

DENSE RECORDING WITH QUANTUM SMART NVR

Reduce recording server footprint for lower costs and complexity



SMART NVR SOLUTION BRIEF

Addressing the Limitations of Recording Servers

Many VMS applications use a “recording server” or “archiver” - a server or server instance that receives video from the cameras and stores it on local or remote storage. These recording servers often have a performance limit for each instance due to technical or licensing reasons. In either case, to get more performance to support more cameras, you will need more recording servers.

With today’s high performance server platforms, most recording server software cannot use all the available performance in a single Windows or Linux instance. The choice is either deploy multiple NVRs to meet the requirement or do what IT departments have done for over 10 years now and use virtualization to create and run multiple virtual servers or “virtual machines” (VM) to take advantage of the performance of that single physical server. To increase the recording density on a modern server platform, you can create multiple virtual recorders on each physical server allowing you to use all the available server performance.

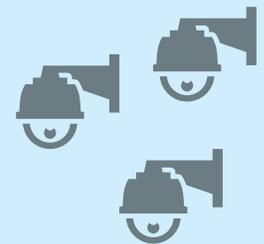
It’s Simple to Set Up Multiple Virtual Recorders

Before the Quantum Smart NVR, creating multiple virtual recorders was a cumbersome process requiring specialized skills. With the Quantum Smart NVR software, you can create all the virtual recorders you will need in a few seconds, without any virtualization or virtual machine creation experience or even having to look at a manual.

EXAMPLE SCENARIO

Video Recording Requirements:

Number of cameras:	350
Sensors per camera:	2
Resolution of cameras:	1080p
Frame Rate for Cameras:	15 fps
Length of video retention:	90 days
Motion Detection:	Yes
Average recording % per day:	50%
Compression:	H.264-20 (“Good Quality”)



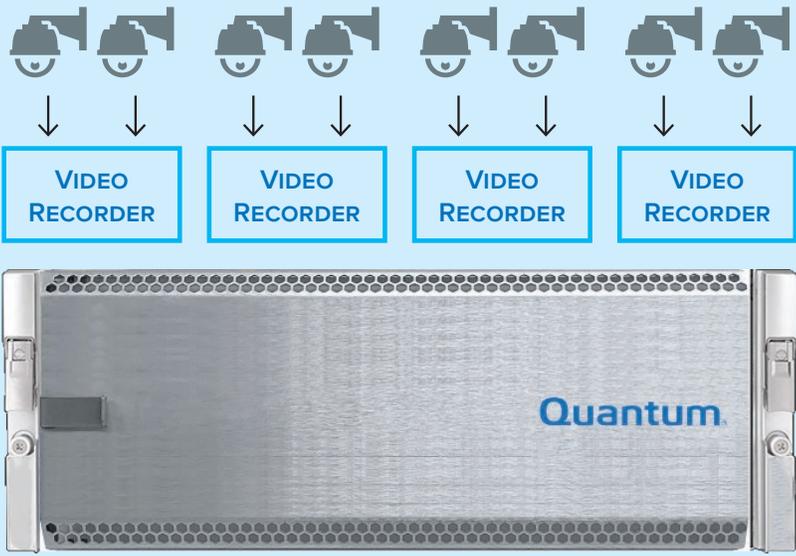
Calculated Total System Requirements:

Storage Space: 878 TB (798.6 TiB)
Recording Bandwidth: 1,806 Mbit/sec

Quantum Smart NVR Solution

Quantum's innovative Smart NVR significantly increases the power and flexibility over conventional video recording servers. Smart NVRs combine the Quantum Unified Surveillance Platform software with a purpose-built recording server to create a next-generation, integrated appliance for capturing and recording surveillance video. They are the first and only network video recorders that allow you to consolidate multiple applications—VMS, physical security, building management, retail, etc., regardless of vendor, on a single server. Fewer physical servers results in lower costs and complexity for your physical security infrastructure.

EXAMPLE SMART NVR SOLUTION



Quantum VS4260-SNVR

- 60 x 20 TB HDD
- Provides 1,000 TB usable storage space
- 4 video recorders provide at least 2,000 Mbps throughput
- Quantum Unified Surveillance Platform software
- 480 GB mirrored SSD for system boot
- 128 GB RAM
- Dual 20-Core Intel Xeon CPU
- Dual 10G-BaseT physical network connections
- Redundant and hot plug power supplies

In the example used in this Smart NVR Solution Brief, the Video Management System (VMS) specifications and requirements for its recording servers/archivers were:

- Recommended maximum throughput per recording server/archiver: 500 Mbit/sec
- Recording server recommended configuration:

CPU: Intel® Xeon® Silver 4210 2.2 GHz or better (10 cores/20 threads)	OS Drive Size: 80 GB or more
RAM: 16 GB of RAM	Storage: At least 12 disk drives in RAID 5 or 6
OS: 64-bit operating system (Such as Windows Server 2019 Standard Edition)	Network: GbE network interface card

Learn More

For more information about Quantum Smart NVRs, visit: www.quantum.com/nvrs

Quantum

Quantum technology, software, and services provide the solutions that today's organizations need to make video and other unstructured data smarter – so their data works for them and not the other way around. With over 40 years of innovation, Quantum's end-to-end platform is uniquely equipped to orchestrate, protect, and enrich data across its lifecycle, providing enhanced intelligence and actionable insights. Leading organizations in cloud services, entertainment, government, research, education, transportation, and enterprise IT trust Quantum to bring their data to life, because data makes life better, safer, and smarter. Quantum is listed on Nasdaq (QMCO) and the Russell 2000® Index. For more information visit www.quantum.com.

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