

# **Troubleshoot hardware problems**

**ONTAP System Manager** 

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# **Troubleshoot hardware problems**

Starting with ONTAP 9.8, you can use System Manager to view the configuration of hardware on your network and troubleshoot problems that might arise.

### **Before you Start**

For ONTAP 9.8, System Manager provides a *preview* of the capability to view hardware configurations. The preview only shows a limited number of AFF models.

### **Steps**

- 1. In System Manager, select **Cluster > Hardware**.
- 2. Hover your mouse over components to view status and other details.

You can view various types of information:

- Information about nodes
- Information about disk shelves
- · Information about storage switches

# Information about nodes

You can view the following:

#### Nodes:

- · Front and rear views are displayed.
- Models with an internal disk shelf also show the disk layout in the front view.
- For ONTAP 9.8, only platform models C190, A220, A300, A400, and A700 are shown.

#### Ports:

- · Console ports are not shown in this preview.
- A port is red if it is down.
- The status of a port and other details are shown when you hover over the port.

#### FRUs:

Information about FRUs appears only when the state of a FRU is non-optimal.

- · Failed PSUs in nodes or chassis.
- · High temperatures detected in nodes.
- · Failed fans on the nodes or chassis.

## Adapter cards:

- · Cards with defined part number fields are shown in the slots if external cards has been inserted.
- · Ports on cards are shown.
- · Certain cards are shown with specific images of the cards. If the card is not in the list of part numbers

supported, then a generic graphic is displayed.

#### FlashCache:

• Details about FlashCache are shown like an adapter card if slot information is available.

# Information about disk shelves

You can view the following:

#### Disk shelves:

· Front and rear views are displayed.

## Shelf ports:

- · Port status is displayed.
- Remote port information is shown if the port is connected.

#### Shelf FRUs:

· PSU failure information is shown.

# Information about storage switches

- The display shows switches that act as storage switches used to connect shelves to nodes.
- For ONTAP 9.8, the following model can be viewed: X190100 (Cisco Nexus 3232).

You can view the following:

- **Storage switch** information includes switch name, IP address, serial number, SNMP version, and system version.
- Storage switch port information includes identity name, identity index, state, and other details, including remote connection.

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