



# **Manage NVMe protocol**

ONTAP 9

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# Manage NVMe protocol

## Manage NVMe

Beginning with ONTAP 9.4, NVMe/FC is supported. Beginning with ONTAP 9.5 a license is required to support NVMe. If NVMe is enabled in ONTAP 9.4, a 90 day grace period is given to acquire the license after upgrading to ONTAP 9.5.

You can enable the license using the following command:

```
system license add -license-code NVMe_license_key
```

## Start the NVMe service for an SVM

Before you can use the NVMe protocol on your storage virtual machine (SVM), you must start the NVMe service on the SVM.

### Before you begin

NVMe must be allowed as a protocol on your system.

The following NVMe protocols are supported:

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

### Steps

1. Change the privilege setting to advanced:

```
set -privilege advanced
```

2. Verify that NVMe is allowed as a protocol:

```
vserver nvme show
```

3. Create the NVMe protocol service:

```
vserver nvme create
```

4. Start the NVMe protocol service on the SVM:

```
vserver nvme modify -status -admin up
```

## Delete NVMe service from an SVM

If needed, you can delete the NVMe service from your storage virtual machine (SVM).

### Steps

1. Change the privilege setting to advanced:

```
set -privilege advanced
```

2. Stop the NVMe service on the SVM:

```
vserver nvme modify -status -admin down
```

3. Delete the NVMe service:

```
vserver nvme delete
```

## Resizing a namespace

Beginning 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

Using System Manager	Using the CLI
<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>	<ol style="list-style-type: none"><li>1. Enter the following command: <code>vserver nvme namespace modify -vserver <i>SVM_name</i> -path <i>path</i> -size <i>new_size_of_namespace</i></code></li></ol>

### 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 SVM_name -path namespace_path -size new_size_of_namespace
```

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