



## **View hardware configurations to determine problems**

### **ONTAP 9**

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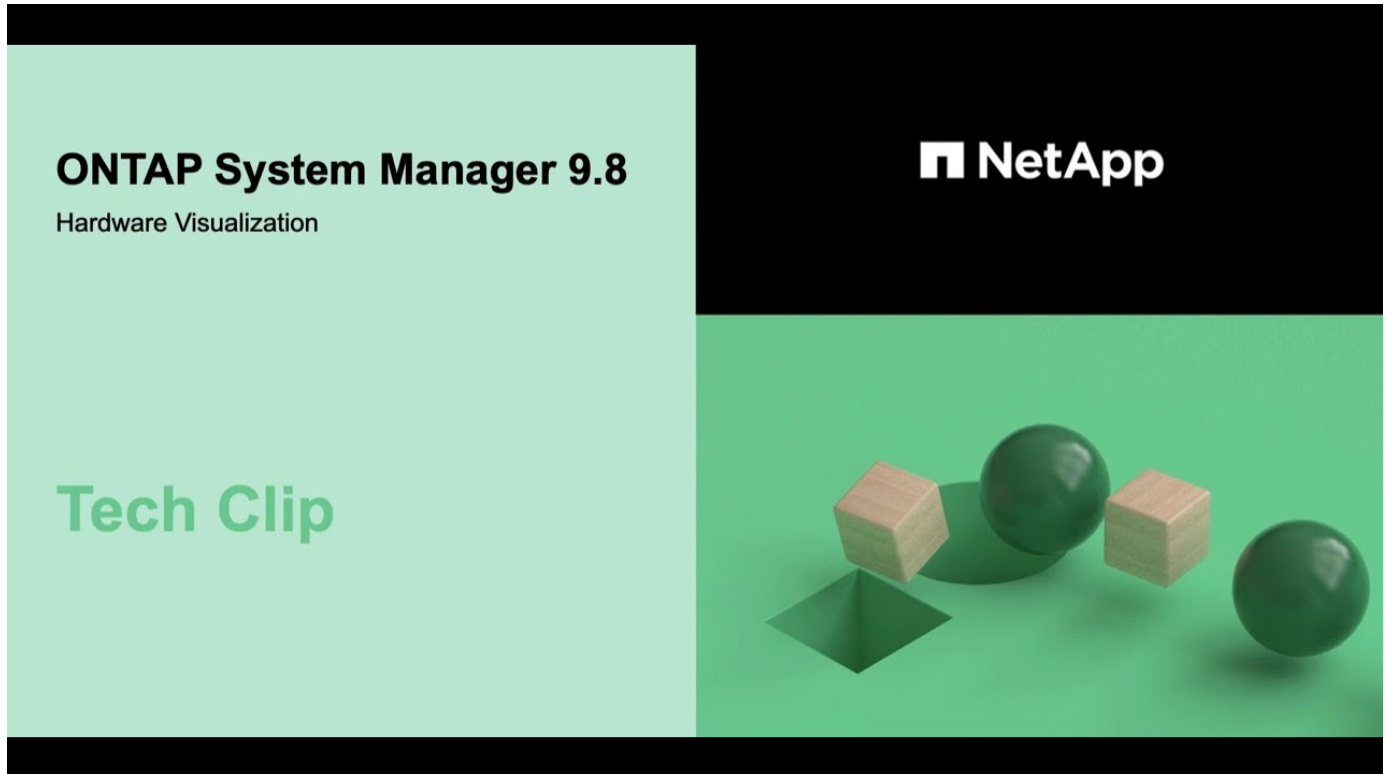
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# View hardware configurations to determine problems

With ONTAP 9.8 and later, you can use System Manager to view the configuration of AFF hardware on your network and determine if problems might arise.

The hardware visualization feature enables users to quickly visualize hardware status and any potential connection issues.



## Before you Start

For ONTAP 9.8, System Manager provides a *preview* of the capability to view AFF hardware configurations. Starting with ONTAP 9.9.1, you can view all AFF hardware configurations.

## Steps

To view AFF hardware configurations, perform the following 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 controllers](#)
- [Information about disk shelves](#)
- [Information about storage switches](#)

# Information about controllers

You can view the following:

## Nodes:

- Rear views are displayed.
- Models with an internal disk shelf also show the disk layout in the front view.
- You can view the following platform models:

If your system is running...	Then you can view...
ONTAP 9.8	C190, A220, A300, A400, and A700
ONTAP 9.9.1	C190, A220, A250, A300, A320, A400, A700, A700s, A800, FAS500f

## Ports:

- Console ports are not shown.
- 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 supported part numbers, then a generic graphic is displayed.

# Information about disk shelves

You can view the following:

## Disk shelves:

- Front and rear views are displayed.
- You can view the following disk shelf models:

If your system is running...	Then you can view...
ONTAP 9.8	DS4243, DS4486, DS212C, DS2245, DS224C, and NS224

If your system is running...	Then you can view...
ONTAP 9.9.1	All supported disk shelf models

#### 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.
- Starting with 9.9.1, System Manager displays information about a switch that acts as both a storage switch and a cluster, which can also be shared between nodes of an HA pair.
- You can view the following storage switch models:

If your system is running...	Then you can view...
ONTAP 9.8	Cisco Nexus 3232C Switch
ONTAP 9.9.1	Cisco Nexus 3232C Switch Cisco Nexus 9336C-FX2 Switch

- 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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