



# **Hot-adding a SAS disk shelf in a direct-attached MetroCluster FC configuration using SAS optical cables**

**ONTAP MetroCluster**

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# Hot-adding a SAS disk shelf in a direct-attached MetroCluster FC configuration using SAS optical cables

You can use SAS optical cables to hot-add a SAS disk shelf to an existing stack of SAS disk shelves in a direct-attached MetroCluster FC configuration, or as a new stack to a SAS HBA or an onboard SAS port on the controller.

- This procedure is nondisruptive and takes approximately two hours to complete.
- You need the admin password and access to an FTP or SCP server.
- If you are adding an IOM12 shelf to a stack of IOM6 shelves, see [Hot-adding IOM12 shelves to a stack of IOM6 shelves](#).

This task applies to a MetroCluster FC configuration in which the storage is connected directly to the storage controllers with SAS cables. It does not apply to MetroCluster FC configurations using FC-to-SAS bridges or FC switch fabrics.

## Steps

1. Follow the instructions for hot-adding a SAS disk shelf in the *Installation Guide* for your disk shelf model to perform the following tasks to hot-add a disk shelf:
  - a. Install a disk shelf for a hot-add.
  - b. Turn on the power supplies and set the shelf ID for a hot-add.
  - c. Cable the hot-added disk shelf.
  - d. Verify SAS connectivity.

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