Stage 4. Relocate and retire node

AFF and FAS Controller Upgrade

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Stage 4. Relocate and retire node

Stage 4. Relocate and retire node2

During Stage 4, all non-root aggregates are relocated from node2 to node3; the non-SAN data LIFs owned by node2 are moved to node3. You must record the necessary node2 information and then retire node2.

Steps

1. Relocate non-root aggregates and NAS data LIFs from node2 to node3
2. Retire node2

Relocate non-root aggregates and NAS data LIFs from node2 to node3

Before you can replace node2 with node4, you must relocate the non-root aggregates that are owned by node2 to node3.

Before you begin

After the post-checks from the previous stage complete, the resource release for node2 starts automatically. The non-root aggregates and non-SAN data LIFs are migrated from node2 to 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.

After the aggregates and LIFs are migrated, the operation is paused for verification purposes. At this stage, you must verify whether or not all the non-root aggregates and non-SAN data LIFs are migrated to node3.

> The home owner for the aggregates and LIFs are not modified; only the current owner is modified.

Steps

1. Verify that all the non-root aggregates are online and their state on node3:

   ```
   storage aggregate show -node <node3> -state online -root false
   ```

   The following example shows that the non-root aggregates on node2 are online:

```
cluster::> storage aggregate show -node node3 state online -root false

Aggregate      Size         Available   Used%   State   #Vols  Nodes
RAID     Status
----------     ---------    ---------   ------  -----   -----  ------
-------  ------
aggr_1         744.9GB      744.8GB      0%     online  5      node2
raid_dp  normal
aggr_2         825.0GB      825.0GB      0%     online  1      node2
raid_dp  normal
2 entries were displayed.
```

If the aggregates have gone offline or become foreign on node3, bring them online by using the following command on node3, once for each aggregate:

`storage aggregate online -aggregate <aggr_name>`

2. Verify that all the volumes are online on node3 by using the following command on node3 and examining the output:

   `volume show -node <node3> -state offline`

   If any volumes are offline on node3, bring them online by using the following command on node3, once for each volume:

   `volume online -vserver <vserver_name> -volume <volume_name>`

   The `<vserver_name>` to use with this command is found in the output of the previous `volume show` command.

3. Verify that the LIFs have been moved to the correct ports and have a status of `up`. 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> -home-node <node_name> - status-admin up`

4. If the ports currently hosting data LIFs will not exist on the new hardware, remove them from the broadcast domain:

   `network port broadcast-domain remove-ports`

5. Verify that there are no data LIFs remaining on node2 by entering the following command and examining the output:

   `network interface show -curr-node <node2> -role data`

6. If you have interface groups or VLANs configured, complete the following substeps:

   a. Record VLAN and interface group information so you can re-create the VLANs and interface groups on node3 after node3 is booted up.

b. Remove the VLANs from the interface groups:

```
network port vlan delete -node <nodename> -port <ifgrp> -vlan-id <VLAN_ID>
```

c. Check if there are any interface groups configured on the node by entering the following command and examining its output:

```
network port ifgrp show -node <node2> -ifgrp <ifgrp_name> -instance
```

The system displays interface group information for the node as shown in the following example:

```
cluster::> network port ifgrp show -node node2 -ifgrp a0a -instance
                  Node: node3
 Interface Group Name: a0a
Distribution Function: ip
        Create Policy: multimode_lacp
          MAC Address: 02:a0:98:17:dc:d4
   Port Participation: partial
        Network Ports: e2c, e2d
             Up Ports: e2c
           Down Ports: e2d
```

d. If any interface groups are configured on the node, record the names of those groups and the ports assigned to them, and then delete the ports by entering the following command, once for each port:

```
network port ifgrp remove-port -node <nodename> -ifgrp <ifgrp_name> -port
<netport>
```

Retire node2

To retire node2, you must shut node2 down correctly and remove it from the rack or chassis.

Steps

1. Resume the operation:

```
system controller replace resume
```

The node halts automatically.

After you finish

You can decommission node2 after the upgrade is completed. See Decommission the old system.

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