub. Once installed on your network, the Video Mesh Node communicates with the Cisco Webex service in the cloud and can be used by devices registered to the Cisco Webex service or to Cisco Unified CM.

When joining a meeting, the devices communicate with Cisco Webex in the cloud to find the most appropriate Video Mesh Nodes for the meeting. Then the media (audio, video, content) is sent to the Video Mesh Node for processing. This can be a single node on the enterprise network or multiple nodes, cloud and on-premises cascaded together to create the meeting. In either case, the user experience is exactly the same.

Table 1 lists the features and benefits of the Cisco Webex Video Mesh.

**Table 1.** Cisco Webex Video Mesh features and benefits

Feature	Benefits
<b>Local media processing for select Cisco Webex on-premises meetings attendees</b>	Media no longer needs to go to the cloud and back for call processing. Media stays on-premises, providing: <ul style="list-style-type: none"> <li>• Improved quality through reduced latency</li> <li>• Faster connection to other users and to meetings</li> <li>• Cost savings due to more efficient Internet bandwidth usage</li> </ul>
<b>Automatic overflow to the cloud if on-premises resources are full or unavailable</b>	<ul style="list-style-type: none"> <li>• Improved reliability</li> </ul>
<b>Centralized management and visibility across premises and cloud</b>	<ul style="list-style-type: none"> <li>• No more fragmented tools – a single centralized management portal, called Cisco Webex Control Hub, to manage your on-premises media nodes and Cisco Webex organization</li> <li>• Removes the guesswork on capacity usage, with consolidated administrator visibility into resource use</li> <li>• Simplified resource planning and utilization management</li> </ul>
<b>Automatic software updates</b>	Easy to maintain –. The Video Mesh Node is an extension of the Cisco Webex service on your premises, that is synchronized with software updates such as security fixes, bug fixes, and features enhancements deployed in the cloud.
<b>Ease of deployment</b>	Each Cisco Webex Video Mesh Node deploys in as little as 10 minutes. Simple to deploy and add capacity when needed.
<b>Capabilities included with purchase of any Cisco Webex Meetings.</b>	Low cost – no additional subscription fees and no overage fees.

## Endpoints supported

Because Cisco Webex Video Mesh supports Cisco Webex Meetings, users can join meetings from the following when on-premises:

- Cisco Webex Teams app, Cisco Webex video room and desk devices and the Cisco Webex Board
- Cisco Unified CM and VCS/EXP-C registered Cisco and 3rd-party standards based SIP endpoints and standards based SIP clients

Users joining the meeting on the following devices are cascaded to the cloud even if they are on-premises:

- Cisco Webex Meetings app
- Skype for Business
- Any standard based SIP/H.323 endpoints

And of course, anyone off-net will be able to join as well through the cloud.

## Cisco Webex Video Mesh licensing

### System requirements

Cisco Webex Video Mesh can be deployed as a virtual machine on a Cisco UCS server or on spec-based hardware. Table 2 lists the system requirements.

**Table 2.** System requirements

Type of Hardware	Requirements
<b>Cisco UCS Cisco Meeting Server 1000</b>	Minimum requirements: 72 vCPU 60 GB main memory 250 GB storage VMware ESXi6 and vSphere client 6.0 or later Cisco Webex Video Mesh software OVA file downloaded
<b>Spec-based installation</b>	Minimum requirements: 2.6-GHz processor 46 vCPU 60 GB main memory 250 GB storage VMware ESXi6 and vSphere client 6.0 or later Cisco Webex Video Mesh software OVA file downloaded

The Video Mesh Node can be run on Cisco Meeting Server 1000 or MM410v hardware, it provides a migration path for Cisco Meeting Server customers to reuse one of these platforms should they choose to move the Cisco Webex Video Mesh in the future. Additionally, MM400v, CMS 2000, BE6000, and BE7000 are not supported platforms for Video Mesh node and do not have a migration path.

For customers looking to try the Cisco Webex Video Mesh in their labs, a low capacity 90 day trial version is available for download from the Cisco Webex Control Hub.

### Webex dependency

The Cisco Webex Video Mesh has functionality that integrates into a Webex meeting. In order for this functionality to work the Webex site will need to be on the proper version and platform to allow media to stay on-premises with the Video Mesh Node for Webex Meetings.

Customers must work with your partner, Customer Success Manager (CSM), or trials representative to correctly provision the Cisco Webex site and Cisco Webex services for Video Mesh. Please navigate to the [“Provision Cisco Webex Teams Services and Cisco Webex Meeting Center Video Site”](#) section.

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### For more information

To learn more about how the Cisco Webex Video Mesh can transform your communications, visit <https://www.cisco.com/c/en/us/solutions/collaboration/webex-hybrid-services/webex-hybrid-media-service.html>.

To learn more about the Cisco Webex service, visit <https://www.cisco.com/webex>.




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