



# **MetroCluster® Upgrade and Expansion Guide**

## **ONTAP MetroCluster**

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# MetroCluster® Upgrade and Expansion Guide

## Choosing an upgrade or refresh method

The upgrade or refresh procedure you use depends on the platform model, scope of the upgrade, and type of MetroCluster configuration.

There are different types of upgrade and refresh procedures.

- Upgrade procedures apply only to the controller modules. The controllers are replaced with a new controller model.

The storage shelf models are not upgraded.

- In switchover and switchback procedures, the MetroCluster switchover operation is used to provide nondisruptive service to clients while the controller modules on the partner cluster are upgraded.
  - In an ARL-based controller upgrade procedure, the aggregate relocation operations are used to nondisruptively move data from the old configuration to the new, upgraded configuration.
- Refresh procedures apply to the controllers and the storage shelves.

In the refresh procedures, new controllers and shelves are added to the MetroCluster configuration, creating a second DR group, and then data is nondisruptively migrated to the new nodes.

The original controllers are then retired.

## Choosing a procedure that does not use aggregate relocation

Type of upgrade or refresh	MetroCluster type	First ONTAP version support	Procedure
<ul style="list-style-type: none"><li>• Scope: Platform (controller modules) only</li><li>• Method: Switchover/switchback</li></ul>	FC	9.8	<a href="#">Upgrading controllers in a MetroCluster FC configuration using switchover and switchback</a>
<ul style="list-style-type: none"><li>• Scope: Platform (controller modules) only</li><li>• Method: Switchover/switchback</li></ul>	IP	9.8	<a href="#">Upgrading controllers in a MetroCluster IP configuration using switchover and switchback (ONTAP 9.8 and later)</a>

<ul style="list-style-type: none"> <li>• Scope: Platform (controller modules) and storage shelves</li> <li>• Method: Expand the MetroCluster configuration and then remove the old nodes</li> </ul>	FC	9.6 and later	<a href="#">Refreshing a four-node MetroCluster FC configuration</a>
<ul style="list-style-type: none"> <li>• Scope: Platform (controller modules) and storage shelves</li> <li>• Method: Expand the MetroCluster configuration and then remove the old nodes</li> </ul>	IP	9.8	<a href="#">Refreshing a four-node MetroCluster IP configuration (ONTAP 9.8 and later)</a>

## Choosing a procedure using aggregate relocation

Aggregate relocation procedure	MetroCluster type	First ONTAP version support	Procedure
Using <code>system controller replace</code> commands	FC	9.8 and later	<a href="#">Using “system controller replace” Commands to Upgrade Controller Hardware Running ONTAP 9.8</a>
Using <code>system controller replace</code> commands	FC	9.5 through 9.7	<a href="#">Using “system controller replace” Commands to Upgrade Controller Hardware Running ONTAP 9.5 to ONTAP 9.7</a>
Using manual ARL commands	FC	9.8	<a href="#">Using Aggregate Relocation to Manually Upgrade Controller Hardware Running ONTAP 9.8 and Later</a>
Using manual ARL commands	FC	9.7 and earlier	<a href="#">Upgrading Controllers with Aggregate Relocation to Manually Upgrade Controller Hardware Running ONTAP 9.7 and Earlier</a>

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