



# **Install and cable the new controller module**

## **ONTAP MetroCluster**

NetApp  
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# Install and cable the new controller module

## Installing and cabling the new controller module

You must physically install the new controller module in the chassis, and then cable it.

### Steps

1. If you have an I/O expansion module (IOXM) in your system and are creating a single-chassis HA pair, you must uncable and remove the IOXM.

You can then use the empty bay for the new controller module. However, the new configuration will not have the extra I/O provided by the IOXM.

2. Physically install the new controller module and, if necessary, install additional fans:

If you are adding a controller module...	Then perform these steps...
To an empty bay to create a single-chassis HA pair and the system belongs to one of the following platforms:	<div>a. Remove the blank plate in the rear of the chassis that covers the empty bay that will contain the new controller module.</div> <div>b. Gently push the controller module halfway into the chassis.</div> <div>To prevent the controller module from automatically booting, do not fully seat it in the chassis until later in this procedure.</div>
<div>In a separate chassis from its HA partner to create a dual-chassis HA pair when the existing configuration is in a controller-IOX module configuration.</div> <div><ul style="list-style-type: none"><li>• FAS8200</li><li>• 80xx</li></ul></div>	Install the new system in the rack or system cabinet.

3. Cable the cluster network connections, as necessary:

- a. Identify the ports on the controller module for the cluster connections.

[AFF A320 systems: Installation and setup](#)

[AFF A220/FAS2700 Systems Installation and Setup Instructions](#)

[AFF A800 Systems Installation and Setup Instructions](#)

[AFF A300 Systems Installation and Setup Instructions](#)

[FAS8200 Systems Installation and Setup Instructions](#)

- b. If you are configuring a switched cluster, identify the ports that you will use on the cluster network switches.

See the *Clustered Data ONTAP Switch Setup Guide for Cisco Switches*, *NetApp 10G Cluster-Mode Switch Installation Guide* or *NetApp 1G Cluster-Mode Switch Installation Guide*, depending on what switches you are using.

c. Connect cables to the cluster ports:

If the cluster is...	Then...
A two-node switchless cluster	Directly connect the cluster ports on the existing controller module to the corresponding cluster ports on the new controller module.
A switched cluster	Connect the cluster ports on each controller to the ports on the cluster network switches identified in Substep b.

## Cabling the new controller module's FC-VI and HBA ports to the FC switches

The new controller module's FC-VI ports and HBAs (host bus adapters) must be cabled to the site FC switches.

### Steps

1. Cable the FC-VI ports and HBA ports, using the table for your configuration and switch model.
  - [Port assignments for FC switches when using ONTAP 9.1 and later](#)
  - [Port assignments for FC switches when using ONTAP 9.0](#)
  - [Port assignments for systems using two initiator ports](#)

## Cabling the new controller module's cluster peering connections

You must cable the new controller module to the cluster peering network so that it has connectivity with the cluster on the partner site.

### About this task

At least two ports on each controller module should be used for cluster peering.

The recommended minimum bandwidth for the ports and network connectivity is 1 GbE.

### Steps

1. Identify and cable at least two ports for cluster peering and verify they have network connectivity with the partner cluster.

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