KL Tower Selects Surveon's End-to-End Megapixel Solutions to Ensure 24x7 Security Monitoring

The visual clarity of megapixel cameras brings explicit benefits for video surveillance. For some applications, this advantage is extremely helpful for enhancing the operation efficiency and increasing the overall service satisfaction, such as in transportation, manufacturing, school or similar public utility. Enterprise- and high-level solutions are usually essential for those highly commercial and sensitive applications generally used in a wider and more open area that require scalability and long video retention period. Mohd Salim Ghonah of Vims Technology, the security project manager for the KL Tower—the highest building in Malaysia—said, "You cannot imagine how much risk and integration effort will be taken for such a project including camera, software, server and storage." Ghonah continued, "Surveon's full end-to-end integration, including enterprise VMS and storage that supports up to 300TB, helps us manage the project in a most efficient way and brings the lowest risk."

Customer

The Kuala Lumpur (KL) Tower is a famous landmark and scenery spot in Malaysia. It is a multi-functional compound building with telecommunication and broadcasting operations. Every year a great amount of tourists visit the KL Tower for sightseeing and business purposes. As more and more customers visit the tower, traditional analogue cameras and DVR solutions were no longer able to meet its video surveillance needs, and the KL Tower authority started to look for an advanced security system to tighten up the public security.

Challenges

Open Field and Wide Monitoring Area

The widely distributed network areas, scalable architecture and maintenance issues (e.g. hard to go up to the top to fix cameras) are the challenges the project manager first faced.

Recorded Video Data Retention

The data retention of recorded videos and the scalable, end-to-end, and robust support for hundreds of megapixel cameras for the whole system structure are particularly important to the planning and acceptance of the governmental public utilities. "The megapixel cameras from Surveon and the scalability for 300+TB storage solutions gave us a proven end to end solution," said Ghonah.

Integration with Hundreds of Channels on Camera, NVR and Video Storage

"Although we have years of experience in professional projects, every single point looked fine at the beginning, but when we connected them together, we started to get into troubles," said Ghonah. "Integration tasks do bring us a lot of troubles. Of course, in a project like this, you may need to purchase cameras, VMS, NVR, and storage systems."

The extremely complicated integration and verification tasks, among all, not only consume many invisible resources, but also contain other potential risks of integration. For example, when video recording is malfunctioning, which device is the cause? Camera? VMS? Or is it storage performance, not the device, that is degrading? Sometimes the integration of VMS and PC causes the system to be unstable too.

Table 1: The I/O and Storage Performance for 32 Cameras

Туре	Resolution	I/O (Mbps)	Storage 14 Days	Storage 28 Days
CIF	320x240	0.5	2.4 TB	5.2 TB
D1	720x480	1.5	7.3 TB	15.5 TB
1.3 Megapixel	1280x960	4	19.4 TB	41.5 TB
2 Megapixel	1920x1080	6	29 TB	62.2 TB



Summary

Customer:

KL Tower, the highest building in Malaysia

Tower Needs:

- Proven end to end solutions for megapixel recording
- Support 120-day continuous recording
- Support surveillance in wide and open areas
- Enterprise VMS and storage with up to 300TB
- System scalability and long video retention period
- Improve quality of video images
- Provide more active management
- Reduce cost for system maintenance

Surveon Solutions:

- Highly integrated solutions with the following:
- CAM3365 3 megapixel day/night fixed bullet
- CAM4365 3 megapixel day/night outdoor fixed dome
- NVR2048 hardware RAID NVR system
- Surveon video analytics
- Surveon enterprise central management software
- Surveon SANwatch storage monitoring suite

Surveon Solution Benefits:

- Certified end to end solutions, from cameras, NVR, VMS, to storage
- 120-day megapixel recording
- Hardware RAID NVR ensures reliability
- Exemplary performance, extremely stable HD and zero frame loss
- Easy integration
- Central management
- Real-time VI detection
- Smart investigation
- 100% in-house design and production
- 3 year warranty



Solutions

The KL Tower has deployed Surveon clustered video surveillance solutions, which contain IP cameras, RAID NVR, IP storage and enterprise central management software. 3 megapixel IP cameras were installed at the crucial points and areas of the tower to more efficiently monitor the premises and people coming in and going out: CAM3365 fixed bullet for day and night usage, and CAM4365 fixed dome for outdoor surveillance. All devices are built from industrial grade components, which lead to reliable solutions that reduce maintenance costs.

"Two important benefits that Surveon brings to our partners are the end-to-end solutions and fully in-house design and manufacturing that make our products superior and provide outstanding performance. Surveon products are also verified by end-to-end based certifications," said Peter Wu, sales manager of Surveon.

Network video recording is handled by Surveon's NVR2000 enterprise NVR, which offers up to 48 channels of megapixel recording and 36 hard drives for 120 days of video content storage. Surveon's iSCSI-based RAID NVR provides scalable architecture which brings lower maintenance effort, fewer required hard disks and lower cost.

Surveon enterprise Central Management Software is built with client-server architecture and adopts central management style, which is also easily scalable. Its active VI detection function has a pre-configured base for a number of scenarios, such as intrusion detection in and around the tower, examination of important gates and detection at parking lots. The smart investigation feature distinguishes what is important from what is not, turning raw surveillance videos into useful information. The recorded events are analyzed and labeled with details such as time, date, direction, color and size of the objects.

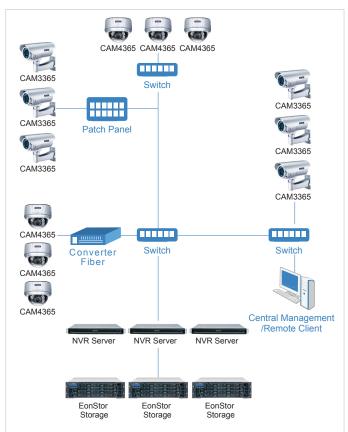


Figure 1: Distributed Architecture for Advanced Applications

Surveon's clustered video surveillance solutions come with the SANwatch storage monitoring suite which helps the customers easily manage and monitor the status of their storage systems. The data protection functions provided by SANwatch storage monitoring suite ensure highest availability of recorded videos and events; no data loss is allowed.

Benefits

True Megapixel Quality

Surveon's 3 megapixel IP cameras are equipped with Sony Exmor Sensors that provide 10 times clearer images than conventional analogue cameras, offering sufficient reliability for long-term operations.

Less Maintenance Effort and Management Cost

"Surveon uses industrial-grade components instead of conventional consumer-based parts and deploy the three-party certified IP66, vandal proof and in-house high quality control production process. These have made a great improvement on product quality and indeed saved massive management costs," said Ghonah. "It's very hard for you to imagine that when a camera fails to function, what challenges and cost we will have to face for climbing up a tower of 421 meters high to fix it."

End to End Solution

Surveon provides various product packages, ranging from different camera segments to resolutions and all kinds of NVR and storage systems. All of them are based on the same VMS framework, allowing partners to keep the investment on existing projects for expansions.

Central Management and Scalable Architecture

Surveon's enterprise Central Management Software is highly scalable to suit a variety of video surveillance systems. The software supports hundreds of channels in a hierarchical system architecture and offers rich services including camera control, live monitoring, recording, configurable playback, remote viewing, and alarm handling. With its client-server architecture and easy scalability, centralized management and consolidated control of video surveillance are easily achieved.

About Vims Technology Sdn Bhd

Vims Technology Sdn Bhd is a Malaysian based company with long experience in supply, delivery, installation, testing, commissioning and maintenance of surveillance and access control systems.

About Surveon

Surveon Technology offers end-to-end network video surveillance solutions that showcase expertise in professional camera design, hardware RAID NVR, high-availability video storage, embedded firmware and video management software. All our products are designed in-house and manufactured at ISO 9001 and ISO 14001 certified production sites. Our highly integrated, proven, and reliable product lineup reduces integration effort and compatibility risks, and maximizes profits for our security partners.

