

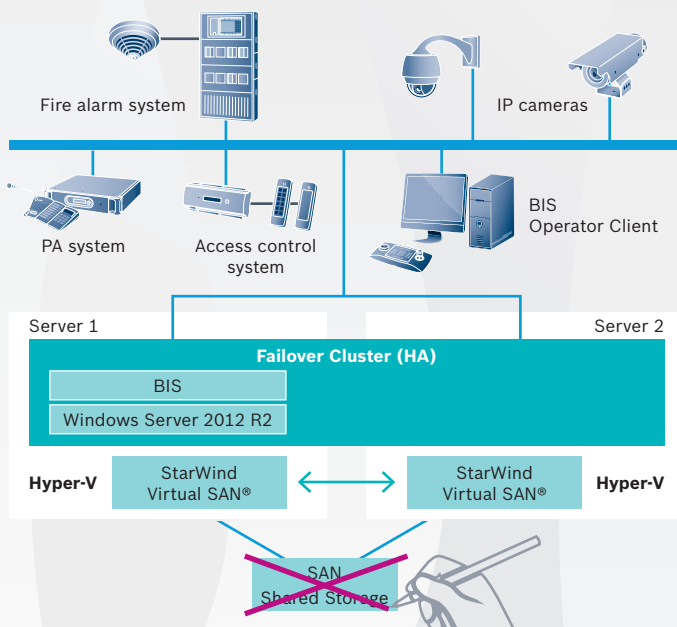
**BOSCH**

Invented for life

# Integrated Security, Safety and Access Control Solution

## Storage Solution

# Bosch Security and Safety Systems and StarWind



- ▶ StarWind Virtual SAN® provides a simple solution for Bosch BIS redundancy on only two nodes
- ▶ Dramatical reduction of costs of High Availability infrastructure for Bosch BIS on Hyper-V Failover Cluster
- ▶ Reduction of power consumption and cooling requirements
- ▶ Reduction of OpEx as no complex SAN infrastructure has to be maintained
- ▶ Rapid setup time

The Bosch Building Integration System (BIS) is a software solution that manages different security subsystems like access control, video surveillance, fire alarm systems, public address (PA) systems or intrusion systems on one single platform.

Bosch BIS offers a "tool box" to allow integration with 3<sup>rd</sup> party applications/ subsystems via open standards (OPC, ONVIF, OSDP) and SDK. This makes it the Bosch's alarm management flagship.

Bosch BIS 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 a 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 Bosch BIS to run on a high performance, low cost, low footprint and low power consumption thanks to Hyper-V Failover Cluster.

## Compatibility

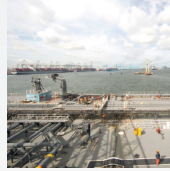
StarWind	Bosch products
<b>StarWind Virtual SAN® v8.0</b> <ul style="list-style-type: none"> <li>- Microsoft Hyper-V Server 2019 (R2)</li> <li>- Microsoft Windows Server 2019 (R2)</li> </ul>	<b>Bosch BIS 4.9.1 or higher</b> <b>Bosch VMS optional</b>

# Applications / Vertical Markets

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



**Transportation: 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.

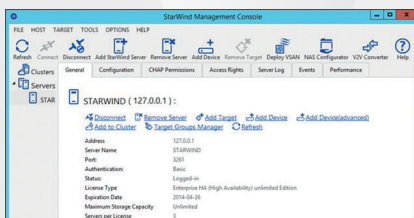
### Easy and fast deployment

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

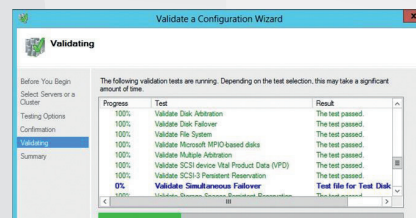
### MultiSystems

StarWind Virtual SAN® allows to run other Bosch Security Products on the same High Available Cluster, like Bosch Video Management Software (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](http://www.boschsecurity.com)**

Visit **[www.ipp.boschsecurity.com](http://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](http://www.starwindsoftware.com)**.