

StarWind Virtual SAN[®]

HyperConverged Appliance

Quick Start Guide

MAY 2015

TECHNICAL PAPER



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In 2016, Gartner named StarWind “Cool Vendor for Compute Platforms”.

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About StarWind

StarWind is a pioneer in virtualization and a company that participated in the development of this technology from its earliest days. Now the company is among the leading vendors of software and hardware hyper-converged solutions. The company's core product is the years-proven StarWind Virtual SAN, which allows SMB and ROBO to benefit from cost-efficient hyperconverged IT infrastructure. Having earned a reputation of reliability, StarWind created a hardware product line and is actively tapping into hyperconverged and storage appliances market. In 2016, Gartner named StarWind “Cool Vendor for Compute Platforms” following the success and popularity of StarWind HyperConverged Appliance. StarWind partners with world-known companies: Microsoft, VMware, Veeam, Intel, Dell, Mellanox, Citrix, Western Digital, etc.

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Introduction

This document is aimed for Windows System based administrators who would like to know how to get started with StarWind HyperConverged Appliance. It describes initial steps for launching the HyperConverged Appliance.

A full set of up-to-date technical documentation can always be found here:

StarWind Software Resource Library:

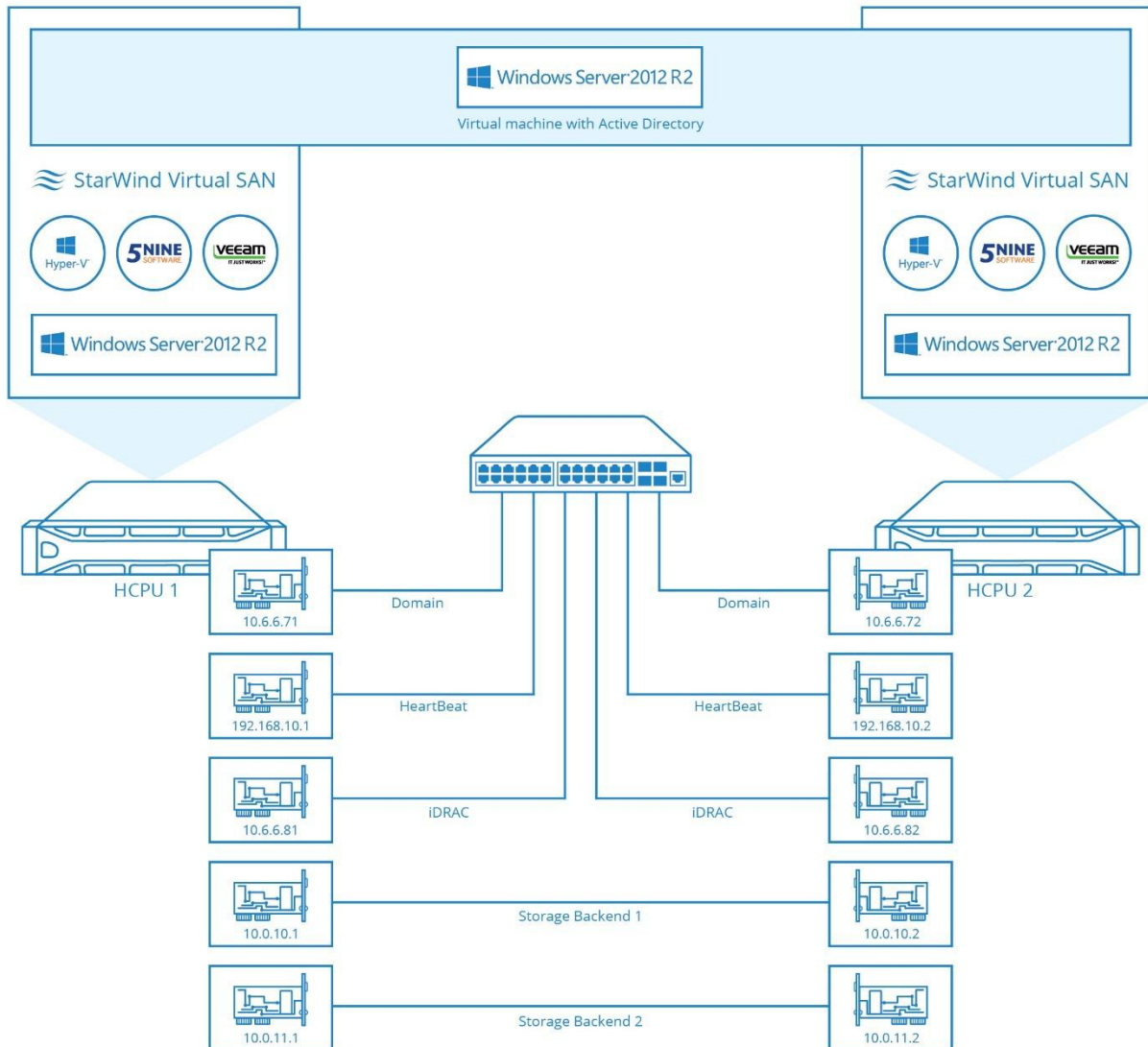
<https://www.starwind.com/resource-library>

Veeam Technical Documentation:

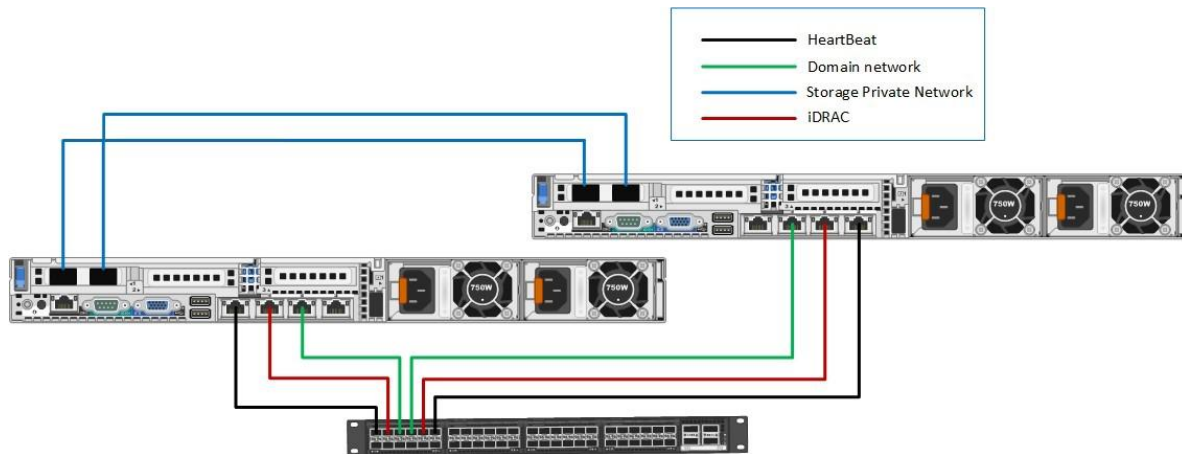
<http://www.veeam.com/en/documentation-guides-datasheets.html>

System diagram and description

Below you can find the network interconnection diagram of the HyperConverged Appliance. It consists of two servers with Windows Server 2012 R2 OS with pre-configured Hyper-V. Also, it includes Veeam Availability Suite v9 as backup solution.



The Hyper-V cluster is managed by the domain configured as the virtual machine that runs on top of this cluster.



The system is fully pre-configured and ready to be integrated into the existing infrastructure. To review all the technical specifications of the server please refer to the corresponding Data Sheet paper.

Caution: before beginning any procedures in this document, follow the safety instructions that shipped with the system.

Servers naming and credentials

The servers by default are configured with the following domain names:

SW-HCA-01

SW-HCA-02

The domain name of the Active Directory virtual machine is following:

AD@domain.local

The default credentials for the servers are:

Local credentials:

Login: **administrator**

Password: **StarWind2015**

Domain credentials:

Login: **administrator@domain.local**

Password: **StarWind2015**

Getting started

There are several stages to setting up the HyperConverged Appliance.

Step 1: Physical Setup

1. Put the servers into the rack.
2. Plug all the servers and a switch into AC power using the enclosed power cables.
3. Turn the switch on
4. Turn the SW-HCA-01 server on
5. Turn the SW-HCA-02 server on

Step 2: Microsoft Windows Server 2012 R2 setup

The system comes up with the Windows Server 2012 R2 already installed and configured, including the Hyper-V role. The Microsoft Hyper-V Failover Cluster is validated, created and configured as well.

Once the operation system is started disable the automatic Windows Updates by following the steps below:

1. Open Windows Update by clicking the **Start** button.
In the search box, type **Update**, and then, in the list of results, click **Windows Update**.
2. In the left pane, click **Change settings**.
3. Under Important updates, choose the option that you want.
4. Under Recommended updates, select the Give me recommended updates the same way I receive important updates check box, and then click **OK**. If you're prompted for an administrator password or confirmation, type the password or provide confirmation.

Step 3: Launch StarWind Virtual SAN

Once the operation system started the splash screen of StarWind management console splash screen will pop-up.



Also, the corresponding services should be started in the Service Manager of Windows.

StarWind Virtual SAN can be used to run the shared storage, which is possible to maintain using the StarWind Management Console or PowerShell scripting.

For further StarWind configuration and maintenance operation assistance refer to the **StarWind Resource Library**:

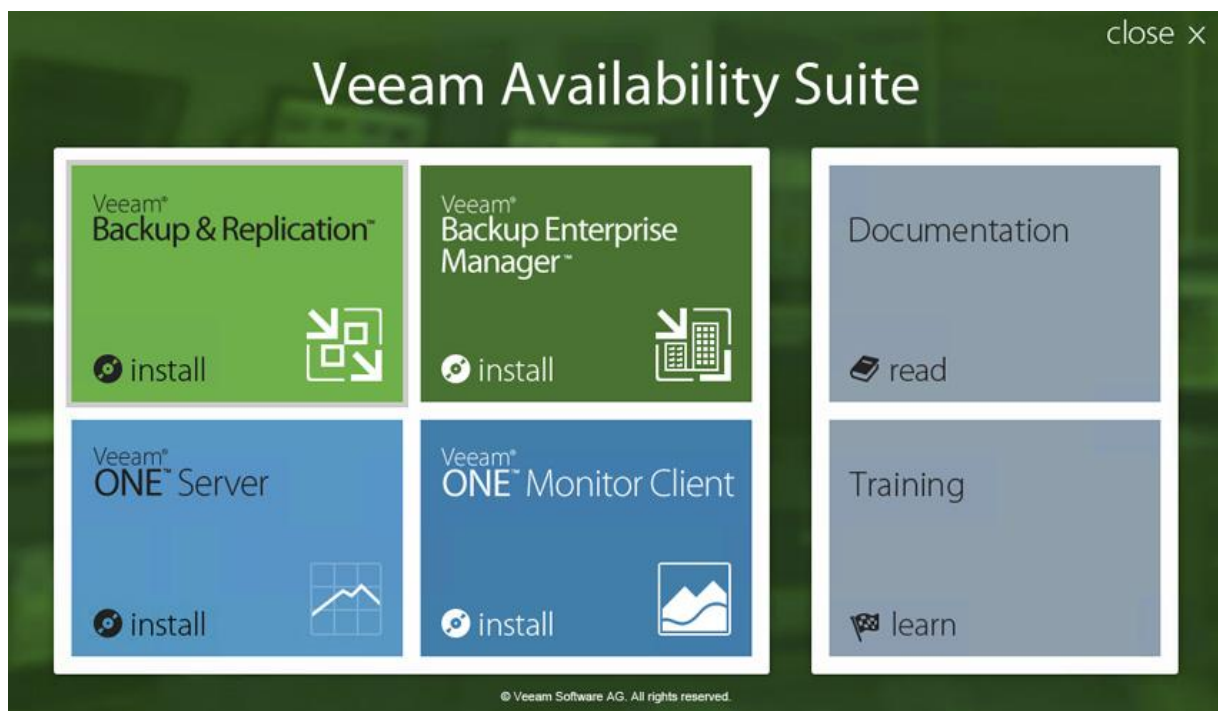
<https://www.starwind.com/resource-library>

Step 4: running Veeam Availability Suite

Veeam Availability Suite provides a set of features for building and maintaining a flexible backup infrastructure, performing data protection tasks (such as VM backup, replication, copying backup files), and carrying out disaster recovery procedures. This section contains a high-level overview of Veeam Availability Suite, its architecture, features, data protection and disaster recovery concepts necessary to understand Veeam Availability Suite background operations and processes.

The Veeam software comes pre-configured on the system, and it will launch automatically after the operations system will be started.

Once the operation system started the splash screen of Veeam Availability Suite splash screen will pop-up.



Also, the corresponding services should be started in the Service Manager of Windows.

For further StarWind configuration and maintenance operation assistance refer to Veeam Technical Documentation:

<http://www.veeam.com/en/documentation-guides-datasheets.html>

Step 5: Update drivers and BIOS

Dell updates drivers, applications and firmware to meet the demands of new software and hardware. Visit the [Drivers and Downloads](#) help site to learn how to get the latest drivers for your Dell.







Please note that the servers may be rebooted one at the time in order to accomplish the updates installation. Before rebooting the server please make sure that StarWind devices are synchronized by checking their state in the StarWind management console.

Summary

StarWind HyperConverged Appliance is the fully functional pre-configured solution that is ready to be integrated into the existing infrastructure, or to be implemented into the new one. It provides the solid virtualization infrastructure for the SMB and ROBO offices by including full feature pack for virtualization:

- Hyper-V as hypervisor
- StarWind as the storage virtualization solution
- Veeam Availability Suite as the backup solution

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