



# **Which upgrade method should I use?**

**ONTAP 9**

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# Which upgrade method should I use?

The method you use to upgrade depends upon your configuration. If available, the automated nondisruptive upgrade (ANDU) using System Manager is the preferred method.

- **Nondisruptive upgrade:** In a nondisruptive upgrade, update procedures are performed in the background while maintaining service to clients. Nondisruptive upgrades can be performed using an automated or manual method.
  - **Automated nondisruptive upgrade (ANDU)** can be executed using System Manager or the ONTAP command line interface (CLI). If available for your configuration, ANDU using System Manager is the recommended method of upgrade. With ANDU, ONTAP automatically installs the target ONTAP image on each node, validates the cluster components to ensure that the cluster can be upgraded nondisruptively, and then executes the upgrade in the background.
  - **Manual nondisruptive upgrade** involves manual steps to confirm the ONTAP configuration on each node and then uses the rolling update method to perform the upgrade. In the rolling update method, a node is taken offline and upgraded while its partner takes over its storage. When the node upgrade is complete, the partner node gives control back to the original owning node and the process is repeated, this time on the partner node. Each additional HA pair is upgraded in sequence until all HA pairs are running the target release. Manual nondisruptive upgrades are executed using the ONTAP CLI.
- **Disruptive:** In a disruptive upgrade, storage failover is disabled for each HA pair, and then each node is rebooted one at a time. Disruptive upgrades can be performed more quickly than nondisruptive upgrades, and require fewer steps to complete. However, you should not perform a disruptive upgrade unless you can take the cluster offline for the duration of the upgrade. If you are operating in a SAN environment, you should be prepared to shut down or suspend all SAN clients before performing a disruptive upgrade. Disruptive upgrades are performed using the ONTAP CLI.

You should only use a manual method if ANDU is not supported for your configuration.

## Non-MCC configurations

The upgrade methods available for each configuration are listed in order of recommended usage.

ONTAP version	Number of nodes	Upgrade method
9.0 or later	2, 4, 8	<ul style="list-style-type: none"><li>• <a href="#">Automated nondisruptive using System Manager</a></li><li>• <a href="#">Automated nondisruptive using the CLI</a></li><li>• <a href="#">Manual nondisruptive using the CLI (the Rolling Method)</a></li><li>• <a href="#">Manual disruptive using the CLI</a></li></ul>

ONTAP version	Number of nodes	Upgrade method
9.0 or later	12	<ul style="list-style-type: none"> <li>• <a href="#">Automated nondisruptive using the CLI</a></li> <li>• <a href="#">Manual nondisruptive using the CLI (the Rolling Method)</a></li> <li>• <a href="#">Manual disruptive using the CLI</a></li> </ul>
9.2 or later	Single-node	<a href="#">Automated disruptive using the CLI</a>

## MCC configurations

The upgrade methods available for each configuration are listed in order of recommended usage.

ONTAP version	Number of nodes	Upgrade method
9.3 or later	2,4	<ul style="list-style-type: none"> <li>• <a href="#">Automated nondisruptive using System Manager</a></li> <li>• <a href="#">Automated nondisruptive using the CLI</a></li> <li>• <a href="#">Manual disruptive using the CLI</a></li> </ul>
9.3 or later	8	<ul style="list-style-type: none"> <li>• <a href="#">Automated nondisruptive using the CLI</a></li> <li>• <a href="#">Manual nondisruptive using the CLI</a></li> <li>• <a href="#">Manual disruptive using the CLI</a></li> </ul>
9.2 or earlier	2	<ul style="list-style-type: none"> <li>• <a href="#">Manual nondisruptive (for 2-node clusters) using the CLI</a></li> <li>• <a href="#">Manual disruptive using the CLI</a></li> </ul>
9.2 or earlier	4, 8	<ul style="list-style-type: none"> <li>• <a href="#">Manual nondisruptive using the CLI</a></li> <li>• <a href="#">Manual disruptive using the CLI</a></li> </ul>
9.0 or later	4, 8 (patch only)	<a href="#">Automated nondisruptive using System Manager</a>
9.2 or earlier	2, 4, 8 (patch only)	<a href="#">Automated nondisruptive using System Manager</a>

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