

## **AXIS D8308 Fiber Aggregation Switch**

**User manual**

# AXIS D8308 Fiber Aggregation Switch

## Table of Contents

---

|  |    |
|--|----|
| <b>About this document</b> .....                                     | 3  |
| <b>Solution overview</b> .....                                       | 4  |
| <b>Get started</b> .....   | 5  |
| Access the product from a browser .....                              | 5  |
| Get to know your product's web page .....                            | 5  |
| Get to know your product's built-in help .....                       | 6  |
| <b>Access devices in your product's network</b> .....                | 7  |
| Topology view .....  | 7  |
| <b>Setup examples</b> .....  | 8  |
| Set up access VLANs .....  | 8  |
| Reserve an IP address based on MAC address .....                     | 9  |
| Use the console port .....   | 9  |
| Create redundant links between switches for network redundancy ..... | 9  |
| <b>Maintain your system</b> .....                                    | 11 |
| Restart the product .....  | 11 |
| Set a reboot schedule .....  | 11 |
| Restore the product to factory default values .....                  | 12 |
| Upgrade the device software .....                                    | 13 |
| Revert to alternate software image .....                             | 13 |
| <b>Specifications</b> .....  | 14 |
| Product overview .....   | 14 |
| Buttons .....  | 14 |
| LED indicators .....   | 14 |
| <b>Troubleshooting</b> .....   | 16 |
| Technical issues, clues, and solutions .....                         | 16 |
| Contact support .....  | 16 |

# AXIS D8308 Fiber Aggregation Switch

## 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

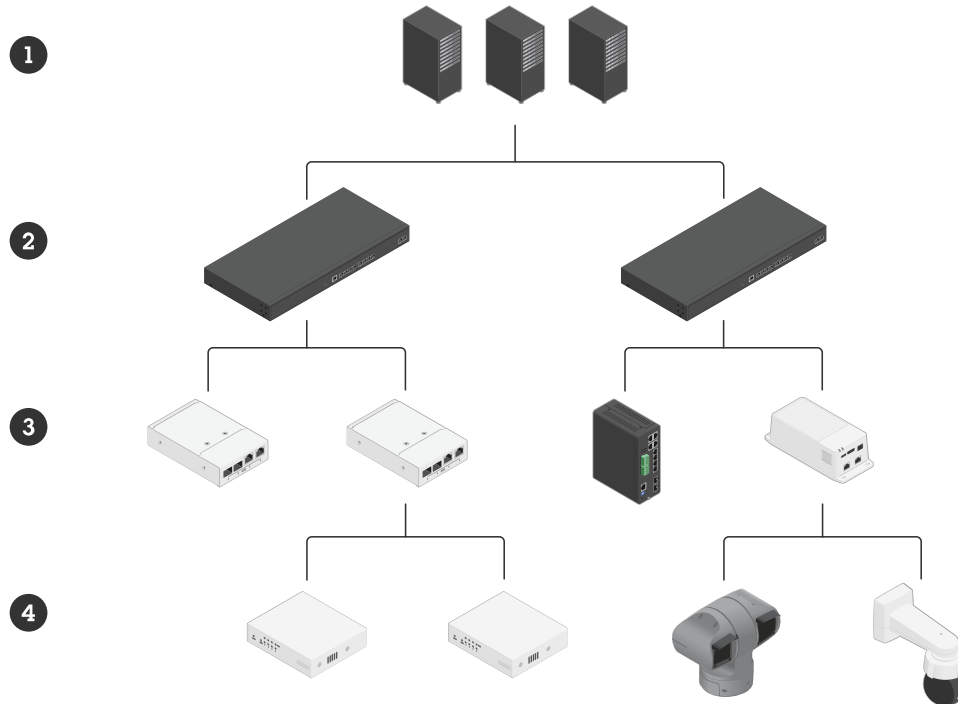
Product features and their settings are covered in more detail in the product's context-sensitive built-in help. For more information, see *Get to know your product's built-in help on page 6*.

# AXIS D8308 Fiber Aggregation Switch

## 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

# AXIS D8308 Fiber Aggregation Switch

## 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](http://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.

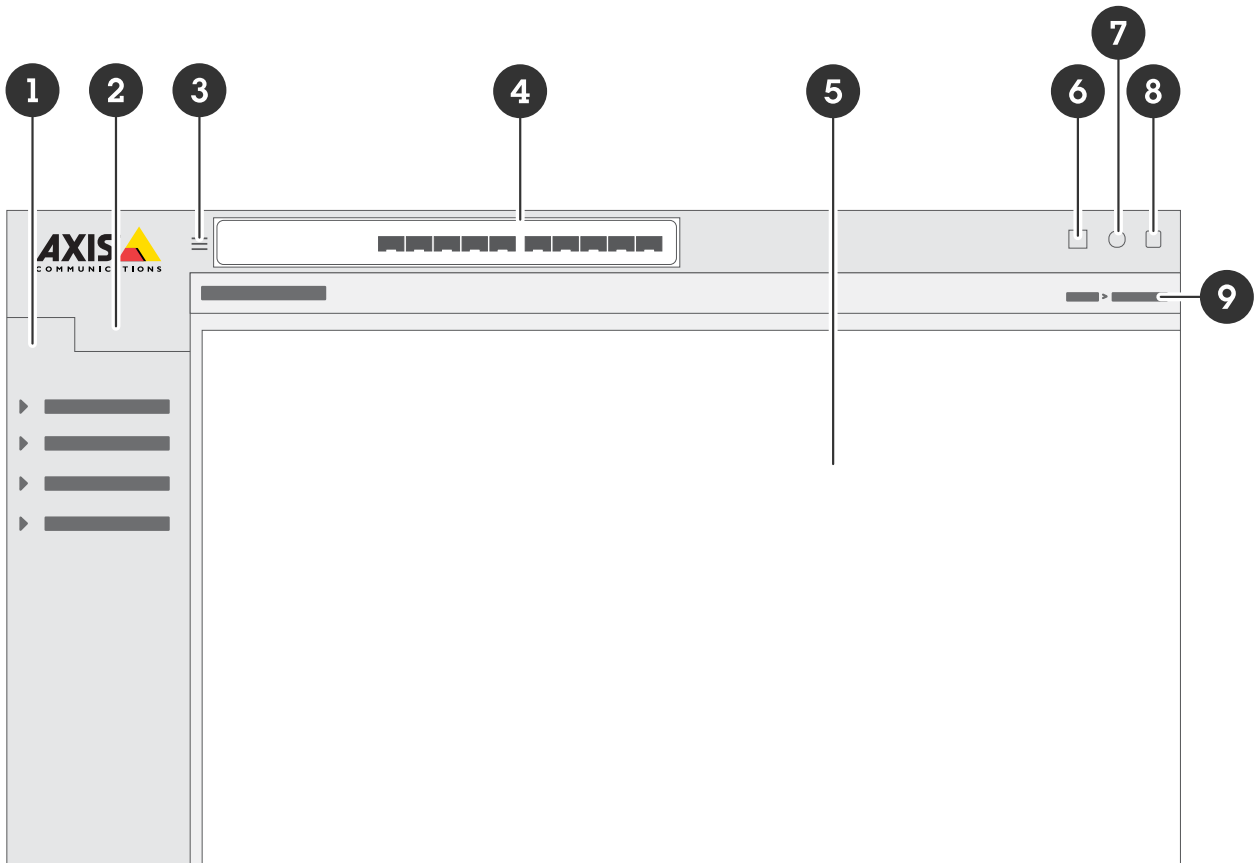
You will now enter the product's web page, and will be able to configure and manage the product.

# AXIS D8308 Fiber Aggregation Switch

## 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.

# AXIS D8308 Fiber Aggregation Switch

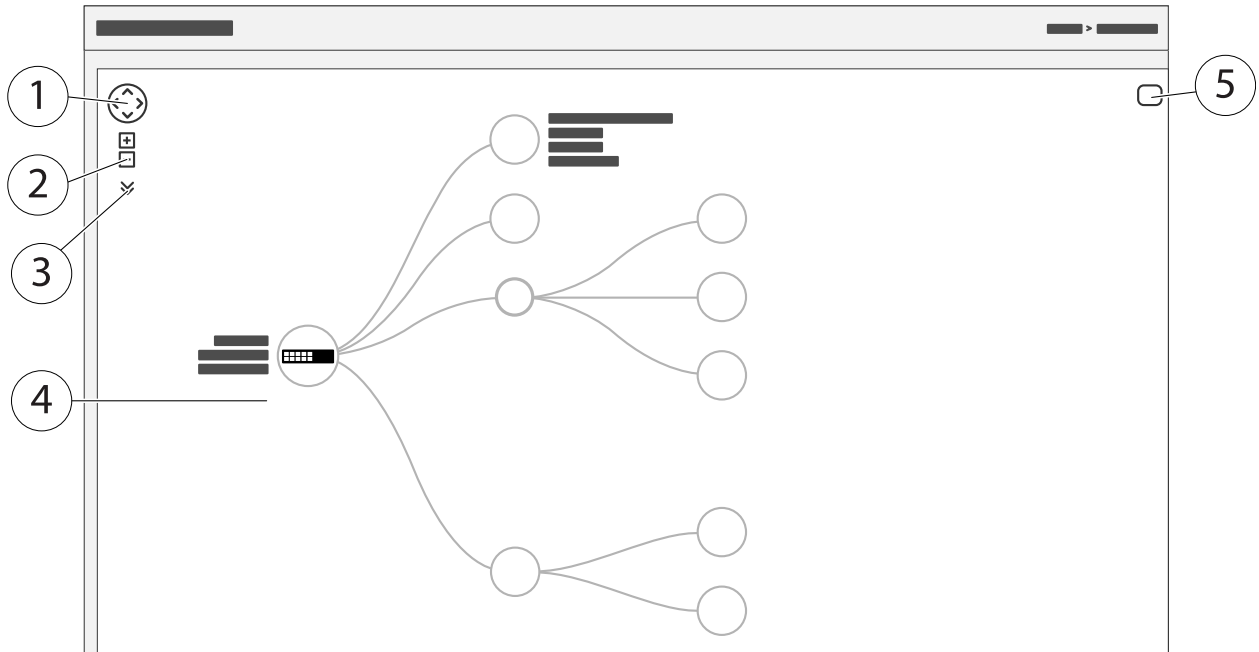
## Access devices in your product's network

---

### 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

# AXIS D8308 Fiber Aggregation Switch

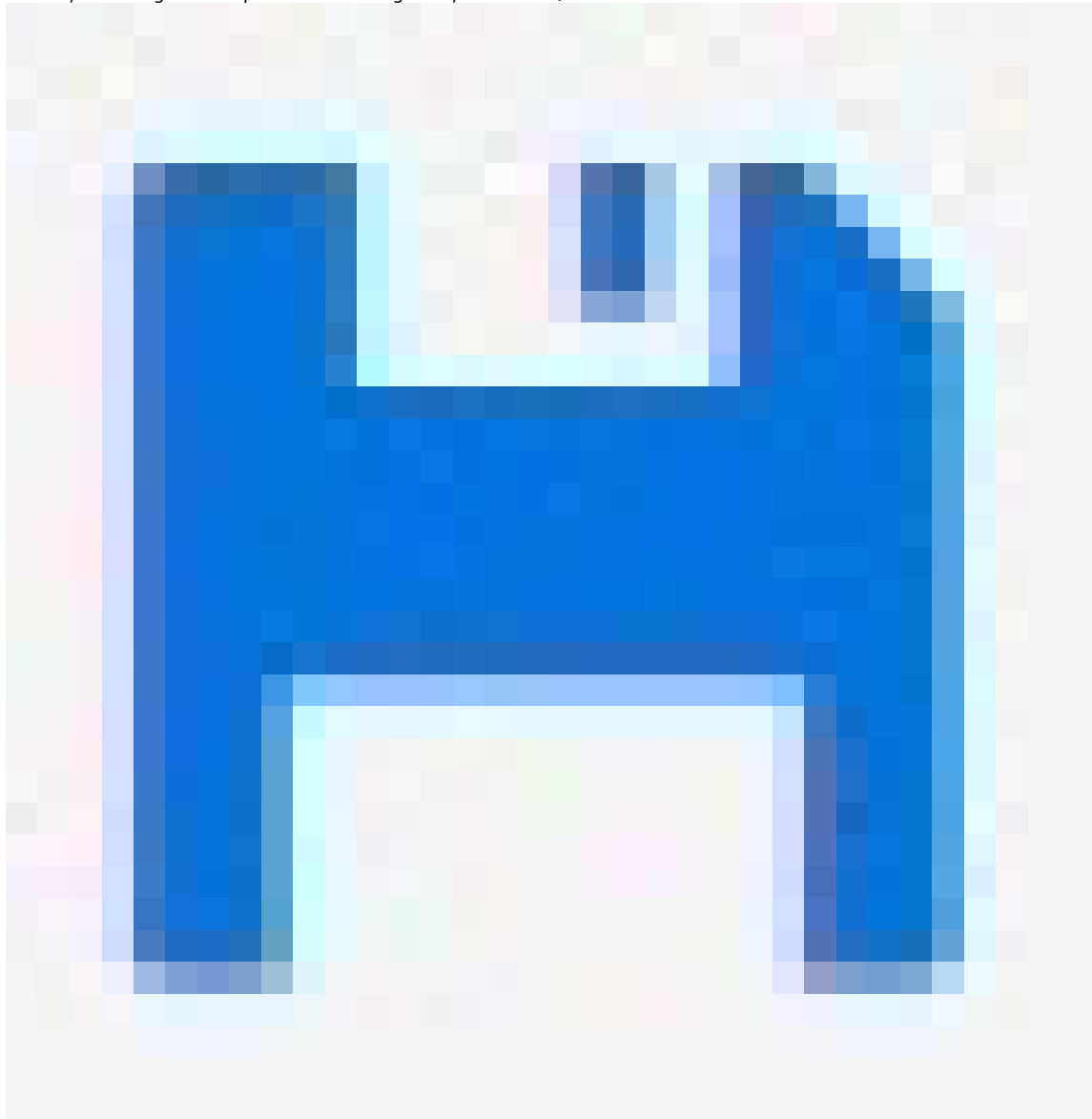
## Setup examples

---

### 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**.



# AXIS D8308 Fiber Aggregation Switch

## Setup examples

---

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 terminal emulator to manage the switch.

Use these port settings:

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

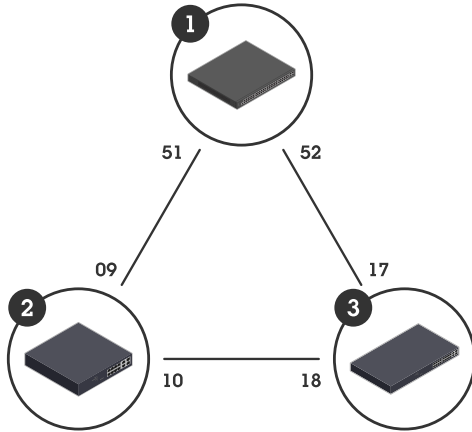
#### Example:

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.

# AXIS D8308 Fiber Aggregation Switch

## Setup examples

---



| Device name | Model name | CIST ports |
|-------------|------------|------------|
| Switch - 01 | AXIS D8248 | 51, 52     |
| 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 51 and 52
  - 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 52 and **Path Cost** value 50 to port 18.

# AXIS D8308 Fiber Aggregation Switch

## Maintain your system

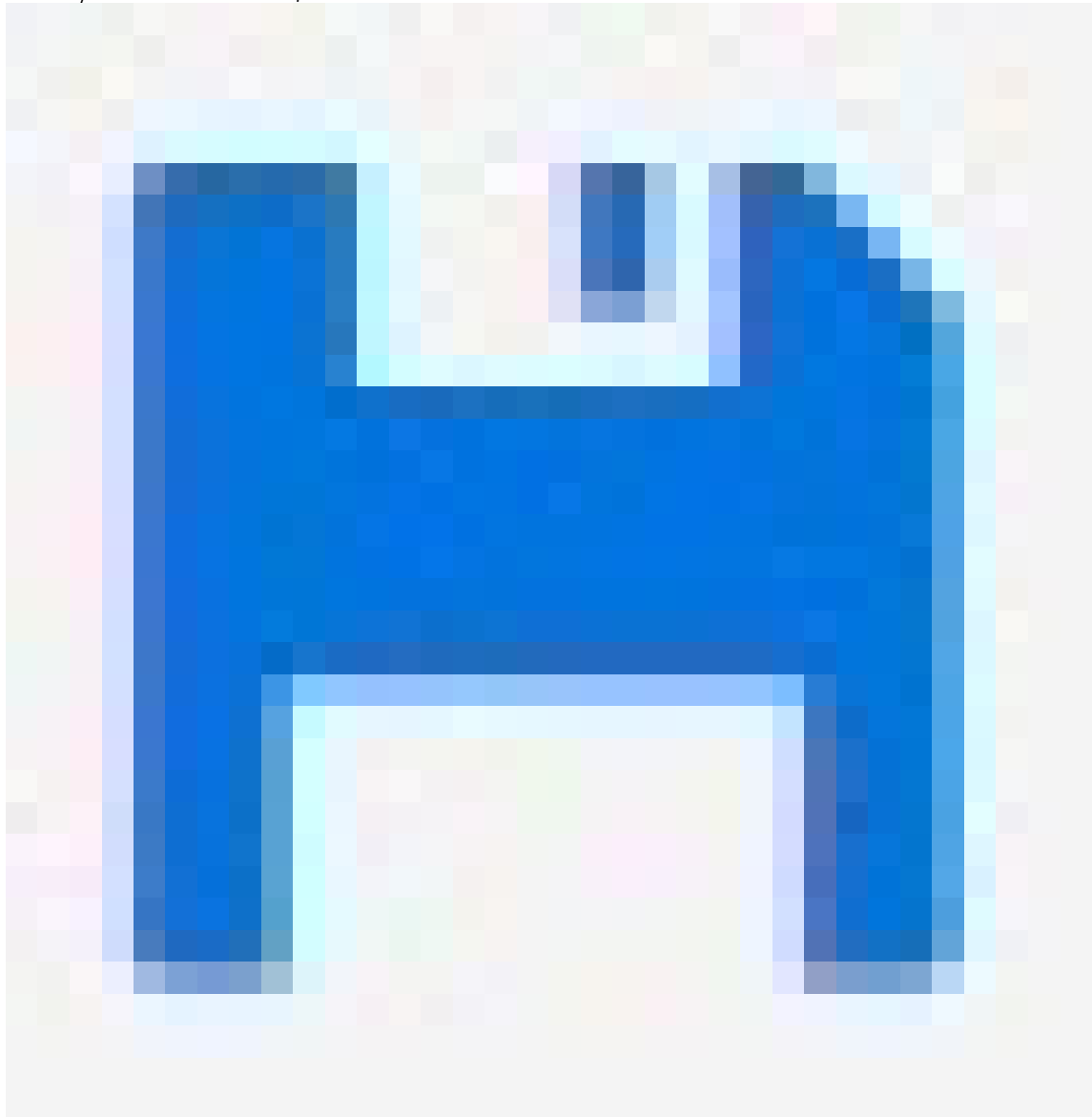
---

### 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 *Buttons on page 14*.

# AXIS D8308 Fiber Aggregation Switch

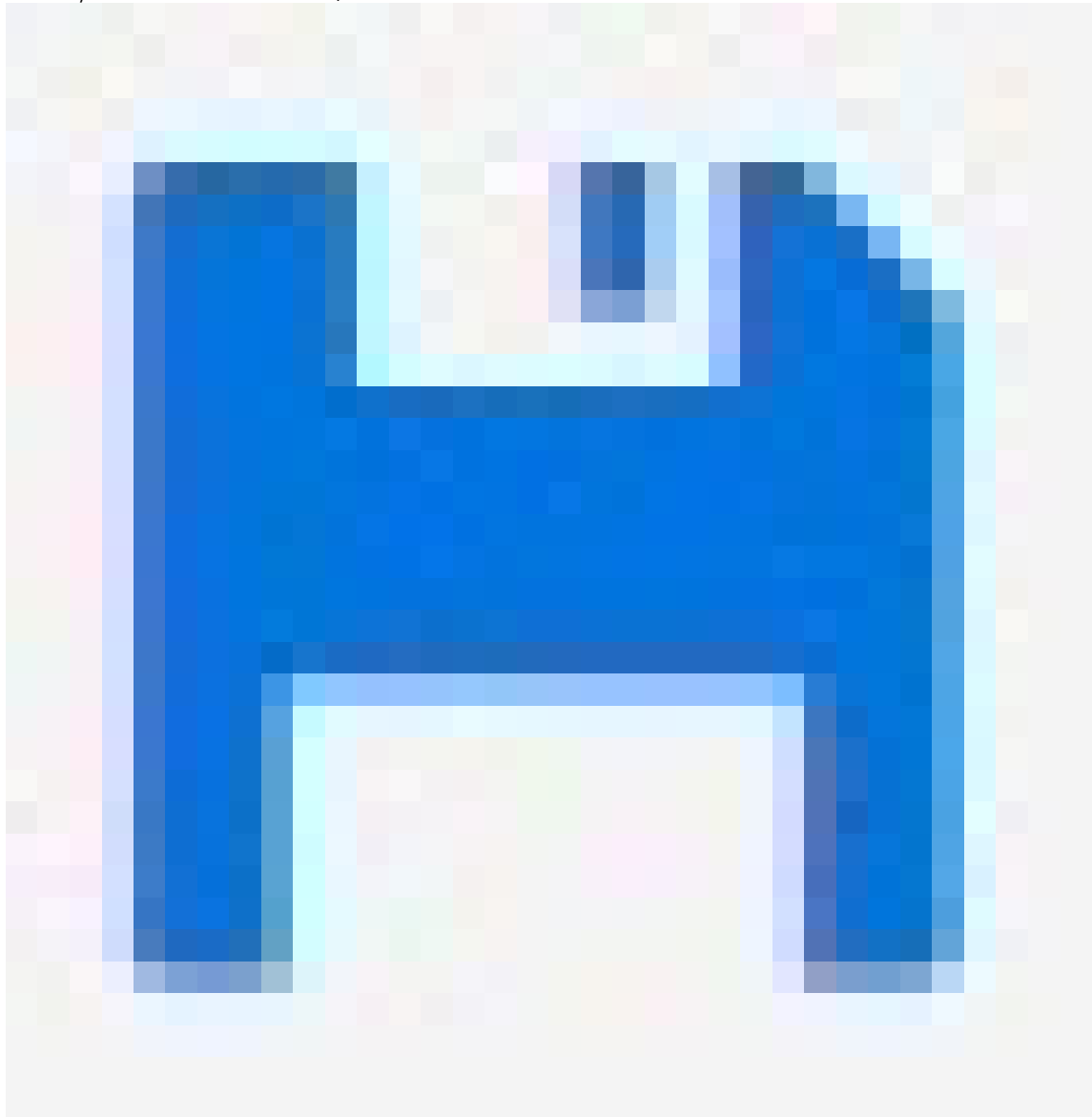
## Maintain your system

---

### 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**.

# AXIS D8308 Fiber Aggregation Switch

## Maintain your system

---

### 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 *Buttons on page 14*.

### 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.

### 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**.

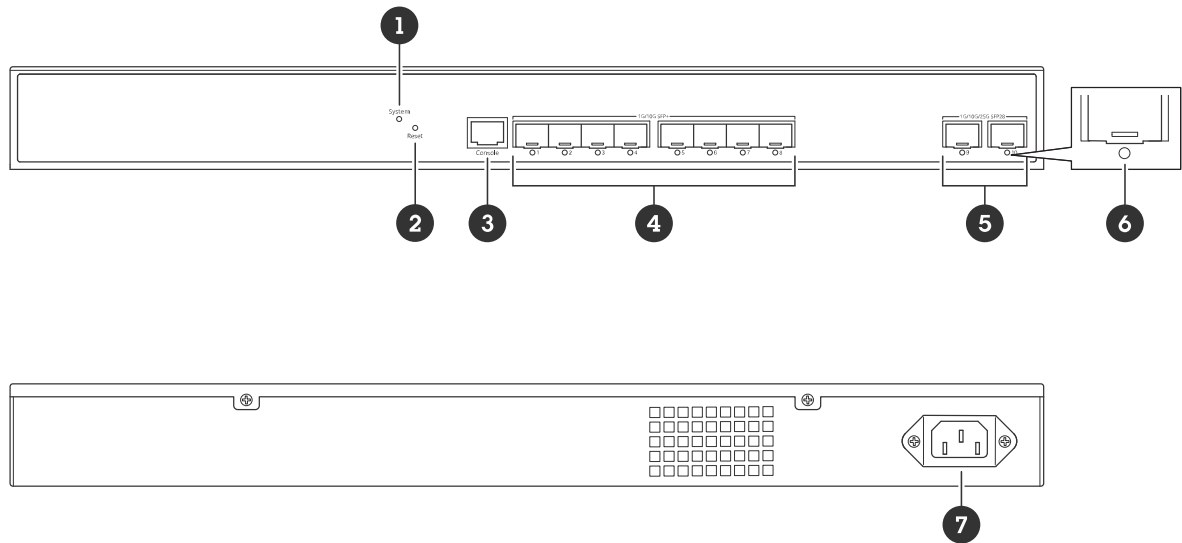
# AXIS D8308 Fiber Aggregation Switch

## Specifications

---

### Specifications

### Product overview



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

### 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

# AXIS D8308 Fiber Aggregation Switch

## Specifications

| 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.        |
| 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. |

# AXIS D8308 Fiber Aggregation Switch

## 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](https://axis.com/support) or in the *Axis Network Switches Configuration Guide*.

##### System LED

---

|                       |   |
|-----------------------|---|
| The system LED is off | If the system LED is off, the switch doesn't receive any power. Try the following: <ul style="list-style-type: none"><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 | If the port status LED is off, there is an issue with the connection to the port. Try the following: <ul style="list-style-type: none"><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> |
|----------------------------|---|

##### Connecting through SFP

---

|   |   |
|---|---|
| Can't connect to another switch through SFP | 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 style="list-style-type: none"><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 <b>Advanced &gt; Ports &gt; Configuration</b>.</li></ul> |
|---|---|

#### Contact support

If you need more help, go to [axis.com/support](https://axis.com/support).



