



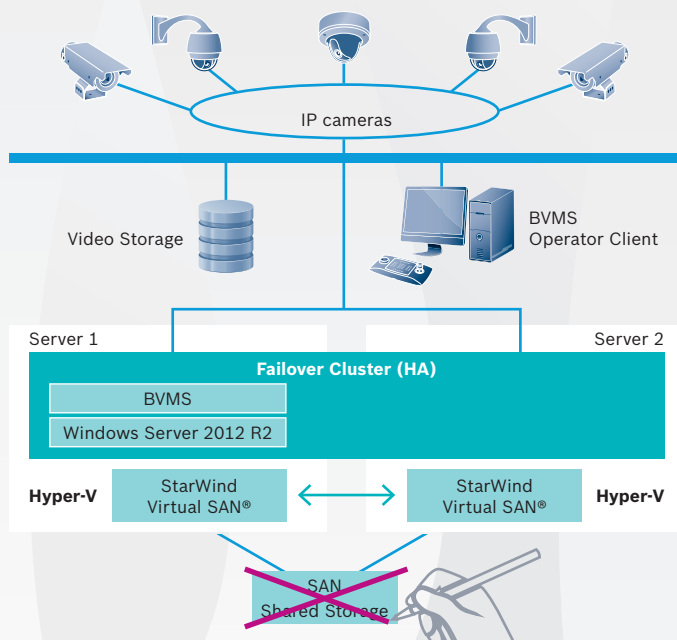
BOSCH

Invented for life

Integrated Security, Safety and Video Management Solution

Storage Solution

Bosch Security and Safety Systems and StarWind



- ▶ Provides a simple solution for BVMS redundancy on 2 nodes only
- ▶ Dramatically reduces cost of High Availability infrastructure for BoVMS on Hyper-V
- ▶ Reduced power consumption and cooling requirements
- ▶ Reduced OpEx as no complex SAN infrastructure has to be maintained
- ▶ Rapid setup time
- ▶ Allows to build an Hyper-V failover cluster without a SAN or SMB v3 volume as shared storage



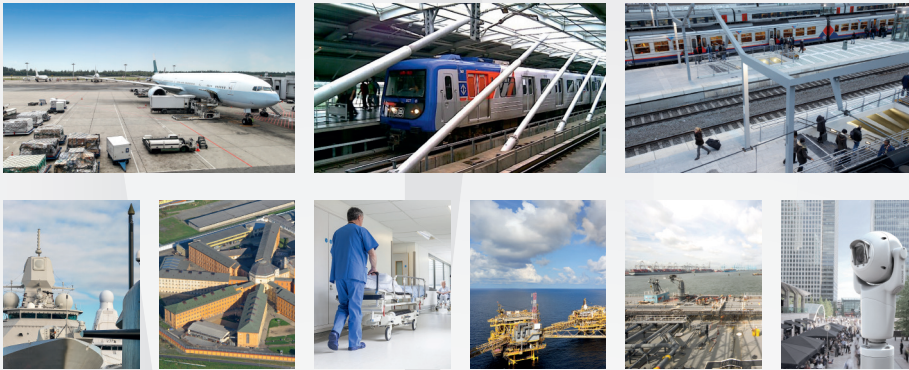
BVMS highly decentralized architecture makes it resilient towards components failure. On top of that, the BVMS is now capable of High Availability using Microsoft Hyper-V Failover Cluster. Hyper-V Failover Clusters usually require a shared storage. iSCSI/FC shared storage are notoriously expensive, complex to configure, have a large rack and thermal footprint. StarWind Virtual SAN® is completely software-based, hypervisor-centric virtual machine storage. It provides a fault-tolerant and high-performing storage pool that is built for the virtualization workload “from scratch”. StarWind Virtual SAN® basically “mirrors” inexpensive internal storage between hosts. It completely eliminates any need for an expensive SAN or NAS or other physical shared storage. It seamlessly integrates into the hypervisor for unbeatable performance and exceptional simplicity of use. Starwind allows BVMS to run on a high performance, low cost, low footprint and low power consumption thanks to Hyper-V Failover Cluster.

Compatibility

StarWind	Bosch products
StarWind Virtual SAN® v8.0	BVMS 5.5 or newer
- Microsoft Hyper-V Server 2012 R2 - Microsoft Windows Server 2012 R2	

Applications / Vertical Markets

All Enterprise customer requiring High Availability for Bosch BIS without an existing High Availability Virtual Machine infrastructure



Critical Infrastructure:
Airports, Metro system, Rail

Other: Defense, Prisons, Healthcare, Energy, Industrial, City Surveillance

Key features

Decrease in redundancy costs

StarWind Virtual SAN® enables to create a High Availability Failover Cluster with Hyper-V on only two nodes.

Simplifies maintenance

There is no complex SAN infrastructure (iSCSI/FC/FCoE) to configure and maintain.

Decrease in datacenter footprint

Using two nodes for a Failover Cluster enables you to save expensive rack space in your data center as well as the consumption of power and cooling.

Future ready

StarWind can scale to three or more nodes, allowing clusters with more than two nodes keeping the simplicity of the design.

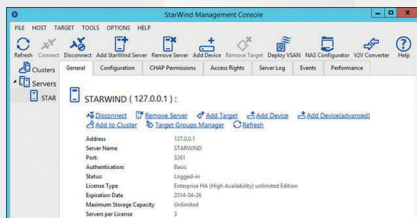
Easy and fast deployment

The configuration of StarWind Virtual SAN® takes only a few minutes and StarWind assists their customers remotely during installation.

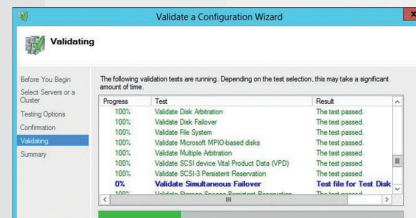
MultiSystems

StarWind Virtual SAN® allows to run other Bosch Security Products on the same High Available Cluster, like BVMS.

StarWind Set-up and Configuration



StarWind Virtual SAN® has a simple management console allowing the virtual SAN's configuration as well as checking its status.



StarWind Virtual SAN® allows a pair of servers to run as a Failover Cluster, without a physical SAN with all Cluster validation tests passed. This is fully supported by Microsoft.

The Bosch division Security and Safety Systems is a leading global supplier of security, safety, and communications products, solutions and services. Protecting lives, buildings and assets is our aim. The 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. Additional information can be accessed at www.boschsecurity.com

Visit www.ipp.boschsecurity.com for details on the Bosch Integration Partner Program

StarWind is a leading provider of enterprise-class virtualization solutions especially designed for SMB and ROBO. It helps SMB to stay agile and competitive, keep overall costs low and achieve performance efficiency. StarWind aims to help SMB and ROBO build virtualization infrastructure without binding to specific vendors. The product range includes software and hardware solutions: StarWind Virtual SAN® – software that eliminates any need in physical shared storage, and StarWind HyperConverged Appliance – a turnkey hardware solution for virtualization. With StarWind SMB and ROBO can enjoy hyperconverged architecture with its main benefits like quick deployment and operational simplicity, while keeping the costs low. Additional information can be found at www.starwindsoftware.com.