



# **Move, delete, or create SAN LIFS**

## **AFF and FAS Controller Upgrade**

NetApp  
January 14, 2022

# Table of Contents

- Move, delete, or create SAN LIFS ..... 1
- Move, delete, or create SAN LIFS ..... 1
- Considerations for moving SAN LIFS ..... 1
- Delete SAN LIFS no longer required from the original nodes ..... 1
- Create new SAN LIFS or re-create deleted SAN LIFS ..... 2

# Move, delete, or create SAN LIFS

## Move, delete, or create SAN LIFS

Depending on your cluster contents and cluster environment, you need to move, delete, or create SAN LIFS, or re-create deleted SAN LIFS.

- [Considerations for moving SAN LIFS](#)
- [Delete SAN LIFS no longer required from the original nodes](#)
- [Create new SAN LIFS or re-create deleted SAN LIFS](#)

## Considerations for moving SAN LIFS

You only need to move the SAN LIFS if you are changing the contents of your cluster, for example, by adding nodes to the cluster or deleting nodes from the cluster. When you move a LIF, you do not have to re-zone your FC fabric or create new iSCSI sessions between the attached hosts of your cluster and the new target interface.

You can move a SAN LIF by using the `network interface modify` command. To move a SAN LIF, you must take the LIF offline, move the LIF to a different home node or port, and then bring it back online in its new location. Asymmetric Logical Unit Access (ALUA) provides redundant paths and automatic path selection as part of any ONTAP SAN solution. Therefore, when the LIF is taken offline for the movement, there is no I/O interruption. The host simply retries and then moves I/O to another LIF.

During the LIF movements, you can nondisruptively perform the following tasks:

- Replace one HA pair of a cluster with an upgraded HA pair in a way that is transparent to the hosts accessing LUN data
- Upgrade a target interface card
- Shift the resources of a storage virtual machine (SVM) from one set of nodes in a cluster to another set of nodes in the same cluster
- When the host server is online, you can move a SAN LUN to a new HA pair without disrupting the host server access to the LUN data

For more information, see the [SAN LIF movement](#) procedure in the *SAN storage management* documentation.

## Delete SAN LIFS no longer required from the original nodes

If the cluster is in a SAN environment, you must delete any SAN LIFS that you no longer require from the original nodes before you can unjoin the original nodes from the cluster.

### Steps

1. If you have iSCSI initiators, complete the following steps:
  - a. Display a list of active initiators currently connected to an SVM on the original nodes, once for each of the old LIFS:

```
iscsi connection show -vserver <Vserver_name> -lif <old_lif>
```

The following example shows the output of the command with an active initiator connected to SVM vs1:

```
cluster::> iscsi connection show -vserver vs1 -lif data2
          Tpgroup          Conn  Local          Remote          TCP
Recv
Vserver  Name      TSIH  ID    Address          Address          Size
-----
-----
vs1      data      9     1    10.229.226.166  10.229.136.188
131400
```

- b. If any initiators are still logged in to an original node, log out of the sessions from your host computer.
2. Display the port set list to determine if any iSCSI or FC LIFs on the original nodes belong to a port set:

```
lun portset show
```

The following example shows output of the `lun portset show` command:

```
cluster:> lun portset show
Virtual
Server  Portset      Protocol  Port Names          Igroups
-----
js11    ps0          mixed    LIF1,
        LIF2              igroup1
        ps1          iscsi    LIF3              igroup2
        ps2          fcp      LIF4              -
3 entries were displayed.
```

3. If any iSCSIs or FC LIFs on an original node are members of a port set, remove them from the port set:

```
lun portset remove -vserver <vserver_name> -portset <portset_name> -port-name
<lif_name>
```

4. Delete the LIFs on the original nodes:

```
network interface delete -vserver <vserver_name> -lif <lif_name>
```

## Create new SAN LIFs or re-create deleted SAN LIFs

Depending on your cluster environment requirements, you might decide to create new SAN LIFs or re-create SAN LIFs that you deleted earlier in this procedure. You can create or re-create SAN LIFs by using the [network interfaces creation](#) procedure in the *Cluster Management Using OnCommand® System Manager* documentation.

## Copyright Information

Copyright © 2022 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.