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Cisco Webex Cloud Connected Audio

What if you could provide employees, partners, and vendors with a better, more consistent web conferencing experience – that actually helped reduce costs? Our integrated audio service delivers just that, while also helping boost productivity, customer service, and your company's reputation.

Overview

Cisco Webex® Cloud Connected Audio (CCA) is an audio conferencing service delivered from the Cisco Webex platform, and it natively integrates into Cisco Webex meetings service. It uses IP connections into Cisco data centers as an alternative to, or in addition to, public switched telephony. CCA delivers one of the best and most consistent user experiences that is flexible and cost-effective, all while using your on-premises IP telephony investments. It can be delivered as a service from a service provider or as a direct enterprise architecture.

CCA makes meetings more effective with an integrated audio, video, and web conferencing experience across any device. And its native integration means you can provide all users with consistently exceptional meeting experiences every time, whether they're connecting from inside or outside the company network. Easily scale conferencing to more users and get future upgrades more quickly from the cloud. Make conferencing affordable by predicting monthly budgets with ports-based pricing and optimized cost savings. All from the convenient integrated scalable and secure Cisco Webex platform.

Benefits

· **One of the best user experiences, with optimal audio for every meeting.** Provide an exceptional user experience with integrated audio, video, and web conferencing across any device. Plus, CCA is a global solution, with PSTN connectivity in regions where Cisco Webex does not provide it

· **Extended investment in existing infrastructure.** Extend investments and simplify IT management by transparently adding audio conferencing into existing data and voice infrastructure

Benefits

- **Scalable with faster automatic updates.** Scale conferencing capabilities to more users, stay current with the latest features, and reduce complexity with future upgrades delivered quickly and automatically from the Cisco Webex

- **Predictable costs and reduced charges.** Better predict monthly budgets with ports-based pricing, and optimize cost savings by eliminating PSTN transport and termination charges for on-net users

The complete package for a consistent, quality experience

Across every industry, businesses are using video, audio, and web conferencing to align with the growing demands of mobile and connected users. These users want the flexibility and freedom to share content and meet "face to face," even when they're geographically dispersed. And they want to use their smartphones and tablets to communicate wherever business takes them.

As the use of these conferencing tools grows, so do the expectations of on-the-go users. People now expect integrated audio, video, and web conferencing – with advanced features, robust meeting controls, and a simple, high-quality experience. Regardless of how or where they join a meeting. Research shows that businesses want a single, unified meeting experience and do not want to spend separately on audio, video, and web collaboration. It can be difficult to find a web conferencing solution that employees will actually use. Or one that integrates easily with existing infrastructure, delivers the required geographic footprint, and scales to accommodate as many users as needed.

Cisco Webex applications have been the answer for millions of users across the world. And now, Cisco Webex Cloud Connected Audio is making it even better.

Key features and capabilities

Integrates naturally into a Cisco Webex meetings service:

- Attendee list, active speaker, hybrid audio, in-meeting controls, and video
- Audio bridging takes place in the cloud

Provides deployment options:

- As a service through a partner
- Direct to enterprise organizations

Extends geographic coverage and phone number reach:

- Partner: Provided by a CCA service provider partner
- Direct: Provided by the customer. Can be combined with Cisco Webex application-provided Public Switched Telephone Network (PSTN) numbers

CCA offers all the features and performance of the Cisco Webex PSTN, with the added benefit of significant cost savings. You pay fewer telephony charges by moving traffic from standard phone lines to your WAN. CCA delivers an integrated attendee list, active speaker, mute and unmute capability, video and audio switching, and hybrid audio support, in addition to all the dynamic tools of the market-leading conferencing solution. Table 1 highlights more features and capabilities.

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Table 1. Main features and capabilities of Cisco Webex Cloud Connected Audio

Feature or capability	Description
Invite and remind	Send invitations and reminders using an automated phone call, text message, email message from your local client, or instant messaging
Integrated attendee list	The Participants panel allows you to view the list of all participants in an event. Feedback icons allow participants to give nonverbal feedback to the presenter during an event; the icons are accessed from a drop-down list on the Participants panel. You can also use chat and Q&A to communicate
Active speaker indicator and intelligent video switching	Focus on who's talking with active speaker technology, which automatically displays the current speaker's video in the active speaker window
Mute and unmute participants	Meeting hosts can mute and unmute participants from meetings and, if necessary, expel a participant. Participants can mute and unmute themselves but not others
Integrated VoIP client	Accommodate PSTN and VoIP users in the same meeting
Smooth switching between telephony audio and VoIP	Allow hosts and participants to choose the device that suits them best as they move from one location to another during a meeting
Integrated audio	Offer an interactive meeting experience with Cisco Webex integrated audio or a third-party audio option. Choose toll or toll-free phone numbers, or give attendees the option to connect using VoIP or their computers' built-in audio. Wideband audio support for VoIP provides outstanding audio quality – even over low-bandwidth networks

Feature or capability	Description
Call-in and callback options	Have your meeting call you. Simply enter your phone number when the meeting begins and the meeting calls you back – no dialing, no passcodes
Meeting recording, editing, and playback	Record meetings for future reference, training, or demonstrations
Mobile support	Enjoy a rich meeting experience with audio, video, and content sharing across Android, iPhone and iPad.
Integrated video	View videos from up to seven attendees. Or select full-screen mode to view the active speaker in the main video panel, with other participants' video displayed as thumbnails. Alternatively, you can choose a full screen video layout, where users can choose to switch to a grid view that shows equal-sized windows for up to six video streams. Easily toggle back and forth between your video and content share. And for the most detailed video view, select the expanded full-screen option to view the active speaker in true high-definition, 720p display resolution. The video in the main panel automatically switches to display the person who is speaking, creating an intuitive meeting experience
Mobile support	Meet even faster in your own permanent, personalized video conferencing space. Schedule ahead or leave your door open and let people drop in. For additional privacy, lock the room so participants can join only when you're ready

Feature or capability	Description
Instant help	Allow your meeting users, both hosts and attendees, to connect to a support agent while in a meeting. Users can press *0 on their phone or click the "Instant help" link on the Cisco Webex Meetings app to connect to a support agent for live help. Hosts can also bring the support agent into the meeting
Customized audio prompts	Customers and partners have the flexibility to personalize messages with audio prompts to improve brand awareness

Different deployment options for different needs

You can get Cisco Webex Cloud Connected Audio in one of two ways: as a service from a service provider (CCA-SPP or through a direct enterprise architecture (CCA-Enterprise).

The CCA-Enterprise option is a Session Initiation Protocol (SIP) trunk-based solution that takes advantage of your IP telephony and existing unified communications environment. When deployed as a service through a partner, some features and capabilities will vary. Table 2 shows the high-level differences and includes the Cisco Webex PSTN Audio option for comparison.

Table 2.   Comparison of Cloud Connected Audio deployment options

Cisco Webex Audio option	Description	Ideal for
CCA-SP architecture	• Audio bridging on the Cisco Webex platform • Global dial-in phone numbers and dial-back services provided by service provider • Peering between Cisco and service provider • Service provider provides lifecycle support • Service provider provides the PSTN connectivity	• Customers with Cisco Unified Communications or a competing PBX • Customers who already have WAN or SIP services with CCA-SP • Customers with disparate conferencing solutions and looking to consolidate user experience under a single Cisco Webx experience • Enterprise, midsize, small business • Existing Cisco Unified MeetingPlace® customers • Customers who embrace the simplicity of Software as a Service (SaaS)

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Cisco Webex Audio option	Description	Ideal for
CCA-Enterprise architecture	• Audio bridging on the Cisco Webex platform • Phone numbers provided by customer • Peering between Cisco and customer • Customer must deploy Cisco Unified Communications Manager (8.5 and beyond) and Cisco Unified Border Element (CUBE) on premises • Can use Cisco Webex PSTN connectivity where the Cisco Webex application provides the dial-in numbers and callback capability in certain countries. Customers must pay separately for Cisco Webex PSTN Audio and be aware of the Cisco Webex PSTN footprint • Customer uses own unified communications/IP telephony network to carry on-net and off-net calls before handing them over to Cisco	• Cisco Unified Communications customers • Large enterprises, or customers with more than 1.5 million monthly minutes • Existing Cisco Unified MeetingPlace customers • Customers with sophisticated network operations

Cisco Webex Audio option	Description	Ideal for
Cisco Webex PSTN Audio offers	• Audio bridging on the Cisco Webex platform • Phone numbers provided by the Cisco Webex app	• Commercial customers (500 to 5000 employees) • Existing Cisco Unified MeetingPlace customers • Public sector • Small and midsize businesses

CCA-SP

The as-a-service option of Cloud Connected Audio from a certified service provider can be convenient for companies that don't want to build or manage the infrastructure needed for an on-premises deployment. You don't have to have a unified communications infrastructure such as a call manager or a SIP trunk to take advantage of the service. And even if you have the infrastructure but don't want to carry all your conferencing traffic over your own network, the as-a-service option from a service provider is a good choice. Table 3 has more details.

Table 3. Highlights of CCA-SP

Strategic feature	Key concepts
Media and signaling	• Service provider determines the requirement for media and signaling
Peering connections	• Service provider determines the requirements for peering connections • Service provider can provide 100% PSTN connectivity, 100% IP solution, or a mix of these two based on your traffic pattern

Strategic feature	Key concepts
Conferencing phone numbers	• Service provider will provide the domestic and international conference dial-in numbers
	• Service provider will also facilitate the callback to on-net and off-net endpoints
Hardware and software licenses	• Service provider will determine the on-premises hardware requirements
	Unlike the CCA-Enterprise architecture, the CCA-SP architecture does not require the partner to mandate Cisco Unified Communications infrastructure at your premises
Telephony coverage	• The telephony footprint will be determined by the service provider

CCA-SP uses call signaling between the service provider's IP network and the Cisco Webex audio bridge through a Session Border Controller (SBC). It is enabled through redundant IP connections between the service provider and Cisco data centers. The service provider carries audio traffic from all of its customer locations and sends it on to the Cisco Webex servers.

CCA-Enterprise

The enterprise option of Cloud Connected Audio is designed for organizations using a minimum of 1.5 million minutes of audio conferencing per month. It extends the functions of Cisco Unified Communications Manager and incorporates on-premises equipment to connect your organization to a Cisco Webex data center via dedicated peering connections. CCA combines on-premises call signaling, routing, and traffic with hosted Cisco audio conferencing ports. It connects that on-premises equipment to a Cisco Webex data center using dedicated SIP trunks. It's ideal for customers with existing Cisco Unified Communications deployments. Table 4 highlights the solution features.

Table 4. Highlights of CCA-Enterprise

Feature or capability	Description
Media and signaling	• Supports audio compression codec G.711, SIP signaling, and RFC 2833 for Dual-Tone Multifrequency (DTMF)
	• Any non-G.711 traffic will need to be transcoded in your network
Peering connections	• Requires redundant peering connections on the Cisco Webex platform at two or more Cisco Webex locations
	• Conferencing audio flows over secure and dedicated peering connections to Cisco
	• Circuit handoffs must be optical Ethernet based; minimum Ethernet handoff interface is Gigabit Ethernet
	• Link Aggregation Control Protocol (LACP) may be used to bundle multiple circuits
Conferencing phone numbers	• Customer uses own IP WAN network and existing telephony networks and PSTN connectivity to provide better call routing and reach
	• Customer owns conference numbers; must provide at least one toll and one toll-free number
	• Customer has option to buy the Cisco Webex PSTN (sold separately), which provides Cisco Webex dial-in numbers and callback capability over the Cisco Webex PSTN

| Feature or capability	Description
Portal	- View organizational usage, analytics, and reports to gain insights that will better optimize experiences; includes insight into CCA ports utilization - Promote adoption of Cisco Webex conferencing and improve employee productivity
Cisco Unified Communications infrastructure	Customer can use on-premises Cisco Unified Communications infrastructure, such as Cisco Unified Communications Manager and Cisco Unified Border Element

How it works

In the past, most Cisco Webex users had to use the toll-based PSTN to make calls into meetings (Figure 1). And over time, those charges added up – especially when calling internationally.

Figure 1. Audio call flow in the older Cisco WebEx Audio solution
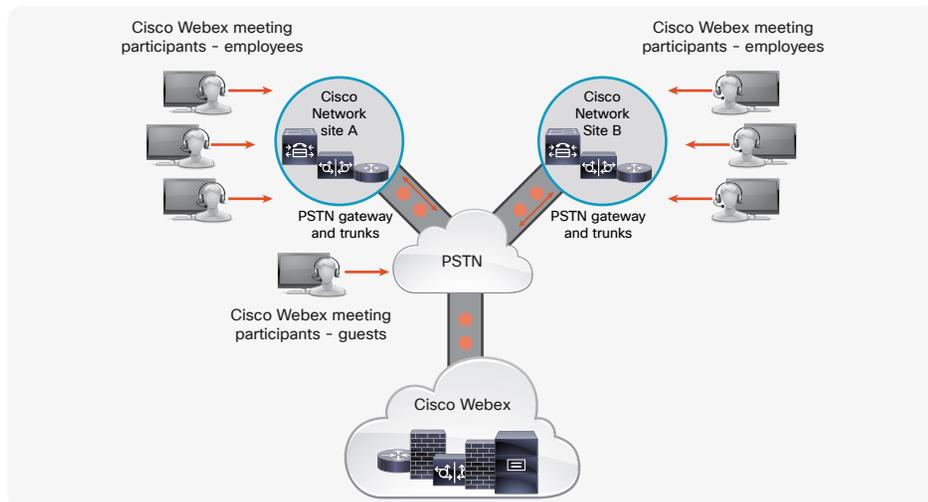
With Cloud Connected Audio, however, web conference session audio travels over your existing IP telephony network, not the PSTN (Figures 2 and 3).

**Figure 2.** Audio call flow in CCA-SP
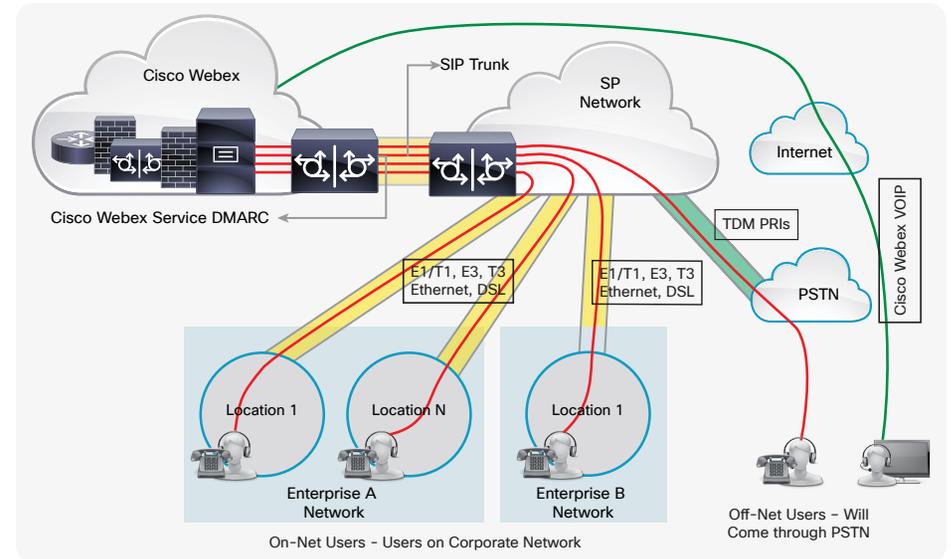
In this model, the service provider connects directly to Cisco via dedicated IP peering connections. The service provider carries all of its customers' audio traffic, from both off-net and on-net users, and sends it to the cloud.

Why Cisco?

When we say Cisco is the proven leader in web conferencing, IP telephony, and cloud networking, we have the numbers to back it up. Cisco has been named a Gartner Magic Quadrant Leader for Meeting Solutions. Ninety-five percent of Fortune 500 companies and 75 percent of high-growth businesses deploy Cisco video collaboration solutions. Over 113 million people per month attend a Cisco Webex meeting. We first developed and used Cloud Connected Audio to reduce our costs – and it worked so well and saved us so much we decided to offer it to our customers.

Figure 3. Audio call flow in CCA-Enterprise
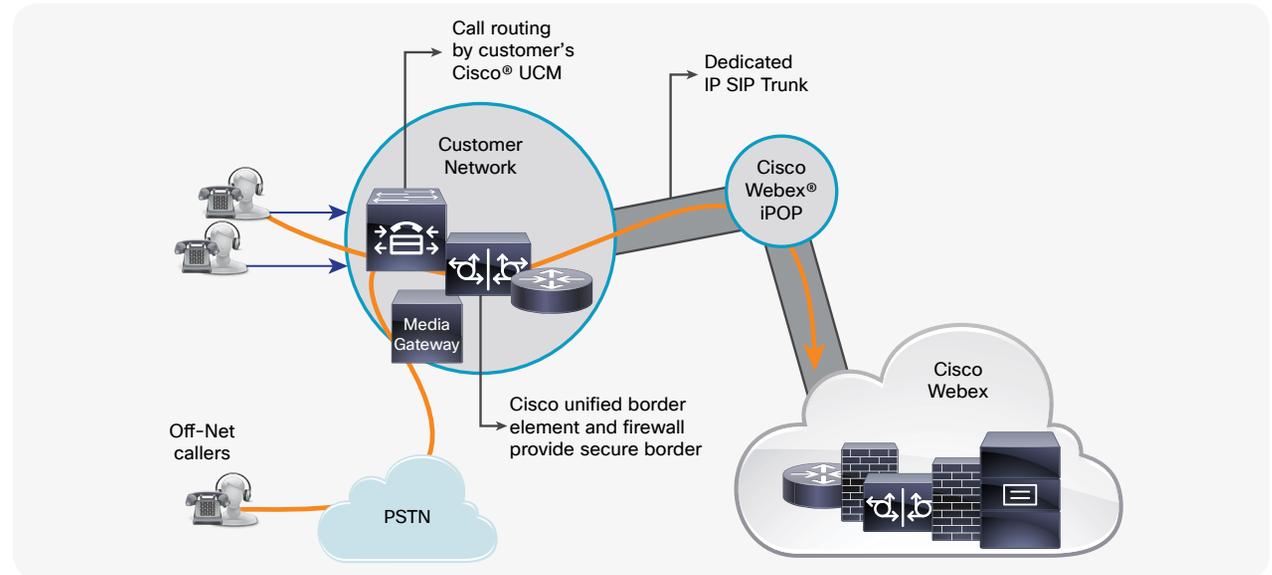
In the CCA-Enterprise architecture, the design moves all on-net calls to the WAN, and uses the existing WAN gateways to connect guest and off-net PSTN users, which substantially reduces Cisco Webex audio conferencing costs.

Cisco Capital

Financing to help you achieve your objectives

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Next steps

For more information about Cisco Webex Cloud Connected Audio and how it can enhance your meetings, please visit https://www.cisco.com/c/en/us/products/conferencing/webex-cloud-connected-audio/index.html.