



Preparing cluster ports on an existing controller module

ONTAP MetroCluster

netapp-ivanad, ntap-bmegan
April 12, 2021

This PDF was generated from https://docs.netapp.com/us-en/ontap-metrocluster/upgrade/task_prepare_cluster_ports_on_the_exist_controller.html on April 28, 2021. Always check docs.netapp.com for the latest.

Table of Contents

Preparing cluster ports on an existing controller module 1

Preparing cluster ports on an existing controller module

Before installing a new controller module, you must configure cluster ports on the existing controller module so that the cluster ports can provide cluster communication with the new controller module.

If you are creating a two-node switchless cluster (with no cluster network switches), you must enable the switchless cluster networking mode.

For detailed information about port, LIF, and network configuration in ONTAP, see the [Network Management Guide](#).

Steps

1. Determine which ports should be used as the node's cluster ports.

For a list of the default port roles for your platform, see the [Hardware Universe](#)

The *Installation and Setup Instructions* for your platform on the NetApp Support Site contains information about the ports for cluster network connections.

2. For each cluster port, identify the port roles: **network port show**

In the following example, ports e0a, e0b, e0c, and e0d must be changed to cluster ports:

```
cluster_A::> network port show
```

```
Node: controller_A_1
```

```
Speed(Mbps) Health
```

| Port | IPspace | Broadcast Domain | Link | MTU | Admin/Oper | Status |
|------|---------|------------------|------|------|------------|---------|
| e0M | Default | mgmt_bd_1500 | up | 1500 | auto/1000 | healthy |
| e0a | Default | Default | up | 1500 | auto/10000 | healthy |
| e0b | Default | Default | up | 1500 | auto/10000 | healthy |
| e0c | Default | Default | up | 1500 | auto/10000 | healthy |
| e0d | Default | Default | up | 1500 | auto/10000 | healthy |
| e0i | Default | Default | down | 1500 | auto/10 | - |
| e0j | Default | Default | down | 1500 | auto/10 | - |
| e0k | Default | Default | down | 1500 | auto/10 | - |
| e0l | Default | Default | down | 1500 | auto/10 | - |
| e2a | Default | Default | up | 1500 | auto/10000 | healthy |
| e2b | Default | Default | up | 1500 | auto/10000 | healthy |
| e4a | Default | Default | up | 1500 | auto/10000 | healthy |
| e4b | Default | Default | up | 1500 | auto/10000 | healthy |

```
13 entries were displayed.
```

3. For any data LIF that is using a cluster port as the home-port or current-port, modify the LIF to use a data port as its home-port: **network interface modify**

The following example changes the home port of a data LIF to a data port:

```
cluster1::> network interface modify -lif datalif1 -vserver vs1 -home  
-port e1b
```

4. For each LIF that you modified, revert the LIF to its new home port: **network interface revert**

The following example reverts the LIF datalif1 to its new home port e1b:

```
cluster1::> network interface revert -lif datalif1 -vserver vs1
```

5. Remove any VLAN ports using cluster ports as member ports and ifgrps using cluster ports as member ports.

- a. Delete VLAN ports:

network port vlan delete -node node-name -vlan-name portid-vlandid

For example:

```
network port vlan delete -node node1 -vlan-name e1c-80
```

- b. Remove physical ports from the interface groups:

**network port ifgrp remove-port -node node-name -ifgrp interface-group-name
-port portid**

For example:

```
network port ifgrp remove-port -node node1 -ifgrp ala -port e0d
```

- c. Remove VLAN and interface group ports from broadcast domain::

***network port broadcast-domain remove-ports -ipspace ipspace -broadcast
-domain broadcast-domain-name -ports nodename:portname,nodename:portname,...**

- d. Modify interface group ports to use other physical ports as member as needed.:

***ifgrp add-port -node node-name -ifgrp interface-group-name -port port-id**

6. Verify that the port roles have changed: **network port show**

The following example shows that ports e0a, e0b, e0c, and e0d are now cluster ports:

Node: controller_A_1

Speed(Mbps) Health

| Port | IPspace | Broadcast Domain | Link | MTU | Admin/Oper | Status |
|------|---------|------------------|------|------|------------|---------|
| e0M | Default | mgmt_bd_1500 | up | 1500 | auto/1000 | healthy |
| e0a | Cluster | Cluster | up | 9000 | auto/10000 | healthy |
| e0b | Cluster | Cluster | up | 9000 | auto/10000 | healthy |
| e0c | Cluster | Cluster | up | 9000 | auto/10000 | healthy |
| e0d | Cluster | Cluster | up | 9000 | auto/10000 | healthy |
| e0i | Default | Default | down | 1500 | auto/10 - | |
| e0j | Default | Default | down | 1500 | auto/10 - | |
| e0k | Default | Default | down | 1500 | auto/10 - | |
| e0l | Default | Default | down | 1500 | auto/10 - | |
| e2a | Default | Default | up | 1500 | auto/10000 | healthy |
| e2b | Default | Default | up | 1500 | auto/10000 | healthy |
| e4a | Default | Default | up | 1500 | auto/10000 | healthy |
| e4b | Default | Default | up | 1500 | auto/10000 | healthy |

13 entries were displayed.

7. If your system is part of a switched cluster, create cluster LIFs on the cluster ports: **network interface create**

The following example creates a cluster LIF on one of the node's cluster ports. The **-auto** parameter configures the LIF to use a link-local IP address.

```
cluster1::> network interface create -vserver Cluster -lif clus1 -role
cluster -home-node node0 -home-port e1a -auto true
```

8. If you are creating a two-node switchless cluster, enable the switchless cluster networking mode:

- a. Change to the advanced privilege level from either node:

set -privilege advanced

You can respond **y** when prompted whether you want to continue into advanced mode. The advanced mode prompt appears (***>**).

- b. Enable the switchless cluster networking mode: **network options switchless-cluster modify -enabled true**

- c. Return to the admin privilege level: **set -privilege admin**



Cluster interface creation for the existing node in a two-node switchless cluster system is completed after cluster setup is completed through a netboot on the new controller module.

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.