

Surveon NVR7800 Provides Security and Stable Platform for Water Treatment Plant in Malaysia

The Malaysia government water treatment plant possesses vision to provide the best Water Treatment Plant with demand of high security protection in industry sector. Therefore, the high reliable platform with flexibility to expand storage by year by budget becomes important criterions to select surveillance partner. Surveon NVR7816 ensures high video image quality with high throughput capability in additional to flexible JBOD storage expansion capability become the best candidate for the surveillance ecosystem.

Customer

The water treatment plant works 24 hours /365 days to supply the clean water to the whole country. The continuous recording to ensure security all the times is mandatory. The high reliable surveillance system with long recording retention days would be required.

Challenges

Continuous Recording with Data Protection

The plant installs hundreds cameras with high image quality demand. It needs a reliable system which supports recording with hundred channels and is able to transmit high resolution images smoothly. Further, the recording data shall be well protected

Flexibility to Expand Storage When in Demand

Government budget might not be able to support one-time purchase in one deal. Hence, the recording retention days shall be flexibility to expand storage size by year, by timeline, by budget

Compatible with Axxonsoft VMS

The plant decides to adopt Axxonsoft VMS for the surveillance project to handle hundred channels cameras. The selected NVR hardware shall be fully compatible with Axxonsoft VMS.

Solutions

High-level Recording Throughput for Smooth Transmission

The NVR7800 Series delivers a high level of recording throughput of nearly 2000 Mbps, supporting recording with more channels, allowing system to receive better video image quality by higher bitrates, and ensuring smooth transmission even with high frame rate.

Server-storage Design NVR for Easy Maintenance

With server-storage hybrid design, Surveon's NVR7800 Series makes the system become really simple in comparison to generic server system structures composed of management server, recording server, storage controller, and storage array. Moreover, its cableless and modular design prevents cable losing and accidental disconnections, providing the multinational hypermarket the easiest maintenance system.



Summary

Customer

Government Water Treat Plant in Malaysia

Project Needs

- Continuous recording to keep all recorded data under robust protection with long storage time
- Flexibility to extend recording time when in demand
- Compatible with Axxonsoft VMS

Surveon Solutions

- Server-storage Design NVR7816
- Flexible JBOD expansion up to 316 drives
- NVR7816 with Axxonsoft VMS Certificate

Surveon Solutions Benefits

- Patented RAID Storage for Stable Performance
- Hassel-free Integration with Major 3rd Party VMS
- Hybrid Design for Best Price-performance Ratio

Patented RAID Engine for Robust Data Protection

Surveon NVR7800 is natively with patented RAID engine which supports RAID 0, 1, 5, 6, 10, 50, 60, 1+Spare, 5+Spare and 6+Spare technology. It monitors HDD healthy status in timely base and can ensure video writing to HDD even with HDD error. The unique patented Spare technology can clone the bad condition HDD into the Spare one to make ensure the whole RAID working good even some HDD failure

Fully Compatible with Axxonsoft VMS

The NVR7800 Series is 100% compatible with Axxonsoft VMS with Axxonsoft certificate. It ensures the high reliable hardware platform + full compatible software VMS ecosystem for robust surveillance system.



Benefits

Patented RAID Storage for Stable Performance

Without additional RAID card into server, not only saving budget, but also high speed stable read / write bandwidth through highly integrated built-in Infortrend RAID storage engine. Infortrend's patented read/write technology guarantees performance during drive I/O delay and isolates the abnormal drive to maintain system stability.

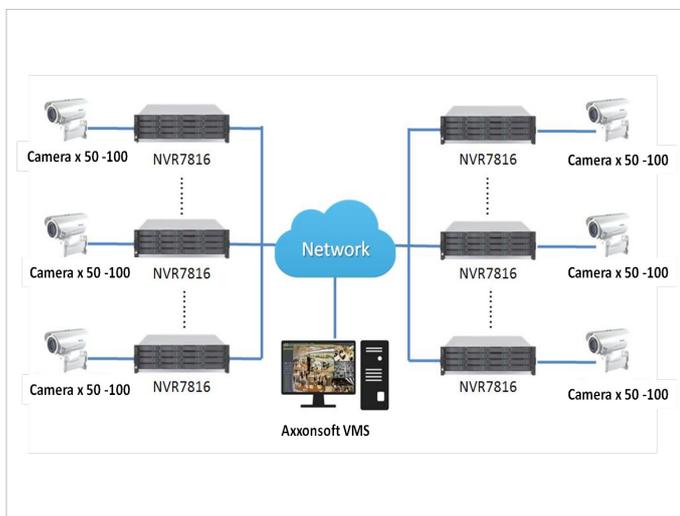


Figure 1: Distributed Architecture

Hassle-free Integration with Major 3rd Party VMS

All of Surveon NVRs are fully compatible with major 3rd party VMS such as Milestone, Genetec and Axxonsoft VMS, saving the efforts and time to integrate different brands of products. In addition, many 3rd party camera providers have been fully tested for compatibility with Surveon NVR systems, giving partners a broad range of solution selections for their projects.

Hybrid Design for Best Price-performance Ratio

Price and performance are always the key elements to help SI to win projects. Surveon NVR7800 Series was designed as a recording server with an archiving function that offers cost advantages compared to general system structures composed of recording server plus a separate storage device. Besides, based on Milestone test* findings, NVR7800 Series supports up to 150 cameras, more than twice Milestone's benchmark level in a non-stop recording scenario. The system is even capable of supporting more than four times the number of cameras estimated by benchmark under the testing scenario where motion detection is enabled, giving medium to large projects the best price-performance solution.

Scenario 1	NVR	CPU	Cameras / Compression %	Read Latency (ms)	Stream Size (Mbps)	Disk I/O (MBps)
Benchmark	NVR7812/7816	i3-4330	60 / 30%	2	10.17	120.64
		e3-1225	60 / 30%	2	10.17	375.92
		e3-1275	60 / 30%	9	10.65	119.98
Maximum	NVR7812/7816	i3-4330	110 / 60%	4	13.94	293.71
		e3-1225	145 / 60%	7	9.91	267.61
		e3-1275	150 / 60%	10	14.41	498.1

Scenario 2	NVR	CPU	Cameras / Compression % / Motion %	Read Latency (ms)	Stream Size (Mbps)	Disk I/O (MBps)
Benchmark	NVR7812/7816	i3-4330	30 / 30% / 30%	3	10.06	493.41
		e3-1225	30 / 30% / 30%	2	5.2	486.79
		e3-1275	30 / 30% / 30%	1	10.23	557.91
Maximum	NVR7812/7816	i3-4330	70 / 60% / 30%	1	5.09	445.29
		e3-1225	110 / 60% / 30%	2	5.07	631.17
		e3-1275	140 / 60% / 30%	2	5.18	516.83

"The hybrid server-storage design of NVR7800 Series gives us a big hand with its robust data protection, high throughput and easy maintenance. And it also give us a better performance with affordable budget in every perspective. We are very satisfied with the result and look forward to working with Surveon in the future." said the administration manager of the water treatment plant.

About Surveon Technology

Surveon Technology offers end-to-end network video surveillance solutions that showcase our expertise in professional camera design, RAID NVR, high-availability video storage, embedded firmware and video management software. All Surveon products are designed in-house and manufactured on our ISO 9001 and ISO 14001 certified production site to ensure the highest quality for our partners. For more information about Surveon, please visit at www.surveon.com