

Solution Overview

Digital Security and Surveillance

Getting Started in Digital Security and Surveillance

Opportunities for resellers are growing as security becomes digital and increasingly an IT responsibility.

Opportunities in Digital Security and Surveillance (DSS) are growing rapidly as the demand for these solutions expands and expectations increase for DSS solutions that are more accurate, more intelligent and able to play a larger role beyond traditional building security applications.

DSS Market Growth

Overall, demand for DSS solutions is growing at a CAGR of 12-15%, fueled by security concerns and government spending as well as the growth of new markets and new applications:

- **Traditional building surveillance:** Providing security for public and private facilities continues to expand and now includes setting up site surveillance temporarily.
- **Mobile surveillance:** More DSS solutions are being implemented in transportation, including police vehicles, cars, buses and trains.
- **Intelligent traffic:** Monitoring systems are being implemented on transport infrastructures to improve traffic safety and management while also supporting automated law enforcement and toll collection.
- **Business intelligence:** Businesses are beginning to take advantage of DSS solutions to gather and analyze operational and anonymous customer data such as demographics, in-store traffic patterns, sales conversions, etc.

A New Generation of DSS Solutions

While the market for DSS solutions is expanding, DSS technology and the way it is implemented are also going through changes:

- DSS is transitioning away from older analog technologies (i.e., traditional videotape recording) to digital IP-based technologies.
- DSS solutions are becoming more sophisticated, taking advantage of IT infrastructure's reach and manageability, high-definition video, and video analytics (such as facial recognition) to enhance the role DSS solutions play in both traditional building security and emerging DSS markets (e.g., business intelligence, mobile surveillance).
- Once separate and standalone, DSS solutions are becoming integrated into the overall enterprise IT framework. Getting all aspects of DSS systems to "talk" to each other is becoming critical.

Opportunities for resellers—leverage your strengths

As DSS become more intelligent and innovations such as HD video and video analytics become more prevalent, the need for higher-performing, more reliable solutions grows even greater. This ongoing evolution in the DSS markets presents opportunities for the traditional IT reseller channel:

- DSS systems are PC/server/storage-based solutions—Leverage your expertise in assembly and support.
- IT departments increasingly own DSS at the customer level—Leverage your existing customer relationships.
- DSS systems reside on the network—Leverage your IT network expertise.

DSS Configuration

A typical DSS installation today consists of the following:

Edge devices

- Cameras—analog and IP
- Encoders

Recording, storage and management

- Digital video recorders/network video recorders
- Client workstations
- IP decoders
- Network: LAN and/or WAN
- Storage
- Video analytics servers

An active ecosystem has emerged in DSS consisting of Original Device Manufacturers (ODMs), Embedded Board Manufacturers (EBMs), Original Equipment Manufacturers/Branded Solution Providers (OEMs), Independent Software Vendors (ISVs), systems integrators, and distributors:

- **ODMs:** DVR/NVRs, cameras, encoders, etc.
- **EBMs:** Motherboard and video card manufacturers
- **OEMs/Branded solution providers:** Integrating DSS solutions for the broad market and/or specific verticals (e.g., retail, health-care, education, etc.)
- **ISVs:** Providing video management software (VMS) solutions, video analytics plug-ins, codecs and other software-based tools

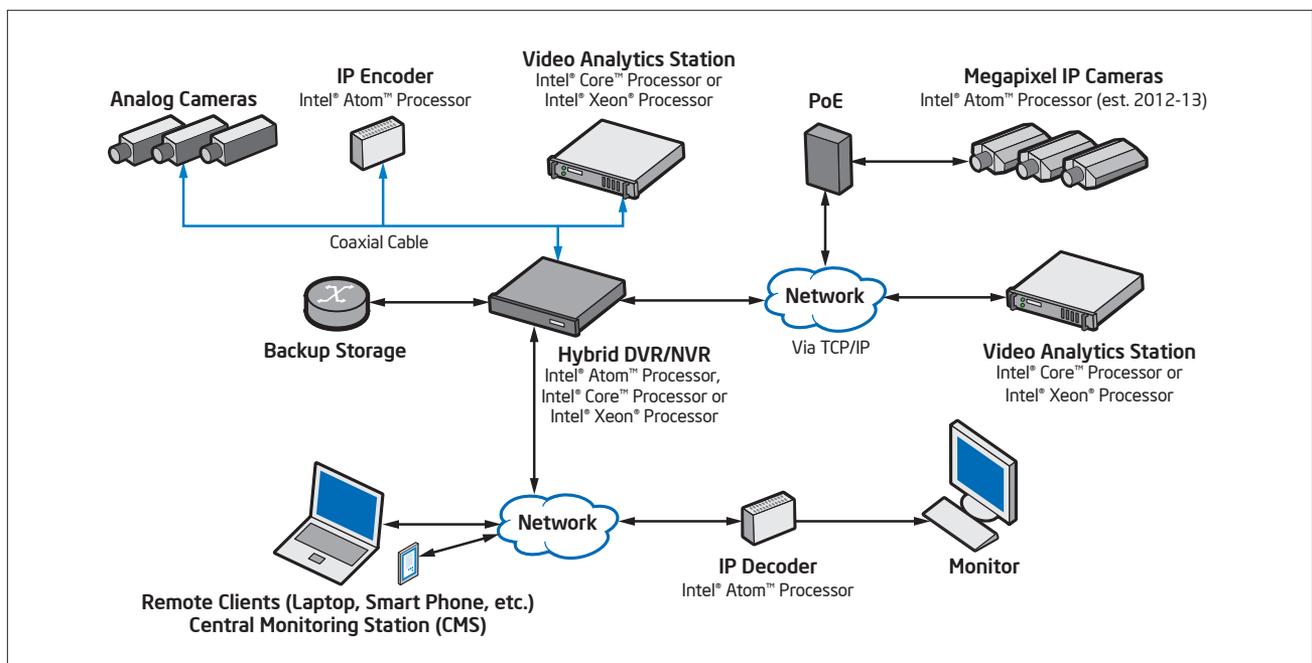


Figure 1. Typical Video Surveillance Infrastructure.

You can take advantage of this ecosystem to develop your own solutions, resell an existing solution or work with an integrator specializing in DSS.

Why Intel for DSS?

DSS solutions deployed to protect people and property need to be capable of high-performance video processing combined with 24/7/365 reliability. Optimized power consumption, simplified management and low-heat generation are other critical performance factors. Solution developers addressing the DSS market need platforms that support ease of development and faster time to market combined with performance scalability and design flexibility.

Intel-based solutions address all of these critical needs:

- **Intel® processors provide a unique combination of enhanced performance capabilities** and lower CPU utilization, providing the processing power required to meet DSS applications today and the headroom needed to accommodate more demanding HD applications tomorrow.
- **Scalability across Intel processor families** enables developers to “write once/develop once” for a wide range of DSS applications, protecting past, present and future software investments and focusing crucial resources on the value-added innovations that drive market growth.
- **Intel processors consolidate various workloads** onto one architecture for easy, fast and cost-efficient solution development. High-performance video processing based on the Intel® HD Graphics 2000/3000 Technology in 2nd generation Intel® Core™ processors is integrated right into the CPU, eliminating the need for discrete signal processing hardware as well as the additional design and software development costs.
- **Intel® Active Management Technology¹ (Intel® AMT)** enables remote system diagnosis, repair and reboot, even if a DSS system is powered off or the operating system is not functioning. AMT lowers operational costs and increases ROI by enabling more failure modes to be fixed remotely, avoiding expensive on-site service calls and getting DSS systems back online faster. AMT enables solution providers an opportunity to offer a value-added service.

- **Intel processors meet the low thermal envelope/performance-per-watt requirements** of the DSS market.
- **Intel® Virtualization Technology² (Intel® VT)** supports effective system integration (e.g., video security, access control, HVAC, and fire).
- **Intel® Media Software Development Kit (SDK) is** designed specifically for developers of media applications for video playback and encoding; enables developers to take advantage of current and future hardware acceleration in Intel platforms without having to write separate code paths; future-proofs software development.

Now Is the Time

There has never been a better time to get involved in DSS. In addition to participating in the current transition from older analog, standard-definition DSS solutions to higher-valued, digital, high-definition solutions, emerging DSS applications present an array of opportunities for resellers.

Intel is committed to driving the future of DSS and working with developers at every level of the ecosystem, facilitating the development of integrated, intelligent, DSS solutions.

Learn More

Get the latest on what Intel is doing in DSS at www.intel.com/info/dss

¹ Requires activation and a system with a corporate network connection, an Intel® AMT-enabled chipset, network hardware and software. For notebooks, Intel AMT may be unavailable or limited over a host OS-based VPN, when connecting wirelessly, on battery power, sleeping, hibernating or powered off. Results dependent upon hardware, setup & configuration. For more information, visit <http://www.intel.com/technology/platform-technology/intel-amt>.

² Intel® Virtualization Technology requires a computer system with an enabled Intel® processor, BIOS, virtual machine monitor (VMM). Functionality, performance or other benefits will vary depending on hardware and software configurations. Software applications may not be compatible with all operating systems. Consult your PC manufacturer. For more information, visit <http://www.intel.com/go/virtualization>.

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