



## Overview

### Cluster and storage switches

NetApp  
May 08, 2024

# Table of Contents

- Overview ..... 1
  - Overview of installation and configuration for Cisco Nexus 3132Q-V switches ..... 1
  - Configuration requirements for Cisco Nexus 3132Q-V switches ..... 1
  - Documentation requirements for Cisco Nexus 3132Q-V switches ..... 2
  - Smart Call Home requirements ..... 3

# Overview

## Overview of installation and configuration for Cisco Nexus 3132Q-V switches

Cisco Nexus 3132Q-V switches can be used as cluster switches in your AFF or FAS cluster. Cluster switches allow you to build ONTAP clusters with more than two nodes.

### Initial configuration overview

To initially configure a Cisco Nexus 3132Q-V switch on systems running ONTAP, follow these steps:

1. [Complete Cisco Nexus 3132Q-V cabling worksheet](#). The sample cabling worksheet provides examples of recommended port assignments from the switches to the controllers. The blank worksheet provides a template that you can use in setting up your cluster.
2. [Install a Cisco Nexus 3132Q-V cluster switch in a NetApp cabinet](#). Install the Cisco Nexus 3132Q-V switch and pass-through panel in a NetApp cabinet with the standard brackets that are included with the switch.
3. [Configure the Cisco Nexus 3132Q-V switch](#). Set up and configure the Cisco Nexus 3132Q-V switch.
4. [Prepare to install NX-OS software and Reference Configuration File](#). Prepare to install the NX-OS software and the Reference Configuration File (RCF).
5. [Install the NX-OS software](#). Follow this procedure to install the NX-OS software on the Nexus 3132Q-V cluster switch.
6. [Install the Reference Configuration File \(RCF\)](#). Follow this procedure to install the RCF after setting up the Nexus 3132Q-V switch for the first time. You can also use this procedure to upgrade your RCF version.

### Additional information

Before you begin installation or maintenance, be sure to review the following:

- [Configuration requirements](#)
- [Required documentation](#)
- [Smart Call Home requirements](#)

## Configuration requirements for Cisco Nexus 3132Q-V switches

For Cisco Nexus 3132Q-V switch installation and maintenance, be sure to review network and configuration requirements.

### Configuration requirements

To configure your cluster, you need the appropriate number and type of cables and cable connectors for your switches. Depending on the type of switch you are initially configuring, you need to connect to the switch console port with the included console cable; you also need to provide specific network information.

## Network requirements

You need the following network information for all switch configurations:

- IP subnet for management network traffic.
- Host names and IP addresses for each of the storage system controllers and all applicable switches.
- Most storage system controllers are managed through the e0M interface by connecting to the Ethernet service port (wrench icon). On AFF A800 and AFF A700 systems, the e0M interface uses a dedicated Ethernet port.

Refer to the [Hardware Universe](#) for latest information.

## Documentation requirements for Cisco Nexus 3132Q-V switches

For Cisco Nexus 3132Q-V switch installation and maintenance, be sure to review all the recommended documentation.

### Switch documentation

To set up the Cisco Nexus 3132Q-V switches, you need the following documentation from the [Cisco Nexus 3000 Series Switches Support](#) page.

Document title	Description
<i>Nexus 3000 Series Hardware Installation Guide</i>	Provides detailed information about site requirements, switch hardware details, and installation options.
<i>Cisco Nexus 3000 Series Switch Software Configuration Guides</i> (choose the guide for the NX-OS release installed on your switches)	Provides initial switch configuration information that you need before you can configure the switch for ONTAP operation.
<i>Cisco Nexus 3000 Series NX-OS Software Upgrade and Downgrade Guide</i> (choose the guide for the NX-OS release installed on your switches)	Provides information on how to downgrade the switch to ONTAP supported switch software, if necessary.
<i>Cisco Nexus 3000 Series NX-OS Command Reference Master Index</i>	Provides links to the various command references provided by Cisco.
<i>Cisco Nexus 3000 MIBs Reference</i>	Describes the Management Information Base (MIB) files for the Nexus 3000 switches.
<i>Nexus 3000 Series NX-OS System Message Reference</i>	Describes the system messages for Cisco Nexus 3000 series switches, those that are informational, and others that might help diagnose problems with links, internal hardware, or the system software.

Document title	Description
<i>Cisco Nexus 3000 Series NX-OS Release Notes (choose the notes for the NX-OS release installed on your switches)</i>	Describes the features, bugs, and limitations for the Cisco Nexus 3000 Series.
Regulatory, Compliance, and Safety Information for the Cisco Nexus 6000, Cisco Nexus 5000 Series, Cisco Nexus 3000 Series, and Cisco Nexus 2000 Series	Provides international agency compliance, safety, and statutory information for the Nexus 3000 series switches.

## ONTAP systems documentation

To set up an ONTAP system, you need the following documents for your version of the operating system from the [ONTAP 9 Documentation Center](#).

Name	Description
Controller-specific <i>Installation and Setup Instructions</i>	Describes how to install NetApp hardware.
ONTAP documentation	Provides detailed information about all aspects of the ONTAP releases.
<a href="#">Hardware Universe</a>	Provides NetApp hardware configuration and compatibility information.

## Rail kit and cabinet documentation

To install a 3132Q-V Cisco switch in a NetApp cabinet, see the following hardware documentation.

Name	Description
<a href="#">42U System Cabinet, Deep Guide</a>	Describes the FRUs associated with the 42U system cabinet, and provides maintenance and FRU replacement instructions.
<a href="#">Install Cisco Nexus 3132Q-V switch in a NetApp Cabinet</a>	Describes how to install a Cisco Nexus 3132Q-V switch in a four-post NetApp cabinet.

## Smart Call Home requirements

To use Smart Call Home feature, review the following guidelines.

Smart Call Home monitors the hardware and software components on your network. When a critical system configuration occurs, it generates an email-based notification and raises an alert to all the recipients that are configured in your destination profile. To use Smart Call Home, you must configure a cluster network switch to communicate using email with the Smart Call Home system. In addition, you can optionally set up your cluster network switch to take advantage of Cisco's embedded Smart Call Home support feature.

Before you can use Smart Call Home, be aware of the following considerations:

- An email server must be in place.
- The switch must have IP connectivity to the email server.
- The contact name (SNMP server contact), phone number, and street address information must be configured. This is required to determine the origin of messages received.
- A CCO ID must be associated with an appropriate Cisco SMARTnet Service contract for your company.
- Cisco SMARTnet Service must be in place for the device to be registered.

The [Cisco support site](#) contains information about the commands to configure Smart Call Home.

## Copyright information

Copyright © 2024 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.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## 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.