



Booting the new controllers and joining them to the cluster

ONTAP MetroCluster

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To join the new controllers to the cluster, you must boot each new controller module and use the ONTAP cluster setup wizard to identify the cluster will join.

You must have cabled the MetroCluster configuration.

You must not have configured the Service Processor prior to performing this task.

This task must be performed on each of the new controllers at both clusters in the MetroCluster configuration.

Steps

1. If you have not already done so, power up each node and let them boot completely.

If the system is in Maintenance mode, issue the **halt** command to exit Maintenance mode, and then issue the following command from the LOADER prompt:

```
boot_ontap
```

The controller module enters the node setup wizard.

The output should be similar to the following:

```
Welcome to node setup
```

```
You can enter the following commands at any time:
```

```
"help" or "?" - if you want to have a question clarified,
```

```
"back" - if you want to change previously answered questions, and
```

```
"exit" or "quit" - if you want to quit the setup wizard.
```

```
Any changes you made before quitting will be saved.
```

```
To accept a default or omit a question, do not enter a value.
```

```
.  
.   
.
```

2. Enable the AutoSupport tool by following the directions provided by the system.
3. Respond to the prompts to configure the node management interface.

The prompts are similar to the following:

```
Enter the node management interface port: [e0M]:
```

```
Enter the node management interface IP address: 10.228.160.229
```

```
Enter the node management interface netmask: 225.225.252.0
```

```
Enter the node management interface default gateway: 10.228.160.1
```

4. Confirm that nodes are configured in high-availability mode:

```
storage failover show -fields mode
```

If not, you must issue the following command on each node, and then reboot the node:

```
storage failover modify -mode ha -node localhost
```

This command configures high availability mode but does not enable storage failover. Storage failover is automatically enabled when you issue the `metrocluster configure` command later in the configuration process.

5. Confirm that you have four ports configured as cluster interconnects:

```
network port show
```

The following example shows output for two controllers in cluster_A. If it is a two-node MetroCluster configuration, the output shows only one node.

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

						Speed
(Mbps)						
Node	Port	IPspace	Broadcast Domain	Link	MTU	Admin/Oper
-----	-----	-----	-----	-----	-----	-----
node_A_1						
	**e0a	Cluster	Cluster	up	1500	
	auto/1000					
	e0b	Cluster	Cluster	up	1500	
	auto/1000**					
	e0c	Default	Default	up	1500	auto/1000
	e0d	Default	Default	up	1500	auto/1000
	e0e	Default	Default	up	1500	auto/1000
	e0f	Default	Default	up	1500	auto/1000
	e0g	Default	Default	up	1500	auto/1000
node_A_2						
	**e0a	Cluster	Cluster	up	1500	
	auto/1000					
	e0b	Cluster	Cluster	up	1500	
	auto/1000**					
	e0c	Default	Default	up	1500	auto/1000
	e0d	Default	Default	up	1500	auto/1000
	e0e	Default	Default	up	1500	auto/1000
	e0f	Default	Default	up	1500	auto/1000
	e0g	Default	Default	up	1500	auto/1000
14 entries were displayed.						

6. Because you are using the CLI to set up the cluster, exit the Node Setup wizard:

exit

7. Log in to the admin account by using the **admin** user name.
8. Start the Cluster Setup wizard, and then join the existing cluster: **cluster setup**

```
::> cluster setup
```

Welcome to the cluster setup wizard.

You can enter the following commands at any time:

"help" or "?" - if you want to have a question clarified,
"back" - if you want to change previously answered questions, and
"exit" or "quit" - if you want to quit the cluster setup wizard.
Any changes you made before quitting will be saved.

You can return to cluster setup at any time by typing "cluster setup".
To accept a default or omit a question, do not enter a value.

Do you want to create a new cluster or join an existing cluster?
{create, join}:`join`

9. After you complete the **Cluster Setup** wizard and it exits, verify that the cluster is active and the node is healthy:

cluster show

The following example shows a cluster in which the first node (cluster1-01) is healthy and eligible to participate:

```
cluster_A::> cluster show
Node           Health  Eligibility
-----
node_A_1       true    true
node_A_2       true    true
node_A_3       true    true
```

If it becomes necessary to change any of the settings you entered for the admin SVM or node SVM, you can access the **Cluster Setup** wizard by using the **cluster setup command**.

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