



# **NVMe storage**

## **ONTAP 9**

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# NVMe storage

## NVMe

### Provision NVMe storage

You can use the non-volatile memory express (NVMe) protocol to provide storage in a SAN environment. The NVMe protocol is optimized for performance with solid state storage.

For NVMe, storage targets are called namespaces. An NVMe namespace is a quantity of non-volatile storage that can be formatted into logical blocks and presented to a host as a standard block device. You create namespaces and subsystems, and then map the namespaces to the subsystems, similar to the way LUNs are provisioned and mapped to igroups for FC and iSCSI.

NVMe targets are connected to the network through a standard FC infrastructure using FC switches or a standard TCP infrastructure using Ethernet switches and host-side adapters.

The following NVMe protocols are supported:

Protocol	Starting with...	Allowed by...
TCP	ONTAP 9.10.1	Default
FCP	ONTAP 9.4	Default

#### Related information

- [Provision NVMe storage for SUSE Linux with System Manager](#)
- [Configure an SVM for NVMe with the CLI](#)

### Resizing a namespace

Starting with ONTAP 9.10.1, you can use the ONTAP CLI to increase or decrease the size of a NVMe namespace. You can use System Manager to increase the size of a NVMe namespace.

#### Increase the size of a namespace

	Do the following...
With System Manager	<ol style="list-style-type: none"><li>1. Click <b>Storage&gt;NVMe Namespaces</b>.</li><li>2. Hoover over the namespace you want to increase, click , and then click <b>Edit</b>.</li><li>3. Under <b>CAPACITY</b>, change the size of the namespace.</li></ol>

With the CLI

1. Enter the following command: `vserver nvme namespace modify -vserver SMV_name -path path - size new_size_of_namespace`

## Decrease the size of a namespace

You must use the ONTAP CLI to decrease the size of a NVMe namespace.

1. Change the privilege setting to advanced: `set - privilege advanced`
2. Decrease the size of the namespace: `vserver nvme namespace modify -vserver SMV_name -path namespace_path -size new_size_of_namespace`

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