



Refreshing a four-node MetroCluster IP configuration (ONTAP 9.8 and later)

ONTAP MetroCluster

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Refreshing a four-node MetroCluster IP configuration (ONTAP 9.8 and later)

Starting with ONTAP 9.8, you can upgrade the controllers and storage in a four-node MetroCluster IP configuration by expanding the configuration to become a temporary eight-node configuration and then removing the old disaster recovery (DR) group.

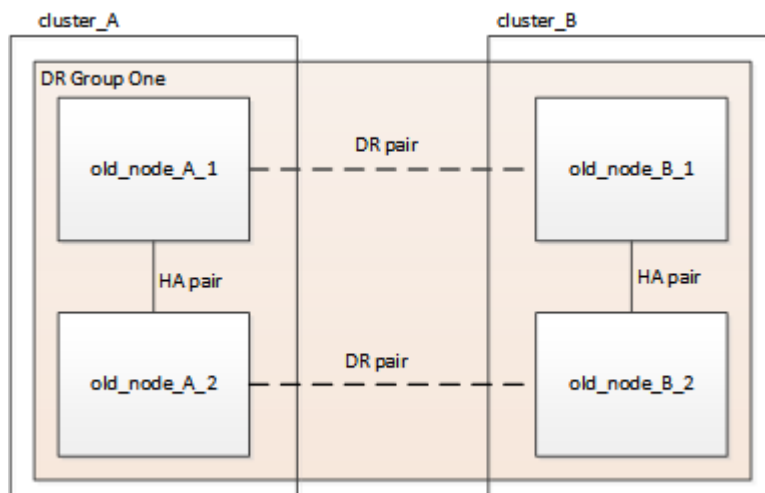
About this task

- This procedure is supported on systems running ONTAP 9.8 and later.
- If you are upgrading the IP switches, they should be upgraded before to performing this refresh procedure.
- References to "old nodes" mean the nodes that you intend to replace.
- This procedure is not supported on AFF A320 systems configured with Broadcom BES-53248 switches.

Steps

1. Gather information from the old nodes.

At this stage, the four-node configuration appears as shown in the following image:



2. To prevent automatic support case generation, send an Autosupport message to indicate the upgrade is underway.

- a. Issue the following command:

```
system node autosupport invoke -node * -type all -message "MAINT=10h  
Upgrading old-model to new-model"
```

The following example specifies a 10 hour maintenance window. You might want to allow additional time depending on your plan.

If the maintenance is completed before the time has elapsed, you can invoke an AutoSupport message indicating the end of the maintenance period:

```
system node autosupport invoke -node * -type all -message MAINT=end
```

- b. Repeat the command on the partner cluster.

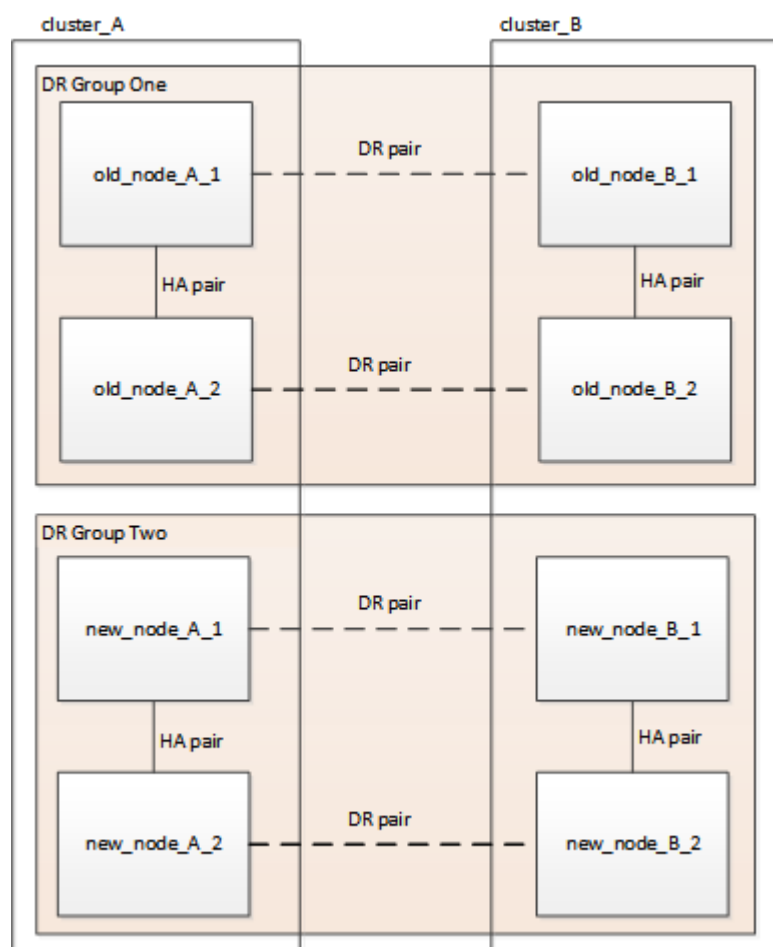
3. Remove the existing MetroCluster configuration from Tiebreaker, Mediator, or other software that can

initiate switchover.

If you are using...	Use this procedure...
Tiebreaker	Removing MetroCluster Configurations in the <i>MetroCluster Tiebreaker Installation and Configuration Guide</i>
Mediator	Issue the following command from the ONTAP prompt: <pre>metrocluster configuration-settings mediator remove</pre>
Third-party applications	Refer to the product documentation.

- Perform all of the steps in [Expanding a four-node MetroCluster IP configuration to an eight-node configuration](#) to add the new nodes and storage to the configuration.

When the expansion procedure is complete, the configuration appears as shown in the following image:



- Move the CRS volumes.

Perform the steps in [Moving a metadata volume in MetroCluster configurations](#).

6. Move the data from the old nodes to new nodes using the following procedures from the *Controller Hardware Upgrade Express Guide*.

Other platform procedures: [Controller Hardware Upgrade Express Guide](#)

- a. Perform all the steps in [Creating an aggregate and moving volumes to the new nodes](#).



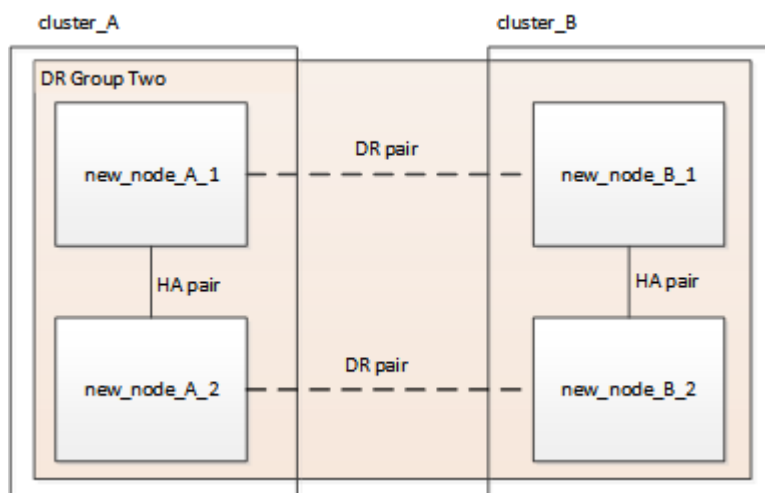
You might choose to mirror the aggregate when or after it is created.

- b. Perform all the steps in [Moving non-SAN data LIFs and cluster management LIFs to the new nodes](#).

7. Follow the steps in the procedure for removing the old DR group.

Removing a Disaster Recovery group

After you have removed the old DR group (DR group one), the configuration appears as shown in the following image:



8. Confirm the operational mode of the MetroCluster configuration and perform a MetroCluster check.
 - a. Confirm the MetroCluster configuration and that the operational mode is normal:

```
metrocluster show
```

- b. Confirm that all expected nodes are shown:

```
metrocluster node show
```

- c. Issue the following command:

```
metrocluster check run
```

- d. Display the results of the MetroCluster check:

```
metrocluster check show
```

9. Restore monitoring if necessary, using the procedure for your configuration.

If you are using...	Use this procedure
---------------------	--------------------

Tiebreaker	Adding MetroCluster configurations in the <i>MetroCluster Tiebreaker Installation and Configuration Guide</i>
Mediator	Configuring the ONTAP Mediator service from a MetroCluster IP configuration in the <i>MetroCluster IP Installation and Configuration Guide</i>
Third-party applications	Refer to the product documentation.

10. To resume automatic support case generation, send an Autosupport message to indicate that the maintenance is complete.

a. Issue the following command:

```
system node autosupport invoke -node * -type all -message MAINT=end
```

b. Repeat the command on the partner cluster.

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