Manage FC protocol

ONTAP 9

NetApp
September 28, 2022

Table of Contents

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Configure an SVM for FC

To configure a storage virtual machine (SVM) for FC, you must create LIFs for the SVM and assign the FC protocol to those LIFs.

Before you begin

You must have an FC license and it must be enabled. If the FC license is not enabled, the LIFs and SVMs appear to be online but the operational status is `down`. The FC service must be enabled for your LIFs and SVMs to be operational. You must use single initiator zoning for all of the FC LIFs in the SVM to host the initiators.

About this task

NetApp supports a minimum of one FC LIF per node for each SVM serving data with the FC protocol. You must use two LIFs per node and two fabrics, with one LIF per node attached. This provides for redundancy at the node layer and the fabric.

Example 1. Steps

System Manager

Configure an storage VM for iSCSI with ONTAP System Manager (9.7 and later).

To configure FC on a new storage VM	To configure FC on an existing storage VM
1. In System Manager, click **Storage > Storage VMs** and then click **Add**. 2. Enter a name for the storage VM. 3. Select **FC** for the **Access Protocol**. 4. Click **Enable FC**. + The FC ports are automatically assigned. 5. Click **Save**.	1. In System Manager, click **Storage > Storage VMs**. 2. Click on the storage VM you want to configure. 3. Click on the **Settings** tab, and then click ⚙ next to the FC protocol. 4. Click **Enable FC** and enter the IP address and subnet mask for the network interface. + The FC ports are automatically assigned. 5. Click **Save**.

CLI

1. Enable FC service on the SVM:

   ```
   vserver fcp create -vserver vserver_name -status-admin up
   ```

2. Create two LIFs for the SVMs on each node serving FC:

   ```
   network interface create -vserver vserver_name -lif lif_name -role data
   -data-protocol fcp -home-node node_name -home-port port
   ```

   The `-role` parameter should be `data` and the `data-protocol` parameter should be `fcp`.

3. Verify that your LIFs have been created and that their operational status is `online`:

   ```
   network interface show -vserver vserver_name lif_name
   ```

Related information

NetApp Support

NetApp Interoperability Matrix Tool

Considerations for LIFs in cluster SAN environments

Delete an FC service for an SVM

You can delete an FC service for a storage virtual machine (SVM) if it is no longer required.

What you'll need

The administration status must be "down" before you can delete a FC service for an SVM. You can set the administration status to down with either the `vserver fcp modify` command or the `vserver fcp stop`

command.

Steps

1. Use the `vserver fcp stop` command to stop the I/O to the LUN.

   ```
   vserver fcp stop -vserver vs_1
   ```

2. Use the `vserver fcp delete` command to remove the service from the SVM.

   ```
   vserver fcp delete -vserver vs_1
   ```

3. Use the `vserver fcp show` to verify that you deleted the FC service from your SVM:

   ```
   vserver fcp show -vserver vs_1
   ```

Recommended MTU configurations for FCoE jumbo frames

For Fibre Channel over Ethernet (FCoE), jumbo frames for the Ethernet adapter portion of the CNA should be configured at 9000 MTU. Jumbo frames for the FCoE adapter portion of the CNA should be configured at greater than 1500 MTU. Only configure jumbo frames if the initiator, target, and all intervening switches support and are configured for jumbo frames.