

User manual

## Table of Contents

About this document3Solution overview4
Get started
Access the product from a browser
Get to know your product's web page5
Get to know your product's built-in help
Access devices in your product's network
Topology view       7         Setup examples       8
Set up access VLANs
Reserve an IP address based on MAC address
Use the console port 8
Create redundant links between switches for network redundancy 9
Maintain your system 10
Restart the product
Set a reboot schedule
Restore the product to factory default values
Upgrade the device software
Revert to alternate software image 10
Specifications 12
Product overview
Buttons 12
LED indicators
Troubleshooting       15         Technical issues, clues, and solutions       15
Contact support

### About this document

### About this document

#### Note

The product is intended for use by network administrators who are responsible for operating and maintaining network equipment. Basic working knowledge of general switch functions, security, the Internet Protocol (IP), and Simple Network Management Protocol (SNMP) is assumed.

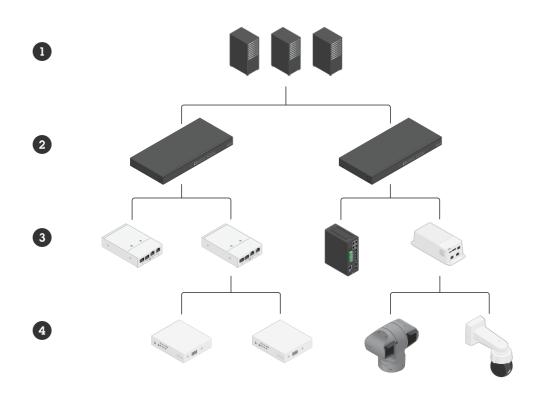
This user manual will give you information on how you:

- access the product
- access connected IP devices in the product's topology view
- configure selected setup examples
- perform maintenance on the product

Product features and their settings are covered in more detail in the product's context-sensitive built-in help. For more information, see .

### Solution overview

## Solution overview



- 1 Core switches
- 2 AXIS D8308 Fiber Aggregation Switches
- 3 Axis media converters, Axis switches and midspans with SFP ports
- 4 Axis network devices

### Get started

### Get started

### Access the product from a browser

#### Note

Install, connect and power up the device as specified in its installation guide.

- 1. Use AXIS IP Utility or AXIS Device Manager to find the device on the network. For more information about how to discover devices, go to *axis.com/support*
- 2. Enter the username and password provided on the product label.

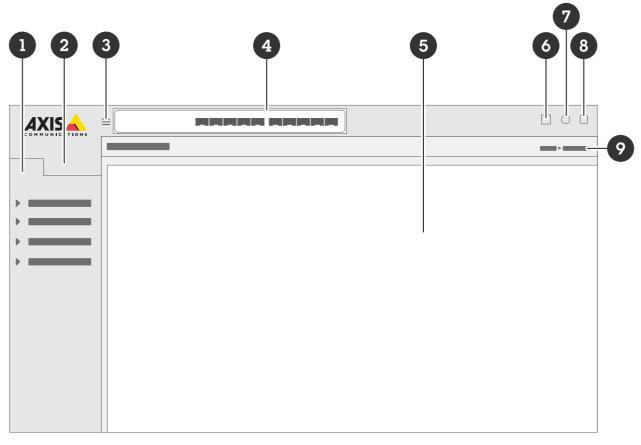
The default username is root.

- 3. Follow the steps in the setup wizard to:
  - Change the password (recommended for security reasons)
  - Set the IP address via DHCP or manually
  - Configure the DHCP server
  - Set the date & time information
  - Set the system information
- 4. Click Apply.
- 5. Relogin using the new password.

You will now enter the product's web page, and will be able to configure and manage the product.

### Get started

### Get to know your product's web page



- 1 Basic features
- 2 Advanced features
- 3 Toggle button hide or unhide the menu
- 4 SFP port status indicators
- 5 Content area for basic/advanced features
- 6 Save button save your settings to the start-up configuration file
- 7 Help button access the context-sensitive built-in help
- 8 Log out button
- 9 Menu path

### Get to know your product's built-in help

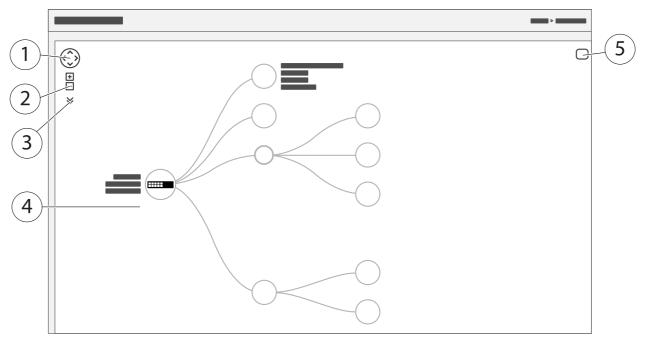
Your product has a context-sensitive built-in help. The help provides more detailed information on the product's basic and advanced features and their settings. To access the help content for any given view, click. Some help content also includes clickable terms and acronyms that are explained in more detail in the built-in glossary.

Access devices in your product's network

### Access devices in your product's network

### **Topology view**

The topology view allows you to remotely access, manage and monitor all discovered IP devices in your product's network, for example via a tablet or a smart phone. To display the discovered IP devices in a graphical network, go to **Basic > Topology View**.



- 1 Arrow button to move the view in four directions. You can also use the mouse to drag and drop the topology into position.
- 2 Zoom in and zoom out buttons. You can also use the scroll wheel on the mouse to zoom in and out.
- 3 Drop-down button to access and change device information to be displayed in the view.
- 4 Content area for devices discovered in the network.
- 5 Settings button to access and change device, group and configuration information.

When you click a device icon in the topology view, a device console is opened to allow you access to:

- dashboard console with device information and available device-specific actions, such as login, diagnostics, find switch, PoE configuration and reboot
- notification console with information on alarms and logs triggered by events
- monitor console with information on device traffic

### Setup examples

### Setup examples

#### Note

When you configure or update the settings of your switch, make sure to click to save the updates to the start-up configuration file.

The start-up configuration file remains when you restart or reboot the switch, but not after you reset the switch to its factory default settings.

### Set up access VLANs

VLANS are typically used on large networks to create multiple broadcast domains, but they can also be used to segregate network traffic. For example, video traffic can be part of one VLAN, and other network traffic can be part of another.

- 1. Go to Advanced > VLANs > Configuration.
- 2. Under Global VLAN Configuration, enter the VLANs you want to create to the Allowed Access VLANs field. For example, if you enter, 1, 10-13, 200, 300, the following VLAN IDs will be created: 1, 10, 11, 12, 13, 200 and 300.
- 3. To assign a created VLAN ID to a given port under Port VLAN Configuration, enter the ID to the Port VLAN field.
- 4. Click Apply.

### Reserve an IP address based on MAC address

- 1. Go to Advanced > DHCP > Server > Pool.
- 2. Click Add New Pool.
- 3. Enter a name for the pool, for example 00:01:02:03:04:05, and click Apply. No spaces are allowed in the name.
- 4. To access the pool settings, click the added name.
- 5. In the Type drop-down menu, select Host.
- 6. Enter other required settings, such as IP address, Subnet Mask and Default Router.
- 7. In the Client Identifier drop-down menu, select MAC.
- 8. In the Hardware Address field, enter the MAC address of the device.
- 9. Click Apply.

### Use the console port

The switch has a serial console port that allows you to manage the switch through the command-line interface.

- 1. Connect a console cable to the console connector on the switch.
- 2. Connect the console cable to the USB port on your computer.
- 3. On your computer, open a teminal emulator to manage the switch.

Use these port settings:

- Baud rate: 115200
- Stop bits: 1
- Data bits: 8

### Setup examples

- Parity: N
- Flow control: None

### Create redundant links between switches for network redundancy

If network redundancy is required, you can create redundant links between switches using spanning tree configuration.

#### Example:

In this example, three switches are connected by a redundant link and no extra VLANS. If any of the uplinks between the switches should fail, the redundant link is activated and provides network connectivity.

Device name	Model name	CIST ports
Switch - 01	AXIS T8524	25, 26
Switch - 02	AXIS D8308	9, 10
Switch - 03	AXIS T8516	17, 18

To create a redundant link on each switch's web page:

- 1. Go to Advanced > Spanning Tree > Configuration > Bridge Settings.
- 2. Under Basic Settings in the Protocol Version drop-down menu, select RSTP, and click Apply.
- 3. Go to Advanced > Spanning Tree > Configuration > CIST Port.
- 4. Under CIST Normal Port Configuration, make sure that STP Enabled is selected for the switch's ports as follows:
  - Switch 01: ports 25 and 26
  - Switch 02: ports 9 and 10
  - Switch 03: ports 17 and 18
- 5. Click Apply.

#### Note

If you want to make sure that a certain port is used as a primary communication link, enter **Path Cost** for that port under **CIST Normal Port Configuration**. If not specified, the switch chooses the port automatically. For example, if you want to use port 17 as the primary communication link, enter **Path Cost** value 10 to port 26 and **Path Cost** value 50 to port 18.

### Maintain your system

### Maintain your system

### Restart the product

Note

Before you restart the device, click to save your settings to the start-up configuration file.

- 1. Go to Advanced > Maintenance > Restart Device.
- 2. Click Yes.

After restart, the product will boot normally.

For information about how to restart the product using the mode/reset button, see .

### Set a reboot schedule

Note

Before you set a reboot schedule, click to save your settings to the start-up configuration file.

- 1. Go to Advanced > Maintenance > Reboot Schedule.
- 2. Set Mode to Enabled.
- 3. Select the weekday and time for reboot.
- 4. Click Apply.

### Restore the product to factory default values

#### Important

Any saved configuration will be restored to factory default values.

- 1. Go to Advanced > Maintenance > Factory Defaults.
- 2. If you want to keep the current IP settings, select Keep IP setup.
- 3. Click Yes.

For information about how to restore the product to factory default values using the mode/reset button, see .

### Upgrade the device software

#### Important

The software upgrade takes up to 10 minutes. Do not restart or power off the device during this time.

- 1. Go to Advanced > Maintenance > Device Software > Software Upgrade.
- 2. To select the software file from a specified location, click Browse.
- 3. Click Upload.

After software upgrade, the product will restart normally.

### Maintain your system

### Revert to alternate software image

You can choose to use the alternate (backup) software image instead of the active (primary) software image in the product. Information tables on both images are shown under Advanced > Maintenance > Device Software > Software Selection.

Note

- If the active image is already set as the alternate image, only the Active Image table is shown, and the Activate Alternate Image button is disabled.
- If the alternate image is already set as the active image (either manually or due to a corrupted primary image), and a new software image is uploaded to the product, the new image will automatically be set as the active image.
- Software version and date information may be empty for older software releases. This is normal.

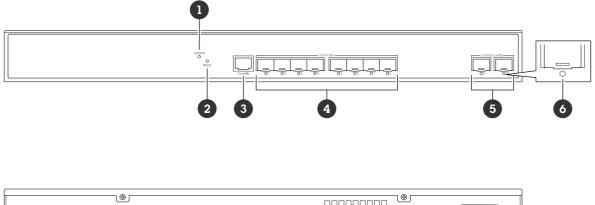
To set the alternate image as the active image:

- 1. Go to Advanced > Maintenance > Device Software > Software Selection.
- 2. Click Activate Alternate Image.

Specifications

Specifications

**Product overview** 





- 1
- System LED Reset button 2
- 3 Console port
- 4 5 . SFP+ ports x8
- , SFP28 ports x2
- 6 Port status LED
- 7 Power connector

# Specifications

### **Buttons**

### **Reset button**

To reset the switch to factory default:

- 1. Start the switch.
- 2. Press and hold the reset button.
- 3. When the LEDs light up, release the button.

### LED indicators

### System LED

LED	Color	Indication
System	Green	The switch is powered and ready.
	N/A	The switch doesn't receive any power.
	Red	The switch has detected an abnormal state, for example an exceeded operating temperature.

#### Port status LEDs

LED	Color	Indication
SFP+ ports (1-8)	Green (lit)	The port is enabled and has established a link to a connected device. The connection speed is 10Gbps.
	Green (blinking)	The port is transmitting/receiving packets. The connection speed is 10Gbps.
	Amber (lit)	The port is enabled and has established a link to a connected device. The connection speed is 1Gbps/2.5Gbps/5Gbps.
	Amber (blinking)	The port is transmitting/receiving packets. The connection speed is 1Gbps/2.5Gbps/5Gbps.
	N/A	The port has no active network cable connected, or has not established a link to a connected device. It's also possible that the port has been disabled through the web interface.

# Specifications

SFP28 ports (9–10)	Green (lit)	The port is enabled and has established a link to a connected device. The connection speed is 25Gbps.
	Green (blinking)	The port is transmitting/receiving packets. The connection speed is 25Gbps.
	Amber (lit)	The port is enabled and has established a link to a connected device. The connection speed is 1Gbps/2.5Gbps/5Gbps/10Gbps.
	Amber (blinking)	The port is transmitting/receiving packets. The connection speed is 1Gbps/2.5Gbps/5Gbps/10Gbps.
	N/A	The port has no active network cable connected, or has not established a link to connected device. It's also possible that the port has been disabled through the product user interface.

### Troubleshooting

## Troubleshooting

### Technical issues, clues, and solutions

If you can't find what you're looking for, try the troubleshooting section at *axis.com/support* or in the *Axis Network Switches Configuration Guide*.

System LED	
The system LED is off	<ul> <li>If the system LED is off, the switch doesn't receive any power. Try the following:</li> <li>Check that the power cord is connected properly to the switch and the AC outlet.</li> <li>Unplug the power connector from the switch, and connect it again.</li> <li>Try connecting the power cord to a different AC outlet.</li> </ul>
The system LED is red	If the system LED is red, the switch has detected an issue. Check the log in the switch's web interface to discover the source of the issue.
Port status LED	
The port status LED is off	<ul> <li>If the port status LED is off, there is an issue with the connection to the port. Try the following: <ul> <li>Check that the cable of the connected device has been inserted properly and locked in the port, both for the switch and for the connected device.</li> <li>Check that the connected device works properly.</li> <li>Try using a different cable.</li> <li>Try to connect the cable to a different port.</li> <li>Check that the port hasn't been disabled in the switch's web interface.</li> </ul> </li> </ul>
Connecting through SFP	
Can't connect to another switch through SFP	<ul> <li>If you can't connect to another switch through SFP, the speed of the SFP slots or modules used to connect the switches may not match. The speed needs to be the same on both ends to establish a link. Try the following: <ul> <li>Change the ports or modules so the auto-configured speed of the SFP ports or modules will be the same on both ends of the link.</li> <li>Set the speed of the SFP ports or modules manually through the web interface or CLI. To change the speed in the web interface, go to Advanced &gt; Ports &gt; Configuration.</li> </ul> </li> </ul>

### **Contact support**

If you need more help, go to axis.com/support.

User manual AXIS D8308 Fiber Aggregation Switch © Axis Communications AB, 2024 Ver. M1.12 Date: October 2024 Part no. T10206621