



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

## **AFF and FAS Controller Upgrade**

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# 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 must 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	fc	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.

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