

Solution Brief

PROMISE Vess A2000 & Milestone XProtect VMS



Delivering Optimal Video Surveillance Systems

PROMISE Vess A2000 NVR Storage Appliances and Milestone XProtect® Video Management Software Offer Proven Quality, Interoperability and Performance for Video Surveillance

Video surveillance plays an increasingly important role in addressing the growing risks organizations face across the world as it has proven to be a valuable tool to protect assets and interests in many environments. Stricter security requirements and the rise of IP-based technologies have led to many innovations in security systems over the past decade. As these systems have become more advanced, a premium is placed on solutions that streamline configuration and management, are easy to use, and deliver consistent throughput and reliable data protection.

THE SOLUTION

The foundation for a robust surveillance system starts with a proven storage appliance, because if you are recording video you need to be able to store and easily view it as needed, while the heart of the surveillance project is the video management software (VMS). PROMISE Technology and Milestone Systems offer a solution that combines the PROMISE Vess A2000 NVR storage appliance and Milestone XProtect® VMS which together are crucial pieces to the framework for a surveillance system that streamlines administration and management, is highly scalable, and offers high levels performance and compatibility.

PROMISE Vess A2000 Series

The Vess A2000 Series are high performance NVR storage appliances optimized for IP video surveillance that combine

Solution Highlights

- Vess A2000 is certified by Milestone Systems for XProtect® VMS
- Verified performance is four times better than Milestone benchmark
- Certification verifies interoperability, optimized performance and quality
- Scalability for large systems is proven
- Best performance achieved by creating one large RAID 5 volume using as many of the physical disks as possible
- Video recording performance will be as efficient as possible when live video database and archive database are both located on this single, large, logical disk volume
- Integrators and end users can build a solution with Vess and XProtect with confidence
- Vess A2000 supports the XProtect plug-in enabling users to manage the appliance and VMS from one convenient interface
- Solution reduces deployment and management costs using integrated server-storage appliance

**PROMISE®
TECHNOLOGY, INC.**



The Open Platform Company

the server, storage, robust RAID firmware, and XProtect VMS.

With 25 years of experience in manufacturing and designing storage solutions and RAID technologies, PROMISE brings a stellar track-record with its surveillance solutions that have been battle tested in many established commercial projects.

The Vess A2000 Series delivers low latency performance with bandwidth optimized for capturing and storing live feeds of high resolution video from megapixel cameras. PROMISE has developed technologies and proven know-how for optimizing video surveillance recording, playback, live view and archive I/O access with incredibly steady and reliable behavior that limits dropped frames. The resilient performance of Vess ensures that video will continue to record - even when the system is undergoing an array rebuild – bringing reliable throughput for multiple, simultaneous video feeds.

Reliability is not only important in regards to consistent throughput but also when examining data protection. Hard drives do fail and when that happens the PROMISE enterprise-grade RAID engine and redundancy in your array ensure that valuable data is protected.

With no separate RAID storage unit to manage, the Vess A2000 Series reduces support and equipment costs as it eliminates the need for an extra server, controller cards, external cables, and a separate storage enclosure. Additionally, the Vess A2000 Series is designed so it is easy to maintain and service. Hot swappable drive bays and redundant power supplies eliminate common causes of downtime and the unique One Plug Auto Service feature streamlines maintenance and an easier tech support workflow.

Milestone XProtect VMS

Milestone XProtect is powerful video surveillance software renowned for its wide array of features for basic to advanced surveillance needs. XProtect VMS is

open platform software which provides customers with the freedom of choice when connecting products such as cameras, network routers, and switches, so they can select from a wide array of vendors that best suit the budget and needs of their installation. Deployed by over 100,000 customers worldwide, XProtect VMS is perfect for any deployment no matter whether it is a small scale project with only a handful of cameras, like a retail store, or large projects with hundreds or thousands of cameras like city or airport surveillance.

XProtect's open platform structure is also a key to making the solution easy to use because independent business and security systems can be seamlessly integrated and managed through one interface for greater efficiency and improved functionality.

With XProtect VMS, the surveillance system is also future proof, so customers can seamlessly expand and upgrade their system allowing them to continually update and improve the solution.

BEST PRACTICES

The Vess A2000 Series can be optimally configured with XProtect VMS to make the best use of the entire system. The recommended hard disk and RAID configuration for the Vess A2000 is to create one large RAID 5 volume, which protects against data loss in the event of a drive failure, using as many of the physical disks as possible.

Video recording performance will be as efficient as possible when the live video database and the archive database are both located on this single, large, logical disk volume. Additionally the thread priority and frame queue variables in the Recording Server configuration file should be modified to make the archive events as efficient as possible.

For more information on how to set up the Vess A2000 with XProtect VMS to achieve the best performance, please read the 'Best Practices' document here: kb.promise.com/KnowledgebaseArticle10405.aspx

THE BENEFITS

The PROMISE and Milestone solution offer many benefits to customers and integrators who are building video surveillance systems, including:

Verified Performance

The Vess A2000 Series is one of the first IT infrastructure solutions to be certified by Milestone for interoperability with XProtect VMS. After an extensive testing process, the Vess A2000 Series was verified to not only offer an optimized user experience, but it delivered over four times the performance required for certification with XProtect VMS. The Vess A2000 Series is certified with XProtect Corporate, XProtect Expert, XProtect Enterprise, XProtect Professional, XProtect Express making it suitable for many different types of applications from small projects to large-scale projects.

Integrators and end users designing, installing and operating surveillance systems which incorporate these solution components can have confidence that the system will record and archive video reliably.

Milestone XProtect Plug-in

The Vess A2000 Series supports the XProtect plug-in which allows users to manage the Vess A2000 series via the management user interface of XProtect. The PROMISE WebPAM ProE management graphic user interface is embedded in the XProtect application environment and runs as an integrated part of the software and its client applications, making it significantly more convenient for users to manage their storage.

Smooth Scalability

The solution has been tested to prove that the Vess and XProtect architecture is highly scalable and could support any size system. Larger surveillance systems can be built with multiple Vess A2000 NVR appliances, and Vess R2000 external storage solutions from PROMISE can easily be added when more capacity is needed. Since the NVR appliance and external storage are both developed by PROMISE, it is a very simple and smooth process to scale and customers can be assured the hardware is fully compatible and able to meet their needs today and in the future.

Solution Architecture



In-Depth Analysis: Vess A2000

The Vess A2000 Series is an integral component of a video surveillance system that integrators and end users can rely on when building security solutions:

Vess A2200



The Vess A2200 is a 2U 6-Bay NVR storage appliance ideal for mid-size deployments of 32-64 full-HD IP cameras. With the latest Intel® I3 processor, the Vess A2200 delivers high-performance essential to avoiding live playback bottlenecks and a single NVR can expand up to 118 drives providing large capacity for long-term data retention.

Vess A2600



The Vess A2600 is a 3U 16-Bay NVR storage appliance that can be deployed in mid-size to large scale deployments of over 100 full-HD IP cameras. With the latest Intel® Xeon processor, the Vess A2600 is ideal for transportation, municipal, government or corporate surveillance needs who require expansion flexibility, rock-solid reliability, and a low total cost of ownership.

Surveillance Solution Planner

The PROMISE Surveillance Solution Planner helps determine the overall installation requirements of a project and makes it easier to build surveillance solutions. The planner calculates the total storage space and bandwidth needed, in addition to the requirements for recording servers and external storage, while also including a topology of the installation for reference. Try it here:

www.promise.com/solutions/surveillanceplanner

ABOUT MILESTONE

Milestone Systems is the global industry leader in open platform IP video management software. Milestone technology delivers powerful surveillance that is easy to manage, reliable and proven in thousands of customer installations around the world. With support for the widest choice in network hardware and integration with other systems, Milestone provides best-in-class solutions to video enable organizations – managing risks, protecting people and assets, optimizing processes and reducing costs.

ABOUT PROMISE Technology

PROMISE Technology brings 25 years of design and manufacturing experience to its sophisticated storage solutions for the video surveillance market. PROMISE Vess NVR storage appliances and external storage solutions are optimized for video surveillance applications, providing surveillance integrators and installers a cost-effective umbrella solution for video data management while also reducing the complexity of surveillance deployments. Backed by an unparalleled commitment to providing the highest levels of quality, reliability and support, PROMISE's surveillance solutions are highly suitable for environments like retail, banking, manufacturing, and many more.

FOR MORE INFORMATION

To learn more about PROMISE Vess A2000 Series NVR storage appliance, please contact your PROMISE sales representative or visit: www.promise.com/surveillance

To learn more about Milestone, please visit:

www.milestonesys.com

© 2014 PROMISE Technology, Inc. All Rights Reserved. PROMISE, the PROMISE logo, VTrak, VTrak A-Class, VTrakFS, SmartStor, SuperTrak, FastTrak, VessRAID, Vess, PerfectFlash, HyperCache, HyperCache-R, HyperCache-W, GreenRAID and Pegasus are registered or pending trademarks of PROMISE Technology, Inc. in the U.S. and other countries. All other trademarks are the property of their respective owners. Information regarding products, services and offerings may be superseded by subsequent documents and are subject to change without notice.