

# Upgrade Nutanix HCI Cluster Offline through Intersight

## Introduction

This document describes the process to perform a firmware upgrade for Cisco Nutanix HCI clusters through Cisco Intersight.


## Background Information

While it is recommended to use Life Cycle Manager (LCM) when remediating firmware for ISM/IMM Clusters, specific scenarios such as hitting a bug or Field Notice (FN) can require selecting a specific version for an upgrade or downgrade. In these cases, firmware changes can be applied through Intersight.

Unlike the LCM process, an offline upgrade requires edit and patch firmware manually on a per-host basis. It is mandatory to understand the workload and capacity of the cluster before execution of these actions.

The user manually places the host in Maintenance Mode, applies the firmware change via Intersight, and then exits Maintenance Mode. This is repeated for each node in the cluster.

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 **Tip:** To know more details about number of simultaneous missing nodes that a cluster can withstand refer to Nutanix documentation [Cluster Fault Tolerance](#).

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## Manual Upgrade Steps at a Glance

1. Edit each of the Firmware Policies with the new firmware version.
2. Deploy All profiles without immediate reboot to stage the firmware.
3. Place single node in Maintenance Mode via Prism Element or Prism Central.
4. Activate the profile for the server in Maintenance Mode to power cycle the server and apply firmware.
5. Repeat steps 3 and 4 for all nodes in the cluster.
6. Verify Upgrade is complete and Cluster is Healthy

## Modify Firmware Policies

Intersight pushes firmware through a Firmware Policy. Each node has its own policy, and new versions are selected by editing these policies.

The syntax for the firmware policy name is: *ntnx\_firmware\_<Serial Number>\_<Deployment UUID>*

## Locate and Edit Policies

Navigate to **Policies** > Click **Filters** > Check Firmware.

The screenshot shows the Intersight 'Policies' page. The main area displays a table of policies with columns for Name, Platform Type, Type, and Usage. A summary card shows 'Platform Type: UCS Server 17' and 'Usage: 17' (4 Used, 13 Not Used). The filters sidebar on the right is open, showing 'Name' (empty), 'Platform Type' (empty), 'Type' (set to 'Firmware'), and 'Usage' (set to 'Used').

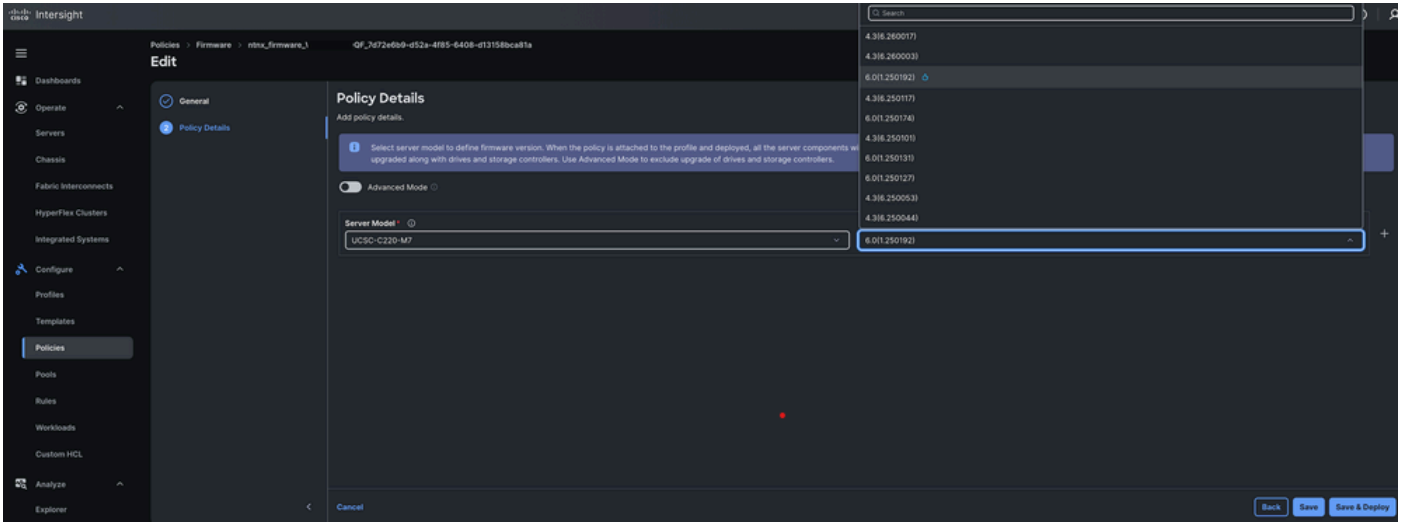
Name	Platform Type	Type	Usage
ntnx_firmware_WB_7d72e6b9-d52a-4f85-6408-d13158bca81a	UCS Server	Firmware	Used -1
ntnx_firmware_YQ_7d72e6b9-d52a-4f85-6408-d13158bca81a	UCS Server	Firmware	Used -1
ntnx_firmware_QF_7d72e6b9-d52a-4f85-6408-d13158bca81a	UCS Server	Firmware	Used -1
ntnx_firmware_WB_ad3d657e-2140-4580-5534-d3b48758ad6a	UCS Server	Firmware	Not Used
ntnx_firmware_QF_ad3d657e-2140-4580-5534-d3b48758ad6a	UCS Server	Firmware	Not Used
ntnx_firmware_YQ_ad3d657e-2140-4580-5534-d3b48758ad6a	UCS Server	Firmware	Not Used
ntnx_firmware_X9_6f405bb5-a033-4f68-691a-5838ce671ec2	UCS Server	Firmware	Not Used
ntnx_firmware_QF_128af6fb-e23b-4a8a-5ad8-d2e43f4262cf	UCS Server	Firmware	Not Used
ntnx_firmware_YQ_128af6fb-e23b-4a8a-5ad8-d2e43f4262cf	UCS Server	Firmware	Not Used
ntnx_firmware_WB_128af6fb-e23b-4a8a-5ad8-d2e43f4262cf	UCS Server	Firmware	Not Used
ntnx_firmware_X9_e0be615c-7411-4c8b-6d21-4ee06b230d03	UCS Server	Firmware	Used -1
ntnx_firmware_YQ_39aaaffb-8f32-4c26-7f85-df3c6b45a284	UCS Server	Firmware	Not Used
ntnx_firmware_QF_39aaaffb-8f32-4c26-7f85-df3c6b45a284	UCS Server	Firmware	Not Used
ntnx_firmware_WB_39aaaffb-8f32-4c26-7f85-df3c6b45a284	UCS Server	Firmware	Not Used
ntnx_firmware_QF_6edae306-fcbb-417b-6d8d-244ae766215f	UCS Server	Firmware	Not Used
ntnx_firmware_WB_6edae306-fcbb-417b-6d8d-244ae766215f	UCS Server	Firmware	Not Used
ntnx_firmware_YQ_6edae306-fcbb-417b-6d8d-244ae766215f	UCS Server	Firmware	Not Used

Select the Policy to modify and click **edit**.

The screenshot shows the Intersight 'Policies' page with a policy selected. The main area displays a table of policies with columns for Name, Platform Type, Type, Usage, Last Update, and Organization. The first row is selected, and the 'edit' button is visible. The filters sidebar is open, showing 'Name' (empty), 'Platform Type' (empty), 'Type' (set to 'Firmware'), and 'Usage' (set to 'Used').

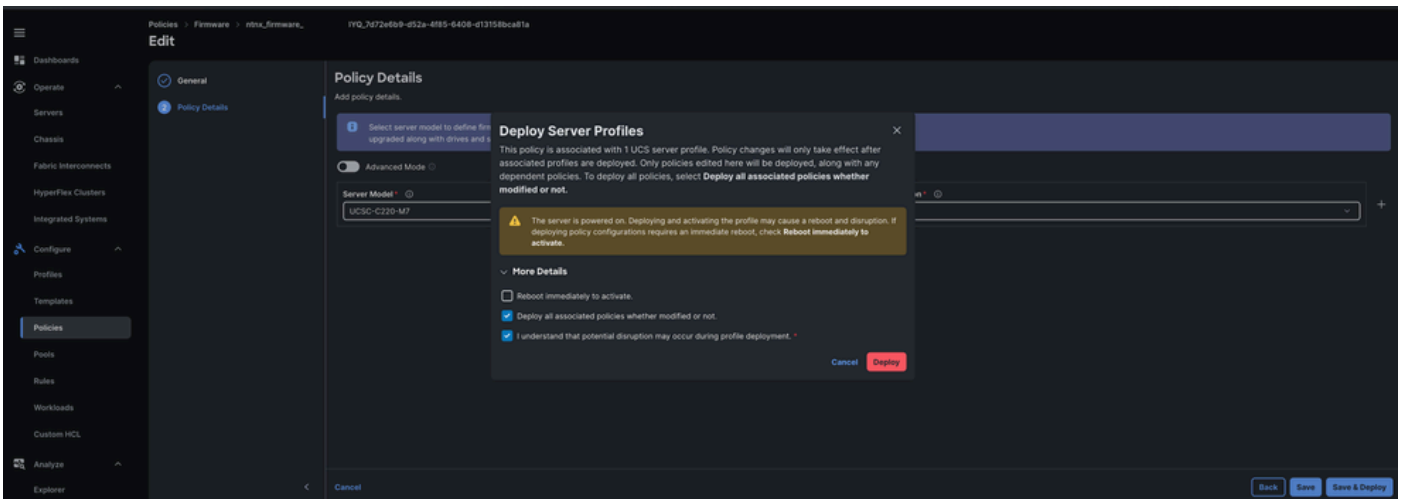
Name	Platform Type	Type	Usage	Last Update	Organization
ntnx_firmware_QF_7d72e6b9-d52a-4f85-6408-d13158bca81a	UCS Server	Firmware	Used -1	Feb 24, 2026 4:12 PM	default
ntnx_firmware_YQ_7d72e6b9-d52a-4f85-6408-d13158bca81a	UCS Server	Firmware	Used -1	Feb 23, 2026 11:36 AM	default
ntnx_firmware_WB_7d72e6b9-d52a-4f85-6408-d13158bca81a	UCS Server	Firmware	Used -1	Feb 23, 2026 11:36 AM	default
ntnx_firmware_X9_e0be615c-7411-4c8b-6d21-4ee06b230d03	UCS Server	Firmware	Used -1	Sep 5, 2025 9:11 AM	default

Select the desired firmware version from the drop-down list and then click **Save & Deploy**.



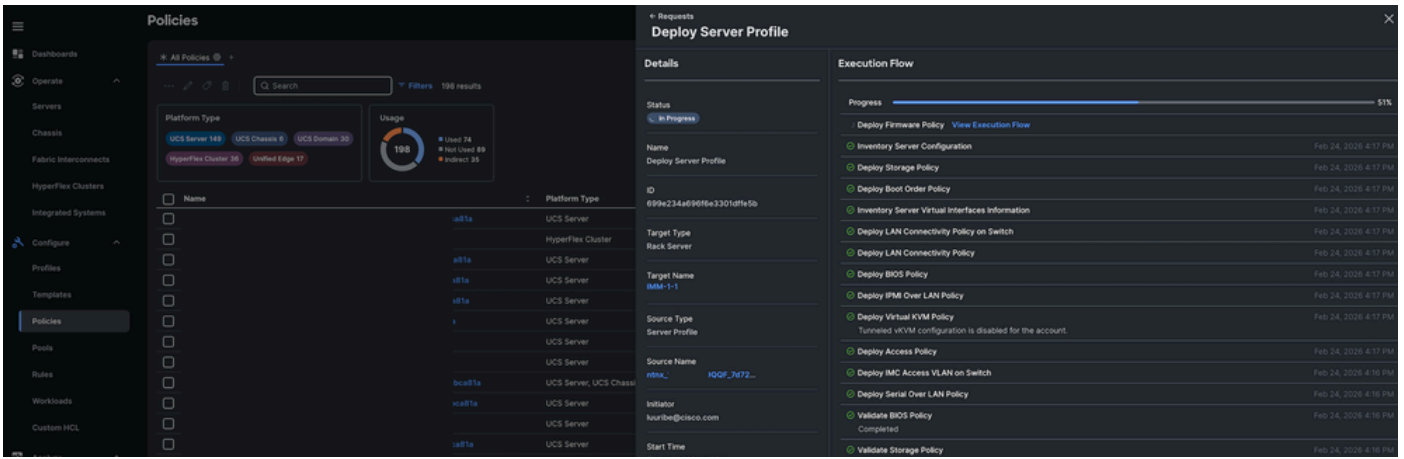
## Stage the Firmware

When server profile is re-deployed, ensure the **Reboot Immediately** option is **unchecked**. This stages the new firmware on the blade; the change is only executed after the next power cycle.

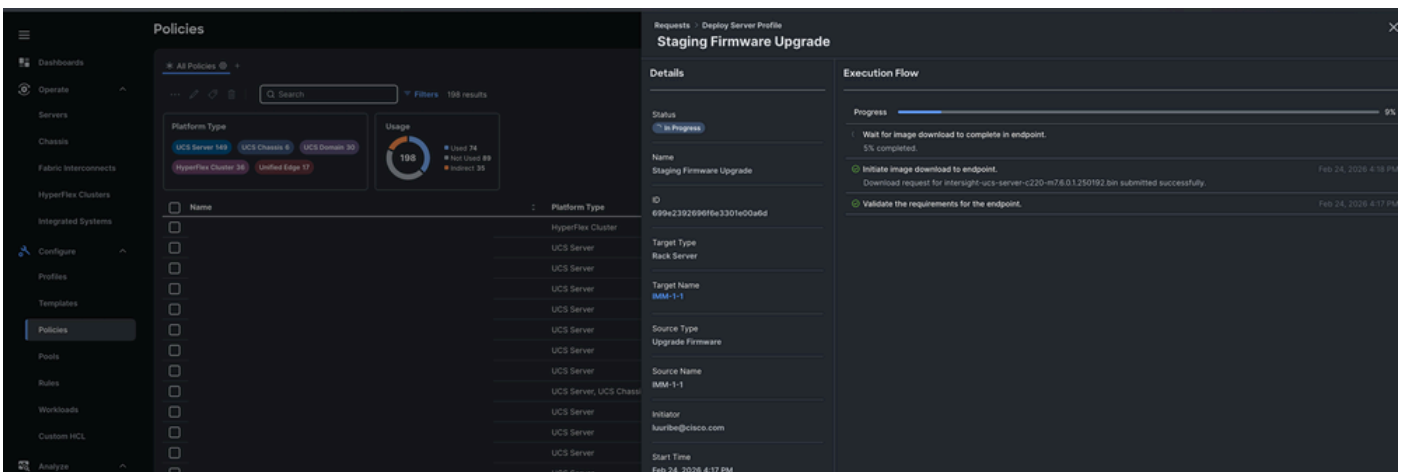


Once deployment starts:

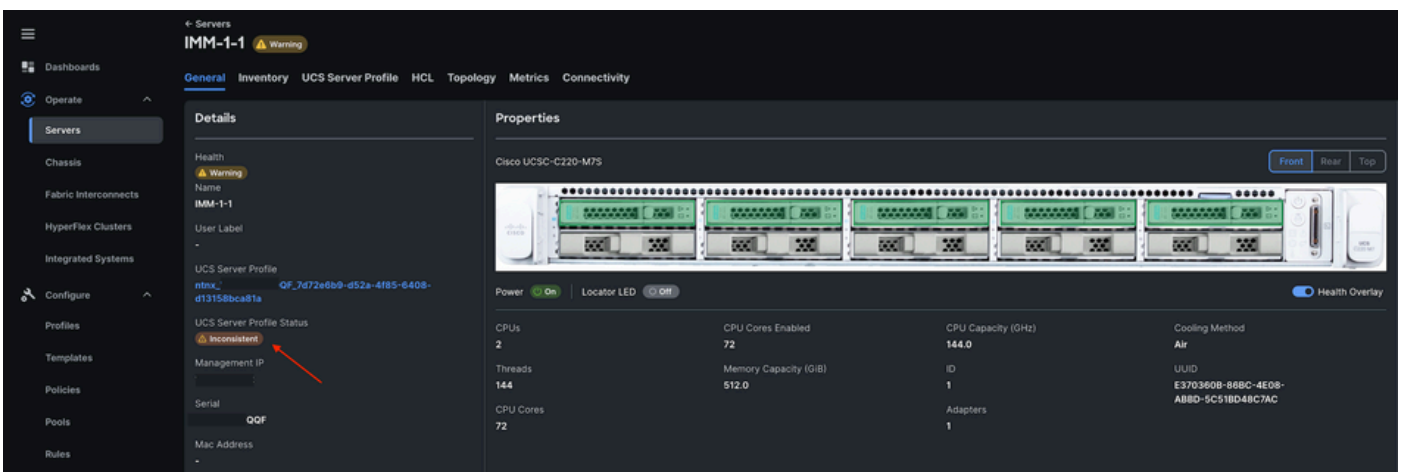
- A new workflow appears in the **Requests** tab.



- The firmware download is initiated.



- After the server is deployed without an immediate reboot, the Server Profile shows an **Inconsistent** status. This is expected until the profile is activated.



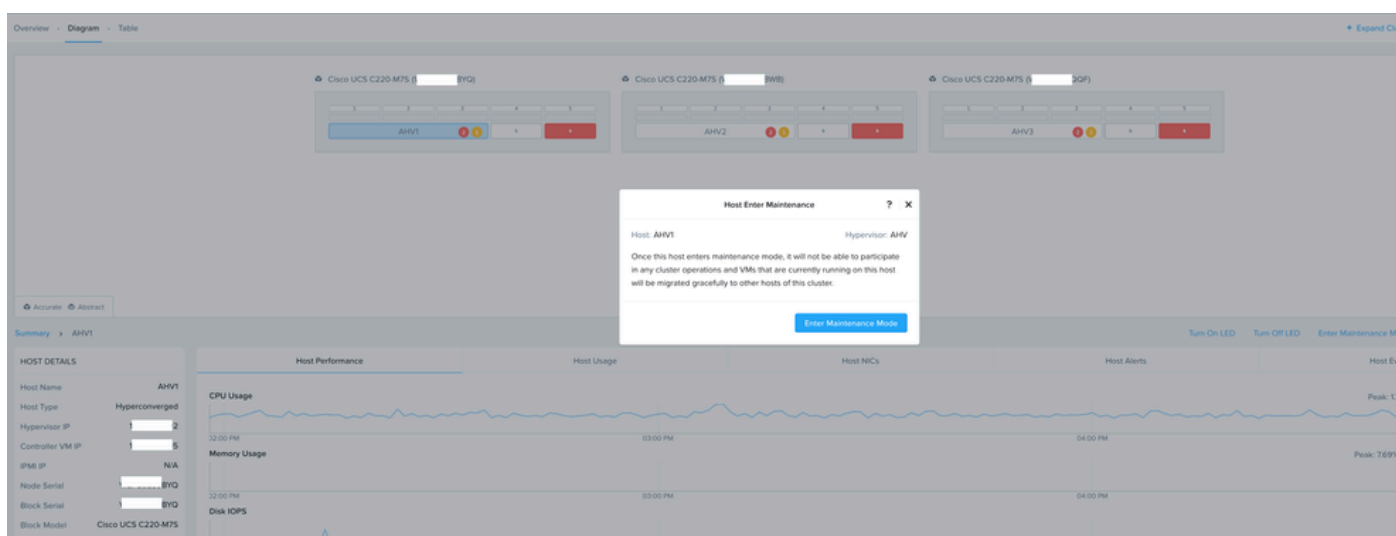
Continue to edit all the firmware other policies and deploy without Immediate reboot.

# Place Servers in Maintenance Mode Through Prism Central or Prism Element

To avoid disruption, servers must be placed into Maintenance Mode to migrate workloads before the reboot.

## Through Prism Element

1. Navigate to **Hardware > Diagram**.
2. Select the **AHV#**.
3. Select **Enter Maintenance Mode**.



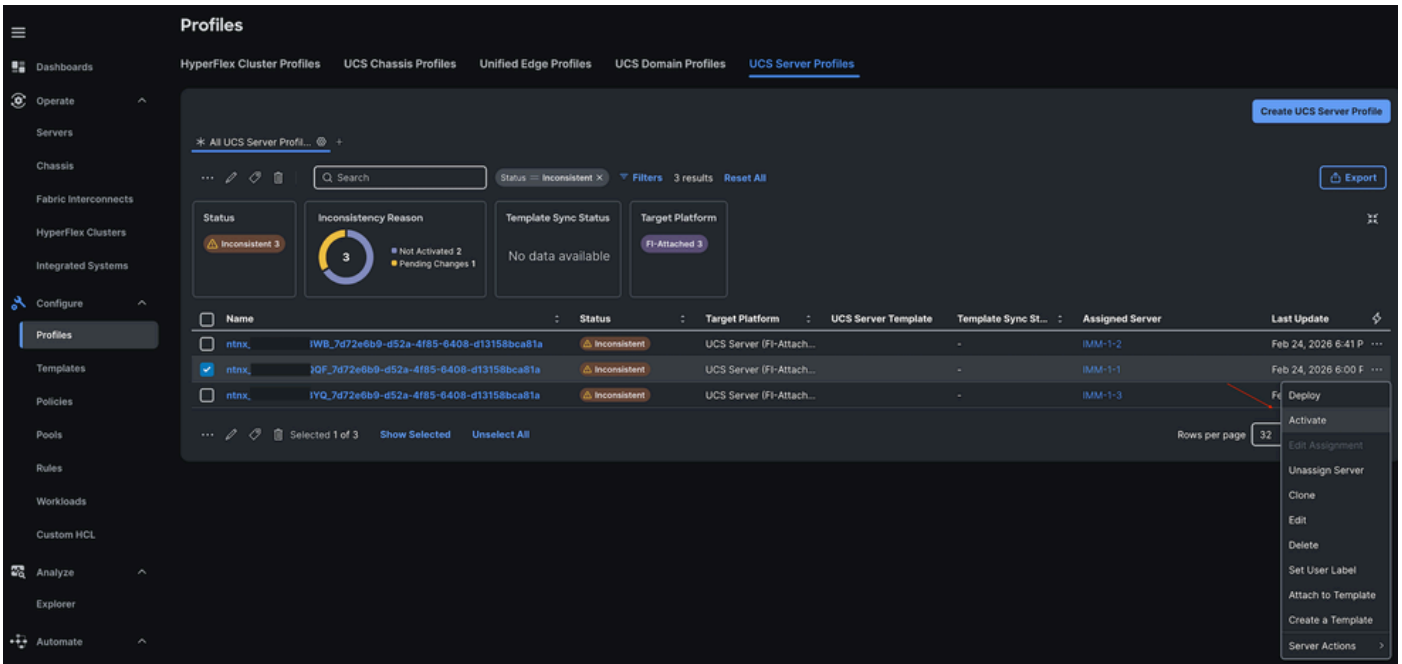
## Through Prism Central

1. Navigate to **Infrastructure > Hardware > Clusters**.
2. Select the **Cluster**.
3. Select the specific Node to place it in **Maintenance Mode**.

## Activate Profiles and Push Firmware

Once the host is in Maintenance Mode firmware can be pushed to the Node

1. Navigate to the **Profiles** tab.
2. Locate the profile of the server in Maintenance Mode by the Serial Number.
3. Select **Actions > Activate**.



(Optional) Monitor the firmware upgrade progress through the KVM console.



## Verify Upgrade and Exit Maintenance Mode

Once the activation is complete the Server Profile status transitions to **OK**.

The screenshot shows the 'Profiles' page in a management console. The 'UCS Server Profiles' tab is selected. A summary card shows 'Status' as 'OK 3', 'Inconsistency Reason' as 'No data available', 'Template Sync Status' as 'No data available', and 'Target Platform' as 'FI-Attached 3'. Below this is a table of profiles:

Name	Status	Target Platform	UCS Server Template	Template Sync ...	Assigned Server	Last Update
ntnx_1	OK	UCS Server (FI-Attac...		-	IMM-1-3	Feb 27, 2026 5:39 PM
ntnx_1	OK	UCS Server (FI-Attac...		-	IMM-1-2	Feb 27, 2026 11:17 AM
ntnx_1	OK	UCS Server (FI-Attac...		-	IMM-1-1	Feb 25, 2026 2:43 PM

The node can now be taken out of Maintenance Mode.

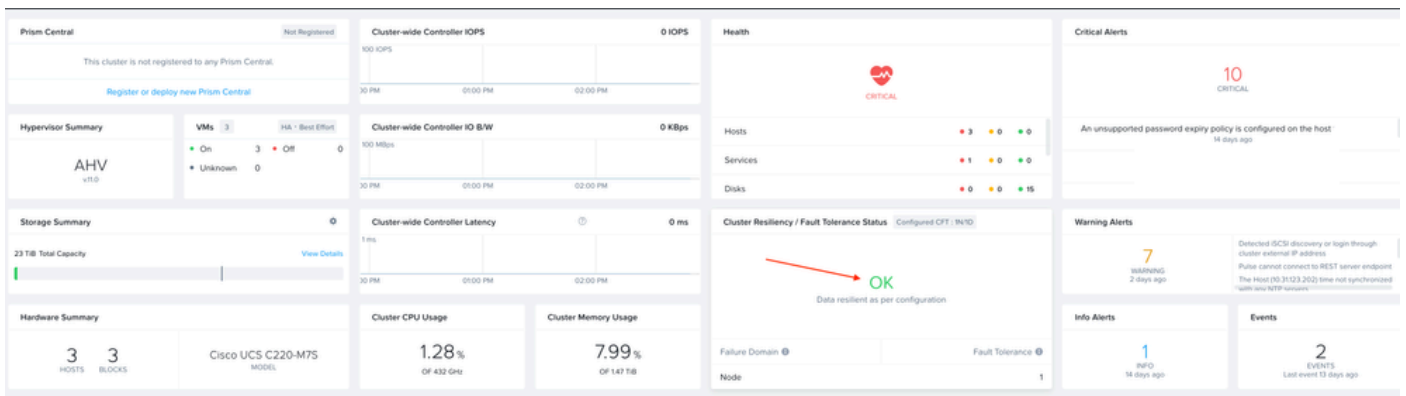
The screenshot shows the 'Host Details' page for a Cisco UCS C220-M75 host. The 'Host Performance' tab is active, showing CPU Usage, Memory Usage, Disk IOPS, and Disk IO Bandwidth. On the right side, there are buttons for 'Turn On LED', 'Turn Off LED', 'Exit Maintenance Mode', and 'Repair Host Boot Device'. A red arrow points to the 'Exit Maintenance Mode' button.

Repeat the process for the remaining nodes until all profiles show an OK Status.

This screenshot is identical to the first one, showing the 'Profiles' page with three UCS Server Profiles, all of which now have an 'OK' status.

# Verify Cluster Health

In Prism verify **Cluster Resiliency** is **OK**.



## Related Information

[Cisco UCS Hardware Compatibility List](#)

[Nutanix Platform Compatibility and Interoperability Matrix](#)

[KB-15110 LCM Pre-check: test cisco validate credentials and setup](#)