PROMISE TECHNOLOGY

Vess

Vess A8110 and
Genetec Security Center

Genetec

SOLUTION BRIEF

Contents

PREFACE P3

PROMISE Vess A8110 P3
Performance Powerhouse Server Platform Build for Surveillance

PROMISE Vess R3600 P3
Battle Hardened Unified Storage

PROMISE Vess A8110 + Vess R3600 P3
Build to Perform, Build to Last

Generic Vess Series Product based Video Surveillance Architecture P4

Genetec VMS P4

Genetec Security Center P5

Vess A8110 Best Solution for Genetec Security Center P5

Setup P6

Topology P7

Conclusions P7

PREFACE

With each progressive stage of Moore's Law, platform performance improves, and bottlenecks are removed. Simultaneous advancements in application technologies then demand acceleration of improvement in hardware platform performance. Thus, we have a never-ending and beneficial competition between improved hardware and applications that run on them.

This is just as true in Video Surveillance. Newer, faster CPUs, increased RAM and network speed are throttled by increased demands created by VMS and complex Analytics. More cameras, higher resolution, higher frame rates, and increased use of AI analytics, all put great pressure on server platforms to perform better and faster.

PROMISE Vess A8110

Performance Powerhouse Server Platform Built for Surveillance

Vess A8110 from PROMISE is an extremely powerful server platform designed and optimized for Video Surveillance. This multipurpose server performs all major server functions on the surveillance network, including Directory Server, Archiver Server, or LPR/ IVA Server.

The scalable CPU architecture of the Vess A8110 server enables handling of extremely heavy workloads created when many cameras are recording, and the simultaneous application of complex AI-based analytics with the addition of a graphics card option.

PROMISE Vess R3600

Battle Hardened Unified Storage

The field-proven Vess R3000 Series unified storage appliance from PROMISE consolidates both block storage and file storage protocols on a single hardware platform. Designed for high-availability with active-active configuration, the Vess R3000 Series storage solutions are used in data-intensive enterprise environments. Vess R3000 Series supports up to 208 hard drives with large online expansion potential.

PROMISE Vess A8110 + Vess R3600

Built to Perform, Built to Last

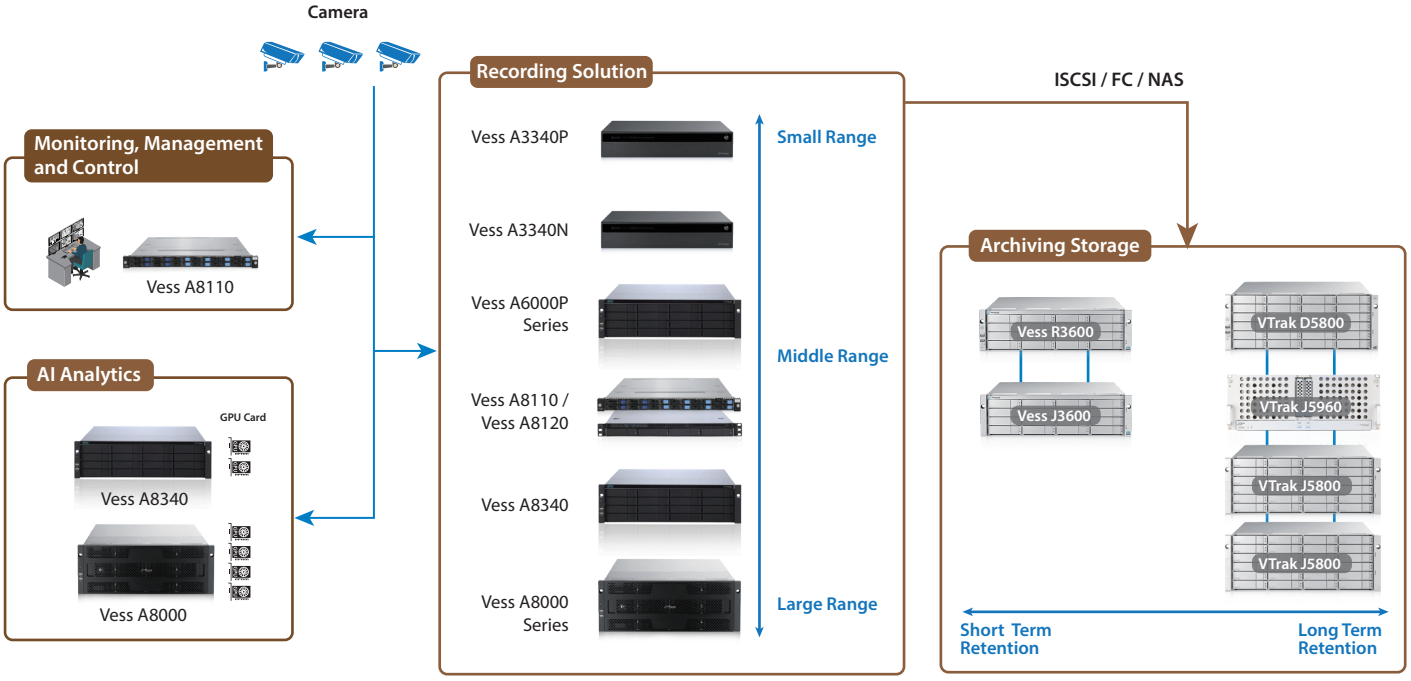
Vess A Series Storage Systems utilize the PROMISE SmartBoost™ technologies bundle created especially for optimization of video surveillance. The result is that many more cameras can be used while maintaining performance and video quality levels.

However, a bottleneck can occur using such optimization on 1U4 servers due to the lower drive count; there are only 4 SSD to process the increased number of cameras. Additional Vess R3600 Storage Systems with SmartBoost™ paired with the 1U4 server resolves these issues.

PROMISE Vess A8110 servers/ Vess R3600 unified storage, a winning combination:

- PROMISE SmartBoost™ significantly enhances the capability of the server platform to handle a greater number of cameras.
- Vess A8110/Vess R3600 combination removes the bottleneck of limited HDD spindles while providing high performance storage for video data handling.
- PROMISE Vess A8110 server with sufficient available resources, can also handle AI analytics, using an optional graphics card for AI analytics acceleration.

Generic Vess Series Product Based Video Surveillance Architecture



Genetec VMS

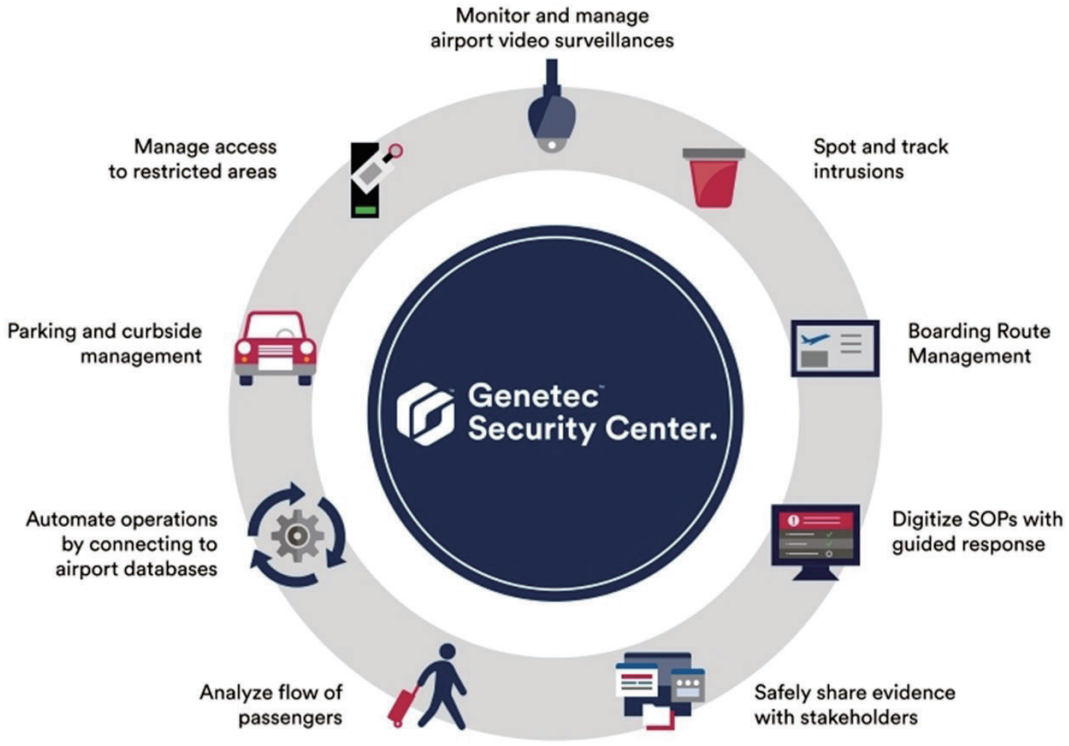
Genetec develops open-platform software, hardware and cloud-based services for the physical security and public safety industry. Its flagship product, Security Center, unifies IP-based video surveillance, access control and license plate recognition (LPR) into one platform. A global innovator since 1997, Genetec is headquartered in Montreal, Canada, and serves enterprise and government organizations via an integrated network of resellers, integrators and consultants in over 80 countries. Genetec was founded on the principle of innovation and remains at the forefront of emerging technologies that unify physical security systems.

For more information about Genetec, visit:
www.genetec.com

Genetec Security Center

Security Center is a unified security platform. It incorporates access control, video surveillance, automatic license plate recognition (ALPR), communications, and more into a single, intuitive solution.

With a platform that unifies your data, you can manage security policies, run investigations, and pay attention to what matters most. Turn on new capabilities when you need them and choose the devices and add-ons that make sense for your needs as your system grows.



Vess A8110 Best Solution for Genetec Security Center

Genetec Security Center delivers a unified security platform powered by a dependable, workhorse system engineered for continuous 24/7 reliability.

Together, Vess A8110 and Genetec Security Center form a complete, high-performance surveillance solution-handling recording, management, archiving, and more with effortless synergy.

PROMISE is always eager to develop software features that complement the capabilities of our VMS partners for a better user experience. In that same spirit, comprehensive testing of PROMISE hardware and partner VMS software is conducted. Extensive testing ensures uninterrupted reliability-so you can focus on what matters.

Vess A8110 fulfils all key Server rolls that are demanded by Genetec Security Center environment

Genetec Security Center Core Server rolls

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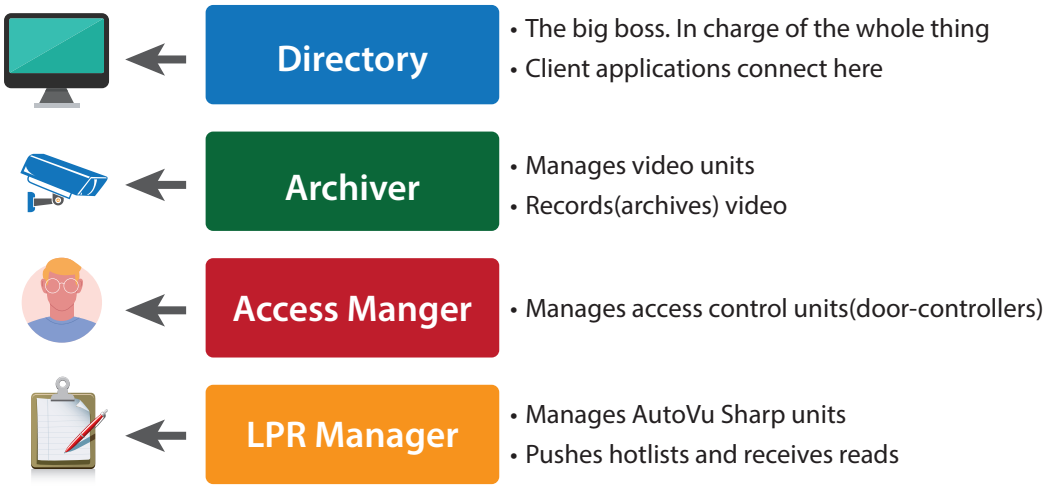


Setup

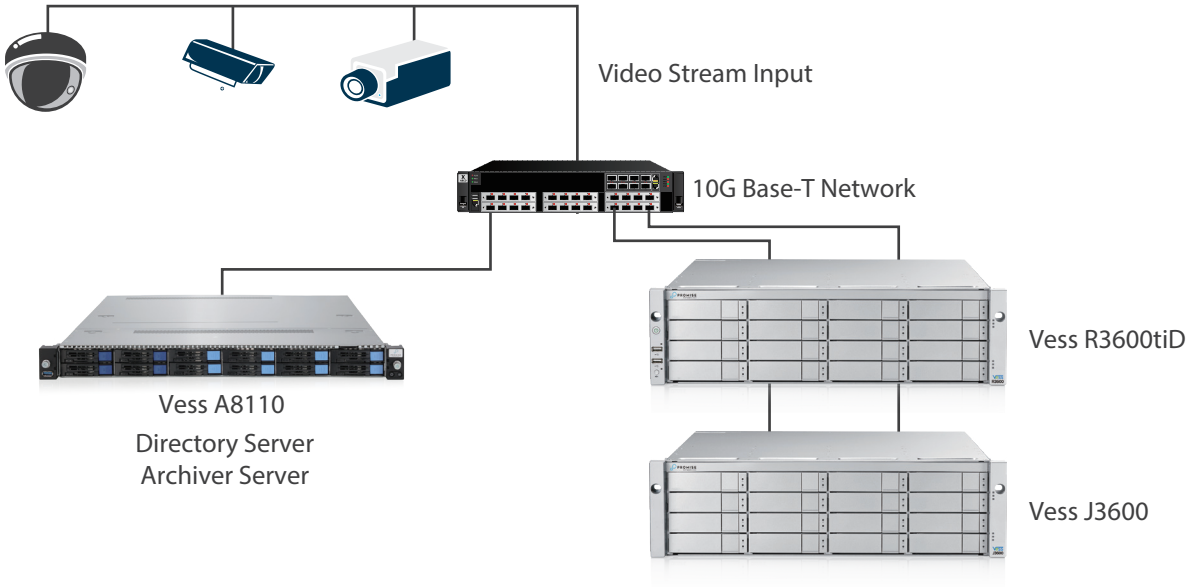
Server	Product	Vess A8110, 1U 4Bay, 19" Rackmount Server
	System Processor	Single Intel® Xeon® Silver 4410Y Processor
	System Memory	2x 16GB DDR5 RDIMM ECC DIMM RAM
	Network Interface	10G Base-T
	Operating System	Microsoft® Windows 11 Pro
Storage	Product	Vess R3600iD, 3U 16Bay, 19" Rackmount
	Drives	16* 3.5" 12G SAS HDD
	System Memory	8GB per Controller
	Network Interface	Dual 10GbE BaseT per Controller
	RAID Levels	RAID5 + Spare
	Protocol	iSCSI
	Capacity/Expansion	Vess J3600sD
Software	VMS	Genetec Security Center

Topology

10GbE interface provides extra-large network bandwidth for handling very large data flows.

Vess A8110 network options include a 10GbE and 1GbE version. The requirements of each deployment will determine which version is appropriate.

Vess R3600 network interface options include: 4 x 1GbE BASE-T, optionally 2 x 10GbE SFP+/BASE-T or 4 x 16GB Fibre Channel.



CONCLUSION

Test results demonstrate the combination of PROMISE Vess A8110 and Vess R3600 provide a high-performance recording environment for enterprise level video surveillance. This setup is ideal for critical infrastructure where high reliability, long retention periods and high performance are required. The scalable CPU architecture of PROMISE Vess A8110 performs well as a platform for online AI-based video analytics. PROMISE Vess products are designed for compatibility with other Vess servers and storage products. The Vess product line are qualified and tested with the most widely distributed Video Management Software and environments.

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