



3 Things to Consider When You Buy Storage for Business Video Systems

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One of the most important components of a surveillance solution is the storage of video recordings and how to ensure that they are retrievable and fit for purpose.

When you need to provide evidence for an incident or use your recordings for video analytics, the last thing you want to see is an error message from the storage subsystem. Storage is not only a matter of capacity; it is also a question of quality and design.

Enterprise-grade surveillance solutions with sophisticated and intelligent functionality such as motion detection, real-time access to recordings and instant alerts to extraordinary events need to have storage systems that meet the highest demands as video safety and business solutions are becoming more and more essential in our world.

You can't simply grab a few disks

Video surveillance data differs from other business data because it is streamed in real-time and multiple streams are stored in parallel.

To put the scale of this into context, consider a surveillance installation with 700 cameras, where video recordings must be legally kept for three months. The system could easily generate 6 Terabytes of video recordings per day, which would equate to 550 Terabytes of video data over a three-month period (based on the assumption that 200 cameras run HD H.264, and 500 cameras run 4CIF JPEG with 5 frames per second, and with an average motion/recording rate of 15%).

Storing video recordings is very different from storing data in an ERP system. You can't simply grab a few disks and put them in a cabinet. This is because video from all cameras has to be written at the same time. The video files are mission-critical to the company and storage failure could result in important evidence being lost. Storage for a VMS system has to be designed with these issues in mind.

Get to grips with storage requirements

There are a multitude of storage solutions out there. Before you buy one, it is important to understand the nature of the surveillance system, the scale of the data output, how and why it will need to be retrieved.

Consider what type of cameras are in use. Are they Analog or IP? How many? Is the number likely to increase? What is the purpose of the video being recorded? In terms of quality, is it high-resolution designed for evidential purposes? Is it continuous recording or on motion-detection?

The higher the resolution of the recordings and the more recordings captured, the faster storage capacity will run out. There are ways to overcome this, including compression and establishing settings to 'overwrite' the oldest recordings once the storage solution has reached its full capacity. However, there are inevitably compromises with both techniques - you risk ending up with either lower quality, inadmissible recordings - or no recordings at all.

Work with the best storage vendors: when it comes to storing video, there should be no compromise. The whole point of storing recordings is to be able to retrieve it easily, quickly, and in a format that is easy to use. Of course, cost is a significant parameter that will also influence the type of implemented solution you choose.

Realize how the changing role of surveillance impacts storage needs

There was a time when surveillance was only designed for security. Now, organizations use recordings for marketing and operational purposes, too. This, coupled with the Internet of Things (IoT), means it is critical that storage solutions are cost-effective, efficient, available and delivered to the right places. There are a variety of options available. The important thing is to implement a solution that considers all assets.

Keven Marier is a business development professional with broad and comprehensive knowledge of the video management software industry. With [Milestone Systems](#) since 2005, he has provided expertise in support of implementing the industries #1 VMS strategy, products, organization, and partner model. He successfully developed business development initiatives in system design knowledge programs, competitive analysis, proposal management, technology products, online services, price-to-win, go-to-market and product marketing strategies. With over 20 years of extensive physical security entrepreneurial and consulting experience, he contributes to the video industry's thought leadership, including speakerships on a wide range of industry topics including advanced technology, business development and solution sales.