Unable to remove an inaccessible NFS datastore with Storage I/O control enabled (2008507)

https://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=2008507

Symptoms

- Cannot remove an inactive/inaccessible NFS datastore.
- Storage DRS is enabled on the NFS datastore.
- The backend storage volume corresponding to the datastore has been removed and the datastore appears as Inactive.
- Cannot unmount a read only NFS datastore that is mounted as read-write on another host with Storage IO control enabled from vCenter Server.
- Planned SRM Failover fails.
- Unmounting the datastore in vCenter Server fails with the error:

  ```
  'Call "HostDatastoreSystem.RemoveDatastore" form object "datastoreSystem-28" on
  vCenter Server "xxxx" failed.
  CannotRemove datastore 'datastore_name' because Storage I/O control is enabled on
  it. Correct it and re-try the operation
  ```

- Disabling Storage I/O Control on the datastore fails with the error:

  ```
  Datastore is not accessible
  ```

Resolution

This is an expected behaviour.

You cannot remove an inactive NFS datastore with Storage I/O Control enabled. However, when the back end volume is ungracefully removed, Storage I/O Control cannot be disabled.

To resolve this issue, log in directly to each ESX/ESXi host that has access to the inactive datastore and manually remove it.

Note: Before attempting to remove the datastore, ensure that there are no virtual machines running or registered against the datastore. Backup programs or third-party tools may also be using the datastore. For more information on requirements for unmounting a datastore, see *Unmounting a LUN checklist* in Unmounting a LUN or detaching a datastore/storage device from multiple VMware ESXi 5.x/6.0 hosts (2004605).

To manually remove the datastore:

1. Connect to the ESX/ESXi host using SSH. For more information, see Connecting to an ESX host using a SSH client (1019852) or Using Tech Support Mode in ESXi 4.1 and ESXi 5.x (1017910).
2. Run this command to list the mounted datastores:

   ESXi 5.0, ESXi 5.1, ESXi 5.5:

   ```
   # esxcli storage nfs list
   Volume Name  Host         Share  Accessible  Mounted  Hardware Acceleration
   -----------  -----------  -----  ----------  -------  ---------------------
   vol_nfs-2    10.21.1.14   /nfs2         true     true  Not Supported
   ```

   ESXi 4.x:

   ```
   # esxcfg-nas -l
   vol_nfs-2 is /nfs2 from 10.21.68.149 mounted
   ```

   Where `vol_nfs-2` is the NFS datastore name.

3. Make a note of the NFS datastore name.
4. Run this command to stop the SIOC service:

   ```
   /etc/init.d/storageRM stop
   ```

5. In the vSphere Client, select the host and then click the **Configuration** tab.
6. Click **Rescan All**.
7. After the rescan completes, run this command to restart the SIOC service:

   ```
   /etc/init.d/storageRM start
   ```

8. Run this command to unmount the NFS datastore:

   ESXi 5.0:

   ```
   # esxcli storage nfs remove -v vol_nfs-2
   ```

   ESXi 4.x:

   ```
   # esxcfg-nas -d vol_nfs-2
   ```

9. Log in to vCenter Server again and refresh the list of datastores in the Datastores View for each host.

Additional Information

For more information about unmounting LUNs from ESXi, see Unmounting a LUN or detaching a datastore/storage device from multiple VMware ESXi 5.x/6.0 hosts (2004605).

How to unmount a LUN or detach a datastore device from ESXi hosts (2004605)

https://kb.vmware.com/selfservice/search.do?cmd=displayKC&docType=kc&docTypeID=DT_KB_1_1&externalId=2004605

Purpose

This article provides steps to unmount a LUN from an ESXi 5.x/6.x host, which includes unmounting the file system and detaching the datastore/storage device. These steps must be performed for each ESXi host.

Note: The documented method using the vSphere Client is limited to detaching the device on a per-host basis. To detach a storage device from multiple hosts at the same time, see *Automating detaching datastores using PowerCLI and the vSphere SDK for Perl* in the *Resolution* section in this article.

For information on unmounting a datastore in ESXi/ESX 4.x, see Removing a LUN containing a datastore from VMware ESXi 4x and ESX 4.x (1029786).

Resolution

Removing a LUN in ESXi/ESX 4.x is complex. Improvements are made in ESXi 5.0 and later to streamline the procedure to make it easier for Administrators to remove LUNs.

Unmounting a LUN checklist

Before unmounting a LUN, ensure that:

- If the LUN is being used as a VMFS datastore, all objects, (such as virtual machines, snapshots, and templates) stored on the VMFS datastore are unregistered or moved to another datastore.

  Note: All CD/DVD images located on the VMFS datastore must also be unregistered from the virtual machines.

- The datastore is not used for vSphere HA heartbeat.
- The datastore is not part of a datastore cluster.

  For more information on datastore clusters, see:
  - vSphere 5.1 Resource Management Guide
  - vSphere 5.0 Resource Management Guide.

- The datastore is not managed by Storage DRS.

  For more information on Storage DRS, see the:

  - vSphere 5.1 Resource Management Guide
  - vSphere 5.0 Resource Management Guide.

- The datastore is not configured as a diagnostic coredump partition.

  For more information, see Configuring a diagnostic coredump partition on an ESXi 5.x host (2004299).

- Storage I/O Control is disabled for the datastore.

  For more information, see the *Managing Storage I/O Resources section* in the vSphere 5.1 Resource Management Guide or vSphere 5.0 Resource Management Guide.

- No third-party scripts or utilities running on the ESXi host can access the LUN that has issue. If the LUN is being used as a datastore, unregister all objects (such as virtual machines and templates) stored on the datastore.

- If the LUN is being used as an RDM, remove the RDM from the virtual machine. Click **Edit Settings**, highlight the RDM hard disk, and click **Remove**. Select **Delete from disk** if it is not selected and click **OK**.

  Note: This destroys the mapping file but not the LUN content.

- Check if the LUN/datastore is used as the persistent scratch location for the host. For more information on persistent scratch, see Creating a persistent scratch location for ESXi 4.x and 5.x (1033696).

  This PowerCLI script can be used to check the current scratch location:

```
$vcServer = "vCenter01"
$cluster = "CL01"
$esxCred = Get-Credential
Connect-VIServer $vcServer | Out-Null
#Connect to ESX hosts in cluster
foreach ($esx in Get-Cluster $cluster | Get-VMHost) {
Connect-VIServer $esx -Credential $esxCred | Out-Null
Get-VMHostAdvancedConfiguration -Name "ScratchConfig.ConfiguredScratchLocation"
}
```

Note: When using the vSphere Web Client with vSphere 5.x, and 6.x, only these checks are performed during the datastore unmount operation:

- Host should not have any virtual machines residing on this datastore
- Host should not use the datastore for HA heartbeats

Obtaining the NAA ID of the LUN to be removed

From the vSphere Client, this information is visible in the Properties window of the datastore.

From the ESXi host, run this command:

```
# esxcli storage vmfs extent list
```

You see output similar to:

```
Volume Name VMFS UUID Extent Number Device Name Partition
----------- ------------------------------------ ------------- ------------------------
--------- ---------
datastore1 4de4cb24-4cff750f-85f5-0019b9f1ecf6 0 naa.6001c230d8abfe000ff76c198ddbc13e 3
Storage2 4c5fbff6-f4069088-af4f-0019b9f1ecf4 0 naa.6001c230d8abfe000ff76c2e7384fc9a 1
Storage4 4c5fc023-ea0d4203-8517-0019b9f1ecf4 0 naa.6001c230d8abfe000ff76c51486715db 1
LUN01 4e414917-a8d75514-6bae-0019b9f1ecf4 0 naa.60a98000572d54724a34655733506751 1
```

Make a note of the NAA ID of the datastore to use this information later in this procedure.

Note: Alternatively, you can run the `esxcli storage filesystem list` command, which lists all file systems recognized by the ESXi host.

Unmounting a LUN using the vSphere Client

To detach a storage device using the vSphere Client, see the *Detach Storage Devices* section in the vSphere 5.0 Storage Guide.

Caution: You must successfully unmount the datastore using the documented method prior to completing the steps described below. For more information, see the *Unmount VMFS or NFS Datastores* section in the vSphere 5.0 Storage Guide.

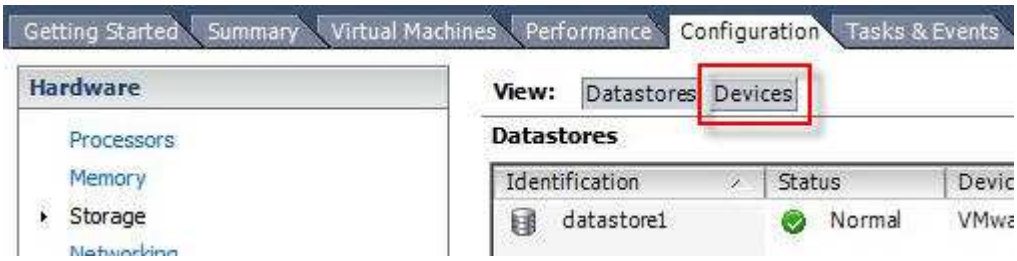
To unmount a LUN from an ESXi 5.0 host using the vSphere Client:

1. If the LUN is an RDM, skip to step 2. Otherwise, in the Configuration tab of the ESXi host, click **Storage**. Right-click the datastore being removed and click **Unmount**.

   A Confirm Datastore Unmount window appears. When the prerequisite criteria have been passed, click **OK**.

   Note: To unmount a datastore from multiple hosts in the vSphere Client, click **Hosts and Clusters** > **Datastores and Datastore Clusters** view (**Ctrl**+**Shift**+**D**). Perform the unmount task and select the appropriate hosts that should no longer access the datastore to be unmounted.

2. Click the **Devices** view (under **Configuration** > **Storage**):



3. Right-click the NAA ID of the LUN (as noted above) and click **Detach**. A Confirm Device Unmount window is displayed. When the prerequisite criteria are passed, click **OK**. Under the Operational State of the Device, the LUN is listed as Unmounted.

   Note: The Detach function must be performed on a per-host basis and does not propagate to other hosts in vCenter Server. If a LUN is presented to an initiator group or storage group on the SAN, the Detach function must be performed on every host in that initiator group before unmapping the LUN from the group on the SAN. Failing to follow this step results in an all-paths-down (APD) state for those hosts in the storage group on which Detach was not performed for the LUN being unmapped.

4. Confirm if the LUN is successfully detached. The LUN can then be safely unpresented from the SAN. For more information, contact your storage array vendor.
5. Perform a rescan on all ESXi hosts which had visibility to the LUN. The device is automatically removed from the Storage Adapters.

When the device is detached, it stays in an unmounted state even if the device is re-presented (that is, the detached state is persistent). To bring the device back online, the device must be attached.

If you want the device to permanently decommission from an ESXi host, manually remove the NAA entries from the host configuration:

1. To list the permanently detached devices, run this command:

   ```
   # esxcli storage core device detached list
   ```

   You see output similar to:

   ```
   Device UID State
   ------------------------------------ -----
   naa.50060160c46036df50060160c46036df off
   naa.6006016094602800c8e3e1c5d3c8e011 off
   ```

2. To permanently remove the device configuration information from the system, run this command:

   ```
   # esxcli storage core device detached remove -d NAA_ID
   ```

   For example:

   ```
   # esxcli storage core device detached remove -d
   naa.50060160c46036df50060160c46036df
   ```

Unmounting a LUN using the command line

To unmount a LUN from an ESXi 5.x/6.x host using the command line:

1. If the LUN is an RDM, skip to step 4. Otherwise, to obtain a list of all datastores mounted to an ESXi host, run this command:

   ```
   # esxcli storage filesystem list
   ```

   You see output, which lists all VMFS datastores, similar to:

   ```
   Mount Point Volume Name UUID Mounted Type Size Free
   ---------------------------------------------- ----------- --------------------
   ------------- ------- ------ ----------- -----------
   /vmfs/volumes/4de4cb24-4cff750f-85f5-0019b9f1ecf6 datastore1 4de4cb24-4cff750f-
   85f5-0019b9f1ecf6 true VMFS-5 140660178944 94577360896
   /vmfs/volumes/4c5fbff6-f4069088-af4f-0019b9f1ecf4 Storage2 4c5fbff6-f4069088-af4f-
   0019b9f1ecf4 true VMFS-3 146028888064 7968129024
   /vmfs/volumes/4c5fc023-ea0d4203-8517-0019b9f1ecf4 Storage4 4c5fc023-ea0d4203-8517-
   0019b9f1ecf4 true VMFS-3 146028888064 121057050624
   /vmfs/volumes/4e414917-a8d75514-6bae-0019b9f1ecf4 LUN01 4e414917-a8d75514-6bae-
   0019b9f1ecf4 true VMFS-5 146028888064 4266131456
   ```

2. To find the unique identifier of the LUN housing the datastore to be removed, run this command:

   ```
   # esxcfg-scsidevs -m
   ```

   This command generates a list of VMFS datastore volumes and their related unique identifiers. Make a note of the unique identifier (*NAA_ID*) for the datastore you want to unmount as this will be used later on.

   For more information on the `esxcfg-scsidevs` command, see Identifying disks when working with VMware ESX/ESXi (1014953).

3. Unmount the datastore by running this command:

   ```
   # esxcli storage filesystem unmount [-u UUID | -l label | -p path ]
   ```

   For example, use one of these commands to unmount the `LUN01` datastore:

   ```
   # esxcli storage filesystem unmount -l LUN01
   # esxcli storage filesystem unmount -u 4e414917-a8d75514-6bae-0019b9f1ecf4
   # esxcli storage filesystem unmount -p /vmfs/volumes/4e414917-a8d75514-6bae-
   0019b9f1ecf4
   ```

   Note: If the VMFS filesystem you are attempting to unmount has active I/O or has not fulfilled the prerequisites to unmount the VMFS datastore, you see an error in the `VMkernel logs` similar to:

   ```
   WARNING: VC: 637: unmounting opened volume ('4e414917-a8d75514-6bae-0019b9f1ecf4'
   'LUN01') is not allowed.
   VC: 802: Unmount VMFS volume f530 28 2 4e414917a8d7551419006bae f4ecf19b 4 1 0 0 0
   0 0 : Busy
   ```

4. To verify that the datastore is unmounted, run this command:

   ```
   # esxcli storage filesystem list
   ```

   You see output similar to:

   ```
   Mount Point Volume Name UUID Mounted Type Size Free
   ---------------------------------------------- ----------- --------------------
   ------------- ------- ------ ----------- -----------
   /vmfs/volumes/4de4cb24-4cff750f-85f5-0019b9f1ecf6 datastore1 4de4cb24-4cff750f-
   85f5-0019b9f1ecf6 true VMFS-5 140660178944 94577360896
   ```

```
/vmfs/volumes/4c5fbff6-f4069088-af4f-0019b9f1ecf4 Storage2 4c5fbff6-f4069088-af4f-
0019b9f1ecf4 true VMFS-3 146028888064 7968129024
/vmfs/volumes/4c5fc023-ea0d4203-8517-0019b9f1ecf4 Storage4 4c5fc023-ea0d4203-8517-
0019b9f1ecf4 true VMFS-3 146028888064 121057050624
LUN01 4e414917-a8d75514-6bae-0019b9f1ecf4 false VMFS-unknown version 0 0
```

The `Mounted` field is set to `false`, the `Type` field is set to `VMFS-unknown version`, and that no `Mount Point` exists.

Note: The unmounted state of the VMFS datastore persists across reboots. This is the default behavior. If you need to unmount a datastore temporarily, you can do so by appending the `--no-persist` flag to the `unmount` command.

5. To detach the device/LUN, run this command:

```
# esxcli storage core device set --state=off -d NAA_ID
```

6. To verify that the device is offline, run this command:

```
# esxcli storage core device list -d NAA_ID
```

You see output, which shows that the **`Status`** of the disk is **`off`**, similar to:

```
naa.60a98000572d54724a34655733506751
Display Name: NETAPP Fibre Channel Disk (naa.60a98000572d54724a34655733506751)
Has Settable Display Name: true
Size: 1048593
Device Type: Direct-Access
Multipath Plugin: NMP
Devfs Path: /vmfs/devices/disks/naa.60a98000572d54724a34655733506751
Vendor: NETAPP
Model: LUN
Revision: 7330
SCSI Level: 4
Is Pseudo: false
Status: off
Is RDM Capable: true
Is Local: false
Is Removable: false
Is SSD: false
Is Offline: false
Is Perennially Reserved: false
Thin Provisioning Status: yes
Attached Filters:
VAAI Status: unknown
Other UIDs: vml.020000000060a98000572d54724a346557335067514c554e202020
```

Running the `partedUtil getptbl` command on the device shows that the device is not found.

For example:

```
# partedUtil getptbl /vmfs/devices/disks/naa.60a98000572d54724a34655733506751

Error: Could not stat device
/vmfs/devices/disks/naa.60a98000572d54724a34655733506751 - No such file or
directory.
Unable to get device /vmfs/devices/disks/naa.60a98000572d54724a34655733506751
```

7. If the device is to be permanently decommissioned, it is now possible to unpresent the LUN from the SAN. For more information, contact your storage team, storage administrator, or storage array vendor.
8. To rescan all devices on the ESXi host, run this command:

```
# esxcli storage core adapter rescan [ -A vmhba# | --all ]
```

The devices are automatically removed from the Storage Adapters.

Notes:

- A rescan must be run on all hosts that had visibility to the removed LUN.
- When the device is detached, it stays in an unmounted state even if the device is re-presented (that is, the detached state is persistent). To bring the device back online, the device must be attached. To do this via the command line, run this command:

  ```
  # esxcli storage core device set --state=on -d NAA_ID
  ```

9. If the device is to be permanently decommissioned from an ESXi host, (that is, the LUN has been or will be destroyed), remove the NAA entries from the host configuration by running these commands:

   a. To list the permanently detached devices:

   ```
   # esxcli storage core device detached list
   ```

   You see output similar to:

   ```
   Device UID State
   ---------------------------- -----
   naa.50060160c46036df50060160c46036df off
   naa.6006016094602800c8e3e1c5d3c8e011 off
   ```

   b. To permanently remove the device configuration information from the system:

   ```
   # esxcli storage core device detached remove -d NAA_ID
   ```

   For example:

   ```
   # esxcli storage core device detached remove -d
   naa.50060160c46036df50060160c46036df
   ```

   The reference to the device configuration is permanently removed from the ESXi host's configuration.

   Note: If the device is detached but still presented (step 7 was skipped), the preceding command fails to permanently remove the device from the system, and the device is automatically re-attached. You must complete step 7 for the device to be permanently removed.

Automating detaching datastores using PowerCLI and the vSphere SDK for Perl

It is possible to automate the process of detaching datastores from multiple hosts using PowerCLI scripts.

Using the PowerCLI

To detach a storage device using PowerCLI:

1. Review the VMware Contributed Sample Code disclaimer.
2. Download the PowerCLI script available at Automating Datastore/Storage Device Detachment in vSphere 5.

   Note: This PowerCLI script is provided as-is and is accordingly community supported. If you experience issues with this PowerCLI script, seek assistance from the VMware Communities forums.

3. Import the script using this command:

   ```
   Import-Module path_to_script
   ```

4. Ensure that you have already unmounted the target datastore. For more information, see the *Unmount VMFS or NFS Datastores* section in the vSphere 5.0 Storage Guide.
5. List all datastores and their attached hosts by running this command:

   ```
   Get-Datastore | Get-DatastoreMountInfo | Sort Datastore, VMHost | FT -AutoSize
   ```

   You see output similar to:

   ```
   Datastore VMHost Lun Mounted State
   --------- ------ --- ------- -----
   IX2ISCSI01 esx01.vmw.local naa.5000144f52145699 False Attached
   IX2ISCSI01 esx02.vmw.local naa.5000144f52145699 False Attached
   IX2ISCSI01 esx03.vmw.local naa.5000144f52145699 False Attached
   LocalDatastore esx01.vmw.local mpx.vmhba1:C0:T0:L0 True Attached
   LocalDatastore esx02.vmw.local mpx.vmhba1:C0:T0:L0 True Attached
   esx04-Internal-150GB esx04.vmw.local
   t10.ATA_____GB0160EAPRR_____________________________WCAT25563003________ True
   Attached
   esx04-Internal-500GB esx04.vmw.local
   t10.ATA_____WDC_WD5000AAKS2D00V1A0_____________________WD2DWMAWF0069467 True
   Attached
   esx03-Internal-150GB esx03.vmw.local
   t10.ATA_____GB0160EAPRR_____________________________WCAT25704089________ True
   Attached
   esx03-Internal-500GB esx03.vmw.local
   t10.ATA_____WDC_WD5000AAKS2D00YGA0_____________________WD2DWCAS85034601 True
   Attached
   ```

6. Select the appropriate datastore and record the name beneath the `Datastore` column, and confirm that the `Mounted` column contains the value `False` for all hosts.
7. Detach the devices from all hosts by running this command:

   ```
   Get-Datastore datastore_name| Detach-Datastore
   ```

   Where *`datastore_name`* is the name of the datastore recorded in step 3.

   You see output similar to:

   ```
   Detaching LUN naa.5000144f52145699 from host esx01.vmw.local...
   Detaching LUN naa.5000144f52145699 from host esx02.vmw.local...
   Detaching LUN naa.5000144f52145699 from host esx03.vmw.local...
   ```

Note: The powercli command `Get-Datastore` *`datastore_name`*`| Detach-Datastore` is detaching only the head extent (first extent) of the datastore which is made up of multiple extents. This step does not work for the datastore which has multiextents.

Using the vSphere SDK for Perl

To detach a storage device using Perl:

1. Review the VMware Contributed Sample Code disclaimer.
2. Deploy the community-supported Perl script available in the VMware vSphere Blog, Automating Datastore/Storage Device Detachment in vSphere 5.

   Caution: Before proceeding, ensure that you have already unmounted the target datastore. For more information, see the *Unmount VMFS or NFS Datastores* section in the vSphere 5.0 Storage Guide.

3. List all datastores and their attached hosts by running this command:

   ```
   ./lunManagement.pl --server vcenter_ip --username user --operation list
   ```

Where *vcenter_ip* is the IP address of the vCenter Server managing your hosts and *user* is a user with administrative privileges.

4. You are prompted for a password for the user account used in step 3. If the correct password is entered, the script generates output similar to:

```
Datastore: esx01-local-storage-1 LUN: mpx.vmhba1:C0:T0:L0
esx01.vmw.local MOUNTED ATTACHED
Datastore: esx02-local-storage-1 LUN: mpx.vmhba1:C0:T0:L0
esx02.vmw.local MOUNTED ATTACHED
Datastore: iSCSI-1 LUN: naa.600144f0a33bc20000004e9772510001
esx01.vmw.local UNMOUNTED ATTACHED
esx02.vmw.local UNMOUNTED ATTACHED
Datastore: iSCSI-2 LUN: naa.600144f0a33bc20000004e9772ee0002
esx01.vmw.local MOUNTED ATTACHED
esx02.vmw.local MOUNTED ATTACHED
Datastore: iSCSI-3 LUN: naa.600144f0a33bc20000004e9773560003
esx01.vmw.local MOUNTED ATTACHED
esx02.vmw.local MOUNTED ATTACHED
Datastore: iSCSI-4 LUN: naa.600144f0a33bc20000004e9773560004
esx01.vmw.local MOUNTED ATTACHED
esx02.vmw.local MOUNTED ATTACHED
Datastore: iSCSI-5 LUN: naa.600144f0a33bc20000004e9773570005
esx01.vmw.local MOUNTED ATTACHED
esx02.vmw.local MOUNTED ATTACHED
```

5. Confirm that the datastore that you want to detach is unmounted by checking the `UNMOUNTED` keyword beneath the applicable datastore name and NAA value.
6. Detach the device across multiple hosts by running this command:

```
./lunManagement.pl --server vcenter_ip --username user --operation detach --
datastore datastore
```

Where *vcenter_ip* is the IP address for vCenter Server, *user* is a user with administrative privileges, and *datastore* is the name of the datastore identified in step 4.

7. You are prompted for a password and confirmation that you want to do the operation. After providing the correct password and acknowledging the warning, the tool generates output similar to:

```
Detaching LUN "02000000000600144f0a33bc20000004e9772510001434f4d535441" from Host
"esx01.vmw.local" ...
Successfully detached LUN!
Detaching LUN "02000000000600144f0a33bc20000004e9772510001434f4d535441" from Host
"esx02.vmw.local" ...
Successfully detached LUN!
```

Note: After detaching the LUN, it can be unpresented from the storage. However, if you run the `esxcli storage core device detached remove -d NAA_ID` command to permanently decommission the LUN from the ESXI host before unpresenting the LUN from the storage, the LUN gets reattached to the host and must be detached again.

TSE Note: While following this you will still experience vCenter storage connectivity alarms. It would be advantageous to disable the alarm when carrying out these tasks.

How to Remove an Inactive NFS Datastore on VMWare ESXi Host

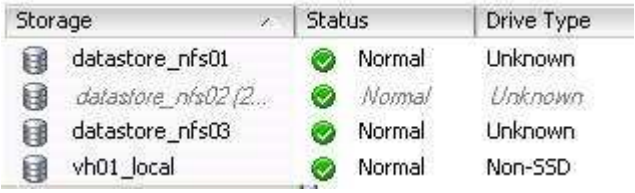
http://woshub.com/how-to-remove-an-inactive-nfs-datastore-on-vmware-esxi-host/

Several times I have come across the situation when the NFS datastore on the VMWare ESXi host becomes unavailable / inactive and greyed out in the host's storage list. However, the NFS storage stays available on the network level. Usually, it can be solved by removing the NFS storage and then adding it back.

However, it happens that when trying to remove such inactive NFS storage from the ESXi host configuration, it returns an error:

The resource datastore_nfs02 is in use.

```
Call «HostDatastoreSystem.RemoveDatastore» form object «datastoreSystem-28" on vCenter
Server «xxxx» failed.
CannotRemove datastore 'datastore_name' because Storage I/O control is enabled on it.
Correct it and re-try the operation
```



Based upon the error, the NFS storage cannot be removed due to the Storage I/O control (SIOC) is enabled. If you disable it, another error appears:

Datastore is not accessible

Solution

To properly remove the NFS storage from the VMWare ESXi host, you must directly connect the ESXi host server via SSH (you can enable SSH from vSphere Client).

Display the list of the NFS storages in the system:

```
esxcli storage nfs list
```

```
# esxcli storage nfs list
Volume Name             Host          Share                 Accessible  Mounted
Read-Only  Hardware Acceleration
----------------------  ------------  --------------------  ----------  -------
---------  ----------------------
datastore_nfs01         10.10.10.111  /vol/datastore_nfs          true     true
    false  Not Supported
datastore_nfs02 (2040)  10.10.10.111  /vol/datastore_nfs02       false     true
    false  Unknown
datastore_nfs03         10.10.10.112  /vol/datastore_nfs03        true     true
    false  Not Supported
```

A similar command in ESXi 4.x looks like this:

```
esxcfg-nas -l
```

To unmount the NFS storage:

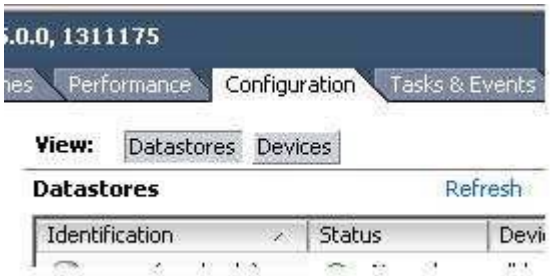
```
esxcli storage nfs remove -v datastore_nfs02
```

In ESXi 4.x command is as follows:

```
esxcfg-nas -d datastore_nfs02
```

Note. If the name of the NFS storage contains spaces, it has to be enclosed in quotes.

If the NFS datastore isn't removed from the vSphere Client, click the Refresh button in the ESXi storage section (Configuration -> Storage).



Note. This has to be done on every ESXi host, where you need to remove the inactive storage.