Good security has long been a business requirement, but traditional security and video surveillance solutions—with their grainy imagery and limited archiving and indexing capabilities—often fall short of expectations for quality, performance and return on investment.

Now new digital capabilities are transforming video surveillance, opening the door to smarter, more cost-effective and more versatile solutions. For a wide range of businesses—corporate offices, medical clinics, retailers, restaurants and more—the new digital security and surveillance (DSS) solutions address critical needs:

- Delivering powerful new weapons for the ongoing battle against theft, vandalism and other malicious activities
- Preventing fraudulent liability claims, saving lives in emergency situations, securing confidential information and protecting critical systems
- Using video analytics to extract valuable data that can be used for marketing and business performance optimization

These and other capabilities are possible because security and video surveillance solutions are now digital and connected via IP networks. The high definition video that is captured can be analyzed and archived with sophisticated video management software, easily retrieved from high performance storage systems and shared on the network with a wide range of other devices and applications.

The transition to digital is also making possible a new generation of preconfigured, easily implemented security solutions such as the SecurePod™ developed by Intel and Ingram Micro along with Dell, Axis Communications and Milestone Systems. It’s a complete package with cameras, servers, software, content management, remote management and more.

With theft, fraud and other malicious activities costing billions of dollars a year, it’s no surprise that businesses of all kinds are increasing their investment in security and surveillance. Intel®-based DSS solutions are ready to meet the demands for quality, performance and return on investment.
Digital Versus Analog Solutions
Digital security and surveillance solutions deliver:

- Higher quality footage that can be used for more purposes, enhancing ROI
- Lower cost installation and operating expenses
- Improved reliability and manageability
- Customizable video analytics
- Myriad integration and functionality possibilities
- Investment protection with standards-based capabilities

The New World of Video Surveillance
Mention “video surveillance” and many people will think of a lonely security guard watching a bank of displays filled with grainy, dark, barely recognizable imagery. That’s how video surveillance has always been, but it’s not going to be that way anymore. Here’s why:

Quality
The image quality delivered by today’s megapixel video cameras is far superior to what’s possible with traditional analog solutions. Images captured by today’s cameras can start out at nearly two square feet (2560 x 1920 pixels), making it possible to zoom in without loss of detail and dramatically increasing the value of this footage in applications from retail fraud (zeroing in on point-of-sale activities) to license plate recognition.

Automated Monitoring
Because the footage is digital, video analytics software can be used to automatically scan footage and identify trigger events (e.g., shelf-sweeping behavior consistent with shoplifting, a truck pulling up to a loading dock after hours) and immediately issue an alert. This increases responsiveness while reducing the reliance on the personnel needed to manually scan masses of video footage.

Mobile DSS
Video captured with today’s DSS solutions can be conveyed over the network to any device connected via the Internet. It is no longer necessary to monitor security footage from a fixed location (e.g., a control room). Video footage can be monitored using mobile, handheld devices. Authorized users can view live and recorded video at any time and from virtually any networked location in the world.

Integration with Other Applications
Traditional security systems used to capture video footage, and that was it. Today’s DSS solutions can connect with other business applications—building control, communications, process management—making it possible to:

- Seal off entrances and exits
- Automatically issue e-mails and text messages
- Automatically “instruct” other cameras in the network to follow movements of an intruder and relay them to security

Enhancing Business Performance
Today’s security solutions are no longer just about security. Because these systems are continuously capturing video footage at a much higher quality, this footage can now be repurposed for numerous nonsecurity applications.

For example, a retailer could use a solution such as Intel® Audience Impression Metric Suite (Intel® AIM Suite) to analyze surveillance footage in real time, anonymously identify the characteristics of passing shoppers and dynamically adapt marketing messages appearing on digital signs. The data is completely anonymous. No image is captured and no identifying data on any individual is stored.

DSS Delivers Lower Total Cost of Ownership
DSS solutions offer proven savings in installation and ongoing operational expenses. For example, in addition to using analytics software instead of personnel to monitor footage, DSS solutions deliver the following savings:

- Because they have a wider focal range and can operate under low-light conditions, one IP camera can cover an area that previously would have required several analog cameras.

Today’s security solutions are no longer just about security. Because these systems are continuously capturing video footage at a much higher quality, this footage can now be repurposed for numerous nonsecurity applications.
• DSS solutions can utilize existing wiring and wireless connectivity. Cameras can be installed and moved less expensively.

• Today’s DSS solutions take advantage of Power-over-Ethernet (PoE), delivering lower costs, greater installation flexibility and increased reliability.¹

Upgrades

Older analog systems typically locked an organization into a single manufacturer for applications, support and replacement parts. Today’s open platform DSS solutions, such as those based on Intel platforms, enable organizations to use servers, cameras and other components from hundreds of manufacturers. Organizations can update selectively and avoid “forklift” upgrades.

Companies currently using analog cameras don’t have to switch over right away: they can migrate to digital in increments as budgets allow, continuing to utilize their analog cameras.

Storage

Digital video storage is less costly and requires less space than analog video storage. Running video surveillance on an IP network enables greater archiving capabilities and storage reliability. Video can be transferred over the network to offsite storage. IP storage components also make it less expensive to increase redundant infrastructure (server and storage architecture) to provide backup storage.

Storage at the edge (including in the camera itself) is also becoming more popular, leading to more resilient and fault-tolerant video solutions: you can lose connectivity and still have recording at the edge. This also allows for more cloud-storage-related deployments, having edge storage as a backup, bringing down the cost of deployment.

DSS Delivers Value to Your Business

Preventing and Reducing Losses
• Reducing shoplifting and stock shrinkage

Increasing Personal Safety
• Monitoring areas where personal security is at risk (e.g., elevators, stairwells, parking lots) or where ill or violent individuals may be present (e.g., hospitals, emergency situations)
• Improving response in emergency situations (e.g., natural disaster, armed intruder)

Reducing Claims and Liability Exposure
• Gathering evidence to verify and reduce the incidence of false claims

Increasing Revenues
• Taking advantage of the intelligence delivered via business analytics software to improve staffing, product placement
• Integrating digital signage and anonymous viewer analytics to customize digital advertising depending on the profile of the person walking by

Lowering Costs and Improving Efficiency²
• Using analytics software to review footage, improve business operations
• Identifying emergencies immediately
• Supporting safety audits
A Smarter, More Secure Future

The transition from analog to digital in video surveillance is about more than just the underlying technology. The improvement in quality, cost and versatility creates more ways to prevent losses and enhance business performance, resulting in operations that are smarter and more secure.

Intel®-based DSS systems, including solutions like the SecurePod™, are designed to take advantage of these new capabilities. Intel®-based DSS solutions are supported by an ecosystem of solution providers whose products are specifically designed to utilize Intel® architecture and solutions, including:

- Intel® Core™ vPro™ processor family—easily handles the demands of compute-intensive HD video and 3D graphics, and enables content coordination across multiple devices
- Intel® AMT—provides the tools to diagnose, repair, and manage entire DSS infrastructures remotely
- Intel® AIM Suite—analyzes footage to gather data on audience size, demographics and breakdowns

For more information about Intel®-based DSS solutions, visit intel.com/info/dss.
For more information on SecurePod™, including product information and videos visit secure-pod.com/solutions.

1 Circumstances will vary and there may be additional unaccounted-for costs related to the use and deployment of this product. Nothing in this document should be interpreted as either a promise of or contract for a given level of costs.
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