Lenovo

Solution Brief:

Veeam + Lenovo ThinkAgile VX



Business challenges

For many organizations, IT complexity is the enemy of business execution. Soaring data volumes combined with the proliferation of new business application services contributes to infrastructure sprawl across the enterprise. Multiple silos of IT server compute, storage and networking devices places greater management burden on IT administrative personnel and often distracts them from focusing on initiatives that are more important to the business. Moreover, the complexity of managing and protecting business data that resides across multiple storage resources puts the business at risk of potential data loss and unplanned downtime. In short, organizationsn eeds oftware-definedd ata center solutions (SDDC)th at consolidate IT resourcesi nto a single,c ohesivelym anagedp ool of resourcest hat can be flexibly applications shared across workloads simplify IT, mitigate risk, lower cost and enhance business agility.

ThinkAgile VX Series

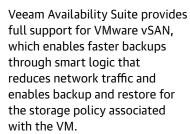
As businesses strategize to create a SDDC, many are adopting VMware-based solutions to take advantage of the integration and support provided by existing investments in VMware SDDC technologies, like VMware vSphere. Lenovo VX is a Hyperconverged Infrastructure (HCI) solution that's based on VMware vSAN, which pools together server-attached storage. This allows businesses to provision and manage storage while taking advantage of the administration and storage policies of vSphere.

Lenovo's VX consolidates silos of IT compute, storage and networking resources to simplify IT, increase business agility and lower cost. To ensure the availability of critical business applications and data while maximizing ROI on HCI, data centers need a solution that provides deep integration across these highly virtualized, software-defined storage environments.

Veeam Availability Suite™ is a ready- for-vSAN solution that provides unique backup and recovery options for Lenovo VX. This allows customers to deploy a more integrated, highly efficient and cost-effective availability solution. Veeam provides Lenovo VX customers with:

- · The ability to expand capacity and performance on demand.
- Storage policy-based management backup and restore to recover entire VMs, individual files and application items in minutes.
- End-to-end AES 256-bit encryption to secure backup files and data at the source in flight and at rest.
- Built-in deduplication and compression to reduce storage and bandwidth consumption.
- A VMware ready-for-vSAN-certified solution designed and optimized specifically for the VMware platform Combining Veeam® and Lenovo VX delivers IT simplicity, mitigates business risk, enhances efficiencies, maximizes ROI and enables IT to move at the speed of business.

At a glance



Key benefits

- · Leverage Veeam's industryleading backup, restore and replication capabilities with the hyper-converged and flash-optimized storage architecture of Lenovo VX.
- Storage policy-based management backup and restore saves time during recovery and maintains the associated storage policy even if a VM is restored to a different datastore on dissimilar storage
- · Veeam solutions have been tested extensively and are certified as VMwareReady for vSAN









How Veeam helps you leverage investments in Lenovo VX vSAN environments

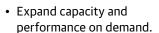
Built specifically for virtual environments, Veeam Availability Suite operates at the virtualization layer and uses an image-based approach for VM backup. To retrieve VM data, no agent software needs to be installed inside the guest OS. Instead, Veeam Availability Suite leverages ESXi snapshot capabilities to create a compressed, deduplicated backup file. All backup files created by a job reside in a dedicated job folder on a backup repository. The flexibility in placement of the backup repository makes maintaining backups simple and affordable.

Veeam's smart logic for processing vSAN datastores can leverage a virtual proxy that resides on the same ESXi host when using virtual appliance transport mode where most of the virtual disk data resides. Veeam Availability Suite obtains information from VMware vCenter about data distribution inside the vSAN datastore — minimizing traffic over the network inside the vSAN cluster by locally retrieving most VM data. There's no need to change backup policies when deploying Veeam on vSAN.

Veeam's unified console ensures availability for your entire virtual infrastructure with industry-leading features such as:

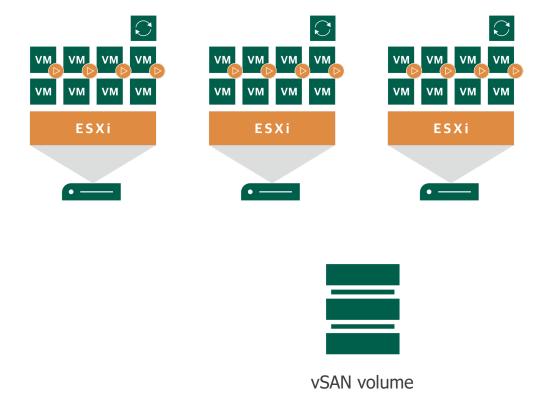
- Instant VM Recovery®
- Granular, application-item recovery with Veeam Explorers™
- · Replicating a backup image of a VM
- New features that further leverage IT investments in modern storage and the cloud





- Restore entire VMs6 individual files and application items in minutes.
- Reduce storage and bandwidth consumption with built-in deduplication for faster ROI.
- Built-in, end-to-end AES 256bit encryption secures backup files and data at the source during backups in flight and at rest.

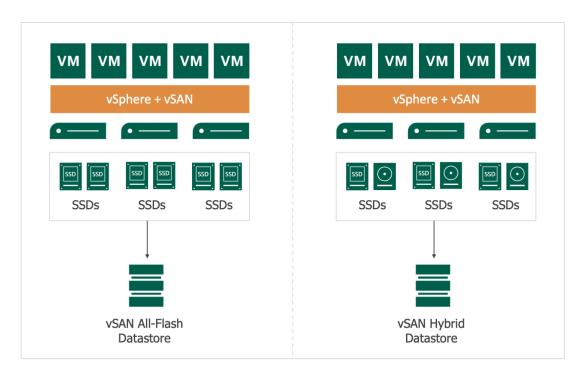
ESXi





VMware vSAN

VMware vSAN is a vSphere-native, software-defined storage platform built on industry-standard x86 servers and components. Its distributed architecture allows for capacity and performance to scale independently by merely adding new drives to existing hosts - providing a simple, fast and efficient way to provision and manage storage at the server layer. Available in hybrid or all-flash configurations, vSAN eliminates high storage costs and complexity that often inhibit deploying a complete storage and backup solution.



VMware vSAN All-Flash and hybrid architectures

Veeam Availability Suite

Veeam Availability Suite delivers constant for all workloads from a single management console, helping organizations meet today's service-level objectives by delivering Modern Data Protection for virtual, physical and cloud-based environments.

Veeam capabilities, including high-speed recovery and dataloss avoidance, are vital to improving a business's ability to provide availability for all applications and data. Together, Lenovo VX and Veeam create a hypervisor-converged, flash-optimized storage architecture where performance and capacity can be scaled to maintain the availability requirements that face the modern data protection environment.

Veeam Availability Suite provides full support for VMware vSphere 6.5 including vSAN 6.6, encrypted VM support, VMFS6 and VVol 2.0 support, SPBM backup and restore and more.

