



Cisco WebEx Cloud Connected Audio

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 WebEx conferencing 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.
- 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 Collaboration Cloud.
- 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.

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 from the secure WebEx Cloud, and it natively integrates into WebEx meetings. It uses IP connections into Cisco[®] data centers as an alternative to, or in addition to, public switched telephony. It 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. CCA can be delivered through a direct enterprise architecture or as-a-service from a service provider.

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 quicker from the cloud. Make conferencing affordable by predicting monthly budgets with ports-based pricing and optimized cost savings. All with the convenient integrated service from the scalable and secure Cisco Collaboration Cloud.

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.

“Application convergence is providing an impetus to growth, primarily driven by a strong demand from customers that do not want to spend separately on audio, video and web collaboration. Users want a single invite, a single entry point, and a unified meeting experience.”

— Frost and Sullivan, December 2014

Key Features and Capabilities

Integrates naturally into a WebEx conference:

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

Provides deployment options:

- Direct to enterprise organizations
- Through a partner as-a-service

Extends geographic coverage and phone number reach:

- Direct: Provided by customer. Can be combined with WebEx application-provided PSTN numbers
- Partner: Provided by CCA Service Provider partner

CCA offers all the features and performance of 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 participants, 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.

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/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.
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, BlackBerry 10, and Windows Phone 8 devices.
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. 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.
Personal Rooms	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 join only when you're ready.
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 WebEx client 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 two ways: through a direct enterprise architecture or as-a-service from a service provider (SP).

The direct-to-enterprise option is a 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 WebEx PSTN Audio option for comparison.

Table 2. Comparison of Cloud Connected Audio Deployment Options

WebEx Audio Option	Description	Ideal for
CCA - SP Architecture	<ul style="list-style-type: none"> • Audio bridging in WebEx Cloud provided by Cisco • Global dial-in phone numbers and dial-back services provided by SP • Peering between Cisco and SP • SP provides lifecycle support • SP provides the PSTN connectivity 	<ul style="list-style-type: none"> • 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 single WebEx experience • Enterprise, midsize, SMB • Existing Cisco Unified MeetingPlace® customers • Customers who embrace the simplicity of SaaS services

WebEx Audio Option	Description	Ideal for
CCA - Enterprise Architecture	<ul style="list-style-type: none"> • Audio bridging in WebEx Cloud provided by Cisco • 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 WebEx PSTN connectivity where the WebEx application provides the dial-in numbers and callback capability in certain countries. Customers must pay separately for WebEx PSTN audio and be aware of 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. 	<ul style="list-style-type: none"> • Cisco Unified Communications customers • Large enterprises, or customers with >1.5M monthly minutes • Existing Cisco Unified MeetingPlace customers • Customers with sophisticated network operations
WebEx PSTN Audio Offers	<ul style="list-style-type: none"> • Audio bridging in WebEx Cloud • Phone numbers provided by WebEx application 	<ul style="list-style-type: none"> • Commercial customers (500 to 5000 employees) • Existing Cisco Unified MeetingPlace customers • Public sector • SMB

Cisco WebEx Cloud Connected Audio for 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 Cloud 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 WebEx data center using dedicated SIP trunks. It's ideal for customers with existing Cisco Unified Communications deployments. Table 3 highlights solution features.

Table 3. Highlights of Cisco WebEx Cloud Connected Audio for Enterprise

Feature or Capability	Description
Media and Signaling	<ul style="list-style-type: none"> • Supports audio compression codec G.711, Session Initiation Protocol (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	<ul style="list-style-type: none"> • Requires redundant peering connections with the Cisco WebEx Cloud at two or more 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	<ul style="list-style-type: none"> • 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 WebEx PSTN (sold separately), which provides WebEx dial-in numbers and callback capability over WebEx PSTN
Portal	<ul style="list-style-type: none"> • View organizational usage, analytics, and reports to gain insights that will better optimize experiences; includes insight into CCA ports utilization • Promote adoption of WebEx conferencing and improve employee productivity
Cisco Unified Communications Infrastructure	<ul style="list-style-type: none"> • Customer can use on-premises Cisco Unified Communications infrastructure, such as Cisco Unified Communications Manager and Cisco Unified Border Element

Cisco WebEx Cloud Connected Audio through a Service Provider

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 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 4 has more details.

Table 4. Highlights of Cisco WebEx Cloud Connected Audio through a Service Provider

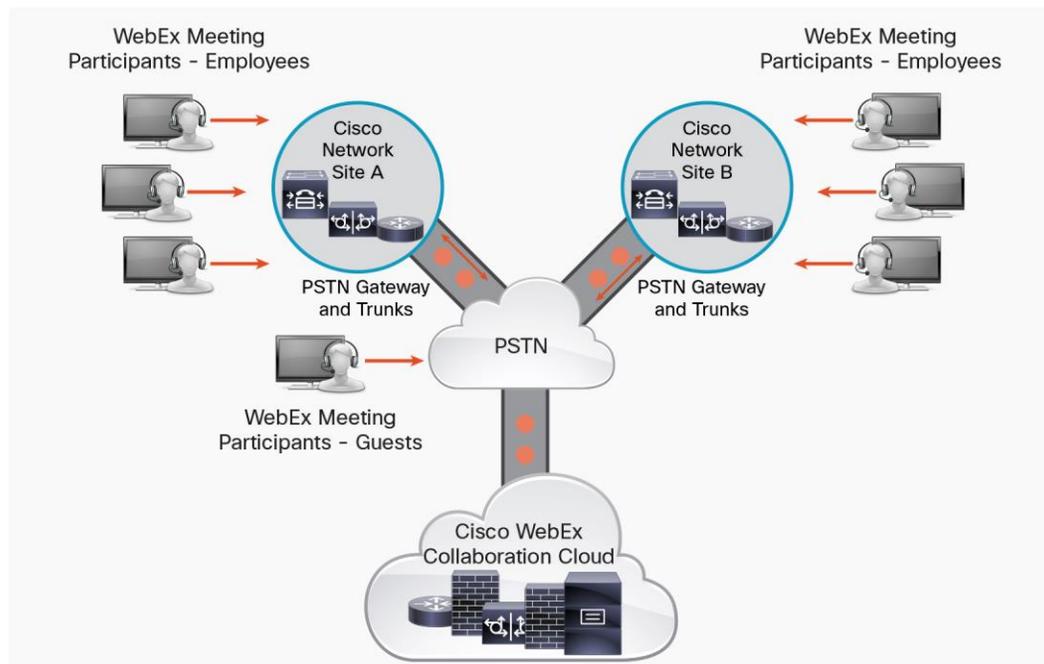
Strategic Feature	Key Concepts
Media and Signaling	<ul style="list-style-type: none"> • SP determines the requirement for media and signaling.
Peering Connections	<ul style="list-style-type: none"> • SP determines the requirements for peering connections. • SP can provide 100% PSTN connectivity, 100% IP solution, or a mix of these two based on your traffic pattern.
Conferencing Phone Numbers	<ul style="list-style-type: none"> • SP will provide the domestic and international conference dial-in numbers. • SP will also facilitate the callback to on-net and off-net endpoints.
Hardware and Software Licenses	<ul style="list-style-type: none"> • SP will determine the on-premises hardware requirements. <p>Unlike CCA Enterprise architecture, CCA SP architecture does not require the partner to mandate Cisco Unified Communications infrastructure at your premises.</p>
Telephony Coverage	<ul style="list-style-type: none"> • The telephony footprint will be determined by the SP.

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

How It Works

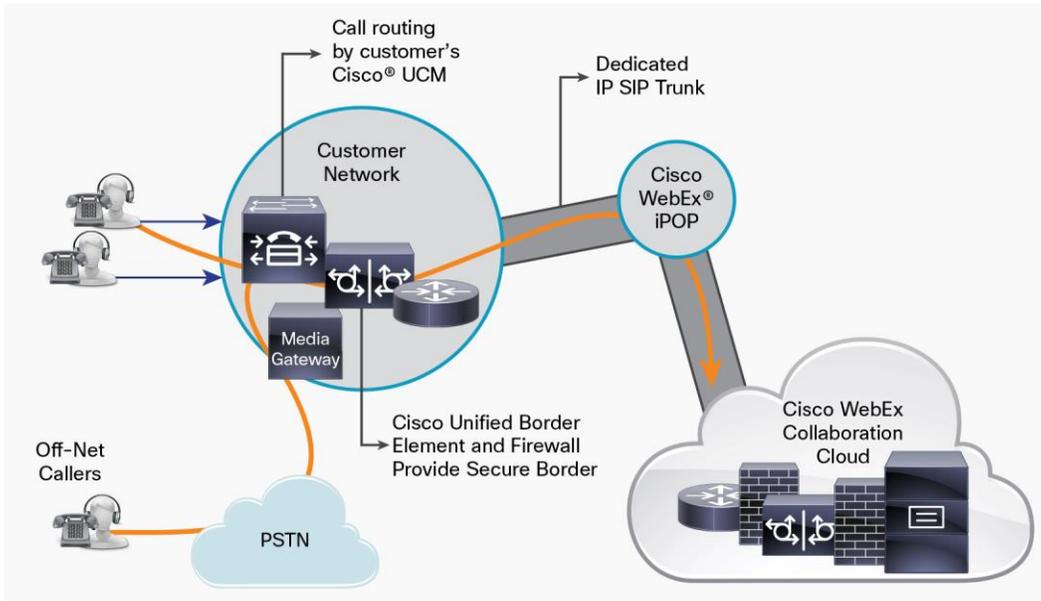
In the past, most WebEx users had to use the toll-based public switched telephone network (PSTN) to make calls into meetings (Figure 1). And over time, those charges added up - especially when calling internationally.

Figure 1. Audio Call Flow in the Older Cisco WebEx Audio Solution



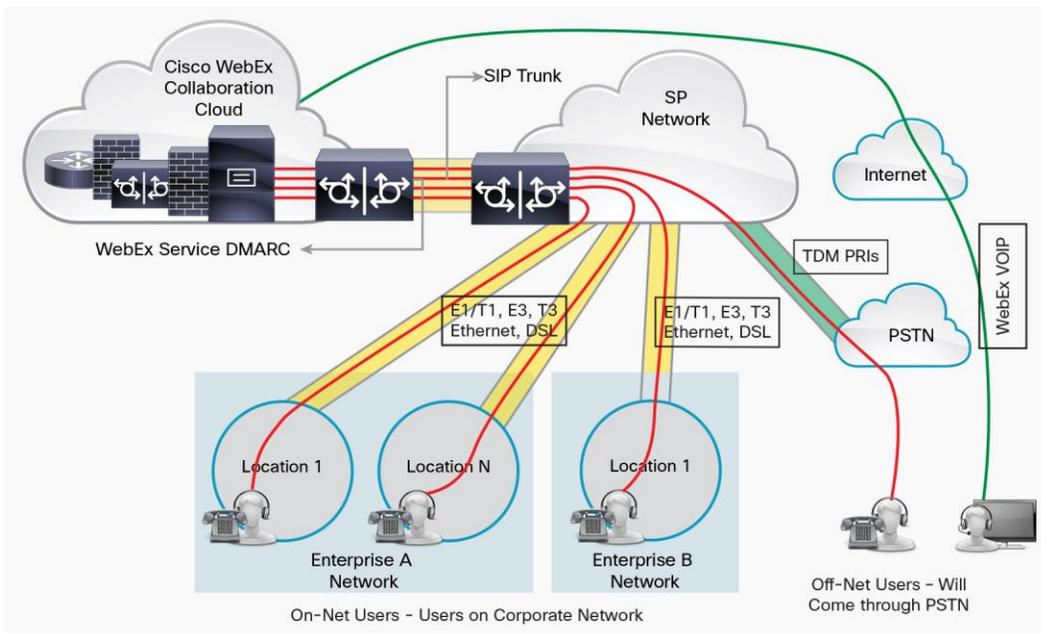
With Cloud Connected Audio, however, web conference session audio travels over your existing IP telephony network, not the PSTN (Figures 2 and 3).

Figure 2. Audio Call Flow in CCA for Enterprise



In CCA for 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 WebEx audio conferencing costs.

Figure 3. Audio Call Flow in CCA through a Service Provider



In this model, the SP connects directly to Cisco via dedicated IP peering connections. The SP carries all of its customers' audio traffic, from both off-net and on-net users, and sends it to Cisco Collaboration Cloud.

We Put It to the Test

Find out how Cisco made significant cuts to the cost of web conferences by carrying audio conferencing on our corporate network.

Visit http://www.cisco.com/c/en/us/solutions/collateral/enterprise/cisco-on-cisco/Cisco_IT_Case_Study-WebEx_Cloud_Connected_Architecture-0.html.

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 WebEx Software has been named a Gartner Magic Quadrant Leader for web conferencing. Ninety-three percent of Fortune 100 companies and 78% of Fortune 500 companies deploy Cisco video collaboration solutions. Fifty-one million people per month attend a 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.

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.](#)

Next Steps

For more information about Cisco WebEx Cloud Connected Audio and how it can enhance your meetings, please visit <http://www.cisco.com/go/cwcca>.



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