



# **Configure the ONTAP Mediator service for unplanned automatic switchover**

## **ONTAP MetroCluster**

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# Configure the ONTAP Mediator service for unplanned automatic switchover

## Prepare to install the ONTAP Mediator service

Your environment must meet the following requirements.



- If you plan on updating your Linux version, do so before you install the most current ONTAP Mediator service.
- The ONTAP Mediator service and MetroCluster Tiebreaker software should not both be used with the same MetroCluster configuration.
- The ONTAP Mediator must be installed on a LINUX host at a separate location from the MetroCluster sites.
- The ONTAP Mediator service can support up to five MetroCluster configurations simultaneously.
- Automatic unplanned switchover is supported in ONTAP 9.7 and later.

## Network requirements for using Mediator in a MetroCluster configuration

To install the ONTAP Mediator service in a MetroCluster configuration, you must ensure that the configuration meets several network requirements.

- Round trip latency

Round trip latency must be no more than 25 ms.

- MTU

The MTU size must be at least 1400.

- Packet loss

Packet loss must be less than or equal to 0.01%.

- Bandwidth

The link between the Mediator service and the MetroCluster configuration must have at least 1 Gbps of bandwidth.

## Firewall requirements for ONTAP Mediator

ONTAP Mediator uses a number of ports to communicate with specific services.

If you are using a third-party firewall: \* HTTPS access must be enabled. \* It must be configured to allow access on ports 31784 and 3260.

+ When using the default Red Hat or CentOS firewall, the firewall is automatically configured during Mediator installation.

The following table lists the ports that you must allow in your firewall:

Port/services	Source	Destination	Purpose
31784/tcp	ONTAP cluster management interfaces	ONTAP Mediator web server	REST API (HTTPS)
3260/tcp	ONTAP cluster	ONTAP Mediator iSCSI targets	iSCSI data connection for mailboxes

## Guidelines for upgrading the ONTAP Mediator in a MetroCluster configuration

If you are upgrading the ONTAP Mediator you must meet the Linux version requirements and follow guidelines for the upgrade.

- The Mediator service can be upgraded from version from an immediately prior version to the current version.
- All Mediator versions are supported on MetroCluster IP configurations running ONTAP 9.7 or later.

[Install or upgrade the ONTAP Mediator service](#)

### After the upgrade

After the Mediator and operating system upgrade is complete, you should issue the `storage iscsi-initiator show` command to confirm that the Mediator connections are up.

## Configure the ONTAP Mediator service from a MetroCluster IP configuration

The ONTAP Mediator service must be configured on the ONTAP node for use in a MetroCluster IP configuration.

### Before you begin

- The ONTAP Mediator must have been successfully installed on a network location that can be reached by both MetroCluster sites.

[Install or upgrade the ONTAP Mediator service](#)

- You must have the IP address of the host running the ONTAP Mediator service.
- You must have the username and password for the ONTAP Mediator service.
- All nodes of the MetroCluster IP configuration must be online.

### About this task

- This task enables automatic unplanned switchover by default.
- This task can be performed on the ONTAP interface of any node in the MetroCluster IP configuration.
- A single installation of the ONTAP Mediator service can be configured with up to five MetroCluster IP configurations.

### Steps

1. Add the ONTAP Mediator service to ONTAP:

```
metrocluster configuration-settings mediator add -mediator-address ip-address-of-mediator-host
```



You will be prompted for the username and password for the Mediator admin user account.

2. Verify that the automatic switchover feature is enabled:

```
metrocluster show
```

3. Verify that the Mediator is now running.

a. Show the Mediator virtual disks:

```
storage disk show -container-type mediator
```

```
cluster_A::> storage disk show -container-type mediator
```

Container	Usable	Disk	Container
Disk	Size	Shelf Bay Type	Type Name
Owner			
NET-1.5	-	- - - VMDISK	mediator -
node_A_2			
NET-1.6	-	- - - VMDISK	mediator -
node_B_1			
NET-1.7	-	- - - VMDISK	mediator -
node_B_2			
NET-1.8	-	- - - VMDISK	mediator -
node_A_1			

b. Set the privilege mode to advanced:

```
set advanced
```

```
cluster_A::> set advanced
```

c. Display the initiators labelled as mediator:

```
storage iscsi-initiator show -label mediator
```

```

cluster_A::*> storage iscsi-initiator show -label mediator
(storage iscsi-initiator show)
+
Status
Node Type Label      Target Portal      Target Name
Admin/Op
-----
node_A_1
  mailbox
    mediator 1.1.1.1      iqn.2012-
05.local:mailbox.target.6616cd3f-9ef1-11e9-aada-
00a098ccf5d8:a05e1ffb-9ef1-11e9-8f68- 00a098cbca9e:1 up/up
node_A_2
  mailbox
    mediator 1.1.1.1      iqn.2012-
05.local:mailbox.target.6616cd3f-9ef1-11e9-aada-
00a098ccf5d8:a05e1ffb-9ef1-11e9-8f68-00a098cbca9e:1 up/up

```

## Connecting a MetroCluster configuration to a different ONTAP Mediator instance

If you want to connect the MetroCluster nodes to a different ONTAP Mediator instance, you must unconfigure and then reconfigure the Mediator connection in the ONTAP software.

### Before you begin

You need the username, password, and IP address of the new ONTAP Mediator instance.

### About this task

These commands can be issued from any node in the MetroCluster configuration.

### Steps

1. Remove the current ONTAP Mediator from the MetroCluster configuration:

```
metrocluster configuration-settings mediator remove
```

2. Establish the new ONTAP Mediator connection to the MetroCluster configuration:

```
metrocluster configuration-settings mediator add -mediator-address ip-address-of-mediator-host
```

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