Adapting servers for IP video surveillance systems: choosing the right solution

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Choosing the right server for a video surveillance application comes down to one question: What does the customer expect from the system?

Is it a retail location with two cameras that only needs video stored for 24 hours? Does the system need failover protection? What are the ramifications if a system goes down? Does business have to stop? How fast does the customer need to have access to video? Is it a regulated industry where immediate access is a requirement? How mission-critical is the video system to operations?

Mission critical video surveillance solutions

Such questions can point video system designers to the right technology for an application, and a manufacturer and reseller with a wide product offering ensure that the perfect solution is available and can be shipped quickly. It’s important to remember that this is not a “one size fits all” marketplace.

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1) JBOD - It stands for "just a bunch of disks" and refers to a collection of hard disks that have not been configured to work together. This approach is typical of stand-alone systems such as a retailer who has one or two cameras recording locally at a remote location, and who have a tolerance for occasionally losing video footage.

2) RAID 5/6 is a redundant array of independent disks in which data is stored across all the disks. The configuration provides more redundancy and reliability, better balance of disk usage, and more throughput and performance.

> RAID 5/6 is a redundant array of independent disks in which data is stored across all the disks

3) SAN or storage area network is a type of centralised storage providing enhanced accessibility to disk arrays. SAN provides high performance but is not as easy to expand. It is also less expensive than NAS systems.

4) NAS or network-attached storage is another type of centralised data storage. NAS systems are networked appliances containing storage drives. Benefits include faster data access, easier administration and simple configuration. NAS systems are easier to expand than SAN but provide less performance. NAS systems fit well in situations where customers have massive storage needs (or expect to in the future.) These are applications with lots of cameras and a need to retain high-frame-rate video for 180 days or longer. Typical uses include sports arenas, large cities, universities, corporate campuses and airports.

Immediate access to video

Highly available systems, such as SAN or NAS, are needed in any regulated industry. For example, in the cannabis grower market, an end user might need immediate access to video to show a compliance regulator.

Gaming is another market in which immediate access to video is critical, and, for example, if a video system goes down at a table game, the gaming has to shut down, which is an expensive prospect to the casino. Therefore, reliability is critical.

Video's benefits beyond safety and security can also help to justify the costs of more expensive system

Importance of video in risk mitigation

In some instances, video is used primarily to manage risk, for example in litigation (or to avoid litigation) in a slip-and-fall claim or other court action. This is referred to as Loss Prevention. The ability to save thousands of dollars (or millions) by averting an expensive legal verdict can go a long way toward justifying the costs of systems.

Video's benefits beyond safety and security, such as for marketing and business analytics, can also help to justify the costs of more expensive systems.

Identifying the right video server equipment

> Offering a variety of choices, and adapting those systems to specific applications, ensures customer satisfaction

"*A tradeoff of cost and needed functionality is at the center of decisions when buying server systems for video applications,*" says Tom Larson, Chief Technology Officer, BCDVideo. "*Identifying specifically what the customer needs from the system, and how important it is to meet those needs, points to the right choice in video server equipment.*

"Various technologies have advantages and some downsides, and it is the customer's need for those advantages (and tolerance for the downsides) that determines which server equipment is right for the job."

Offering a variety of choices, and adapting those systems to specific applications, ensures customer satisfaction. The systems builder can help integrators analyse the site and project requirements and translate those into the right equipment and networking choices. What does the customer need and how much are they willing to pay for it? The real determination is *"how important is the video?"*

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An experienced journalist and long-time presence in the US security industry, Larry is SourceSecurity.com's eyes and ears in the fast-changing security marketplace, attending industry and corporate events, interviewing security leaders and contributing original editorial content to the site. He leads SourceSecurity.com's team of dedicated editorial and content professionals, guiding the "editorial roadmap" to ensure the site provides the most relevant content for security professionals.

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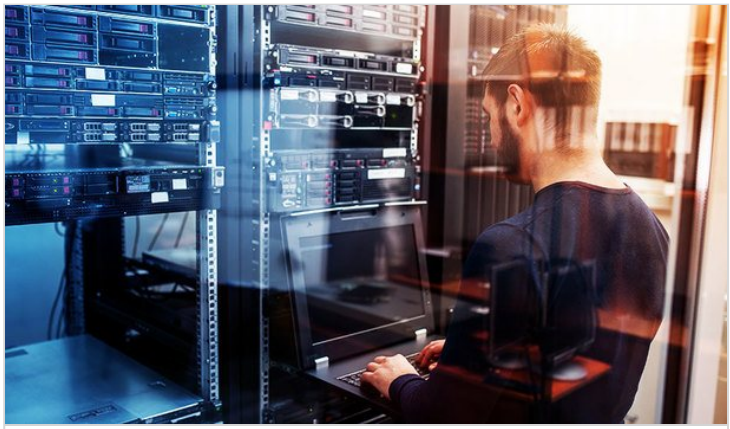

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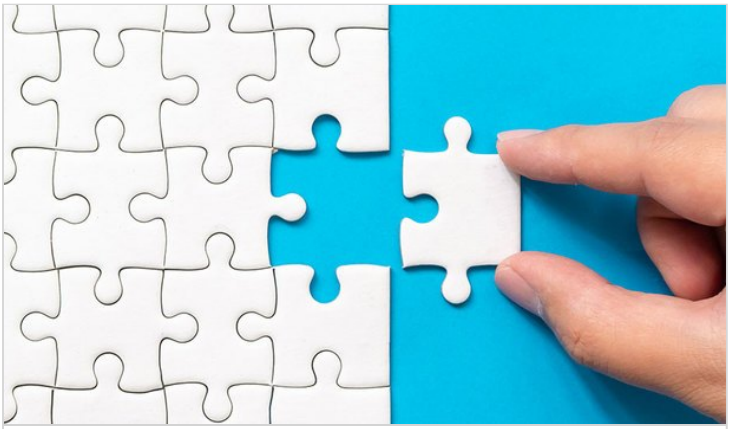

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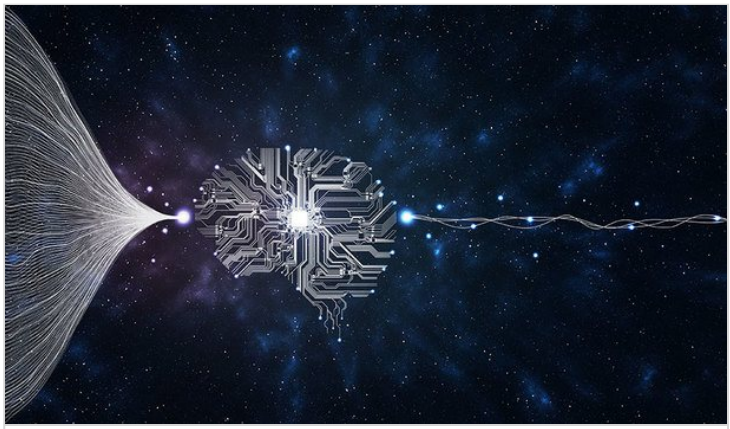

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