

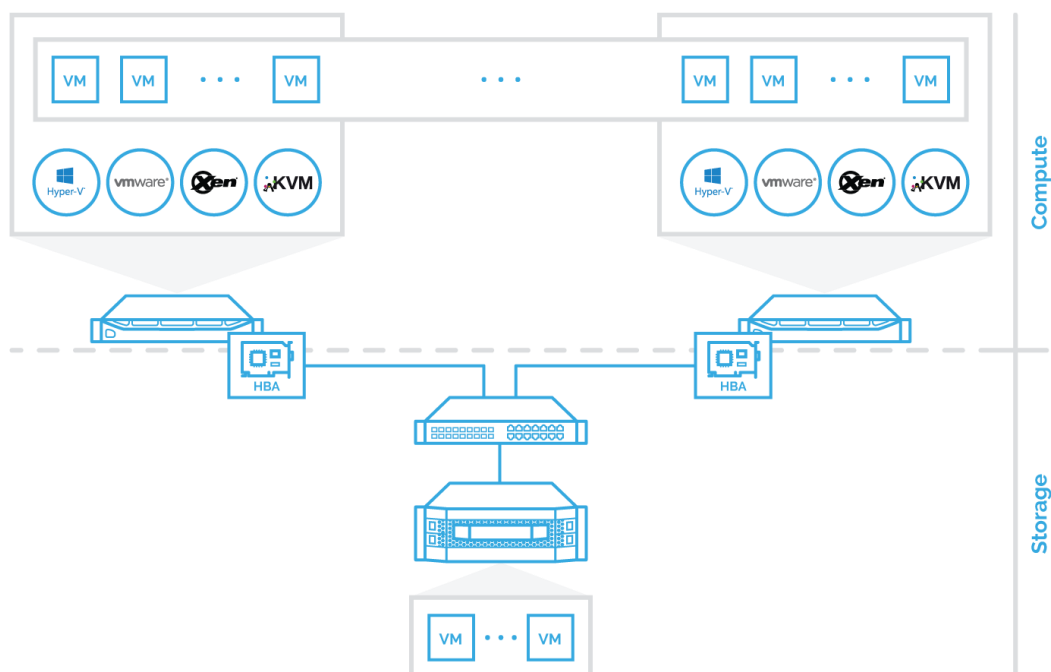
StarWind Virtual SAN

Introduction

Virtualization is currently in haste to make “physical everything” fade into history as it is confidently gaining leading positions in the IT sphere. Many businesses are implementing this technology steadily, “getting wind of” its tremendous benefits. Industry leaders in different markets are enjoying virtual IT infrastructures with increased performance rates and cost-efficiency way ahead of anything the “old” physical approach could ever offer. At the same time, virtualization becomes a “quick fix” solution for the companies of any size because it is adapting various business needs to the constantly changing business environment.

Problem

As a rule, storage virtualization is rather expensive and requires trained IT staff members, which typically goes far beyond the SMB budget limits. Enterprises usually have enough resources to manage IT infrastructure in the head office. However, equipping dozens of ROBO locations with proper hardware, software, and personnel becomes an unreasonably complex and exhausting task. Budgets and trained staff are commonly insufficient for remote sites and smaller companies, so typical storage virtualization is out of reach for SMB and ROBO.



Converged architecture has many drawbacks, including complexity, high cost and high I/O latency

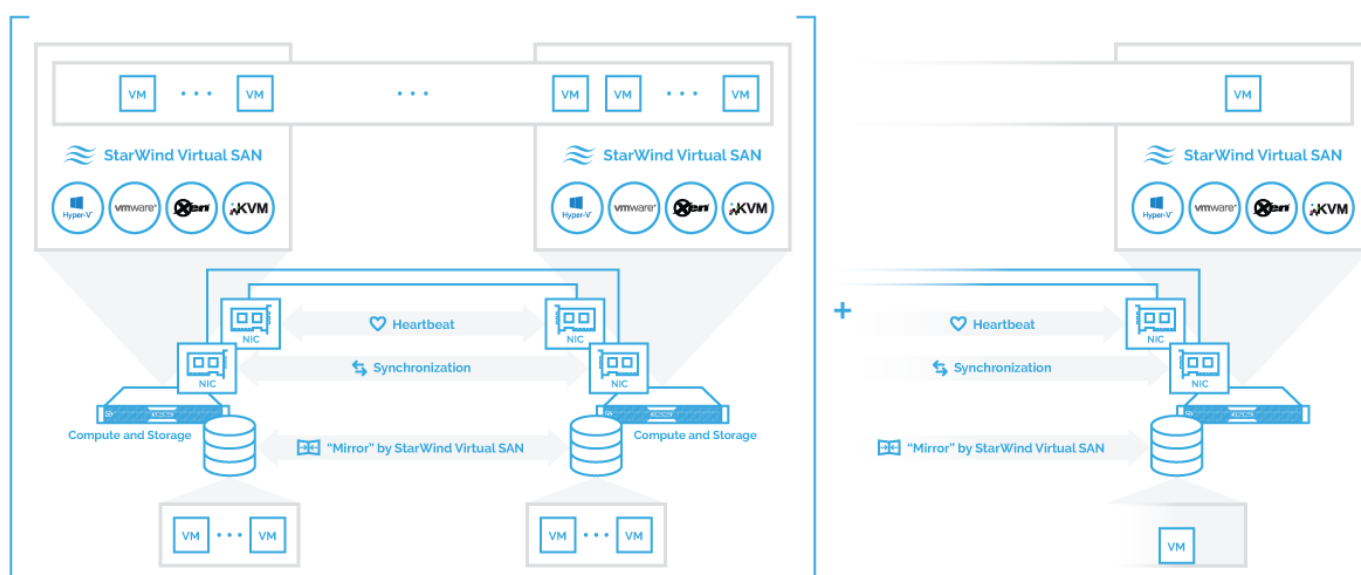
Software Defined Storage (SDS) solutions claim to solve the problem with their low prices, but in most cases they conceal associated costs. Some of them require additional hardware and software, so extra licenses and servers increase CapEx. Others just initiate a vendor lock-in, forcing the use of a single expensive brand, which makes OpEx grow. Besides, most SDS solutions are not easy to manage and require trained staff for installation, configuration, and maintenance.

Solution

StarWind Virtual SAN (VSAN) provides SMB and ROBO with inexpensive and easily manageable storage virtualization solution, creating fault-tolerant storage for VMs and applications by “mirroring” internal hard disks and flash between servers. It reduces implementation cost, using less hardware than any similar solution. StarWind VSAN HA cluster starts from just two physical nodes and accepts commodity components, easily purchased in the nearest PC store. When branch offices are considered, the money saved on hardware is multiplied by the number of locations, making StarWind VSAN exceptionally cost-effective. Moreover, with the help of StarWind Stretched Clustering support, mission-critical applications become highly available thanks to Live Migration made possible between different geographical locations.

StarWind Virtual SAN is available in two versions: for Hyper-V and for vSphere. VSAN for Hyper-V is a Windows-native application, VSAN for vSphere comes as a prepackaged Linux virtual machine and is aimed at VMware vSphere deployments. Managed with an easy-to-use StarWind web Management Console, so a typical system administrator with minimal experience in Hyper-V or vSphere will easily install, configure, and manage it. There is no need for any specialized storage and network trainings.

StarWind Virtual SAN was designed with virtualization workloads in mind. It employs server-side Flash/RAM caches and minimalistic/short I/O path to provide performance unmatched by typical virtual appliances and physical shared storage. Using StarWind Virtual SAN high availability architecture also makes it possible to extend existing workloads to public cloud. StarWind Hybrid Cloud Feature combines the best of public and private cloud worlds by creating a true HA cluster between on-premises and public cloud infrastructure.



Hyperconverged architecture and scale-out using public cloud

Conclusion

StarWind Virtual SAN brings Enterprise-class storage virtualization to the SMB and ROBO. Being easy to manage and inexpensive, it optimally meets their IT team requirements and budgets. At the same time, performance and features are far ahead of anything physical shared storage and typical SDS could ever offer.