



# **FLI post-migration procedures**

## **ONTAP**

NetApp  
September 20, 2021

This PDF was generated from [https://docs.netapp.com/us-en/ontap-fli/san-migration/task\\_removing\\_source\\_luns\\_from\\_ontap\\_storage.html](https://docs.netapp.com/us-en/ontap-fli/san-migration/task_removing_source_luns_from_ontap_storage.html) on September 20, 2021. Always check docs.netapp.com for the latest.

# Table of Contents

- FLI post-migration procedures ..... 1
  - Removing source LUNs from ONTAP storage ..... 1
  - Removing source LUNs from hosts ..... 2
  - Removing source storage and host zone from the zoneset ..... 3
  - Creating post-migration Snapshot copies ..... 5
  - FLI migration cleanup and verify phase ..... 5
  - Migration report ..... 5
  - Unzoning source and destination array ..... 6
  - Removing the source array from ONTAP ..... 7
  - Removing destination array configuration ..... 8
  - Documenting the newly migrated environment ..... 9

# FLI post-migration procedures

This section provides examples of post-migration tasks for all FLI workflows. Post-migration tasks include removing source LUNs from your host and removing source storage and host zone from your zoneset.

All of the post-migration tasks listed use an *HDS AMS2100* array in the examples. Your tasks may be different if you are using a different array or a different version of the array GUI.

## Removing source LUNs from ONTAP storage

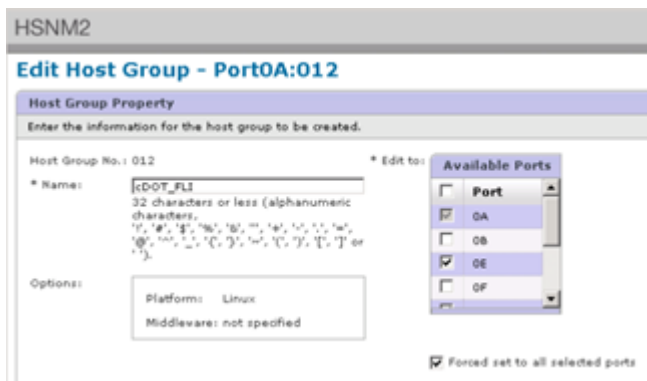
The following steps describe how to remove source LUNs from your ONTAP storage after migration is complete.

### Steps

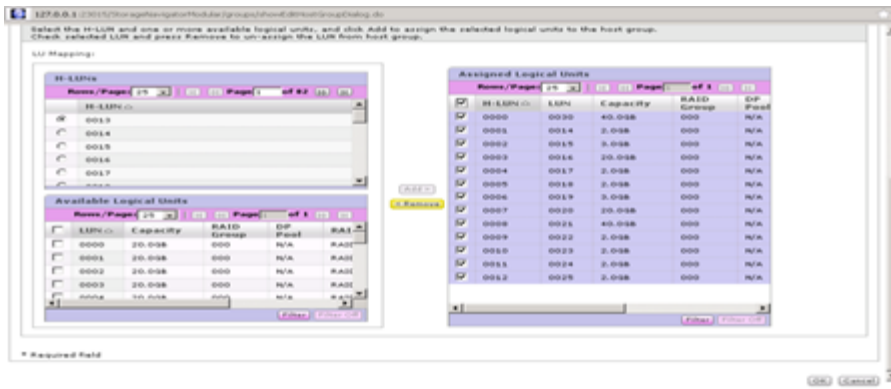
1. Log in to Hitachi Storage Navigator Modular.
2. Select the ONTAP host group created during the plan phase and select **Edit Host Group**.



3. Select the **Ports** and select **Forced set** to all selected ports.



4. Select the host LUNs that are migrated from Assigned Logical LUNs. Use LUN Names for each host mentioned in the Source LUNs worksheet. Here, select LUNs of Windows 2012, RHEL 5.10, and ESXi 5.5 hosts and select **Remove**.



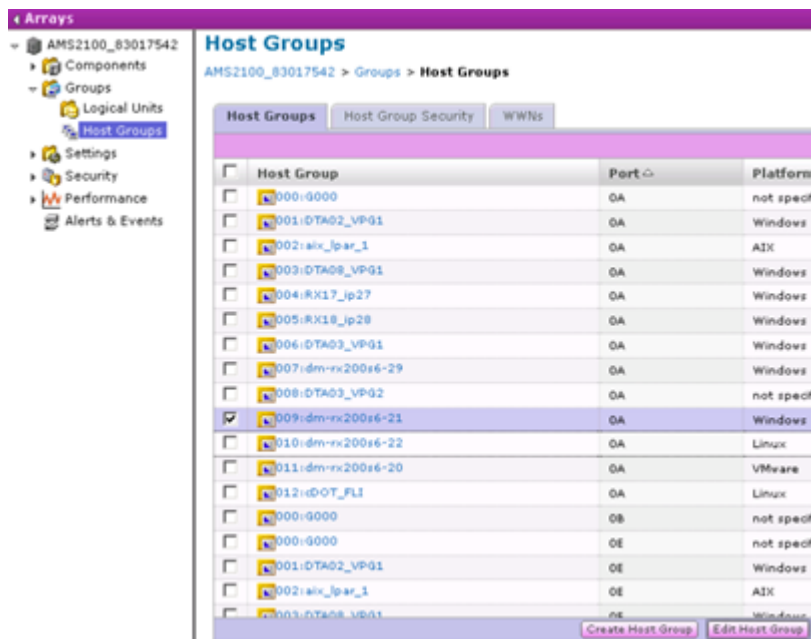
## Removing source LUNs from hosts

The following steps describe how to remove source LUNs from your host after FLI migration is complete.

To remove source LUNs from the host, complete the following steps:

### Steps

1. Log in to Hitachi Storage Navigator Modular.
2. Select the host that is migrated and select **Edit Host Group**.



3. Select the **Ports** and select **Forced set** to all selected ports.

## Edit Host Group - Port0A:009

Host Group Property

Enter the information for the host group to be created.

Host Group No.: 009 \* Edit to:

\* Name: Em-r20016-21  
32 characters or less (alphanumeric characters, !, @, #, \$, %, ^, &, \*, (, ), ~, `), ~, ` or ~)

Options:

Platform: Windows  
Middleware: not specified

Available Ports

Port  
 0A  
 0B  
 0E  
 0F

Forced set to all selected ports

4. Select the host LUNs that are migrated from Assigned Logical LUNs. Use LUN Names for each host mentioned in Source LUNs worksheet. Here, select LUNs of Windows 2012 host and select **Remove**.

Logical Units

Select the H-LUN and one or more available logical units, and click Add to assign the selected logical units to the host group. Check selected LUN and press Remove to un-assign the LUN from host group.

LU Mapping:

H-LUNs

H-LUN
0003
0004
0005
0006
0007

Assigned Logical Units

H-LUN	LUN	Capacity	RAID Group	DP Pool
0000	0030	40.0GB	000	N/A
0001	0014	2.0GB	000	N/A
0002	0015	3.0GB	000	N/A

Available Logical Units

Add > < Remove

5. Repeat the steps for Linux and VMware ESX hosts.

## Removing source storage and host zone from the zoneset

The following example procedures show how to remove the source storage and host zone from the zoneset after FLI migration is complete.



The zone name for the examples is `rx21_AMS2100`.

### Brocade fabric example

This procedure shows removing the source storage and host zone from a Brocade fabric zoneset.

#### Steps

1. Remove the zone from the zoneset in fabric A.

```
cfgDelete "PROD_LEFT", "rx21_AMS2100"  
cfgDelete "PROD_LEFT", "rx22_AMS2100"  
cfgDelete "PROD_LEFT", "rx20_AMS2100"
```

2. Activate the zoneset in fabric A.

```
cfgEnable "PROD_LEFT"  
cfgSave
```

3. Remove the zone from the zoneset in fabric B.

```
cfgDelete "PROD_RIGHT", "rx21_AMS2100"  
cfgDelete "PROD_RIGHT", "rx22_AMS2100"  
cfgDelete "PROD_RIGHT", "rx20_AMS2100"
```

4. Activate the zoneset in fabric B.

```
cfgEnable "PROD_RIGHT"  
cfgSave
```

## Cisco fabric example

This procedure shows removing the source storage and host zone from a Cisco fabric zoneset.

### Steps

1. Remove the zone from the zoneset in fabric A.

```
conf t  
zoneset name PROD_LEFT vsan 10  
no member rx21_AMS2100  
no member rx22_AMS2100  
no member rx20_AMS2100  
exit
```

2. Activate the zoneset in fabric A.

```
zoneset activate name PROD_LEFT vsan 10  
end  
copy running-config startup-config
```

3. Remove the zone from the zoneset in fabric B.

```
conf t
zoneset name PROD_RIGHT vsan 10
no member rx21_AMS2100
no member rx22_AMS2100
no member rx20_AMS2100
exit
```

#### 4. Activate the zoneset in fabric B.

```
zoneset activate name PROD_RIGHT vsan 10
end
copy running-config startup-config
```

## Creating post-migration Snapshot copies

You can create a post-migration Snapshot copy to facilitate a revert if needed later.

### Step

1. To create a post-migration Snapshot copy, run the `snap create` command.

```
DataMig-cmode::> snap create -vserver datamig -volume winvol -snapshot
post-migration

DataMig-cmode::> snap create -vserver datamig -volume linuxvol -snapshot
post-migration

DataMig-cmode::> snap create -vserver datamig -volume esxvol -snapshot
post-migration
```

## FLI migration cleanup and verify phase

In cleanup phase, you collect FLI migration logs, remove source storage configuration from NetApp storage, and remove the NetApp storage host group from source storage. Also, delete source to destination zones. Verification is the point where the accuracy of the migration plan execution is determined.

Review logs for errors, check paths, and perform any application testing to verify that your migration completed cleanly and successfully.

## Migration report

Import logs are stored in the cluster event log file. You should review the logs for errors to

verify that your migration was successful.

The migration report should appear as follows:

```
DataMig-cmode::*> rows 0; event log show -nodes * -event fli*
7/7/2014 18:37:21 DataMig-cmode-01 INFORMATIONAL
fli.lun.verify.complete: Import verify of foreign LUN 83017542001E of size
42949672960 bytes from array model DF600F belonging to vendor HITACHI
with NetApp LUN QvChd+EUXoiS is successfully completed.
~~~~~ Output truncated ~~~~~
```



The verification steps to compare the source and destination LUNs are covered in the execute migration phase. The importing and LUN verification steps are covered in the execute migration phase because they are linked to the import job and the foreign LUN.

## Unzoning source and destination array

After all migrations, transitions, and verifications are completed, you can unzone source and destination arrays.

To unzone source and destination arrays, remove the source storage to destination zone from both fabrics.

Brocade fabric example

### Steps

1. Remove the zone from the zoneset in fabric A.

```
cfgDelete "PROD_LEFT", "ZONE_AMS2100_cDOT_Initiator_fabA"
zoneDelete "ZONE_AMS2100_cDOT_Initiator_fabA"
```

2. Activate the zonesets in fabric A.

```
cfgEnable "PROD_LEFT"
cfgSave
```

3. Remove the zone from the zoneset in fabric B.

```
cfgDelete "PROD_RIGHT", "ZONE_AMS2100_cDOT_Initiator_fabB"
zoneDelete "ZONE_AMS2100_cDOT_Initiator_fabA"
```

4. Activate the zonesets in fabric B.



```
cfgEnable "PROD_RIGHT"  
cfgSave
```

Cisco fabric example

### Steps

1. Remove the zone from the zoneset in fabric A.

```
conf t  
zoneset name PROD_LEFT vsan 10  
no member ZONE_AMS2100_cDOT_Initiator_fabA  
no zone name ZONE_AMS2100_cDOT_Initiator_fabA vsan 10  
exit
```

2. Activate the zonesets in fabric A.

```
zoneset activate name PROD_LEFT vsan 10  
end  
copy running-config startup-config
```

3. Remove the zone from the zoneset in fabric B.

```
conf t  
zoneset name PROD_RIGHT vsan 10  
no member ZONE_AMS2100_cDOT_Initiator_fabB  
no zone name ZONE_AMS2100_cDOT_Initiator_fabB vsan 10  
exit
```

4. Activate the zonesets in fabric B.

```
zoneset activate name PROD_RIGHT vsan 10  
end  
Copy running-config startup-config
```

## Removing the source array from ONTAP

The following steps show how to remove the source array from the destination array after FLI migration is complete.

### Steps

1. Display all visible source arrays.

```
DataMig-cmode::> storage array show
Prefix Name Vendor Model Options
-----
HIT-1 HITACHI_DF600F_1 HITACHI DF600F
```

2. Remove the source storage array.

```
DataMig-cmode::> storage array remove -name HITACHI_DF600F_1
```

## Removing destination array configuration

The following steps show how to remove the destination array configuration from the source array after FLI migration is complete.

### Steps

1. Log in to Hitachi Storage Navigator Modular as system.
2. Select **AMS 2100** array and click **Show** and **Configure Array**.
3. Log in using root.
4. Expand Groups and select **Host Groups**.
5. Select **cDOT\_FLI** host group and click **Delete Host Group**.

The screenshot shows the 'Host Groups' configuration page in the Hitachi Storage Navigator Modular web interface. The page title is 'Host Groups' and the breadcrumb is 'AMS2100\_83017542 > Groups > Host Groups'. The table below lists various host groups with columns for Host Group, Port, Platform, and Middleware. The 'cDOT\_FLI' host group is selected and highlighted in blue.

Host Group	Port	Platform	Middleware
000-6000	SA	not specified	not specified
001-DTA02_VP91	SA	Windows	not specified
002-wlx_9w_1	SA	ADIX	not specified
003-DTA08_VP91	SA	Windows	not specified
004-RX17_p27	SA	Windows	not specified
005-RX18_p28	SA	Windows	not specified
006-DTA03_VP91	SA	Windows	not specified
007-dm-vx20016-29	SA	Windows	not specified
008-DTA03_VP92	SA	not specified	not specified
009-dm-vx20016-21	SA	Windows	not specified
010-dm-vx20016-22	SA	Linux	not specified
011-dm-vx20016-20	SA	VMware	not specified
012-cDOT_FLI	SA	Linux	not specified
000-6000	OE	not specified	not specified
000-6000	OE	not specified	not specified
001-DTA02_VP91	OE	Windows	not specified
002-wlx_9w_1	OE	ADIX	not specified
003-DTA08_VP91	OE	Windows	not specified

6. Confirm the host group deletion.



## Documenting the newly migrated environment

You will need to issue the `AutoSupport` command to document the customer environment.

To document the customer environment, complete the following steps:

### Steps

1. Issue an `AutoSupport` command to document the final configuration.

```
B9CModeCluster::*> autosupport invoke -node DataMig-cmode-01 -type all  
-message "migration-final"
```

2. Fully document the newly migrated environment.

## 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.