



# **Manage NVMe protocol**

ONTAP 9

NetApp

February 24, 2022

# Table of Contents

- Manage NVMe protocol ..... 1
  - Manage NVMe ..... 1
  - Start the NVMe service for an SVM ..... 1
  - Delete NVMe service from an SVM ..... 1
  - Resizing a namespace ..... 2

# 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
```

## Copyright Information

Copyright © 2022 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system- without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

## Trademark Information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.