Keeping People and Property Safe

Using Intelligent Video Surveillance to ensure security… and more

It is Friday evening on a holiday weekend, and a local bank branch is closed for the evening. The bank’s business customers have been very busy this week, and have made several large deposits today; the safe is packed with cash.

To safeguard customer deposits, the bank employs an IP-based video surveillance system. This networked solution provides 24x7 monitoring of the entire branch system that can be viewed from anywhere with an Internet connection. The intelligent network provides real-time performance monitoring to ensure maximum quality video, so events captured via video can be shared in the best way. An offsite security service employs trained experts to continually observe the live feed. Instead of using a proprietary CCTV system, or even clunky videotapes, the bank saves its surveillance footage to an onsite server, and offloads to a cloud-based service.

Dependable, Consistent Monitoring and Analysis

At 3:00 A.M. Sunday morning, two burglars are captured on the video surveillance system, forcing a back door open. In seconds, a security service employee zooms in to get a closer, high definition view of the break-in on her screen, and then clicks a mouse to notify police and send a screen shot instantly to the security guard in the area.

The security guard gets a notification with video of the event on his mobile phone, and instantly connects via the IP network to speak with the offsite supervisor. His phone receives a floor plan of the bank and a live feed from the...
video surveillance system. During a crime or emergency situation, nonstop, high-quality communication can mean the difference between life or death, so Cisco's solutions are focused on ensuring seamless communications. Quality of Service (QoS) prioritizes the streaming video over all other traffic, and other Cisco Medianet features ensure the network between the video camera and the monitoring systems are trouble free.

This means the guard is prepared with all the right information before he enters the building. The local police get alerts dynamically via the same incident response communication system so they can gather and share information with on site security personnel while viewing the floor plans and video of the incident.

A Collaborative Approach to Public Safety

Minutes later, the security guard enters the building, just as the intruders run out the back door. The guard stays in touch with supervisors over his mobile phone, which taps network intelligence to dynamically switch from Wi-Fi to a local cell service.

As police are on their way to the crime scene, they tap into the security surveillance feed to assess the situation. They arrive minutes later, and apprehend the intruders several blocks away from the bank.

The IP video surveillance and communications solutions have performed flawlessly, enabling law enforcement and security to stop intruders in their tracks quickly and safely, while at the same time gathering high-definition video evidence that is watermarked for use in court.

Video Intelligence, Powered by the Intelligent Network

By providing visibility into a site from anywhere, IP video surveillance is transforming the way businesses think about safety and security. Unlike proprietary systems, IP-based surveillance can provide nonstop flexible monitoring of a site from any location, on multiple devices, at any time of day or night. When combined with video analytics for intelligence and collaboration tools for communications, it delivers a rich set of capabilities to help security professionals respond to emergencies faster and more safely.

Today's video surveillance is primarily used for safety and security. But increasingly organizations are using the ability to capture motion and actions in video for many other purposes. For example, retailers and banks are using video to track customer behavior—to improve service and in-store or in-branch experiences. Entertainment venues and transportation hubs can analyze visitor traffic patterns. Retailers use combinations of video analytics with advertising to determine placement and audience receptivity. Today, the uses are in their infancy. Tomorrow, the possibilities are endless.

Enabled by the Medianet Architecture

As video becomes pervasive in our lives--at work and at home--the quality of the experience matters. A high quality experience is critical to adoption and to promoting business transformation. If an end user's experience with video is not good, the user will not use it, watch it, consume it or create it. An architectural approach and intelligent network are critical in delivering quality, consistent, and predictable experiences. Cisco® video solutions and the underlying intelligent Cisco Medianet architecture are optimized for video to create superior experiences (and cost-effective operations) by integrating video capabilities all the way from the network to the application. A medianet has the following characteristics:

- **Media-aware:** The network is aware of the types of media crossing the network, and handles automatic format transcoding to deliver the best experience.
● **Endpoint-aware:** Adaptive endpoints on the network automatically configure and register themselves, saving time and money for IT organizations.

● **Network-aware:** An intelligent network is aware of itself, and employs sophisticated quality of service (QoS) to prioritize traffic and mitigate congestion. It can even dynamically troubleshoot problems to identify devices that are compromising quality.

**Cisco: Creating the Future of Video... Today**

Cisco today provides a complete array of video solutions for organizations. These solutions include video-enabled collaboration applications such as Cisco TelePresence, Cisco WebEx®, and Cisco Jabber meeting applications; video content offerings that democratize the ability to create and consume video; video surveillance for physical security and new emerging uses; and digital signage for engaging customers and employees. Cisco Videoscape lets service providers bring together content from pay TV, online, and on-demand sources. Altogether, this comprehensive networked video portfolio enables Cisco customers to combine content with social media, communications, and mobility to deliver tomorrow's "better than being there" video experiences—everywhere, at scale, to tens of thousands of enterprise users or millions of consumers.

Cisco's unique approach to video collaboration, video entertainment, and video intelligence, together with its broad portfolio of solutions, provides a flexible, scalable foundation to enable people to enjoy a more interactive, immersive video experience at work and at play—anywhere, at any time, using any device.