

StarWind Virtual SAN®

FREE vs. PAID

MARCH 2017

WHITE PAPER

BRIEF:

StarWind Virtual SAN® is a virtual shared storage. StarWind® eliminates any need for a SAN or NAS or other physical shared storage. Software installs on top of virtualized or bare metal servers and “mirrors” internal storage between them to create a fault-tolerant shared storage pool. It integrates into an operating system or hypervisor for performance and simplicity of use.

When using StarWind® to manage your business data, there are two options to consider, free and paid: install and “self-support” it in a bit limited set of deployment scenarios or... Invest into our engineers to configure and “babysit” your virtualization infrastructure completely.



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Technical Support and Services

If you have questions about installing or using this software, check this and other documents first - you will find answers to most of your questions on the [Technical Papers](#) webpage or in [StarWind Forum](#). If you need further assistance, please [contact us](#).

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 compares two different versions of StarWind Virtual SAN – commercial and free. Unlike the other vendors' free offers, which are essentially cut and limited versions of the main products, StarWind Virtual SAN Free is a full-fledged production storage platform. The comparison will reveal the difference in detail and show the capabilities of both versions.

The thing in common is that both versions can be configured as the principal storage provider to both hyperconverged and converged environment. In the first approach, StarWind can be used to virtualize the internal capacity of the hyperconverged infrastructure thereby creating Virtual SAN between the clustered servers. Further, the hyperconverged storage can be carved up into new logical volumes. In the second approach, when the environment is separated into compute and storage resources, StarWind pools the resources of the storage servers and thereby builds the dedicated SAN/NAS storage cluster.

This white paper is intended for virtualization admins and StarWind users who need information on the commercial and free versions of StarWind Virtual SAN.

A full set of up-to-date technical documentation can always be found [here](#), or by pressing the **Help** button in the StarWind Management Console.

For any technical inquiries please visit our [online community, Frequently Asked Questions](#) page, or use the [support form](#) to contact our technical support department.

Free. “Self-Supported”

StarWind Virtual SAN Free takes brand new or decommissioned servers and turns them into a DIY “Active - Active”, “shared nothing” fault-tolerant SAN and NAS by “mirroring” their internal storage.

Free version comes with an unrestricted set of features: multi-tiered server side caching is available out of the box, scale-up and scale-out are both allowed, Log Structured File System with deduplication and asynchronous replication are also available in any deployment scenario, VTL is not included (see [Comparison Matrix](#) for details).

StarWind Virtual SAN Free supports any deployment scenario, such as: “Hyper-Converged”, “Compute and Storage Separated”, and various combinations. In the first scenario, StarWind Virtual SAN Free allows to create a hyperconverged infrastructure converting the internal storage capacity of the clustered servers into a Virtual SAN. In the second scenario, when the environment is separated into compute and storage components, StarWind Virtual SAN Free can be used to build the dedicated SAN/NAS storage cluster. Free version can be deployed on a bare-metal Windows Server or installed inside a virtual machine.

Unrestricted protocol support. Highly Available iSCSI (including iSER), Continuously Available SMB 3.1.1 shares, and Failover NFS 4.1 mount points are all supported.

IMPORTANT NOTE:

The only component which will not be always available in StarWind Virtual SAN Free is StarWind Management Console. Compared to StarWind Virtual SAN Commercial version, Free version provides access to StarWind Management Console for a period of 30 days after installation. After this period, StarWind Free can be managed through the Windows PowerShell or SCVMM just like you would manage Microsoft Storage Spaces Direct.

StarWind Virtual SAN Free is shipped with a set of ready-to-use PowerShell scripts that would help users to quickly deploy the Virtual SAN infrastructure and configure most of its features. Moreover, any StarWind Free user is allowed to modify existing scripts, create new ones, and share them with others. Finally, the free version doesn't have any synthetic performance limitations, so the resulting performance of this solution stands in line with Enterprise-class storage arrays.

Use cases are:

- Shared storage for Microsoft Hyper-V VMs and SQL Server DBs (HA iSCSI & CA SMB 3.1.1)
- Shared storage for Microsoft Failover Clusters, Exchange, Oracle and SAP DBs (HA iSCSI)
- Shared storage for KVM, Citrix XenServer and Xen Project VMs (HA iSCSI & CA SMB 3.1.1)
- HA file server (general purpose file sharing, VDI profiles, backups etc.) (SMB 3.1.1 & NFS 4.1)

Free version is intended to be self-supported or community-supported on public discussion forums. Our engineers will still do their best to help you with your possible technical “hiccups”, but our delivery here is not guaranteed because of the obvious reasons.

You’re an IT geek, student, blogger, or hardcore admin? You have time, required expertise, and passion to build, support, and maintain your IT infrastructure? Yes? Then the only missing component for your “roll-your-own-fault-tolerant-software-defined-storage-for-free” project is right here! **StarWind Virtual SAN Free. FREE. Production use IS allowed.**

Paid. “StarWind is Responsible”

Paid version is “a la carte” offering with a few “bonus” Enterprise features and StarWind’s famously effective support service included. While the free version is good for production use, it is only self-maintained, so if anything goes wrong – you are, basically, on your own. With commercial StarWind Virtual SAN, you are in the caring hands of StarWind engineering team, who can assist you 24/7 with any issues.

Use cases are:

- Shared storage for Microsoft Hyper-V VMs and SQL Server DBs (HA iSCSI & CA SMB 3.1.1)
- Shared storage for Microsoft Failover Clusters, Exchange, Oracle and SAP DBs (HA iSCSI)
- Shared storage for KVM, Citrix XenServer and Xen Project VMs (HA iSCSI & CA SMB 3.1.1)
- HA file server (general purpose file sharing, VDI profiles, backups etc.) (SMB 3.1.1 & NFS 4.1)
- Scalable backup storage (iSCSI & VTL)

Top-notch support provided is another key differentiator here. Technically, we have a complete “fire-and-forget” IT solution, you pull the trigger, pay the bills, and our qualified support engineers do initial PoC and production setup, help with picking proper hardware configuration, provide 24/7 support, and, generally speaking, “babysit” your entire IT infrastructure!

You’re a highly-paid **IT director or senior system administrator, CFO, or other decision maker** of your business? You know how to estimate budget and optimize operational expenses for your company, you care about uptime and general availability of your company’s mission critical IT infrastructure, and you actively look for highly performing, well-supported, and still inexpensive storage built with virtualization in mind? Yes? Then we have a proper solution to your challenge! A storage with truly Enterprise features, highest possible performance, unbeatable support plan, and strict Service Level Agreements. **StarWind Virtual SAN. All you need in terms of primary and backup storage without breaking the bank!**

Free as a Trial?

It's not the greatest idea to use StarWind Virtual SAN Free as an "evergreen" Trial, especially with future commercial use in mind! We can perfectly understand people who prefer to go "under radar" of our quite helpful sales reps, as they don't want to be annoyed and they also tolerate no time bombs in their PoC projects because they want to be masters of their own time. However... **there is no pre-sales support for StarWind Virtual SAN Free for obvious reasons.** If you immediately claim you want Free and are willing to go "self-supported" or "community-supported", we give you space! If you confess you were planning to go into production later with a commercial version, our engineers will do their best to deliver fastest performing PoC in a shorter term. In case with StarWind Virtual SAN Free, you're pretty much on your own, so if you have an issue, you can give up at some point after having spent a considerable amount of your valuable time. This is quite an unfortunate occurrence. Nobody here wants this happening ever! Again... Give our "best of breed" engineering team a chance to demonstrate their pre-sales support skills.

Summary: try to **avoid using Free as a Trial, and use StarWind Virtual SAN Trial license instead.** We're not forcing you to do anything, just recommend what we see as the most straight-forward and proven way to go.

Comparison Matrix

Key Points	StarWind Virtual SAN Free	StarWind Virtual SAN Commercial
Maximum Number of StarWind Nodes	Unlimited	
Maximum number of initiator hosts	Unlimited	
Served Capacity	Unlimited	
License Life Time (TTL)	Perpetual	
Capacity Expansion Options	Scale-Up and Scale-Out	
Served Protocols (NAS & SAN)	iSCSI "Active-Active" mode (workload is distributed across all StarWind nodes) MPIO (Multipath I/O, Multipathing) iSER protocol support (RDMA) SMB 3.1.1 SMB Direct (RDMA) SMB Multichannel SMB Transparent Failover NFS v4.1 NFS Multichannel NFS over RDMA	
Deployment Scenarios	"Hyper-converged" (Including the ability to run inside hypervisor kernel without a "controller VM") "Compute and Storage Separated"	
StarWind Virtual SAN Management Capabilities	Command line (Windows PowerShell)	StarWind Management Console, WEB Management, vSphere Plugins, PowerShell, VVOLs, SMI-S
Features	All, except VTL	All
Technical Support Assistance (Give us a call to know more as this one is really something special in our Paid version!)	Self-Supported or Community-supported on StarWind Forums	Pre- and Post-Sale Technical Support via Phone, E-mail, and StarWind Forums Remote Troubleshooting Sessions 24/7/365 Premium Support options with 1 Hour Response Time Strict Service Level Agreements Dedicated Support Engineer StarWind Virtual SAN Installation and Configuration Assistance Hypervisor and 3rd Party Software configuration

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