



Considerations for Configuring Virtual Nasuni Filers to use VMware High Availability (HA)

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Overview

VMware offers a feature called VMware vSphere High Availability (HA). Nasuni Filers can take advantage of VMware HA for an additional level of protection. HA enables you to create a cluster out of multiple ESXi hosts, in order to protect virtual machines and their workloads, such as a Nasuni Filer. In the event of a failure of the Nasuni Filer's host in the cluster, the Nasuni Filer automatically restarts on another ESXi host within that same VMware vSphere Cluster. Configuration requires only a few simple steps using the vCenter Server interface.

Note: Nasuni supports VMware ESXi 5.5 and above.

VMware considerations

For details on implementing HA on VMware, see

<https://docs.vmware.com/en/VMware-vSphere/6.5/com.vmware.vsphere.avail.doc/GUID-63F459B7-8884-4818-8872-C9753B2E0215.html>

Requirements for HA include the following:

- Minimum of two ESXi hosts. All hosts must be licensed for VMware HA. All hosts need a unique host name. All hosts should be configured with static IP addresses: if using DHCP, ensure that the address for each host persists across reboots.
- Minimum of 5 GB memory per host to install ESXi and enable HA (8 GB recommended).
- VMware vCenter Server. VMkernel network with the Management Network checkbox enabled.
- To ensure that any virtual machine can run on any host in the cluster, all hosts should have access to the same virtual machine networks and datastores. Similarly, virtual machines must be located on shared, not local, storage; otherwise, they cannot be failed over in the case of a host failure.
- A gateway or other reliable network device accessible using ICMP ping or HTTP.
- All hosts must have access to the same management networks. There must be at least one management network in common among all hosts, and best

Last modified: March 26, 2018



practice is to have at least two. Management networks differ depending on the version of host you are using.

- All hosts in a VMware HA cluster must have DNS configured so that the short host name (without the domain suffix) of any host in the cluster can be resolved to the appropriate IP address from any other host in the cluster. Otherwise, the Configuring HA task could fail. If you add the host using the IP address, also enable reverse DNS lookup (the IP address should be resolvable to the short host name).

All hosts should be capable of handling the anticipated workload.

Configuration details include the following:

- **Turn On vSphere HA.**
 - Select **“Enable host monitoring”**.
 - Select **“Enable admission control”**.
 - Select **“VM and Application Monitoring”**.

Failover requires a reboot, then a restart. A failover incurs downtime because the virtual machine is literally restarted on one of the remaining hosts in the cluster. The time to restart is approximately 1 to 2 minutes.

During failover, SMB connections time out. If so, first disconnect, then reconnect.

Nasuni Filer considerations

Requirements for the Nasuni Filer include the following:

- Base operating system version OS7 only. The version of the Nasuni Filer base operating system appears on the bottom right of each page.
- Nasuni Filer software version 7.8 or later. The version of the Nasuni Filer software appears on the bottom right of each page.