White Paper

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Capture, Transform, and Share Your Video Content: An Overview



Extend the Life and Value of Video

Video conferencing is enhancing teamwork and business relationships across all industries. The ability to meet live and face to face with remote colleagues and customers is having a great effect on companies. They're saving time and money. Improving collaboration. Making faster informed decisions. All while creating experiences that are "almost as good as being there."

But video doesn't only improve live meetings. It provides a simple, effective way to engage people in many ways. Backed by powerful Cisco products and services, you can increase the value of video conferencing in your organization. This guide will help you understand the different stages of enterprise video content, and how you can use them to get the most out of your video investment. The three stages are:

- Capture video content using any device, including smartphones, tablets, and desktops as well as Cisco TelePresence[®] Systems and other equipment.
- **Transform** the video content for live streaming and optimized viewing on different devices, from mobile devices and PCs to large, high-definition displays in conference rooms or lecture halls.
- Share the video content with people anywhere in the world, in real time or on demand.

"Moffitt is always looking at new and better ways to communicate and collaborate, and video is central to this as we look to extend our reach and impact the cancer community in a positive way. With Cisco's recent partnership with VBrick, Moffitt is extremely excited about VBrick's enterprise video platform Rev. The Rev platform, with the integration into Cisco's video solutions, allows Moffitt to continue to find success in video acceptance. VBrick's architectural approach to Rev is highly customizable with the opportunity to be on premises and in the cloud through a hybrid solution that fits our needs today and can grow with us into tomorrow."

John Maass, Manager of Conferencing Technology, Moffitt Cancer Center

Deliver Anytime, Anywhere Access

Anytime: People who cannot attend a live event can view recorded video at their convenience. Here's how
one organization got positive results:

For nearly 30 years, Moffitt Cancer Center has been on the front lines in cancer care and research, working tirelessly toward its mission to contribute to the prevention and cure for cancer. This mission is embodied in every aspect of the organization, using every tool and technology to its fullest in the fight against this indiscriminate disease. The use of enterprise video is no different here; over the years, Moffitt has grown into a videocentric culture and is constantly looking to expand video adoption with its patients, physicians, researchers, and staff.

Moffitt was pleased to learn about VBrick's enterprise video platform Rev. The Rev platform, integrated into Cisco[®] video solutions, allows Moffitt to continue to find success in video acceptance. Moffitt's use cases range from internal and external live video streams with thousands of connected viewers to categorized video archives of recorded lectures, events, and topics for viewers to search and browse.

John Maass, Manager of Conferencing Technology, says, "The clean and modern look of the Rev interface is appealing to our end users, and the accessibility across all devices was a necessity that everyone demands. VBrick's architectural approach to Rev is highly customizable, with the opportunity to be on premises and in the cloud through a hybrid solution that fits our needs today and can grow with us into tomorrow."

- Anywhere: People can view live or archived video content from anywhere in the world. For example: For its annual offsite sales meeting, Mentor Graphics of Portland, Oregon, used Cisco TelePresence Content Servers to capture video of all the presentations. Remote employees could view the live broadcast from any of Mentor Graphics' 100 or so conference rooms or from their personal PCs, smartphones, and tablets. Employees also had the option to watch it later on demand.
- Any device: Video content is most useful when people can view it however they like, whether that's on mobile devices, desktop systems, or boardroom-style Cisco TelePresence Systems.
- Start a conversation: Social networking tools such as rating and commenting make video content even more valuable by giving viewers the option to provide feedback. Features such as content tagging, relevant content search, and playlist creation and sharing encourage viewers to find and share popular clips.

Capture, Transform, and Share with Cisco

Cisco makes it easy to capture, transform, and share streaming video. The primary component of this solution is VBrick Rev, which simplifies streaming video management and distribution. Rev is an enterprise video management platform that works with on-premises, hybrid, multitenant, and cloud models. It is built on a cloud-native architecture and provides a modern, consumer-grade user experience across all devices.

Rev lets you efficiently deliver high-quality live and on-demand video to enterprisewide audiences, whether using the corporate WAN or the public Internet. At the same time, it centrally manages all video assets, user access, and permissions. When combined with the VBrick Distributed Media Engine - forming your enterprise content delivery network (eCDN) - Rev provides a single interface to publish and distribute video across the network. All in the most bandwidth-efficient manner.

Capture Your Video Content

You can capture any video meeting from anywhere on any device, from smartphones to professional recording equipment. Stream it live to people across the globe, record it for later viewing, or both. Rev makes your Cisco TelePresence endpoints function as broadcast and recording platforms. In this way, you can send live and on-demand video directly from your Cisco video endpoints to Rev. You can also record Cisco WebEx[®] meetings and publish them in the Rev portal.

Opportunities for video capture include:

- Executives can deliver a real-time company update to all employees, and make it available as video-ondemand for employees who miss the live event.
- Team members can record a Cisco TelePresence meeting to share later with people who cannot attend.
- Company trainers can create videos to supplement or replace in-person training.
- Quality engineers can capture video of an error-prone manufacturing process to share with design engineers.
- Instructors can record a lecture for viewing before or after class.
- Sales representatives can record a product demonstration over Cisco Collaboration Meeting Rooms or WebEx meetings and easily share it later.

Transform It for Viewing on Any Device

Rev automatically transforms video content so anyone in the organization can share it (Figure 1). Rev performs all steps needed to:

- Support tens of thousands of live viewers with a single stream of media from a central site.
- Store the video content locally for on-demand access by thousands more.
- Connect users automatically to the closest stream, delivering higher-quality broadcasts while reducing burden on the network.
- Centrally manage the event with intelligent video streaming through unicast, multicast, or both.
- Make high-quality video available to massive, geographically dispersed audiences, all without overloading your WAN.
- Intelligently and automatically deliver seamless live and stored content to users.



Figure 1. Rev Automatically Creates Different Versions of the Video Content for Different Devices

Share Content with Colleagues or Customers

Rev allows you to stream live video to viewers anywhere in the world and make it available for viewing on demand. The Rev portal provides the dashboard for accessing this video content. The solution offers the following benefits (Figure 2):

- Support for both mobile and desktop devices helps ensure that users can watch live and on-demand content the way they want.
- The responsive design of Rev means the user interface adapts to the device in use, helping ensure optimal user experiences.
- In tandem with Cisco Digital Media Manager (DMM), Rev forms an eCDN that intelligently provides media redistribution, media transformation, and the serving and storage of video-on-demand and live streaming content.

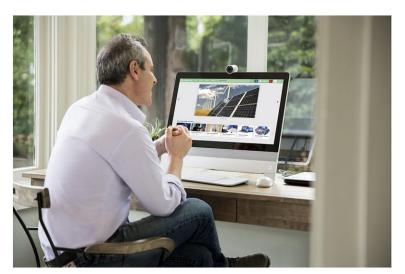


Figure 2. The Rev Consumer-Grade Portal and Integral eCDN Unleash Scalable Video Streaming in the Enterprise

User Experience

Common use cases for capturing video content include meetings, organizational communications, and training (Table 1). The user experience is similar for each.

Table 1. The Same Enterprise Video Content Tools Support Meetings, Organizational Communications, and Training

Business Need	Benefits of Video Capture	Enterprise Video Content Tools
Meetings	 Preserve content to review discussion Find specific parts of a meeting by searching for keywords or speakers Record meetings for those participants who couldn't be there 	 Cisco TelePresence Content Server VBrick Rev video management platform VBrick DME enterprise content delivery network
Organization communications	 View on any device, including mobile devices, desktops, and digital signage View or review the announcement whenever convenient Quickly find specific parts of announcements based on keyword or speaker Share and discuss with others 	
Training	 View on any device, anywhere Review specific parts as often as needed to master the material Share and discuss with others 	

You can notify people about the available video content through newsletters or email messages containing a link. You can also search for keywords or speakers on the Rev portal. You can watch the content in the application itself or on any video-enabled device, including desktops, tablets, smartphones, and even digital signage.

"With Cisco TelePresence Content Server, employees in India can easily view a team meeting in California, either as it is happening, or days, weeks, or months later."

- John Byers, Collaboration Engineer, Mentor Graphics Corporation

Case Studies

Training Organization Extends Video to Online Community

Cisco Live![™] events, held around the world, offer education, training, and professional networking opportunities to Cisco customers and partners. Tens of thousands of IT, networking, and communications professionals attend the events each year to share insights on emerging technologies and their potential to transform the way people live, work, learn, and play.

Travel costs and busy schedules prevent some people from attending Cisco Live! training events in person. In response, Cisco created an online community where people can watch events live or on demand.

For Cisco Live! training purposes, the production team automated video capture of more than 50 sessions, using Cisco TelePresence and enterprise video content solutions. Benefits included:

- Tens of thousands of customers and partners who could not attend Cisco Live! events could view the sessions recorded with Cisco TelePresence Content Server during the event.
- Operational costs were reduced by eliminating the need to have recording technicians in each room.
- Recorded video was available quickly. The ease of transcoding video content enabled the Cisco Virtual Live team to publish sessions online within hours - much faster than the 72 hours needed for previous events that did not include video.

University Uses Video to Give Students Global Education

St. Edward's University in Austin, Texas, strives to create a learning ecosystem that allows graduates to experience a culturally, economically, religiously, and politically interdependent world. To accomplish its mission, the university partners with institutions in more than a dozen countries to provide a variety of opportunities for global learning. St. Edward's also chose Cisco video, recording, and streaming solutions to support its goal. Now, for example, using a Cisco video-enabled web client, instructors can directly record videos to connect with universities abroad. Through the tools available in the global digital classroom, students can experience the world from their own campus.

The technology in St. Edward's University library also reaches beyond class sessions. The Cisco recording and streaming solution creates a portal for the university, which can be shared privately among a class or posted publicly. Using the Cisco Jabber[®] web client, instructors can record videos from any laptop or computer across campus. The recording and streaming solution automates the processes of tagging, transcoding, and publishing the content for students and faculty to consume. The university now uses Cisco TelePresence Systems to enhance the classroom experience by bringing in remote guest lecturers. Connecting students with peers. Expanding education on study-abroad programs. And sharing content with partner universities such as the Université Catholique de l'Ouest in Angers, France.

Overall, video conferencing has allowed St. Edward's University to enhance its curriculum, offer greater access to course material, create a broader global footprint, and establish meaningful relationships with universities, experts, and students around the world.

"Cisco TelePresence technology has allowed us to expand our horizons and move St. Edward's University into the future as a university without borders," says Bill Clabby, associate vice president for global initiatives. "By making these international connections available to our students, we've been able to further our mission and give graduates the skills and understanding needed to be successful in their future careers."

Conclusion

After investing in video conferencing endpoints for real-time interaction, you can increase their business value by also using them to capture and deliver video content for meetings, organizational communications, and training. The investment is often nominal because your organization can use existing video-capture devices and easy-to-use tools that require little or no training for transforming and sharing video content.

For More Information

To learn more about Cisco enterprise video content solutions to capture, transform, and share, visit: http://www.cisco.com/go/videoplatform.



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Printed in USA