



# **vSphere VMFS Datastore - Fibre Channel over Ethernet storage protocol with ONTAP**

## **NetApp Solutions**

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# vSphere VMFS Datastore - Fibre Channel over Ethernet storage protocol with ONTAP

## About this task

This section covers the creation of a VMFS datastore with the Fibre Channel over Ethernet (FCoE) transport protocol to ONTAP storage.

For automated provisioning, use one of these scripts: [\[PowerShell\]](#), [\[Ansible\]](#), or [\[Terraform\]](#).

## What you need

- The basic skills necessary to manage a vSphere environment and ONTAP
- An ONTAP storage system (FAS/AFF/CVO/ONTAP Select) running ONTAP 9.8 or later
- ONTAP credentials (SVM name, userID, and password)
- [A supported FCoE combination](#)
- [A completed configuration worksheet](#)
- vCenter Server credentials
- vSphere host(s) information
  - vSphere 7.0 or later
- Fabric switch(es)
  - With either ONTAP FC data ports or vSphere hosts connected
  - With the N\_port ID virtualization (NPIV) feature enabled
  - Create a single initiator single target zone.
  - [FC/FCoE zoning configured](#)
- Network switch(es)
  - FCoE support
  - DCB support
  - [Jumbo frames for FCoE](#)
- ONTAP Tool for VMware vSphere deployed, configured, and ready to consume

## Provision a VMFS datastore

- Check compatibility with the [Interoperability Matrix Tool \(IMT\)](#).
- [Verify that the FCoE configuration is supported](#).

## ONTAP tasks

1. [Verify the ONTAP license for FCP](#).
  - a. Use the `system license show` command to verify that the FCP is listed.

- b. Use `license add -license-code <license code>` to add a license.
2. Verify that the FCP protocol is enabled on the SVM.
  - a. [Verify the FCP on an existing SVM.](#)
  - b. [Configure the FCP on an existing SVM.](#)
  - c. [Create a new SVM with the FCP.](#)
3. Verify that FCP logical interfaces are available on the SVM.
  - a. Use `Network Interface show` to verify the FCP adapter.
  - b. When the SVM is created with the GUI, logical interfaces are a part of that process.
  - c. To rename the network interface, use `Network Interface modify`.
4. [Create and map a LUN](#); skip this step if you are using ONTAP tools for VMware vSphere.

## VMware vSphere tasks

1. Verify that HBA drivers are installed. VMware-supported HBAs have drivers deployed out of the box and should be visible in the [storage adapter information](#).
2. [Provision a VMFS datastore with ONTAP Tools](#).

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