

How Cisco Uses IP Video Conferencing to Communicate with Remote Workers

Cisco Unified Video Advantage delivers timely, flexible communications that help remote studio producers work more productively.

Cisco IT Case Study Video / Cisco Unified Video Advantage: Enterprises with in-house video production studios can find it difficult to maximize the use and value of these expensive resources. Cisco faced these challenges as demand increased for video production in its four internal studios and other video facilities located around the world. This case study showcases an innovative use of the Cisco Unified Video Advantage product, which gives Cisco many flexible options for video production. Customers can draw on Cisco IT's real-world experience in this area to help support similar enterprise needs.

“Juggling multiple projects is a fact of life for a Cisco Media Network producer. Cisco Unified Video Advantage allows me to provide almost the same level of client care as being present in the studio.”

– Chris Witzgall, Cisco Media Network Producer

CHALLENGE

The Cisco Systems® Media Network team produces and distributes live streaming events and video on demand (VoD) content for both internal and external audiences. Most live events and VoD content are created in Cisco® studios located in San Jose, California; Research Triangle Park, North Carolina; London; and Sydney, as well as smaller sites throughout the world. A Cisco Media Network producer works with the sponsoring Cisco business unit (internal client) to plan and produce the project. The producer also works with the

studio team (camera operators, audio technicians, etc.) during actual production to assure proper camera placement, shot placement, and content flow for the video.

When all producers in one studio are fully engaged, new projects can be handled remotely by an available producer at another studio. In this case, the production is done in the originating studio. The remote producer needs the ability to see and hear, in real time, the video and audio captured during the production and the ability to transmit verbal instructions to the studio team.

All Cisco studios use Cisco IP/VC endpoints to enable remote producer communications. However, in order to use the Cisco IP/VC unit, the remote producer historically needed to be in another Cisco studio. This arrangement tied up valuable resources in two studios simultaneously, creating a significant impact on overall production activity given the small number of Cisco studios.

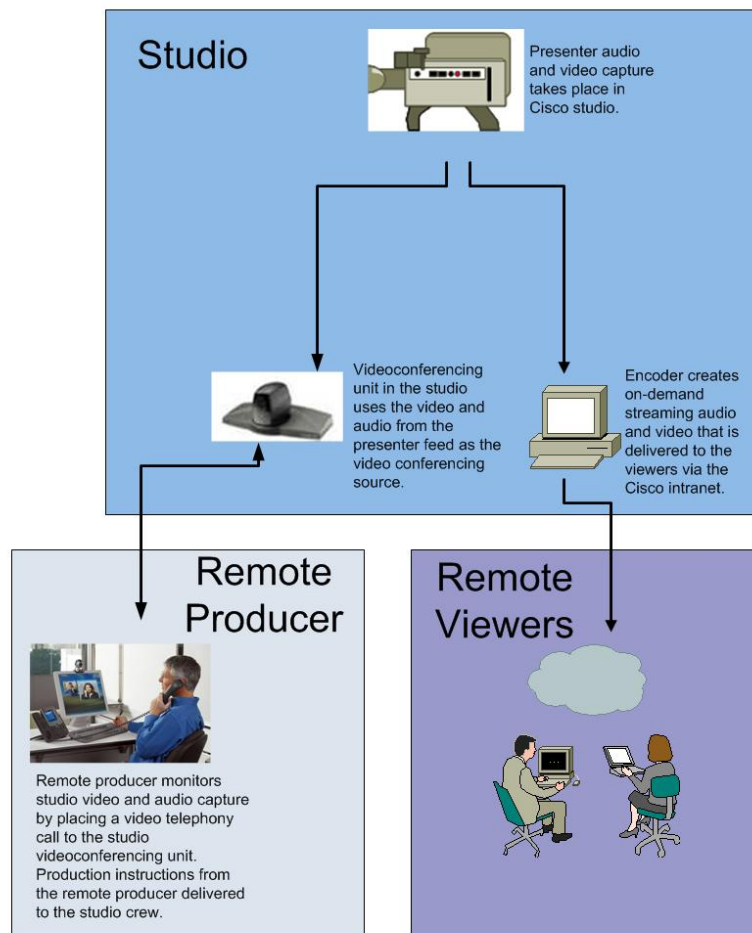
The Cisco Media Network team needed a more flexible and cost-effective method for a remote producer to communicate with a studio team—a solution the producer could use anywhere by simply connecting to the Cisco intranet. “Sometimes I work on projects where presenters are recorded in different studios. It is not cost-effective or even possible for me to travel to these multiple locations given the project's time and budget constraints,” says Chris Witzgall, Cisco Media Network producer.

SOLUTION

The Cisco Media Network team found a solution for remote producers in Cisco Unified Video Advantage, which is deployed at all major Cisco facilities. This solution uses a Cisco Unified IP phone, a personal computer, and a Cisco

VT Camera for easily placing video telephony calls to other Cisco Unified Video Advantage users and to Cisco IP/VC endpoints. With this solution, a Cisco producer can work at any Cisco location and remotely manage a live event that is being produced in any Cisco studio (Figure 1).

Figure 1. Using Cisco Unified Video Advantage, a remote producer can see the real-time video and audio streams while communicating with the studio crew over an IP telephony connection.



“High-quality video streaming starts with a properly executed production,” says Witzgall. “Without this quality, no matter how robust the network is, your production will not be perceived as professional or engaging.”

With Cisco Unified Video Advantage, the video and audio feeds are split and sent to the Cisco IP/VC unit in the studio and the encoder that produces the live or VoD streams. The Cisco IP/VC unit is configured to accept the incoming video and audio feeds from the studio.

To manage the production, the remote producer calls the studio’s Cisco IP/VC unit via the Cisco Unified Video Advantage application and Cisco IP phone. Once connected to the Cisco IP/VC unit, the producer can see and hear all video and audio as it is captured at the studio. Additionally, the producer can give instructions to the crew studio via the two-way audio connection on the Cisco IP phone.

With the simple addition of Cisco Unified Video Advantage to Cisco IP telephony, the value of video is accessible to everyone. Many telephony features are not generally available on traditional H.323 video conferencing systems. With Cisco Unified Video Advantage, video telephony is as easy as placing a voice telephone call.

RESULTS

At Cisco, video events and content have an increasingly important role for delivering timely and flexible communications that help employees work productively. Cisco Unified Video Advantage enables Cisco Media Network staff to produce and support more video content because the team can make more efficient use of producer resources.

“Cisco Unified Video Advantage gives me the ultimate in flexibility because I am no longer tied to being the producer for just one studio,” says Witzgall. “Instead, I can manage productions that span multiple studios, while I remain in one location. Producers from other studios can manage projects that are recorded in the Research Triangle Park studio in the same way. These capabilities free my time to manage my own projects and allow me to manage studio sessions while I am working in a remote Cisco office.”

By allowing producers to work remotely, Cisco Unified Video Advantage alleviated the burdens of producer scheduling, travel, and associated costs. With the option of working outside of the studio, producers can also greatly increase their productivity.

LESSONS LEARNED

Using Cisco Unified Video Advantage in a studio environment presents special considerations for an organization, as shown in the following lessons learned by the Cisco Media Network team.

- Test all network, video, and audio connections among studio cameras, microphones, and Cisco IP/VC endpoints to ensure compatibility.
- Test video telephony connectivity several times prior to the event to ensure producer availability and ability to access the presentation feed.
- If the Cisco IP/VC unit is physically colocated with the source camera and microphones, mute the audio on the remote producer’s Cisco IP phone so the remote audio does not enter the production stream. This issue also can be overcome with audio routing control, performed by the studio audio technician.
- The remote producer should not accept any other incoming calls during the live event to avoid the possibility of the other call entering the production feed.

NEXT STEPS

Cisco IT plans to support Cisco Unified Video Advantage over VPN connections as well as direct Cisco intranet connections. This support will give producers more flexibility for work locations, because they will be able to use any broadband Internet connection when managing a production.

Cisco IT is also implementing support for remote presenters, who can be located anywhere in the world. These presenters will use Cisco Unified Video Advantage to produce live or recorded video events outside of a Cisco studio. Supporting remote presenters will enable cost-effective and flexible production of video projects that do not require the broadcast-quality tools and facilities available in the Cisco studios.

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