

Surveon the Best Price-performance NVR7800 Protected the Multinational Hypermarkets in South America

Security is always one of the top concerns for any stores, especially for multinational hypermarkets, and IP surveillance is becoming the norm in the retail sector. The administration manager of the multinational hypermarket in South America knows that the reliable storage and server are the key success factors of a IP surveillance system, and has adopted 70 Surveon NVR7816, which was designed as a recording server with an archiving function that offers cost advantages and easy maintenance. Besides, NVR7816 ensures high video image quality with high throughput capability, providing a safe environment for people and goods in the 66 stores.

Customer

The multinational hypermarket plan to level-up their security system since the original surveillance system was not able to meet their requirements of clearer image, high-level data protection and easier maintenance. First of all, the multinational hypermarket planned to adopt Dxxl's server and storage solutions to integrate with their existing Genetec VMS. However, with simpler system architecture, better performance and cost advantage, Surveon server-storage design NVR7816 becomes the top choice for the multinational hypermarket.

Challenges

Smooth Transmission with High Resolution Images

Each hypermarket installs 80 to 100 cameras with improved image quality. The multinational hypermarket needs a reliable system which supports recording with hundred channels and is able to transmit high resolution images smoothly.

Easy Maintenance with Simple Architecture

A simple system makes easy maintenance for multinational hypermarket. Therefore, simple system architecture is one of requirements for the multinational hypermarket.

Compatible with Genetec VMS

The multinational hypermarket bought 6,000 channels Genetec VMS license before deciding the supplier of server and storage makes the system must composed by brands. The multinational hypermarket needs a solution which is fully compatible with Genetec VMS.

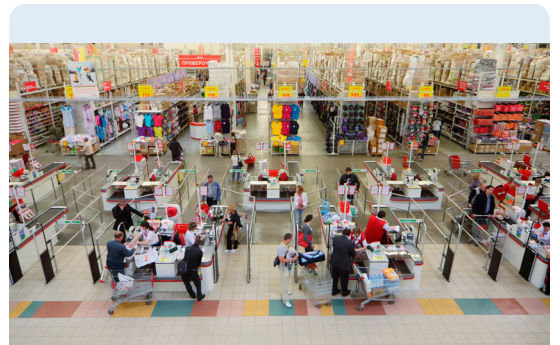
Solutions

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 compared to Dxxl's 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

66 Multinational Hypermarkets in South America

Project Needs

- Smooth Transmission with High Resolution Images
- Easy Maintenance with Simple Architecture
- Compatible with Genetec VMS

Surveon Solutions

- High-level Recording Throughput
- Server-storage Design NVR7816
- High Compatibility with Genetec VMS

Surveon Solutions Benefits

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

High Compatibility with Genetec VMS

The NVR7800 Series is 100% compatible with Genetec VMS license. With Genetec VMS, NVR7800 Series can serve up to 300 channels 1.3MP cameras with continuous recording or 190 channels 1.3MP cameras with motion detection recording.

Continuous Recording

Test Scenario 1	NVR Model	Processors	Stream Profile (Ref camera, resolution)	Live Video Database Read Latency (milliseconds)	Individual Video Stream Size (Mbps)	Maximum Disk I/O (Mbps)
Maximum	NVR7816	i3-4330	300 camera, 1.3MP	-	1	-
		E3-1225	300 camera, 1.3MP	-	1	-
		E3-1275	300 camera, 1.3MP	-	1	-
		i3-4330	60 camera, 1.3MP	-	5	-
		E3-1225	60 camera, 1.3MP	-	5	-
		E3-1275	60 camera, 1.3MP	-	5	-

Motion Detection Recording

Test Scenario 2	NVR Model	Processors	Stream Profile (Ref camera, resolution)	Live Video Database Read Latency (milliseconds)	Individual Video Stream Size (Mbps)	Maximum Disk I/O (Mbps)
Maximum	NVR7816	i3-4330	110 camera, 1.3MP	-	1	-
		E3-1225	150 camera, 1.3MP	-	1	-
		E3-1275	190 camera, 1.3MP	-	1	-
		i3-4330	45 camera, 1.3MP	-	5	-
		E3-1225	60 camera, 1.3MP	-	5	-
		E3-1275	60 camera, 1.3MP	-	5	-

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

Benefits

Patented RAID Storage for Stable Performance

Without buying RAID card and server separately, NVR7800 Series has built-in Infortrend RAID storage to ensure stable read/write performance in high speed for the system. Infortrend's patented read/write technology guarantees performance during drive I/O delay and isolates the abnormal drive to maintain system stability.

Hassle-free Integration with Major 3rd Party VMS

All of Surveon NVRs are fully compatible with major 3rd party VMS such as Milestone and Genetec 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

"The hybrid server-storage design of NVR7800 Series gives us a big hand with its 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 multinational hypermarket.

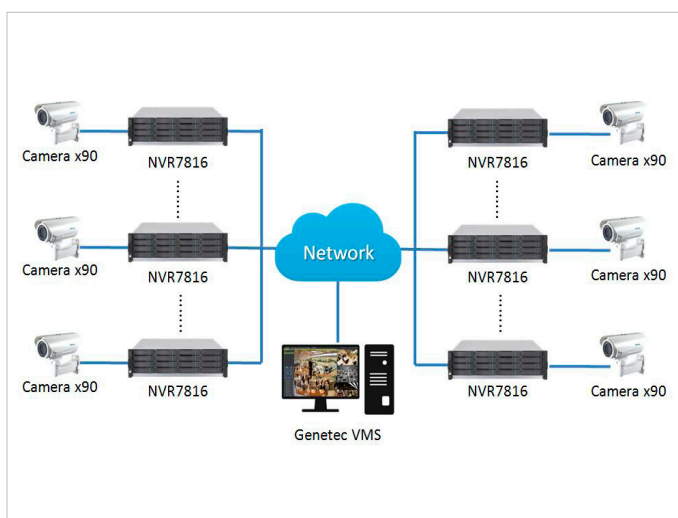


Figure 1: Distributed Architecture

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