



# **Move NAS data LIFs owned by node1 from node2 to node3 and verify SAN LIFs on node3**

## **AFF and FAS Controller Upgrade**

NetApp  
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# Move NAS data LIFs owned by node1 from node2 to node3 and verify SAN LIFs on node3

After you verify the node3 installation and before you relocate aggregates from node2 to node3, you need to move the NAS data LIFs belonging to node1 that are currently on node2 from node2 to node3. You also need to verify the SAN LIFs on node3.

## About this task

Remote LIFs handle traffic to SAN LUNs during the upgrade procedure. Moving SAN LIFs is not necessary for cluster or service health during the upgrade. SAN LIFs are not moved unless they need to be mapped to new ports. You will verify that the LIFs are healthy and located on appropriate ports after you bring node3 online.

## Steps

1. List all the NAS data LIFs not owned by node2 by entering the following command on either node and capturing the output:

```
network interface show -role data -curr-node <node2> -is-home false -home-node <node3>
```

2. Take one of the following actions:

| If node1...                                       | Then...  |
|---|--|
| Had interface groups or VLANs configured          | Go to <a href="#">Step 3</a> .                 |
| Did not have interface groups or VLANs configured | Skip Step 3 and go to <a href="#">Step 4</a> . |

3. Perform the following substeps to migrate any NAS data LIFs hosted on interface groups and VLANs that were originally on node1 from node2 to node3:

- a. Migrate any data LIFs hosted on node2 that previously belonged to node1 on an interface group to a port on node3 that is capable of hosting LIFs on the same network by entering the following command, once for each LIF:

```
network interface migrate -vserver <vserver_name> -lif <LIF_name>  
-destination-node <node3> -destination-port <netport|ifgrp>
```

- b. Modify the home port and home node of the LIF in [Substep a](#) to the port and node currently hosting the LIFs by entering the following command, once for each LIF:

```
network interface modify -vserver <vserver_name> -lif <LIF_name> -home-node <node3> -home-port <netport|ifgrp>
```

- c. Migrate any data LIF hosted on node2 that previously belonged to node1 on a VLAN port to a port on node3 that is capable of hosting LIFs on the same network by entering the following command, once for each LIF:

```
network interface migrate -vserver <vserver_name> -lif <LIF_name>  
-destination-node <node3> -destination-port <netport|ifgrp>
```

- d. Modify the home port and home node of the LIFs in [Substep c](#) to the port and node currently hosting the LIFs by entering the following command, once for each LIF:

```
network interface modify -vserver <vserver_name> -lif <LIF_name> -home-node <node3> -home-port <netport|ifgrp>
```

4. Take one of the following actions:

| If the cluster is configured for... | Then...   |
|-------------------------------------|---|
| NAS                                 | Complete <a href="#">Step 5</a> and <a href="#">Step 6</a> , skip Step 7, and complete <a href="#">Step 8</a> through <a href="#">Step 11</a> .   |
| SAN                                 | Disable all the SAN LIFs on the node to take them down for the upgrade:<br><br><pre>network interface modify -vserver &lt;vserver_name&gt; -lif &lt;LIF_name&gt; -home-node &lt;node_to_upgrade&gt; -home-port &lt;netport ifgrp&gt; -status-admin down</pre> |

5. If you have data ports that are not the same on your platforms, then add the ports to the broadcast domain:

```
network port broadcast-domain add-ports -ipspace <IPspace_name> -broadcast-domain mgmt -ports <node:port>
```

The following example adds port "e0a" on node "6280-1" and port "e0i" on node "8060-1" to broadcast domain "mgmt" in the IPspace "Default":

```
cluster::> network port broadcast-domain add-ports -ipspace Default -broadcast-domain mgmt -ports 6280-1:e0a, 8060-1:e0i
```

6. Migrate each NAS data LIF to node3 by entering the following command, once for each LIF:

```
network interface migrate -vserver <vserver_name> -lif <LIF_name> -destination -node <node3> -destination-port <netport|ifgrp>
```

7. Make sure that the data migration is persistent:

```
network interface modify -vserver <vserver_name> -lif <LIF_name> -home-port <netport|ifgrp> -home-node <node3>
```

8. Ensure that the SAN LIFs are on the correct ports on node3:

- a. Enter the following command and examine its output:

```
network interface show -data-protocol iscsi|fc -home-node <node3>
```

The system returns output similar to the following example:

```

cluster::> net int show -data-protocol iscsi|fc -home-node node3
      Logical      Status      Network      Current
Current Is
Vserver      Interface  Admin/Oper  Address/Mask  Node
Port      Home
-----
vs0
a0a      true      a0a      up/down      10.63.0.53/24      node3
e0c      true      data1     up/up        10.63.0.50/18      node3
e1a      true      rads1     up/up        10.63.0.51/18      node3
e1b      true      rads2     up/down      10.63.0.52/24      node3
vs1
e0c      true      lif1      up/up        172.17.176.120/24  node3
e1a      true      lif2      up/up        172.17.176.121/24  node3

```

b. If node3 has any SAN LIFs or groups of SAN LIFs that are on a port that did not exist on node1 or that need to be mapped to a different port, move them to an appropriate port on node3 by completing the following substeps:

i. Set the LIF status to "down":

```

network interface modify -vserver <vserver_name> -lif <LIF_name> -status
-admin down

```

ii. Remove the LIF from the port set:

```

portset remove -vserver <vserver_name> -portset <portset_name> -port-name
<port_name>

```

iii. Enter one of the following commands:

- Move a single LIF:

```

network interface modify -vserver <vserver_name> -lif <LIF_name> -home
-port <new_home_port>

```

- Move all the LIFs on a single nonexistent or incorrect port to a new port:

```

network interface modify {-home-port <port_on_node1> -home-node
<node1> -role data} -home-port <new_home_port_on_node3>

```

- Add the LIFs back to the port set:

```
portset add -vserver <vserver_name> -portset <portset_name> -port-name  
<port_name>
```



You need to ensure that you move SAN LIFs to a port that has the same link speed as the original port.

9. Modify the status of all LIFs to "up" so the LIFs can accept and send traffic on the node:

```
network interface modify -home-port <port_name> -home-node <node3> -lif data  
-status-admin up
```

10. Enter the following command on either node and examine its output to verify that LIFs have been moved to the correct ports and that the LIFs have the status of "up" by entering the following command on either node and examining the output:

```
network interface show -home-node <node3> -role data
```

11. If any LIFs are down, set the administrative status of the LIFs to "up" by entering the following command, once for each LIF:

```
network interface modify -vserver <vserver_name> -lif <LIF_name> -status-admin  
up
```

12. Send a post-upgrade AutoSupport message to NetApp for node1:

```
system node autosupport invoke -node <node3> -type all -message "node1  
successfully upgraded from <platform_old> to <platform_new>"
```

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