



Relocate non-root aggregates and NAS data LIFs owned by node 1 to node 2

AFF and FAS Controller Upgrade

NetApp
July 23, 2021

Table of Contents

Relocate non-root aggregates and NAS data LIFs owned by node 1 to node 2 1

Relocate non-root aggregates and NAS data LIFs owned by node 1 to node 2

Before you can replace node1 with node3, you must move the non-root aggregates and NAS data LIFs from node1 to node2 before eventually moving node1's resources to node3.

Before you begin

The operation should already be paused when you begin the task; you must manually resume the operation.

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. You must verify that the LIFs are healthy and located on appropriate ports after you bring node3 online.



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

Steps

1. Resume the aggregate relocation and NAS data LIF move operations:

```
system controller replace resume
```

All the non-root aggregates and NAS data LIFs are migrated from node1 to node2.

The operation pauses to allow you to verify whether all node1 non-root aggregates and non-SAN data LIFs have been migrated to node2.

2. Check the status of the aggregate relocation and NAS data LIF move operations:

```
system controller replace show-details
```

3. With the operation still paused, verify that all the non-root aggregates are online for their state on node2:

```
storage aggregate show -node <node2> -state online -root false
```

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

```
cluster::> storage aggregate show -node node2 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 node2, bring them online by using the following command on node2, once for each aggregate:

```
storage aggregate online -aggregate <aggr_name>
```

4. Verify that all the volumes are online on node2 by using the following command on node2 and examining its output:

```
volume show -node <node2> -state offline
```

If any volumes are offline on node2, bring them online by using the following command on node2, 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.

5. 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
```

6. 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 <nodename> -status-admin up
```

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

- a. If you have not already saved them, record the VLAN and interface group information so you can recreate 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>
```



Follow the corrective action to resolve any errors that are suggested by the `vlan delete` command.

- c. Enter the following command and examine its output to see if there are any interface groups configured on the node:

```
network port ifgrp show -node <nodename> -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 nodel -ifgrp a0a -instance
          Node: nodel
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>
```

Copyright Information

Copyright © 2021 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system-without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

Trademark Information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.