



Configure ESXi settings

ONTAP tools for VMware vSphere

NetApp
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Configure ESXi settings

Configure ESXi server multipathing and timeout settings

ONTAP tools for VMware vSphere checks and sets the ESXi host multipath settings and HBA timeout settings that work best with NetApp storage systems.

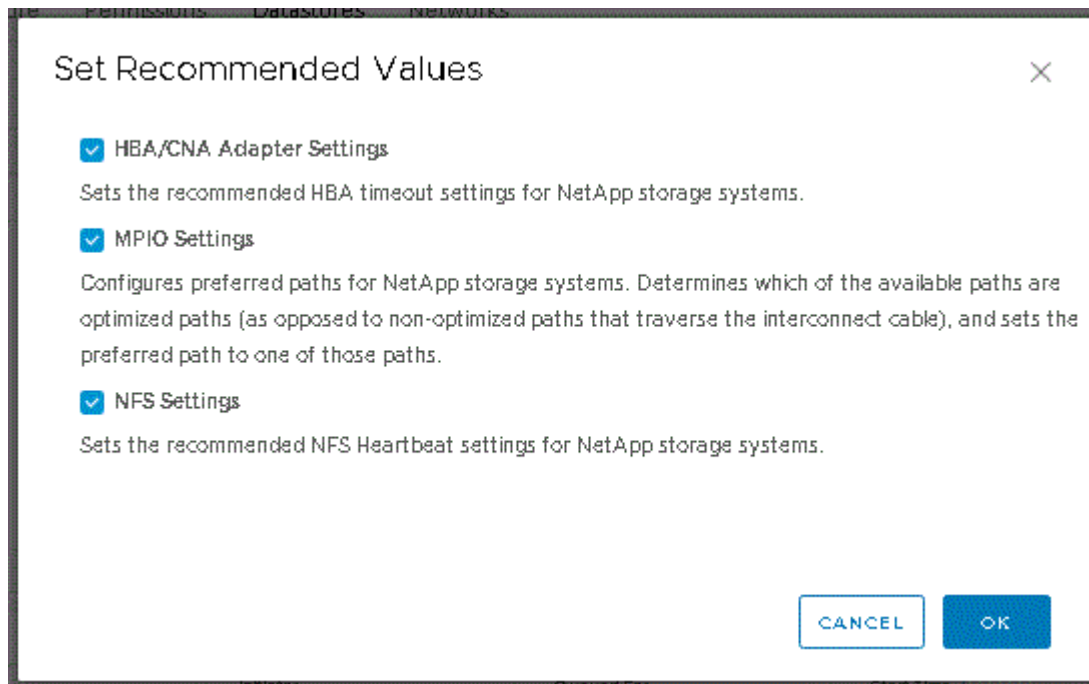
About this task

This process might take a long time, depending on your configuration and system load. The task progress is displayed in the Recent Tasks panel. As the tasks are completed, the host status Alert icon is replaced by the Normal icon or the Pending Reboot icon.

Steps

1. From the VMware vSphere Web Client Home page, click **vCenter > Hosts**.
2. Right-click a host, and then select **Actions > NetApp VSC > Set Recommended Values**.
3. In the NetApp Recommended Settings dialog box, select the values that work best with your system.

The standard, recommended values are set by default.



4. Click **OK**.

ESXi host values set using ONTAP tools

You can set timeouts and other values on the ESXi hosts using ONTAP® tools for VMware vSphere to ensure best performance and successful failover. The values that Virtual Storage Console (VSC) sets are based on internal NetApp testing.

You can set the following values on an ESXi host:

ESXi advanced configuration

- **VMFS3.HardwareAcceleratedLocking**

You should set this value to 1.

- **VMFS3.EnableBlockDelete**

You should set this value to 0.

NFS settings

- **Net.TcpipHeapSize**

If you are using vSphere 6.0 or later, you should set this value to 32.

- **Net.TcpipHeapMax**

If you are using vSphere 6.0 or later, you should set this value to 1536.

- **NFS.MaxVolumes**

If you are using vSphere 6.0 or later, you should set this value to 256.

- **NFS41.MaxVolumes**

If you are using vSphere 6.0 or later, you should set this value to 256.

- **NFS.MaxQueueDepth**

If you are using the vSphere 6.0 or later version of ESXi host, then you should set this value to 128 or higher to avoid queuing bottlenecks.

For vSphere versions prior to 6.0, you should set this value to 64.

- **NFS.HeartbeatMaxFailures**

You should set this value to 10 for all NFS configurations.

- **NFS.HeartbeatFrequency**

You should set this value to 12 for all NFS configurations.

- **NFS.HeartbeatTimeout**

You should set this value to 5 for all NFS configurations.

FC/FCoE settings

- **Path selection policy**

You should set this value to “RR” (round robin) when FC paths with ALUA are used.

You should set this value to “FIXED” for all other configurations.

Setting this value to “RR” helps to provide load balancing across all of the active/optimized paths. The value “FIXED” is used for older, non-ALUA configurations and helps to prevent proxy I/O.

- **Disk.QFullSampleSize**

You should set this value to 32 for all configurations. Setting this value helps to prevent I/O errors.

- **Disk.QFullThreshold**

You should set this value to 8 for all configurations. Setting this value helps prevent I/O errors.

- **Emulex FC HBA timeouts**

Use the default value.

- **QLogic FC HBA timeouts**

Use the default value.

iSCSI settings

- **Path selection policy**

You should set this value to “RR” for all iSCSI paths.

Setting this value to “RR” helps to provide load balancing across all of the active/optimized paths.

- **Disk.QFullSampleSize**

You should set this value to 32 for all configurations. Setting this value helps to prevent I/O errors.

- **Disk.QFullThreshold**

You should set this value to 8 for all configurations. Setting this value helps prevent I/O errors.

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