Recabling and zoning a switch fabric for the new nodes

ONTAP MetroCluster

NetApp
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When adding nodes to the MetroCluster configuration, you must change the cabling and then run RCF files to redefine the zoning on the fabric.

About this task

This task must be performed on each switch fabric. It is done one fabric at a time.

Disconnecting the existing DR group from the fabric

You must disconnect the existing controller modules from the FC switches in the fabric.

About this task

This task must be performed at each MetroCluster site.

Steps

1. Disable the HBA ports that connect the existing controller modules to the switch fabric undergoing maintenance:

   `storage port disable -node` *`node-name`* `-port` *`port-number`*

2. On the local FC switches, remove the cables from the ports for the existing controller module's HBA, FC-VI, and ATTO bridges.

   You should label the cables for easy identification when you re-cable them. Only the ISL ports should remain cabled.

Applying the RCF files and recabling the switches

You must apply the RCF files to reconfigure your zoning to accommodate the new nodes.

Steps

1. Locate the RCF files for your configuration.

   You must use the RCF files for an eight-node configuration and that match your switch model.

2. Apply the RCF files, following the directions on the download page, adjusting the ISL settings as needed.
3. Ensure that the switch configuration is saved.
4. Reboot the FC switches.
5. Cable both the pre-existing and the new FC-to-SAS bridges to the FC switches, using the cabling layout you created previously.

   The FC switch port usage must match the MetroCluster eight-node usage described in the *Fabric-attached MetroCluster Installation and Configuration Guide* so that the Reference Configuration Files (RCFs) can be used.

   Fabric-attached MetroCluster installation and configuration

If your environment cannot be cabled in such a way that RCF files can be used then contact technical support. Do NOT use this procedure if the cabling cannot use RCF files.

6. Verify that the ports are online by using the correct command for your switch.

Switch vendor	Command
Brocade	switchshow
Cisco	show interface brief

7. Cable the FC-VI ports from the existing and new controllers, using the cabling layout you created previously.

   Fabric-attached MetroCluster installation and configuration

   The FC switch port usage must match the MetroCluster eight-node usage described in the *Fabric-attached MetroCluster Installation and Configuration Guide* so that the Reference Configuration Files (RCFs) can be used.

   If your environment cannot be cabled in such a way that RCF files can be used then contact technical support. Do NOT use this procedure if the cabling cannot use RCF files.

8. From the existing nodes, verify that the FC-VI ports are online:

   ```
   metrocluster interconnect adapter show

   metrocluster interconnect mirror show
   ```

9. Cable the HBA ports from the current and the new controllers.
10. On the existing controller modules, e-enable the ports connected to the switch fabric undergoing maintenance:

    ```
    storage port enable -node node-name -port port-ID
    ```

11. Start the new controllers and boot them into Maintenance mode:

    ```
    boot_ontap maint
    ```

12. Verify that only storage that will be used by the new DR group is visible to the new controller modules.

    None of the storage that is used by the other DR group should be visible.

13. Return to the beginning of this process to re-cable the second switch fabric.