

Cisco Spark Hybrid Media Service

Cisco Spark™ Hybrid Media Service is a revolutionary capability that brings the benefits of cloud and on-premises meeting deployments together for Cisco Spark meetings.

Now you can deploy Cisco Spark meetings not only from the cloud, but also on your premises or even both. 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 Spark Hybrid Media Service and Cisco Spark Meeting:

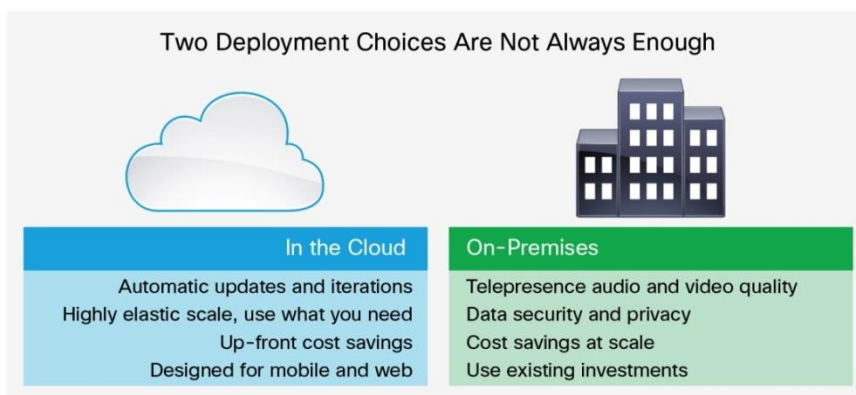
- **Quality and privacy:** Local media processing improves the quality of audio, video, and data sharing and reduces Internet bandwidth consumption.
- **Simplified resource planning:** Transparent overflow to the cloud simplifies resource planning and solution sizing. And eliminates resource limitations for your meetings, even very large ones. Best of all, users get one seamless meeting experience, regardless of whether they are joining from the cloud or the premises.
- **Cloud simplicity on your premises:** Hybrid Media Service enables on-premises meetings without the operational overhead. It offers a single management system across all Cisco Spark meeting deployment types. And 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 simple meeting experiences that enable rich audio, video, and content sharing. They want to join a meeting from whatever device they choose, with a great, consistent experience on each one.

Providing this experience to users is not always simple. IT has to be concerned with scalability, reliability, and costs, along with delivering these great experiences to their users. And one of the biggest 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 Spark Hybrid Media Service does for Cisco Spark meetings.

Cisco Spark Hybrid Media Service is a simple, secure way to create unique value by enabling Cisco Spark meetings to be deployed not just from the cloud, but now also on-premises and even as a mix of both.

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. And if local resources are full, additional attendees can overflow to the cloud so that no one misses a meeting. It does this automatically through policies set by IT.

How it works

Cisco Spark Hybrid Media Service uses a Hybrid Media Node, software that is installed on a Cisco UCS[®] server and managed by Cisco[®] Cloud Collaboration Management. Once installed on your network, the Hybrid Media Node communicates with the Cisco Spark service in the cloud and the endpoints registered to the Cisco Spark service located on-premises (Cisco Spark Room Systems and the Cisco Spark app).

When joining a meeting, the devices communicate with the Cisco Cloud to find the most appropriate Hybrid Media Nodes for the meeting. Then the media for the Cisco Spark Room Systems and the Cisco Spark app (audio, video, content) are sent to the Hybrid Media Node for processing. This can be a single node on the enterprise network or multiple nodes cascaded together across the network to create the meeting. In either case, the user experience is exactly the same.

Table 1 lists the features and benefits of the Cisco Spark Hybrid Media Service when used with Cisco Spark meetings.

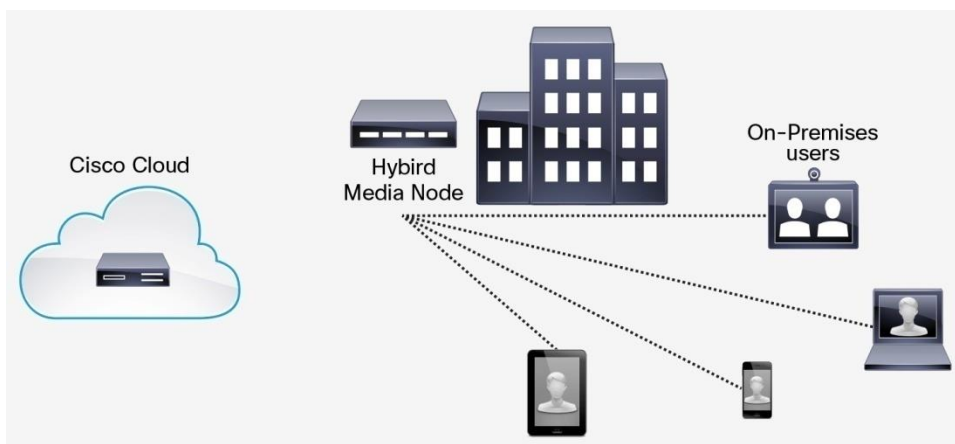
Table 1. Features and Benefits

Feature	Benefits
Local media processing for Cisco Spark on-premises attendees	All media no longer need to go to the cloud and back for call processing. Media stay on the premises, providing: <ul style="list-style-type: none"> • Improved video quality through reduced latency • Faster connection to other users and to meetings • Cost savings due to more efficient Internet bandwidth usage
Automatic overflow to the cloud if on-premises resources are full or unavailable	<ul style="list-style-type: none"> • Improved reliability • Everyone can attend the meeting, and no one gets “locked out” • Have the capacity you need for every meeting, even large ones
Centralized management and visibility across premises and cloud	<ul style="list-style-type: none"> • No more fragmented tools – a single centralized management portal, called Cisco Cloud Collaboration Management, for both the cloud and the premises • Removes the guesswork on capacity usage, with consolidated administrator visibility into resource use • Simplified resource planning and utilization and management
Automatic software updates	Easy to maintain – just as if it was in the cloud. The Hybrid Media Node is an extension of the Cisco Spark service on your premises.
Each Cisco Spark Hybrid Media Node deploys in as little as 10 minutes	Simple to deploy and add capacity when needed.
Capabilities included with purchase of any Cisco Spark license.	Low cost – no additional license fees and no overage fees.

Use Cases

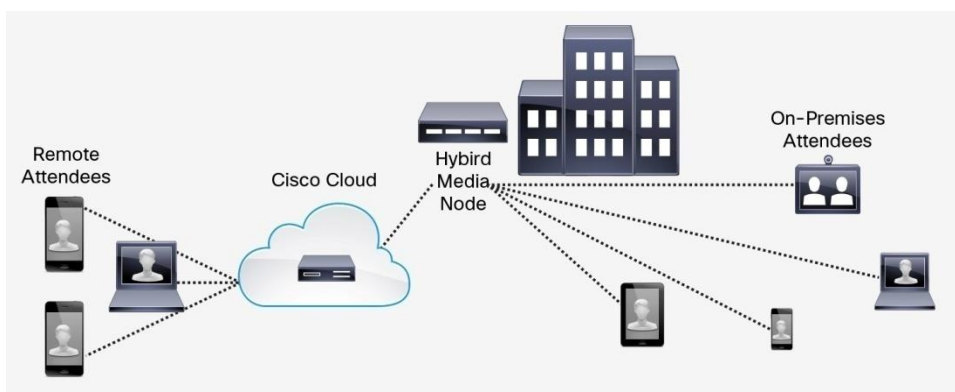
All attendees are on-premises: When all Cisco Spark meeting attendees are local or on-premises, the meeting is delivered from the on-premises Hybrid Media Node (Figure 2). The media no longer need to go to the cloud and back for call processing. Instead, they stay on-premises, thus reducing latency and Internet bandwidth consumption.

Figure 2. Users Joining a Cisco Spark Meeting from the Premises. This pertains to 1 to 1 or 1 to many Cisco Spark meetings.



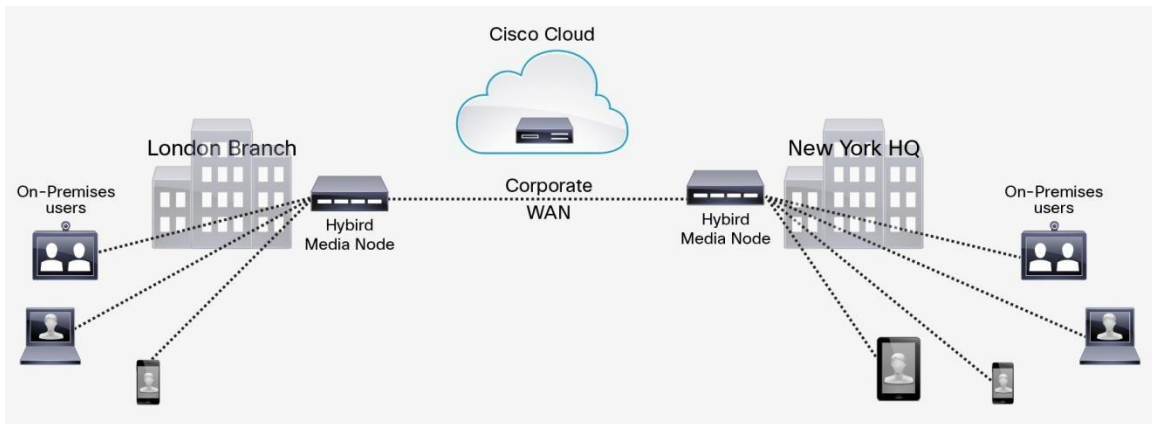
Mix of on-premises and remote attendees: When a Cisco Spark meeting has both on-premises and remote attendees, the meeting is delivered both from the on-premises Hybrid Media Node and from Cisco Spark in the cloud, providing the best experience for each type of user. Remote attendees connect to the cloud, and on-premises attendees connect to the Hybrid Media Node (Figure 3).

Figure 3. Mix of On-Premises and Remote Attendees



All attendees are on-premises but are at different corporate offices: Attendees join the Hybrid Media Node closest to their location. Then the meeting is cascaded between locations across the corporate WAN network without needing to connect to the Cisco Cloud for call processing. Like the use case above, all media is kept on-premises, reducing latency and Internet bandwidth consumption (Figure 4).

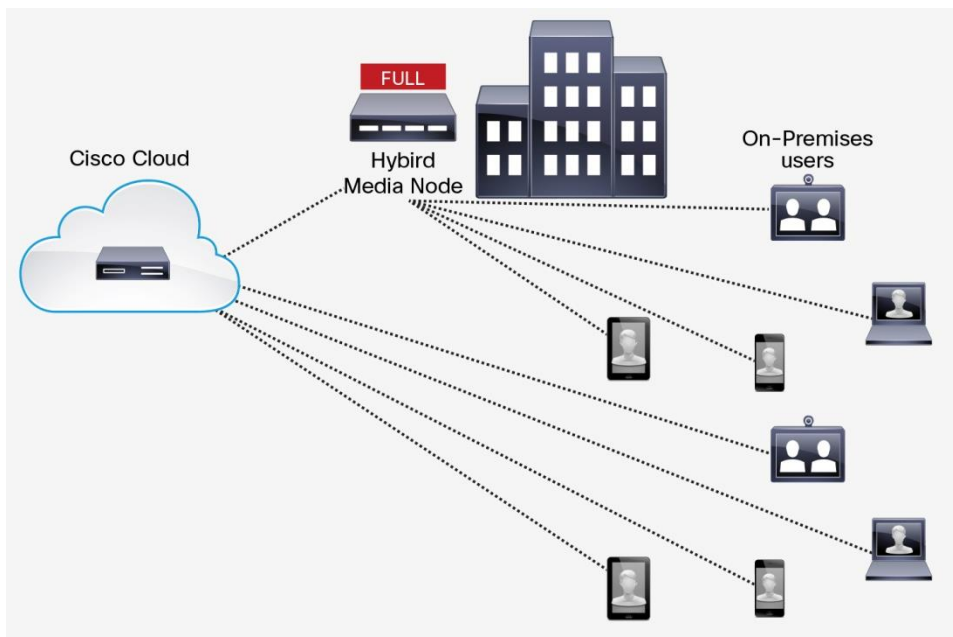
Figure 4. All Attendees Are On-Premises but at Different Corporate Offices



Capacity of the on-premises Hybrid Media Node is reached: With typical on-premises deployments, if capacity is reached, no more attendees can join the meeting. They are essentially locked out. Cisco Spark Hybrid Media Service avoids this by allowing the additional Cisco Spark attendees to join via the Cisco Cloud. This cascading between on-premises and cloud is automatic and transparent to the users when they join. All attendees have the same meeting experience and capabilities, whether they join via the premises or the cloud (Figure 5). And there are no overage fees from Cisco when users are cascaded to the cloud.

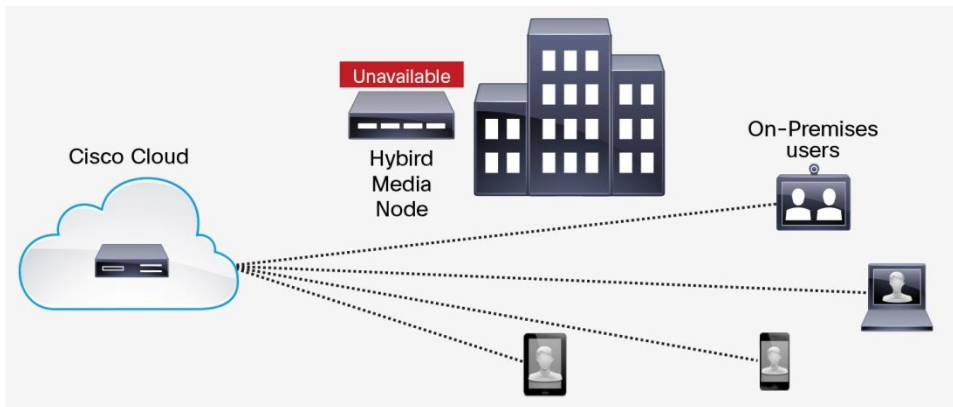
IT can easily monitor the overflow of meetings from Cisco Cloud Collaboration Management and add additional Hybrid Media Nodes to accommodate more on-premises attendees, if desired.

Figure 5. Users Connected to the Cloud When the Capacity of the On-Premises Hybrid Media Node Is Reached



On-premises Hybrid Media Node is unavailable: If the Hybrid Media Node is unavailable due to a data center outage or other issue, all the on-premises attendees will automatically join their meeting via the cloud (Figure 6). This provides added reliability and no impact to business operations.

Figure 6. Users Connected to the Cloud When the Hybrid Media Node Is Unavailable

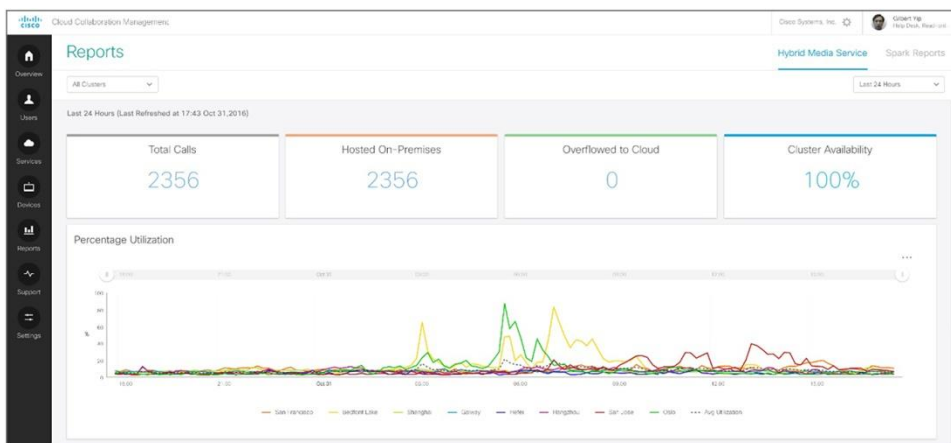


Managing Cisco Spark Hybrid Media Service

Cisco Cloud Collaboration Management is used to register and manage the Hybrid Media Nodes. It provides the ability to automatically update the Hybrid Media Node software without any effort from IT – just as if the nodes were deployed in the cloud. This keeps the software version consistent with the Cisco Spark cloud to ensure the same attendee meeting experience – no matter whether they join from the cloud or the premises. Additionally, Cisco Cloud Collaboration Management provides the availability and status of each Hybrid Media Node in the organization.

For capacity planning and reporting, Cisco Cloud Collaboration Management provides a simple snapshot of the meeting activities across the organization (Figure 7). The administrator can look at a 24-hour, weekly, monthly, or three-month view of the meetings. They can quickly assess overflows, including where they occurred, and how much overflow they had. This gives the administrator the trending analysis to understand if additional capacity is needed on-premises and to plan for additional Hybrid Media Nodes.

Figure 7. View of Cisco Cloud Collaboration Management



Endpoints Supported

Because Cisco Spark Hybrid Media Service supports Cisco Spark meetings, the following endpoints are supported:

- Any Cisco Spark Room System registered to the Cisco Spark service in the cloud
- The Cisco Spark app

Licenses Supported by Cisco Spark Hybrid Media Service

There are no incremental subscriptions or fees for deploying Cisco Spark Hybrid Media Service. The Hybrid Media Nodes are downloadable at no charge with a Cisco Spark subscription. Table 2 lists the offers that support Cisco Spark Hybrid Media Service.

Table 2. Cisco Spark Hybrid Media Service Is Available with These Offers

SKU	Cisco Spark Service
A-SPK-NU-M1	Business Messaging (includes 1:1 and 3-way video calls in the app)
A-SPK-NU-M2	Business Messaging and Basic Meetings
A-SPK-NU-M3	Business Messaging, Basic Meetings, and Advanced Meetings
A-SPK-NU-C1	Cloud Calling and Business Messaging
A-SPK-NU-C2	Cloud Calling, Business Messaging, and Basic Meetings
A-SPK-NU-C3	Cloud Calling, Business Messaging, Basic Meetings, and Advanced Meetings
A-SPK-ND-SR	Cisco Spark Room System registration (Cisco Spark Room System device sold separately)

System Requirements

Cisco Spark Hybrid Media Service can be deployed as a virtual machine on a Cisco UCS server or on spec-based hardware. Table 3 lists the system requirements.

Table 3. System Requirements

Type of Hardware	Requirements
Cisco UCS Multiparty Media (MM) 410v	Minimum requirements: <ul style="list-style-type: none">• 46 vCPU• 60 GB main memory• 250 GB storage• VMware vSphere client 6.0 or later• Hybrid Media Service software OVA file downloaded
Cisco UCS Cisco Meeting Server 1000	Minimum requirements: <ul style="list-style-type: none">• 70 vCPU• 60 GB main memory• 250 GB storage• VMware vSphere client 6.0 or later• Hybrid Media Service software OVA file downloaded
Spec-based installation	Minimum requirements: <ul style="list-style-type: none">• 2.6-GHz processor• 46 vCPU• 60 GB main memory• 250 GB storage• VMware vSphere client 6.0 or later• Hybrid Media Service software OVA file downloaded

Note that since the Hybrid Media 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 Hybrid Media Service in the future.

Country Availability

Cisco Spark Hybrid Media Service is supported wherever Cisco Spark message and meetings are sold. To find out what is available in your region, please go to: <http://www.cisco.com/go/spark-availability>.

Cisco Capital

Financing to Help You Achieve Your Objectives

Cisco Capital can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx. Accelerate your growth. Optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital is available in more than 100 countries. [Learn more.](#)

For More Information

To learn more about how the Cisco Spark Hybrid Media Service can transform your communications, visit <http://www.cisco.com/go/hybridmedia>.

To learn more about the Cisco Spark service, visit <http://www.ciscospark.com>.



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