Cisco Enterprise Video Content and the Cisco Enterprise Video Strategy

Enterprise video content solutions enable organizations to capture, transform, and share video-based knowledge and information in meaningful and relevant ways. On September 29, 2011, Cisco announced its entry into an emerging market called “Video Content”.

Cisco Enterprise Video Strategy

Q. Why is video a priority area for Cisco?

A. From our most recent Visual Networking Index (VNI) report, we have seen that video now accounts for more than 50 percent of all consumer Internet traffic. This trend of increasing video use is strong in the enterprise, where video is transforming the way businesses, educational institutions, and governments communicate with customers and citizens.

We are taking advantage of our long history of network expertise along with our track record of innovation to help customers streamline their networks and prepare for the rapid growth of video of all types—communications, content, security, and entertainment. Cisco is uniquely positioned; we offer video endpoints and applications, video infrastructure solutions, and comprehensive video services for complete solutions for our customers.

Q. What is unique about the Cisco strategy and technology offering around pervasive video?

A. Only Cisco offers an architectural approach to video—called medianet—that ties together a rich set of solutions and an unmatched breadth of video endpoints, robust video infrastructure, and scalable network-based media services. These solutions offer organizations of all sizes a compelling set of video applications that meet a range of use cases—from meetings, customer care, advertising, and communications to training and events. Customers can confidently choose Cisco to help them deploy video everywhere, and capture the power of the next evolution of business collaboration—and become a video-enabled organization.

Q. What does Cisco mean by enterprise video? Do you mean everything video-enabled in the collaboration portfolio?

A. “Enterprise video” is a broad term that includes all Cisco video solutions for the enterprise, comprising video communications, video content, and video security. “Video communications” incorporates telepresence, videoconferencing, video telephony, and desktop messaging applications with video. “Video content” enables the capture, transformation, and sharing of video-enabled assets with solutions such as recording and streaming, transcoding and analytics, enterprise content distribution, and desktop video sharing. “Video security” includes physical surveillance and video management, and integrated video communications for safety and security,

The Cisco solutions for video communications include Cisco® TelePresence® systems, the video components of Cisco Unified Communications and Cisco WebEx® meeting applications. The Cisco solutions for video content include Cisco Digital Media Systems (DMS) and Cisco Media Transformation and Analytics. Both rely on the Cisco initiatives for medianet infrastructure capabilities for video and media services.

Many collaboration solutions are becoming video-enabled. As a result, the Cisco enterprise video strategy encompasses progressively more and more of the Cisco Collaboration portfolio.

Q. Do Cisco video and collaboration solutions interoperate with each other?

A. More than interoperate, video and collaboration solutions from Cisco are integrated. For example, Cisco TelePresence WebEx OneTouch extends Cisco TelePresence meetings to Cisco WebEx users, connecting the collaboration and video communications portfolios. Another example is the ability to transcode WebEx® meeting files (.ARF formats) using the media-transformation products in the Cisco Video Content portfolio.

Q. How big is the market opportunity for video?

A. Cisco already has a run rate of more than $5B in video, including more than $2B in the enterprise alone.

Q. Where does the Cisco video strategy lie within the larger Cisco landscape?

A. Video spans all of the Cisco critical business architectures and has direct ties to the other top Cisco priorities. Video is one of our five critical corporate priorities.

Q. What is Cisco doing in terms of innovation around video?

A. Cisco has a long history of innovation across our video portfolio. We are not only committed to innovating in delivering a superior user experience across our video solutions; we also provide video services that span the medianet video architecture to make video easy to manage and share. With our entry into the video content market, Cisco is introducing even more innovation, such as video analytics that make video more searchable and navigable.

Q. Cisco has a long legacy of delivering video technology to service providers. How is Cisco bringing service provider technology into the enterprise?

A. The Cisco Content Delivery System was built to help service providers optimize their networks to handle the growing demand for video content streamed into the home. To address the same trend of growing load demands on enterprise networks, Cisco has incorporated this service provider–class technology into our Cisco Enterprise Content Delivery System (ECDS) portfolio. Cisco ECDS is a new set of video-distribution products that work together to optimize the distribution of video content across WAN networks for delivering the highest-quality live and on-demand video to end users.

Q. Does Cisco intend to compete against competitors who also seem to be taking an interest in video technology, such as HP, Microsoft, or even Google?

A. Cisco continues to advance our position in the enterprise video market. Our strategy is network-based, giving us a strategic position to enable enterprises that use video for communications and content.

Other companies like HP are divesting some assets for video, such as Halo, whereas Microsoft and Google continue to invest. We expect that Microsoft will increasingly advance into video from desktop collaboration and its recent acquisition of Skype for communications. Google is expanding from its consumer offers to try to offer “good enough” solutions for the enterprise.

Q. Is Cisco’s focus on video just an attempt to ultimately sell more routers and switches?

A. Cisco’s emerging technologies are expected to grow to be billion-dollar businesses on their own. Cisco’s video offerings are meeting a direct need from our customers to help them provide enterprise-grade video solutions across their organizations. As the explosive growth of video continues, we are also providing infrastructure to help our customers manage this demand.

In the enterprise, our strategy is to enable customers to unlock the power of video, deliver it to any endpoint, make it easy to use and manage, and provide outstanding and integrated experiences across the portfolio.

Technologies such as medianet and solutions such as the Cisco Enterprise Content Delivery Network actually help enterprises use their existing network infrastructure to best advantage while improving performance and manageability.

Q. Who is currently using Cisco video technology? Can you describe some interesting real-world examples?

A. Cisco has many customers using video throughout their organizations in interesting, new ways to transform their business. You can find many examples in our customer case studies.

Q. What is medianet, and why is it important?

A. A medianet is a network architecture created specifically to make it easier for customers to deploy and scale video across their organizations. The main concept behind medianet is that the intelligence resides within the network to optimize video across many different previously siloed areas of video deployment.

A medianet is made up of three critical elements:

- Video endpoints: Medianet-enabled endpoints are ready-to-use, with intelligence housed in the endpoints themselves to enable the network to automatically see and configure the video device.
- A common shared layer of media services: This layer encompasses capabilities such as video recording, media analytics, transcoding, or interoperability, that are shared across the different silos of video in an organization.
- Infrastructure: Medianet architecture also includes intelligent infrastructure devices such as routers and switches to further enable easier video deployment and management.

Q. Do you need to have a network with no third-party components to take advantage of medianet?

A. Cisco video endpoints and infrastructure are tightly integrated and intelligently designed to deliver high ROI and TCO for customers. As a leader in network technologies, Cisco is uniquely positioned to help organizations design a network architecture to scale video applications. Because of the complexity of video applications, Cisco developed a smarter network and endpoints to simplify deployment and management while ensuring high-quality video experiences for end users.

In a medianet, endpoints are tied to the network to enable services such as autoconfiguration and media monitoring. Autoconfiguration in such a medianet facilitates the deployment of video endpoints and reduces the ongoing operational costs of managing moves, adds, and changes. Media monitoring in such a medianet enhances your visibility into the network by providing details of where your traffic moves across your network—allowing you to better troubleshoot and plan for video applications.

Q. Why should an enterprise customer care about the medianet architecture?

A. The proliferation of technology and consumerization of IT are changing behaviors in the workforce in a way that relies more on video communication and video content technologies; however, the sheer volume of video consumption requires significant bandwidth and storage requirements that enterprises do not have—nor do they have the budget to support these requirements. Therefore, IT is challenged with delivering high-quality tools at high scale. Medianet helps organizations design an architecture that effectively scales video applications and minimizes challenges in network overload and management—one that ties video endpoints and infrastructure for a complete end-to-end solution.

Enterprise Video Content Category

Q. What is enterprise video content? Is this term the name of a new business within Cisco?

A. Enterprise video content is a rapidly growing market category. Simply put, it covers the ability to capture, transform, and share video-enabled information throughout the enterprise in meaningful and relevant ways. It is a sub-category of the enterprise video market, much like video communications.

Most enterprises that have invested in video solutions did so with the intent of using it for video communications—the ability to communicate, connect, and collaborate over video. Today, organizations are looking to extend their use of video beyond video communications to become truly video-enabled organizations. Enterprises can achieve pervasive use of video throughout their organizations through video content. Video content helps customers use video in new ways, such as for organizational communications and training, while enhancing the value of the meetings we already engage in. With video content anyone can capture video through any device, transform the content to view it on any device, and then share it across the organization.

Cisco has already demonstrated leadership in the video communications market, through Cisco TelePresence and Unified Communications applications, for example, and is now entering the video content market with a combination of new products and existing product updates. Although many companies provide partial solutions, none has as comprehensive a product portfolio as Cisco for capturing, transforming, and sharing video.

Q. What factors that encourage the enterprise video content market?

A. The need to communicate faster, more accurately, and more consistently is at the heart of the push toward enterprise video content.

Organizations are continually seeking more ways not only to take advantage of existing investments, but also to seek new competitive advantages. Video is a particularly rich communications medium; because it is now predominantly digital, it can scale around the world.

Q. What are the inhibitors of the enterprise video content market?

A. Although most organizations are familiar with videoconferencing—more than 50 percent of employees, according to a CDW straw poll in 2011, have used videoconferencing—it has been difficult, if not impossible, for personnel to create videos easily and share them in ways that accommodate the particularities of each organization.

The first is the difficulty for a typical employee to coordinate across the various solutions needed to capture and share. Booking a professional studio with a camera operator, sound technician, and producer takes expertise and budget. The second, transcoding and transrating, or applying simple graphics such as logos or names, requires outsourcing to specialists. Sharing it requires yet another step, often without enterprise-class features, and without optimizing for the devices on which the videos are consumed.

No wonder such use of video remains largely restricted to executives at global companies, used rarely, and far from pervasively. Moreover, the advanced planning required makes videos a far less “fresh”—and thus compelling or timely—communication.

Q. How is enterprise video content related to pervasive video?

A. Pervasive video is a market transition. Enterprise video content will help accelerate this transition by enabling video users to do more with what they already now, and explore new use cases they may not have considered yet.

Q. Why is Cisco entering this market?

A. The enterprise video content market has emerged as islands of functions have gradually come together. Examples of these individual markets include enterprise streaming, digital signage, encoders and decoders, video and speech analytics, video content management, portal services, video delivery networks, and postproduction video services. Most of these markets emerged from highly specialized fields and are only now being adapted for more general use in the enterprise.

As organizations began to explore the uses and applications of video, it became clear that the various video components needed to be coordinated and, ideally, approached from an architectural perspective. This way, bandwidth needs could be identified proactively, policies could be extended across all types of media (from text to email to collaboration and now, to video), and workflows could be configured easily across different video mechanisms, from video creation to consumption.

Cisco is applying our extensive experience in the video communications industry and the collaboration market to the video content market. Organizations benefit from video solutions that integrate across the network, collaboration solutions, video solutions, and telepresence, enabling them to take advantage of existing investments. With medianet at the core, organizations get smarter networks that require fewer upgrades, configuration, and time spent on management.

Q. What are enterprise video content solutions?

A. Enterprise video content solutions enable organizations to capture, transform, and share video-based knowledge and information in meaningful and relevant ways, across time zones and devices. Video content solutions can expand the audience from a limited number to as many as you need to reach. You can share knowledge and information live or on demand. You can record, stream, distribute, syndicate, and display video. With enterprise video content solutions, video becomes knowledge—knowledge that can be indexed, browsed, searched, and made social.

Q. What are examples of what enterprise video content solutions do?

A. Organizations are revolutionizing their organizational communication methods, making meetings more useful, and transforming events. Specific examples include broadcasting an all-hands meeting around the globe, developing a repository of training videos, or creating innovative, video-based business models that generate a competitive advantage.

Q. What are Cisco's differentiators in the enterprise video content market?

A. Video is an inherently network-intensive form of media; from endpoints to infrastructure, Cisco is well-positioned to help enterprises explore and harness the power of video.

Cisco differentiators include:

- Simple, intuitive workflows: Cisco attacks one of the critical challenges—usability. With smooth workflows across collaboration, video communications, unified communications, and video content products, pervasive video becomes reality.
- Video analytics: Video analytics are crucial to making videos useful. By automatically identifying keywords and speakers, videos are easier to search, navigate, share, and recommend.

- Medianet: Medianet is a network architecture that enhances video and application experiences and eases the deployment and configuration of a video-enabled network. Cisco is the pioneer of medianet.
- Any-to-any device agnosticism: With the diversity of video-enabled devices, any enterprise video architecture must be able to accommodate video from any device, to any device.
- End-to-end management: By taking an architectural approach, Cisco customers gain simpler deployments, easier management, greater visibility, and more effective use of bandwidth.

No other vendor in the video content market space today has equivalent breadth, quality, interoperability, and ease of use.

Q. What are the benefits of Cisco's approach?

Cisco takes what was previously manual and complex and turns it into something that is automated and simple, meaning that anyone—not just executives—can capture, transform, and share video. Thus video moves from being an occasional mode of sharing knowledge and information to becoming a commonplace, frequently used method. In other words, video becomes pervasive.

Q. Why do customers need enterprise video content solutions? How are these solutions different from other video solutions?

A. Customers are continually looking for ways to streamline their operations, optimize their internal communications, and create new business models that provide a competitive advantage. Video is a critical and pioneering technology that, although common in the consumer space, has posed challenges for enterprise adoption.

With Cisco entering the space with existing, proven video content solutions, customers now have a strategic partner to help them unlock the power of video. Cisco helps customers from the core (with medianet) all the way up the stack to applications. Cisco video content solutions offer consumer-grade ease of use with enterprise-grade functions and security.

Q. How does today's announcement benefit the Cisco partner community? Why should partners sell Cisco enterprise video solutions?

A. Cisco's presence in the enterprise video content market provides another point of differentiation for Cisco enterprise video solutions. Partners that have already built video communications practices can add video content to their services and integration portfolios. AV partners that are qualified to support Cisco TelePresence offerings will find that video content is a natural extension of their practices. Both are rich areas to offer customers solutions that address a variety of business challenges, such as internal communications, training, events, and meeting recording.

Q. Are there any service considerations that might be important to us and our customers as they consider capture, transform, and share?

A. Although it might seem pragmatic to design the network for the first application organizations plan to adopt, then see how it goes, and then add other capabilities for additional video content just before adopting them, this approach has some drawbacks. Most serious is the potential for early problems that discourage user adoption, such as poor video quality, difficulty connecting, or, complicated interfaces. Overcoming an initial poor impression can take a long time, preventing an enterprise from realizing the full value of its investment in video. It is more efficient and less costly over time to thoroughly plan the video content deployment at the outset of the project. With a robust portfolio of business video services, Cisco can help you realize new possibilities with video applications and greater ROI from your investments in video solutions.

Q. Will enterprise video content place any changing requirements on the network that Cisco can assist with?

A. Recent surveys of chief information officers (CIOs) at Fortune 500 companies reveal that they are undertaking initiatives to improve application availability and stability; to optimize, consolidate, and virtualize their data centers; and to ensure business continuity and disaster recovery. For these initiatives to be successful, it is imperative to understand the current state of the environment. You must have a holistic picture of the environment from both business process and video application perspectives. In most organizations, no single department has ownership of the holistic view of video applications—what it takes to keep applications operational and meet specific service-level expectations. It is more important than ever to understand how video content is running on your network, what resources it is consuming, and how it is performing—especially from within a data center.

Another consideration is how to manage the increasing volume of video media that contain proprietary, confidential, or corporate intellectual property. Policies and regulatory compliance planning must be in place to manage video content as a company would manage any of its sensitive financial or customer information. Cisco is uniquely positioned to provide medianets, offering a comprehensive set of video products and solutions for the network infrastructure designed with built-in media support, as well as having Cisco and our partners provide services to address this planning on video content within network data centers.

Product Q&As

Q. What products are included in the launch?

A. As proof points of our presence in the enterprise video content market, we are announcing enhancements to the Cisco Show and Share® video sharing application and the Cisco Enterprise Content Delivery System. We also have updates to the Cisco TelePresence Content Server and the Cisco MXE 3500 and MXE 5600 Series Media Experience Engines.

Q. Why is Cisco only now entering a market with products it has had for several years?

A. The enterprise video content market has been emerging as well, consolidating parts of multiple discrete markets as enterprises continue to look at how video can improve—and in many cases, transform—their businesses. Enterprises are recognizing that an architectural approach is needed to maximize video investments across many of their business areas. At the same time, Cisco has been working on taking a customer view of our video portfolio. This process has resulted in Cisco's recognition of an enterprise video content market and a formal announcement of Cisco's participation in it.

Q. What are the new features in Cisco TelePresence Content Server (Content Server) Release 5.2?

A. Cisco TelePresence Content Server Release has several new features:

- Integration with the Cisco MXE 3500: You can now make a recording with the Content Server and upload it automatically to a Cisco MXE 3500 server for further transformation and publishing. The recording is copied to the Cisco MXE 3500 using FTP on completion of a call and then transformed based on the profile selected in the server configuration.
- Automated creation of personal recording aliases: You can now automatically create a personal recording alias for each user with creator privileges when the user logs in to the Content Server web interface.
- Improved lookup for access control lists (ACLs): Editors can now add Microsoft Active Directory users and groups to ACLs for their recordings if those users or groups exist on the Lightweight Directory Access Protocol (LDAP) server configured for the Content Server even if users have not logged in to the Content

Server and user or group accounts have not yet been added through the Groups and Users page by a site manager.

- Impromptu recording of a personal identification number (PIN)-protected multipoint control unit (MCU) conference: You can now dial out from the Content Server user interface to make an impromptu recording of a PIN-protected MCU conference.
- Support for a static URL for live streaming of MPEG-4 for Flash content from a Wowza Media Server: If the live stream URL needs to be published before streaming starts, site managers can now enter a stream name in the Static stream name field on the media server configuration: Wowza Media Server for Flash > Live unicast streaming settings page. The resulting URL is generated and displayed on the page; for example: rtmp://myWowza/live/mp4:mystream.
- PIN protection for watching a recording using a videoconference endpoint: You can now PIN-protect recordings that are available for watching using a videoconference endpoint.

Q. What is Cisco Pulse® Video Analytics, and how does it work?

A. Cisco Pulse Video Analytics can listen to the video and automatically extract the relevant keywords and identify the speakers automatically through LDAP integration.

Q. What is the benefit of Cisco Pulse Video Analytics?

A. Cisco Pulse Video Analytics makes video navigable, searchable, recommend-able. Instead of viewing an entire video for discrete nuggets of relevant information, this technology can find, extract, and make important or interesting points social. For example, now videos can be searched based on content, rather than title. Viewers of video can consume it more efficiently, skipping to the subject or speakers of interest. You can now browse videos as you do text or web pages.

Q. Does Cisco Pulse Video Analytics have any caveats?

A. For Cisco Pulse Video Analytics to perform at an optimal level, the speaking environment should be “clean” in the sense that there is not too much background noise, there are not too many overlapping speakers, and speakers speak in a fairly straightforward way.

Q. What is new in the Cisco MXE 3500?

A. These are the new features in Cisco MXE 3500:

- Simplified user experience with the Cisco TelePresence Content Server and Cisco Show and Share video sharing application: End users can now make a recording with the Content Server and automatically send it to the Cisco MXE 3500 for further transformation and publishing to the Cisco Show and Share application under their user accounts.
- Support for new video formats: You can now submit Cisco WebEx recordings in ARF format and Flash 9 and 10 video files to the Cisco MXE 3500 to be transformed. The ability to transcode Cisco WebEx recordings is an industry first.
- Enhanced Cisco MXE 3500 Video Conversion Interface: Administrators can now define a custom help link for their users. Users benefit from a more intuitive interface for video upload.
- Cisco Pulse Video Analytics integrated into Cisco Show and Share 5.3: You can now find and navigate within videos based on spoken keywords and speakers. Cisco Pulse Video Analytics can listen to the video and automatically extract the relevant keywords and identify the speakers.

Q. What are the new features in Cisco Show and Share Release 5.3?

A. Cisco Show and Share Release 5.3 has several new features:

- Cisco Show and Share Mobile Client: Now you can create, view, and share video anywhere—anytime with the Cisco Show and Share mobile client for Apple iPad and iPhone devices, including the ability to browse and search both private and public on-demand videos; view, rate, share, and provide comments for on-demand videos; and record, upload, and publish on-demand videos from the Apple iOS devices to a Cisco Show and Share system.
- Cisco Pulse Video Analytics: The Cisco Show and Share application with Cisco Pulse Video Analytics integration makes video much easier to consume and much more meaningful to viewers because they can easily find the information in the video that is pertinent to them. For example, now you can search videos based on content, rather than title. Viewers of video can consume it more efficiently, skipping to the subject or speakers of interest. You also now can browse videos.
- Multilanguage support: The Cisco Show and Share application is currently available in English, French, Spanish, German, Portuguese, and Italian, meeting a wide footprint of customer requirements.

Q. What languages will be supported by the Cisco Show and Share mobile client?

A. We plan to offer language support for English, Spanish, French, and German. The language chosen is based on the language the iOS device is configured for. If the device is set to Spanish (MX), German, or French, it will pick up the appropriate language strings. This information is per the localization guidelines provided by Apple.

Q. How does Cisco Enterprise Content Delivery System (ECDS) differ from the Cisco Application and Content Networking System (ACNS)?

A. Customers use Cisco ACNS today for video delivery optimization as part of a complete Cisco WAN optimization solution. Customers who want a robust and versatile video delivery optimization solution will want Cisco ECDS, especially if they plan to continue to invest heavily in enterprise video solutions such as the Cisco Show and Share application and digital signs. Cisco ECDS offers more visibility and control over video delivery throughout the network.

Q. What is the Cisco Media Delivery Engine ISR Virtual Blade Series?

A. The Cisco Media Delivery Engine ISR Virtual Blade (MDE IVB) Series is a software-based application of the Cisco ECDS solution deployed on Cisco Services-Ready Engine modules for the Cisco Integrated Services Routers Generation 2 (ISR G2) Routers..

Q. How does the Cisco MDE IVB Series fit into the overall Cisco ECDS solution?

A. Because the Cisco MDE IVB Series is deployed on ISRs in the branch office, it acts as the service engine, caching and stream-splitting content to local users. Now customers have a cost-effective option for video distribution by consolidating branch-office infrastructure and taking advantage of existing network investments. The first product of this series is the Cisco Media Delivery Engine 50IVB.

Q. What is the Cisco Media Delivery Engine 50IVB?

A. The Cisco Media Delivery Engine 50IVB is the first product of the Cisco MDE IVB Series deployed on Cisco SRE 900 and SRE 910 Services-Ready Engines. It supports throughput of 25 Mbps up to 100 Mbps and delivers video from 100 to 200 simultaneous clients.

Q. How do I use the Cisco Media Delivery Engine 50IVB as part of my ECDS solution?

A. The Cisco Media Delivery Engine 50IVB is deployed on local branch-office ISRs and acts as a service engine in the ECDS solution.

Q. Will other products be available for the Cisco MDE IVB Series? If so, when?

A. Cisco is evaluating and developing strategies to grow the overall portfolio both in form factor and feature enhancements.

Q. The ISR G2 has video support now. What does that mean?

A. Cisco IOS® Software Release 15.1(4)M introduced new features for ad-hoc and meet-me video conference support for a variety of video endpoints, enhancing the existing ISR G2 audio conferencing capabilities. Small to medium-sized businesses and enterprise branch offices can meet their video telephony and conferencing needs in a single platform by using the onboard digital-signal-processor (DSP) resources combined with Cisco IOS Software to facilitate local ad-hoc or meet-me videoconference calls.

Q. How does the Cisco Media Delivery Engine 50IVB fit into the video strategy for the ISR G2? What will be new with the Cisco Media Delivery Engine 50IVB?

A. The Cisco Media Delivery Engine 50IVB enhances the video capabilities of the ISR G2 by converging video distribution along with voice, data, wireless, WAN optimization, videoconferencing, and security into a single platform.

Q. Why should I choose to install the Cisco Media Delivery Engine 50IVB over any of the other MDEs?

A. Cisco offers customers the flexibility they need to integrate ECDS into their overall network architecture. The benefit of installing the Cisco Media Delivery Engine 50IVB over other MDEs is that it reduces the need for additional physical space by using the existing ISR G2. As a software deployment, customers will benefit from the reduction in deployment, Cisco SMARTnet, capital expenditures (CapEx) and operating expenses (OpEx) costs.

For more information, please visit http://wwwin.cisco.com/etg/.

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