

Solution Brief

NetApp and Bosch Security and Safety Systems

Integrated security, safety, and video recording solution

Key Features

Maximum Resiliency

With Bosch VRM, your cameras keep recording and know where to send their data, even when the server, VMS, or storage goes down.

High Availability of Data

Two camera streams with different recording qualities are recorded simultaneously and are sent to physically separated locations, giving you high data availability.

Cost Savings

Bosch IP cameras stream directly to your NetApp network storage, which helps you achieve considerable cost savings.

Scalability

Add extra storage or cameras as you need to, with an automatic balance upgrade. With Bosch VMS, you can scale your system according to your needs—up to 2,000 cameras with a single VRM.

The unique Bosch Video Recording Manager (VRM) solution takes the traditional dedicated network video recording approach to the next level by using the revolutionary concept of storage virtualization. VRM supports iSCSI-based storage systems and Bosch video-over-IP cameras and video encoders. With a combination of Bosch VRM and customized NetApp® video surveillance storage, you get support for specific workloads and tight integration of cameras and storage infrastructure. You also get full integration into Bosch video management applications, such as Bosch Video Management System (VMS) and Bosch Video Client.

By introducing a storage virtualization layer, Bosch VRM makes installation, operation, and maintenance of your video surveillance system easier, reducing your TCO. With this layer, Bosch VRM can manage all the individual disk arrays in your entire system as a single virtual common pool of storage that is intelligently allocated on demand. Bosch VRM also balances loads across your network by fully using your available storage, which maximizes your return on investment.

Because Bosch VRM software provides virtualization and recording management services, it enables Bosch IP cameras to stream directly to your NetApp network storage. This capability reduces your need for server hardware, operating systems, and antivirus software, as well as the ongoing software patches and updates that these systems usually require.

Bosch VRM combines and controls advanced Bosch video recording solution features in the application. If an array fails, Bosch VRM immediately redirects your camera traffic. The use of NetApp technology further enhances the Bosch iSCSI recording solution, giving you a high-performance, flexible, scalable, and reliable storage management solution for IP network video recording.

Bosch and NetApp Solution Components and UI

Table 1 lists the compatible NetApp storage and Bosch security system components.

NETAPP STORAGE	BOSCH SECURITY SYSTEMS
<ul style="list-style-type: none"> • NetApp E2800 12-bay system (single or dual controller) • NetApp E2800 60-bay system (dual controller) • NetApp E2800 expansion units (12-bay or 60-bay) 	<ul style="list-style-type: none"> • Bosch Video Recording Manager • Bosch Video Management System • Bosch Video Client • Bosch IP cameras • Bosch video encoders

Table 1) Compatible NetApp E2800 storage hardware and Bosch security systems.

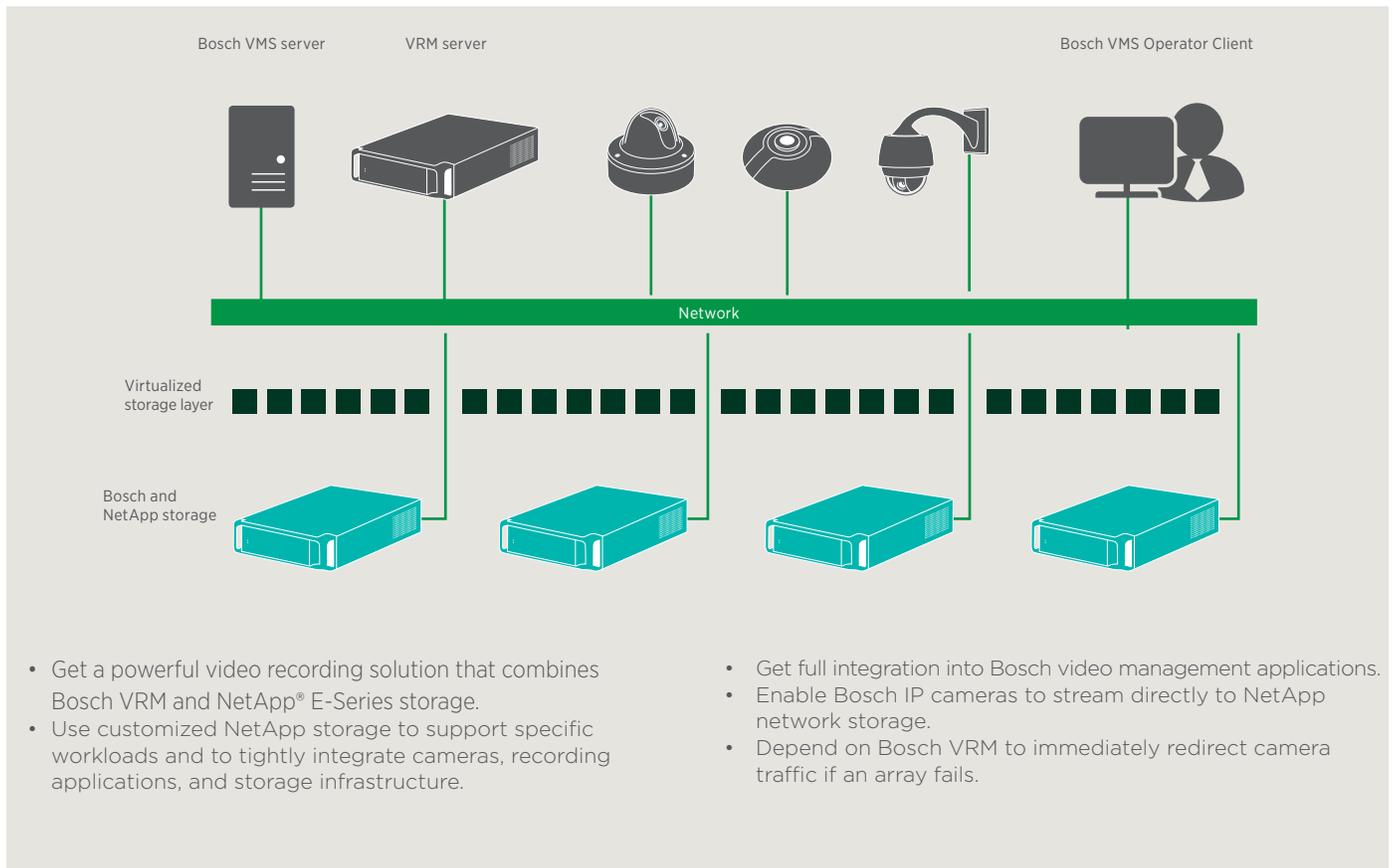


Figure 1) Bosch and NetApp solution.



Transportation
(airports, metro
systems, railways)



Industry



Government



Defense



Energy



Commercial
buildings

Figure 2) Typical use cases.

About Bosch

The Bosch Security and Safety Systems division is a leading global supplier of security, safety, and communications products, solutions, and services. Protection of lives, buildings, and assets is our aim. Our product portfolio includes video surveillance, intrusion detection, fire detection, and voice evacuation systems, as well as access control and management systems. Professional audio and conference systems for communication of voice, sound, and music complete the range.

Bosch Security and Safety Systems develops and manufactures in its own plants across the world. You can find additional information at www.boschsecurity.com.

For details about the Bosch Integration Partner Program, visit <https://ipp.boschsecurity.com>.

About NetApp

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation and optimize their operations. For more information, visit www.netapp.com. #DataDriven