Connected Safety Solutions Help to Create a Secure Campus

Cisco IP based surveillance along with video analytics helps to proactively manage threats

Business Challenge

Manipal University Jaipur was launched under Manipal Education Group in 2011.The permanent campus of the university , set up on 122 acres of land at Dehmi Kalan village near Jaipur, is by far one of the best campuses in the region. MUJ has world class infrastructure, including state-of-the-art research facilities and modern library.

In line with Manipal University's legacy of providing quality education, the university uses the latest and innovative methods and technology to impart education. The multidisciplinary university offers career-oriented courses at all levels, i.e., UG, PG and Doctoral and across diverse streams, including Engineering, Architecture, Planning, Fashion Design, Hospitality, Allied Health Sciences, Humanities, Commerce, Management, Communication, Basic Sciences, Fashion Design and Jewellery Management, etc.

Manipal University Jaipur (MUJ) was looking to replace its existing manual security system with an automated one. The solution had to be available 24*7 and enhance the security cover of the University so that the large number of students both on the university campus and in the hostels to felt safe.

EXECUTIVE SUMMARY
CUSTOMER NAME:MANIPAL UNIVERSITY • Education • Jaipur, India
BUSINESS CHALLENGE • Replace Manual security system with an automated one • Help enhance security cover on campus • Proactively monitor threats
NETWORK SOLUTION • Integrated Physical safety and security solution encompassing Video surveillance and video analytics
BUSINESS RESULTS • Create a SMART,SAFE and SECURE campus • Increased network flexibility, improved content • Reduced Capex and Opex

Cisco Solution

The Cisco Physical Safety & Security solution provides Video Surveillance with rich analytics features for the campus including indoor and outdoor applications and integrates the command & control center with the existing IP Telephony solution. It has the capability to integrate with the Radio communication system (PTT Radios) used by security personnel.

Cisco's network-centric video surveillance software and hardware supports video transmission, monitoring, recording, and management. The video surveillance solution works with advanced features and functions of the IP network infrastructure-switches, routers, and other network security devices-to enable secure, policy-based access to live or recorded video. MUJ has added Cisco Video Surveillance solution on top of the existing Cisco Network Infrastructure.

> "The Cisco IP -based surveillance solution has helped MUJ transform into a SMART, SAFE and SECURE campus. Video analytics helps to proactively monitor and manage likely threats thus creating an environment of heightened safety to our students"
>
> – T Mohandas Pai,Chairrman, Manipal Global Education

The Cisco Smart PSS solution with 400+ cameras deployed in the campus monitors the important areas 24/7 with intelligence built-in providing the much needed layer of security. One big benefit of the solution was that the administration could monitor and manage instances of ragging, bullying ans student movements considered as major issue in today's universities.

Service and support are integral to succeed with the deployment and operation. The partner was involved in the deployment, at each stage of the solution lifecycle, including in maintaining the network solution.

Business Results

Cisco IP Based Surveillance Solution with remote monitoring capability has helped keep track of the campus helping MUJ become a "smart, safe and secure" campus. Solutions like PSS deployed are scalable and can be extended to all campuses because the solution is also way better than legacy physical security personnel.

- Total of 423 cameras divided into 3 phases Hostels, Admin block and Common areas
- 12 IR Enabled Bullet cameras in common areas to cover the entire area.
- 358 Cameras inside the Lifts
- Rest in Admin blocks with 720P resolutions to cover the entire campus
- VSM 7.5.1 with SASD at command and control centre
- 4 no's of 42' video walls for 24/7 monitoring
- Advanced Video analytics running at edge level to create state of the art Campus surveillance solutions
- Analytics configured on common areas, and few critical areas inside admin blocks to send alerts automatically to command center as a video Pop up and minimize the requirement of security personnel.
- Alert mechanisms to send mails in case of unforeseen event happening to facility admin.

Cisco Video Analytics consists of embedded software on video endpoints, such as IP cameras provide innovative ways to perform video analysis. The software package delivers the following benefits:

- Cisco Video Analytics software offers users innovative ways to perform video analysis. The software provides an intuitive interface and powerful tools to enable organizations to make the best use of their surveillance video. Analytics processing occurs on capable edge devices, providing a cost-effective method of deploying video analytics on the network.
- Simplifies operations and lowers costs by freeing up security personnel
- Helps you use your security resources more efficiently
- Scalability and easy deployment eliminate the need to purchase additional analytics servers or storage resources

Cisco Video Surveillance Manager Benefits:

- Video surveillance convergence with network infrastructure can optimize bandwidth and storage utilization. By integrating and synchronizing video with other networked applications, the true value of video and system investments can be unlocked.

Challenge of Centralized management	**Integrate security operations:** Cisco physical security products support the vision for a single, unified security suite that helps enable integration with all security operations within the IP network. Many non-security applications are also supported.
Protect investments	**Enable interoperability:** Cisco offers the flexibility to mix equipment from multiple vendors to help MUJ capitalize on existing investments; including migration flexibility and interoperability among installed devices. This approach can help MUJ reducing total cost of Ownership of the solutions and minimize the manned security personnel.
Reduce CapEx and OpEx	**Reduce costs:** The Cisco VSM solution helps reduce CapEx and OpEx, resulting in migration away from proprietary, single-vendor implementations with fully open systems with Open APIs

The Cisco VSM solution offers MUJ the following advantages:

- Cisco Video Surveillance solution is plug-and-play, and requires almost no additional management time
- Ease of management further reduces total cost of ownership. The Cisco Video Surveillance solution requires almost no effort from the IT team.
- The college IT team also appreciates the responsiveness of the Cisco support organization. The Cisco SMARTnet service provides access to the Cisco Technical Assistance Center (TAC) support and a guaranteed turnaround time for replacement parts. When TAC determined that a server needed a new hard drive, the replacement arrived the very next day, resolving the issue.

  - **Increased network flexibility:** Systems can be scaled to meet changing or growing needs by adding standards-based cameras, servers, storage, technologies, and users, as needed.
  - **Improved content control:** Real-time incident response, investigation, and resolution helps protect MUJ's people and assets. Displays are easily switched from one live video surveillance feed to another.
  - **Enhanced storage utilization:** Cisco VSM receives and indexes live video surveillance feeds, manages its own storage, and provides long-term video archives.
  - **Decreased staff training:** Cisco products help enable any-to-any multivendor device interoperability. Consequently, the need for operating re-training can be reduced or nearly eliminated.

- An IP-based video monitoring system that uses the existing network infrastructure can provide a cost advantage over a traditional analog-based system. Existing IP networks already support VoIP and data applications. Networks that are enabled for VoIP often have access layer switches installed that support Power over Ethernet (PoE), QoS, and Auto SmartPorts. Attaching IP video surveillance cameras to PoE switches can be more cost effective than using externally powered, analog-based systems.

ROI Benefits:

MUJ's ROI can further benefit through Cisco VSM:

- o **Reduced OpEx:** Typically, approximately 80% of the long-term costs of any security system is considered operating expenses (OpEx). Converged IP networks can deliver operational savings immediately and throughout the much longer life of a networked IP-based video surveillance system.
- o **Decreased financial risk:** Unlike non-integrated point products, Cisco's end-to-end support quickly detects incidents, allowing personnel to prioritize key information. This helps enable incident response teams to collaborate more quickly, ultimately reducing downtime and financial risk.
- o **Improved storage options:** Cisco's cost-effective storage devices allow enterprises to choose the most economical solution when storing their video and audio—in loops, one-time archives, or as event clips triggered by external systems.
- o **Increased investment protection:** Standalone video surveillance systems can be costly to operate, maintain, integrate, and upgrade over time and become obsolete more quickly. Since Cisco's video surveillance devices and applications interoperate with third-party products, there is no loss to MUJ's initial investments in your current security system.

For More Information:

To know more about Cisco Physical safety and security solutions go to:

http://www.cisco.com/web/IN/products/psbs/index.html

To know more about Manipal Univeristy, go to http://jaipur.manipal.edu/muj.html

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