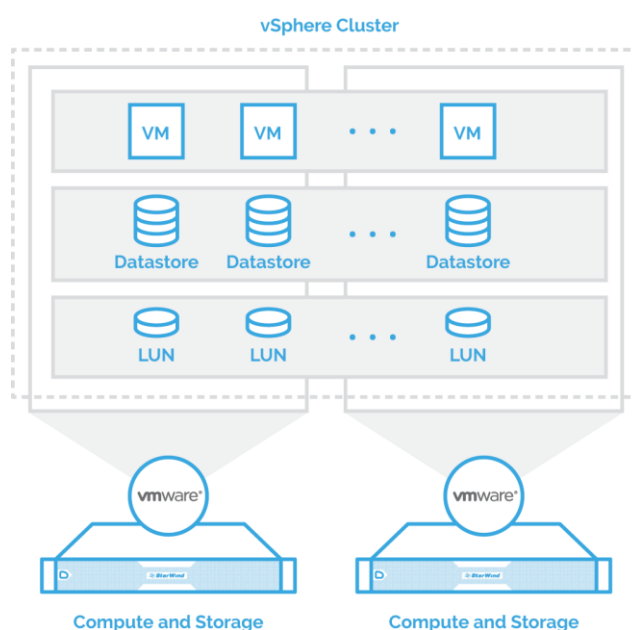# StarWind VVols

Introduction

Virtual Volumes (VVols) is a new storage integration and management framework available in VMware vSphere, offering simplified storage provisioning and consumption. VMware Virtual Volumes was designed as an alternative storage architecture making management easier and eliminating the legacy architecture drawbacks.

StarWind has developed and integrated VMware Virtual Volumes support and vSphere API for Storage Awareness (VASA) in StarWind products for virtualization environments, providing VMware users with seamless storage management experience.

Problem

The exponential data growth in modern IT infrastructures results in a significant increase of management and maintenance efforts. As more and more applications become virtualized, the storage system design demands granular configuration to provide each virtual machine with the required level of performance and resiliency.
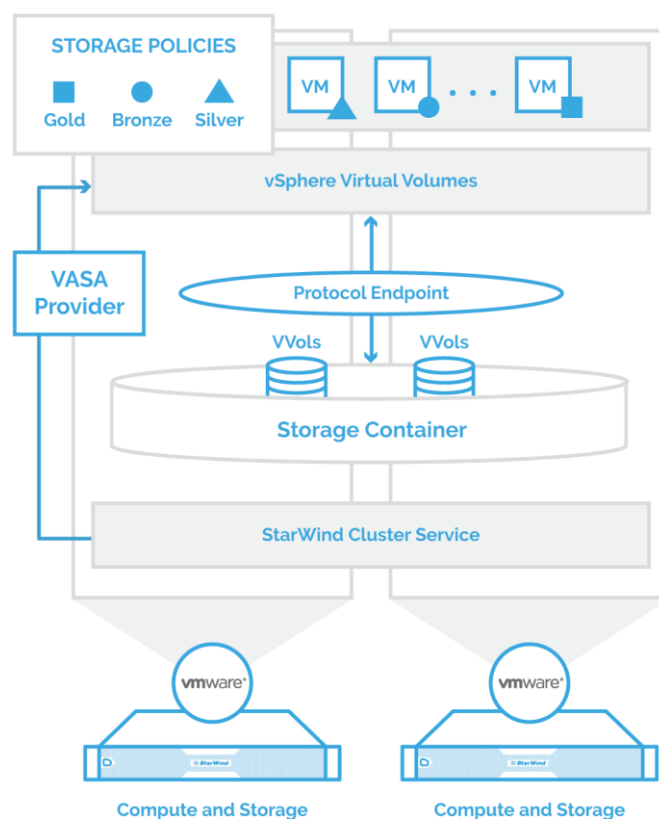
Traditional storage management model with VMware datastores requires administrators to manually deploy numerous LUNs as a means to choose an appropriate storage and meet the application performance requirements. An excessive number of datastores created on top of the storage tiers makes their management extremely complicated and significantly affects the overall storage utilization efficiency.

Solution

The Virtual Volumes support integration into StarWind Products provides VMware administrators with efficient tools for easy, automated, and efficient storage administration. StarWind VVols allows delivering fine-tuned policies based on pre-defined storage with required performance and resiliency characteristics for the virtual machines. The storage container allocates the VM on an appropriate storage.

Administrators achieve seamless vSphere management experience with the implementation of Starwind VVols. In a couple of clicks, Platinum, Gold, Silver, and Bronze VM policies utilize respective storage tiers, for example: NVMe HA, SSD HA, and/or Hybrid HD with asynchronous replication and Archive HDDs with automated tiering to the cloud. Therefore each application is hosted on an appropriate storage with defined performance and availability.

Conclusion

With the integration of Virtual Volumes (VVols) feature in StarWind products, storage management and provisioning has become efficient, transparent, and automated. StarWind interacts as the VASA provider presenting the physical storage as Virtual Volumes, so each virtual machine and its disks become an atomic manageable unit of the infrastructure. By integrating vSphere storage management technologies, StarWind Appliances provide VMware administrators with full capabilities of enterprise storage management.

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