Executive Summary
USB Passthrough for Room Kits and Room Series
Cisco Best Practices
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If there is such a thing as a "silver lining" to the cloud of COVID-19, one possible thing to mention is the increased use of video conferencing to conduct business. Suddenly, seemingly overnight, Zoom became a household word, and the use of all video collaboration technologies increased greatly.

However, there is a serious problem that affects all organizations, whether small business or enterprise. Microsoft made the decision long ago to use proprietary technologies, instead of supporting the established ITU-T and IETF protocols for H.323 and SIP, which guarantee interoperability between vendors. Because Microsoft is in virtually every organization, their influence is incredibly broad, and I believe they were a major influence in moving away from interoperable standards. Along the same lines, GoogleMeet, Zoom, BlueJeans, GoToMeeting, are island technologies, with limited ability to communicate with each other.

As a result, every company faces the same problem: how do we communicate with other companies, or even other divisions within our own company, that use different conferencing technologies?

There are solutions out there, fortunately. For example, Pexip specializes in providing a gateway service so that these different technologies can communicate through Pexip's servers. In my experience it is easy to use. In addition, special licensing from Microsoft and Zoom can enable interoperability with Cisco's video endpoints. But the licensing structures are complicated – your vendor that uses MSFT Teams may have paid for CVI licensing, but your contracted manufacturer has not; which means you can call your vendor but not your manufacturer. If you, yourself, purchase CVI licensing, you *stIll* cannot call your manufacturer, because they must purchase CVI licensing. As I said, it is complicated.

However – the solution that we have developed uses something that will work *with any of these technologies,* and it does not require any licensing.

If you stop to think about it, the common denominator for all of these various conferencing services is the computer or laptop. You can call into Webex, Zoom, MSFT Teams, GoogleMeet, BlueJeans, etc by using your computer. All that is needed is a way to attach your computer – simply and easily – to your

video conferencing system so that you can use all of the cameras, microphones, screens, and loudspeaker systems that are already in the conference room. It does not help anyone when ten people gather around a laptop screen to join a Zoom conference. But this same laptop computer – when connected with just two wires into the video conference system down the hall – allows a superior experience, because everything in the room works. SpeakerTrack, PresenterTrack, wireless microphones, ceiling speakers – everything.

The Solution

An inexpensive audiovisual integration is needed, which is fully documented by Cisco. An easy-to-use "USB Mode" button on the Touch 10 or Navigator configures the system to work with your in-room computer or laptop. The software to enable this button on the Touch 10 is already written and fully tested.

We have certified four "USB Capture" devices, which range from consumer products in the $500 price range to the professional quality Vaddio AV Bridge Mini, and the Extron MediaPort 200 at list prices of $1800 and $3300, respectively.

Automation, using the Touch 10 and programming directly on the Room Kit system, means that the user need not worry about the configuration. As mentioned previously, a simple "USB Mode" button on the Touch 10 sets the system for laptop use. A one-time installation of a freely available set of CE macros enables the feature, after the physical installation of the device.

Support

From the Cisco standpoint, this is a standard third-party audiovisual integration, but it is not a Cisco product. Therefore, Cisco TAC cannot take support calls.
If an audiovisual company does the integration, then logically they would provide support, with additional community-based support.
If the end user does the integration on their own – and remember this requires some level of AV expertise – support follows the community model.

The solution has been designed using Cisco Best Practices for simplicity and ease of use.

Community-based support is available through the public Webex messaging app (formerly called Webex Teams) by using the link below. The space is called "PROJECT: USB Mode (External)".

USB passthrough is already available on the Cisco Room Kit Mini, as well as the Desk Pro, without needing any additional integration. But this new third-party solution allows USB passthrough to be used with the expanded product set: all Room Kits / Room Series, SX80, and MX700/MX800. (It does not work with Webex Boards.)

Where to Find the Solution

Any partner or customer can join the public Webex space by going to https://eurl.io/#L6Rcn39Rn and downloading the free messaging app. There are two ZIP files to be downloaded, which contain all of the design documentation and installation instructions. Or you can contact your Cisco Collaboration Account Team for more information.

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