

# Configure Boot from Local Storage in Intersight Manage Mode (IMM)

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## Introduction

This document describes the configuration to boot from local storage with **MRAID/HDD and M.2 Controller** on Intersight Managed Mode (IMM) servers.

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## Prerequisites

### Requirements

Cisco recommends knowledge of these topics:

- Intersight
- Local Boot
- Local Storage Devices (HDD/SSD and M.2 Drives)
- Knowledge of **Redundant Array of Independent Disks (RAID)** configuration

### Components used

The information in this document is based on these software and hardware versions:

- Cisco UCS 6454 Fabric Interconnect, firmware 4.2(1e)
- UCSB-B200-M5 blade server, firmware 4.2(1a)
- Intersight software as a service (SaaS)
- Storage Controllers MRAID, MSTOR-RAID

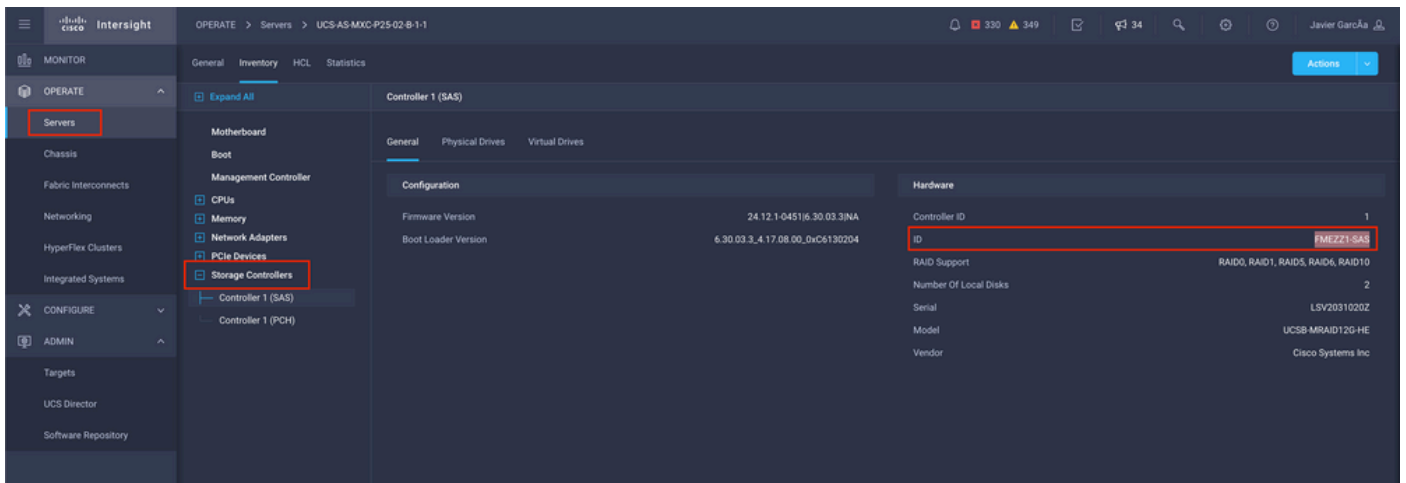
The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

## Configure

# Local Storage MRAID - HDD

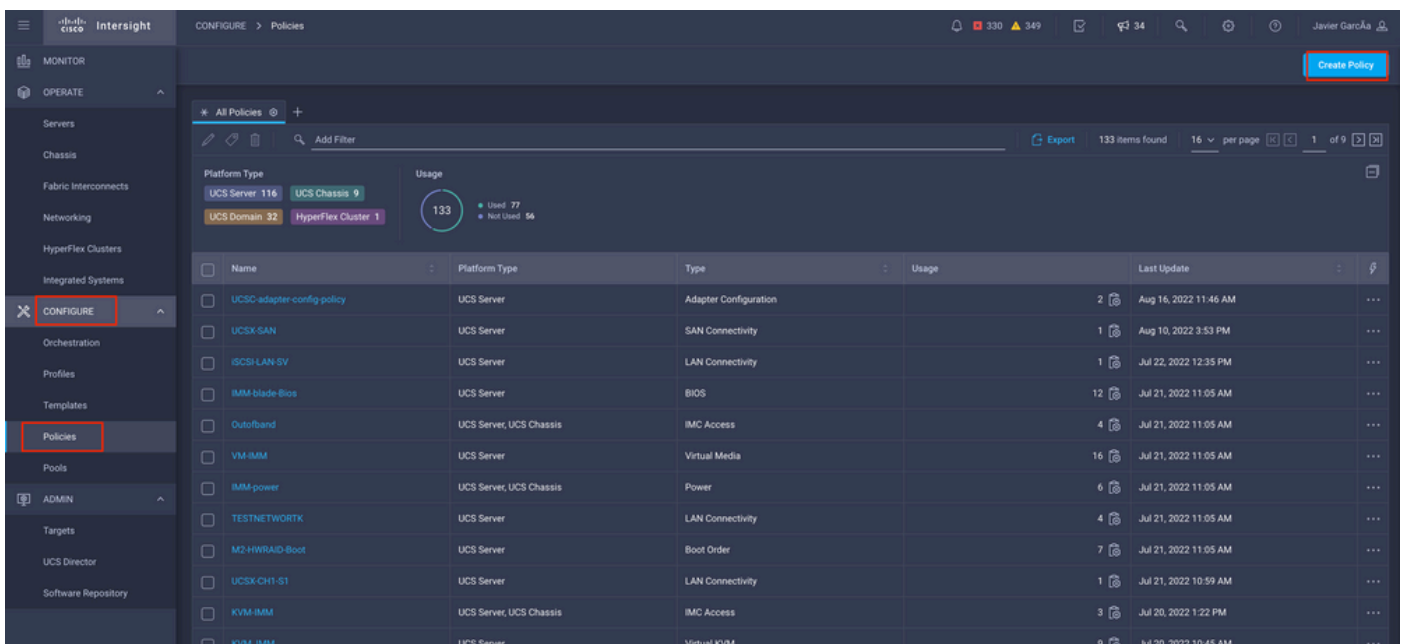
**Step 1.** Identify the controller installed in the Server and slot ID.

Navigate to **Servers > [server name] > Inventory > Storage Controllers**. Take note of the ID.

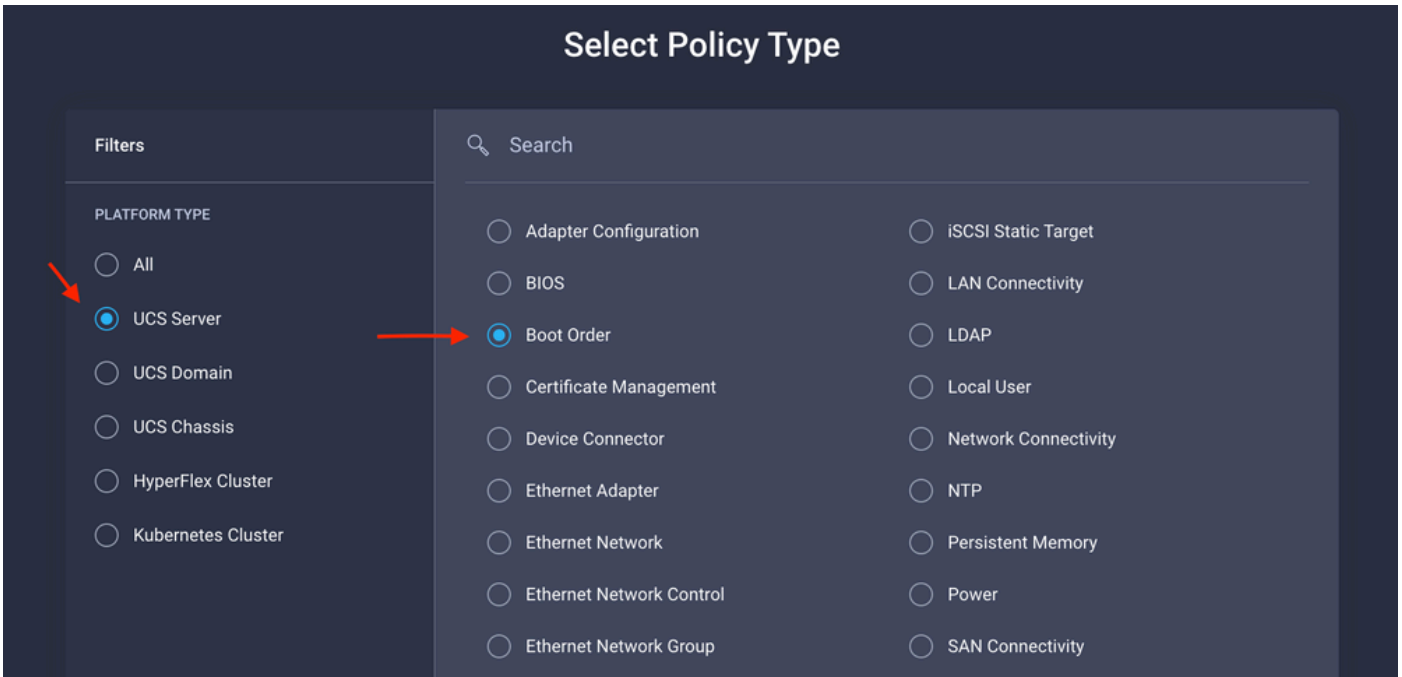


**Step 2.** Create Boot Order Policy:

Navigate to **Policies > Create Policy > UCS Server > Boot Order**

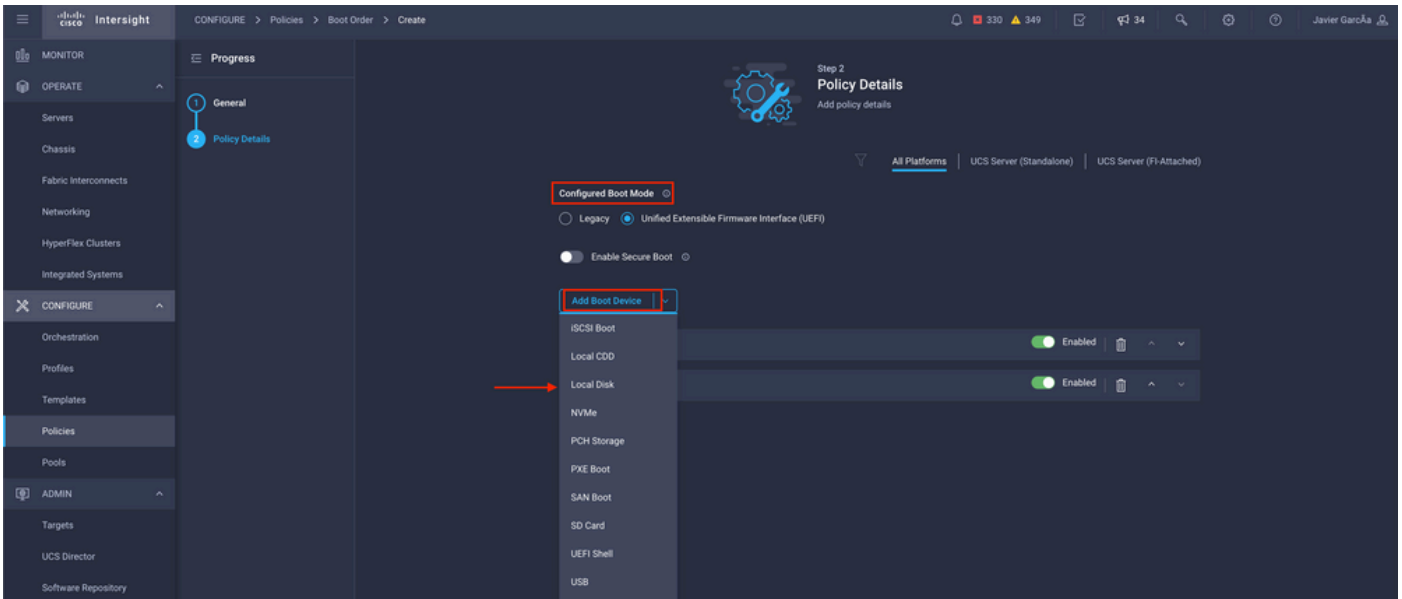


Select UCS server and Boot order



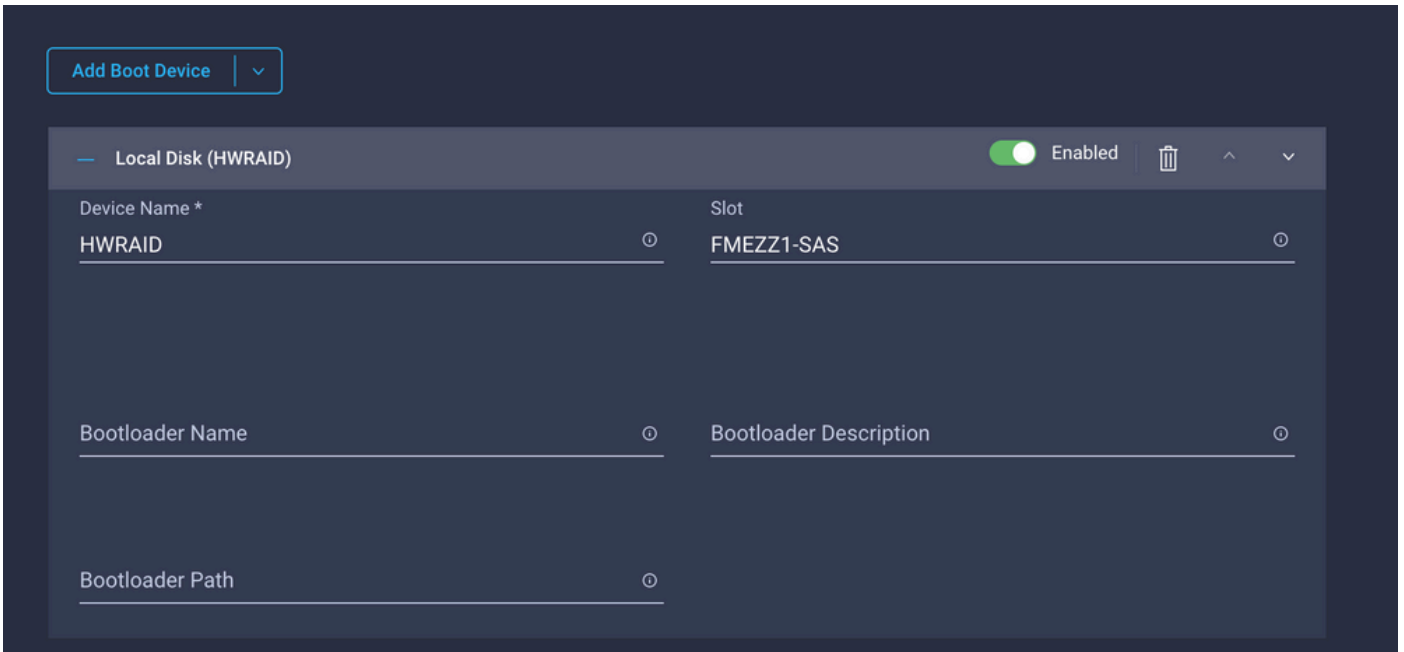
Configure **Policy Organization, Name, and Description.**

Add **local Disk boot option**, select **Legacy** or **Unified Extensible Firmware Interface (UEFI)**.

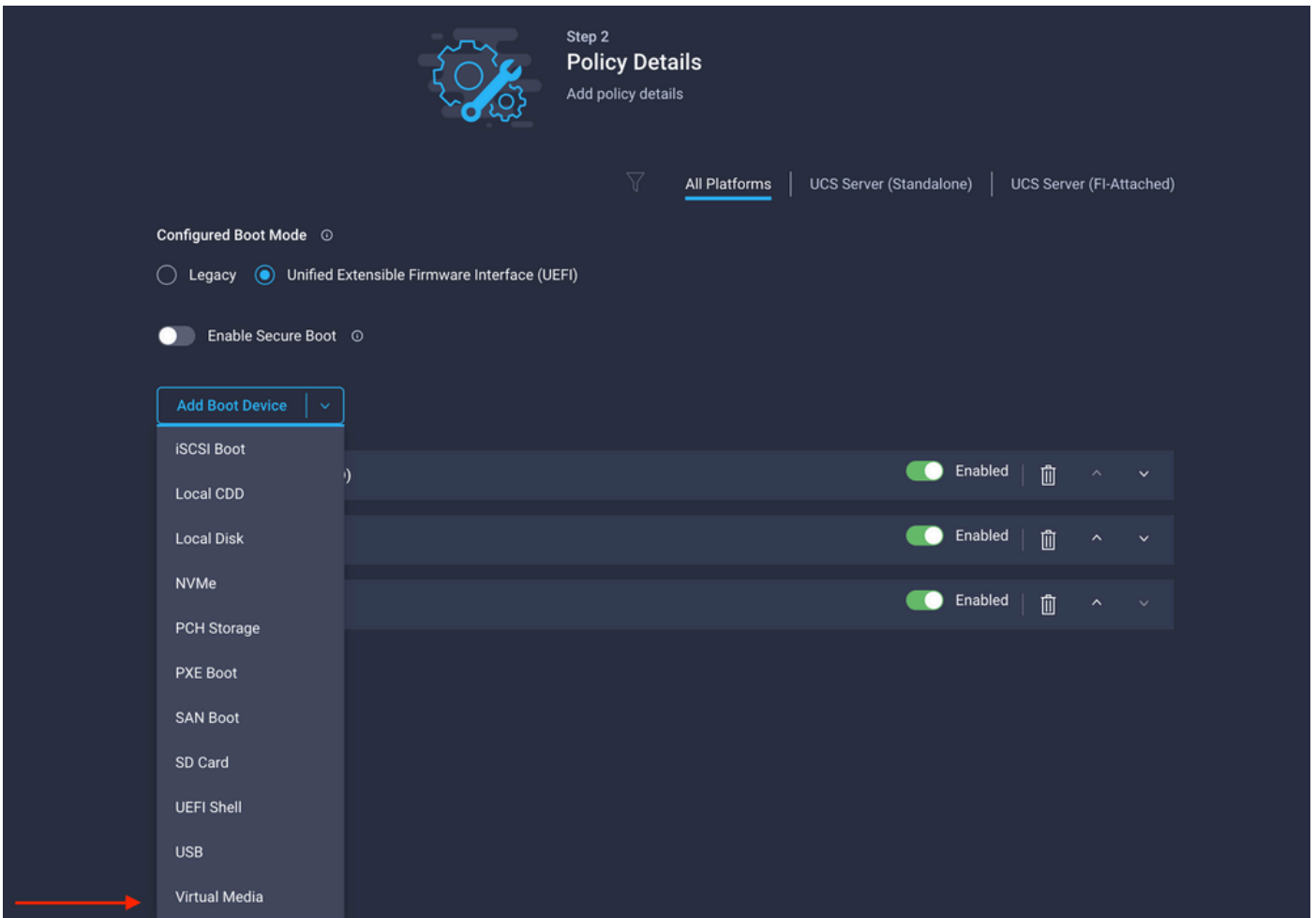


Configure the **Device Details**:

- **Device Name** is the name for reference on the Policy.
- **Slot** is the ID saved from **Step 1**.
- **Bootloader** fields (optional).



Add **Virtual Media** option to install the .iso image.



Configure **Device Name** and **Type**.



## Step 2 Policy Details

Add policy details



All Platforms

UCS Server (Standalone)

UCS Server (FI-Attached)

Configured Boot Mode ⓘ

Legacy  Unified Extensible Firmware Interface (UEFI)

Enable Secure Boot ⓘ

Add Boot Device ▾

Virtual Media (DVD)

Enabled



Device Name \*

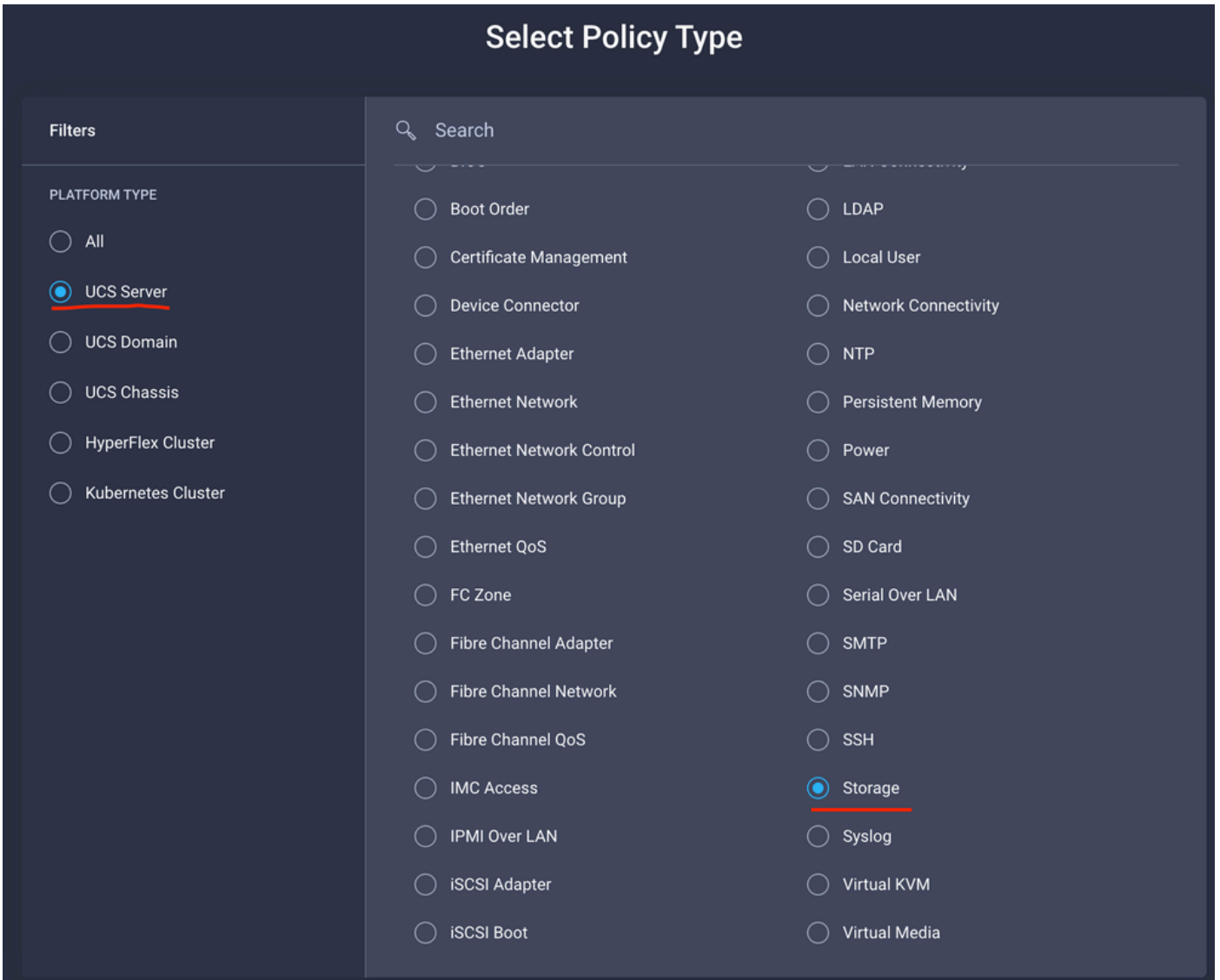
DVD ⓘ

Sub-Type

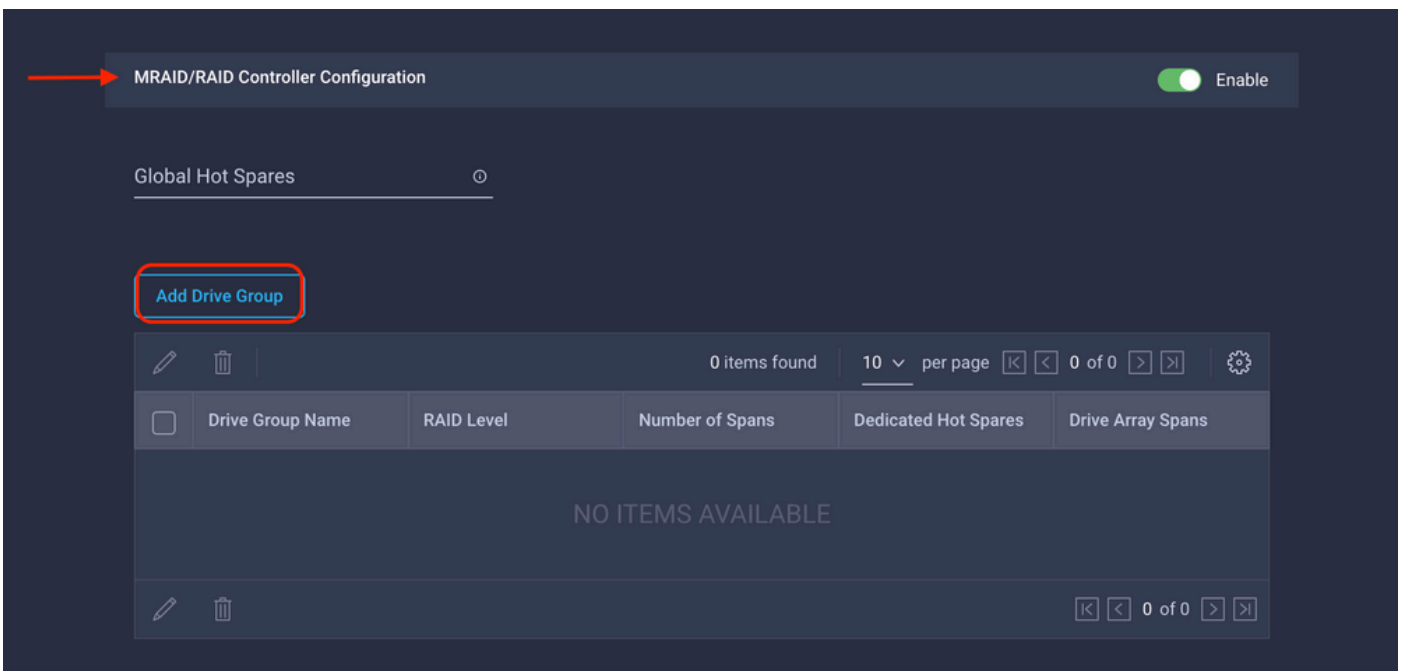
KVM MAPPED DVD ▾ ⓘ


### Step 3. Create Storage Policy

Name the Storage Policy and enable the MRAID/RAID Controller Configuration.

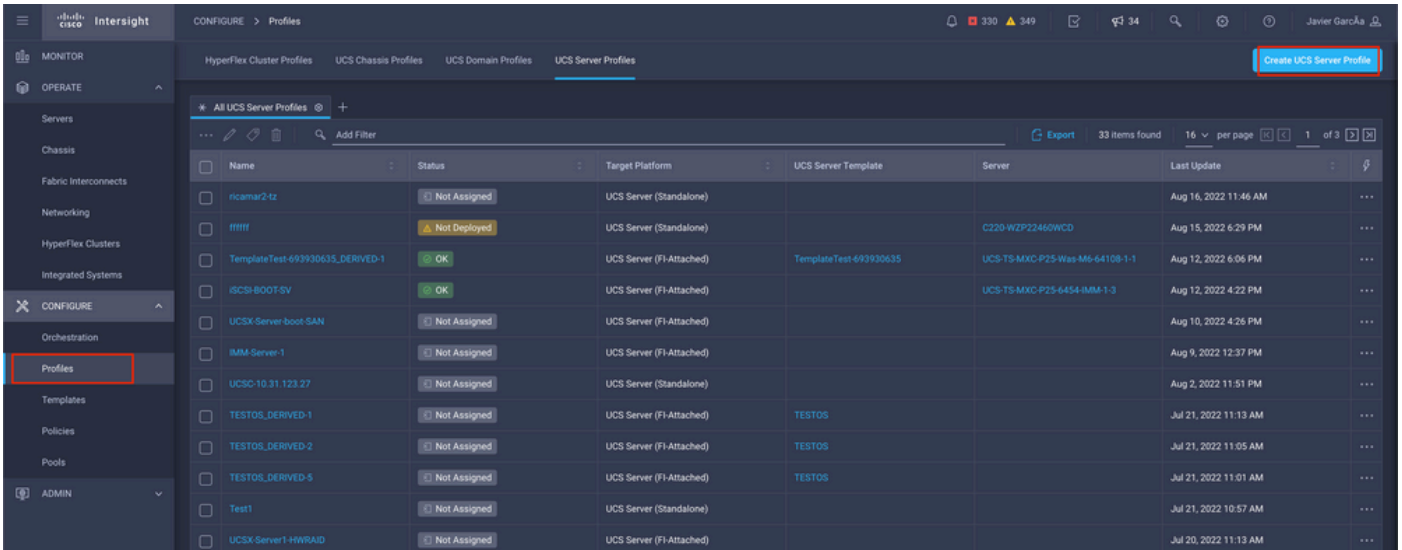


Configure **Drive Group** and **Virtual Drive**.



 **Note:** To avoid the addition of a virtual drive, use single drive RAID0 creation.

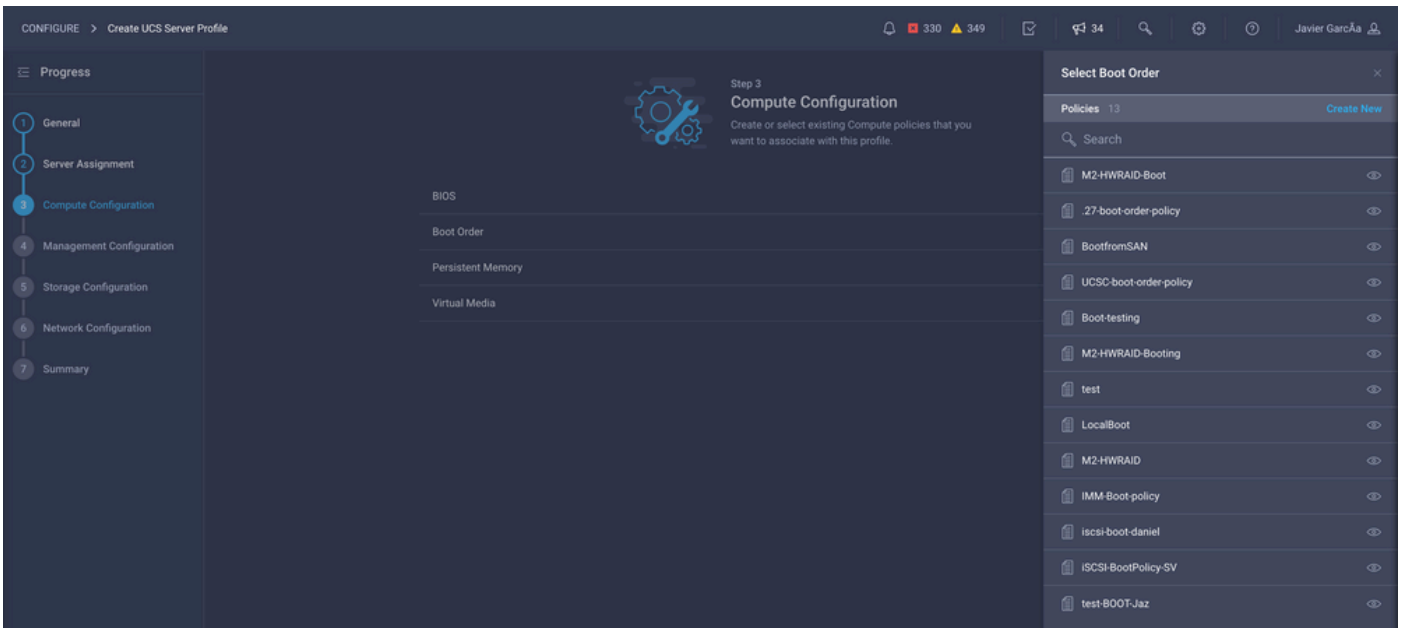
## Step 4. Deploy Server profile.




The screenshot shows the Cisco Intersight interface with the 'Profiles' section selected. A table lists various UCS Server Profiles with their status, target platform, template, and server details.

Name	Status	Target Platform	UCS Server Template	Server	Last Update
ricamar2-tz	Not Assigned	UCS Server (Standalone)			Aug 16, 2022 11:46 AM
fffff	Not Deployed	UCS Server (Standalone)		C220-WZP22460WCD	Aug 15, 2022 6:29 PM
TemplateTest-693930635_DERIVED-1	OK	UCS Server (FI-Attached)	TemplateTest-693930635	UCS-TS-MXC-P25-Was-M6-64108-1-1	Aug 12, 2022 6:06 PM
iSCSI-BOOT-SV	OK	UCS Server (FI-Attached)		UCS-TS-MXC-P25-6454-IMM-1-3	Aug 12, 2022 4:22 PM
UCSX-Server-boot-SAN	Not Assigned	UCS Server (FI-Attached)			Aug 10, 2022 4:26 PM
IMM-Server-1	Not Assigned	UCS Server (FI-Attached)			Aug 9, 2022 12:37 PM
UCSC-10.31.123.27	Not Assigned	UCS Server (Standalone)			Aug 2, 2022 11:51 PM
TESTOS_DERIVED-1	Not Assigned	UCS Server (FI-Attached)	TESTOS		Jul 21, 2022 11:13 AM
TESTOS_DERIVED-2	Not Assigned	UCS Server (FI-Attached)	TESTOS		Jul 21, 2022 11:05 AM
TESTOS_DERIVED-5	Not Assigned	UCS Server (FI-Attached)	TESTOS		Jul 21, 2022 11:01 AM
Test1	Not Assigned	UCS Server (Standalone)			Jul 21, 2022 10:57 AM
UCSX-Server1-HWRAID	Not Assigned	UCS Server (FI-Attached)			Jul 20, 2022 11:13 AM

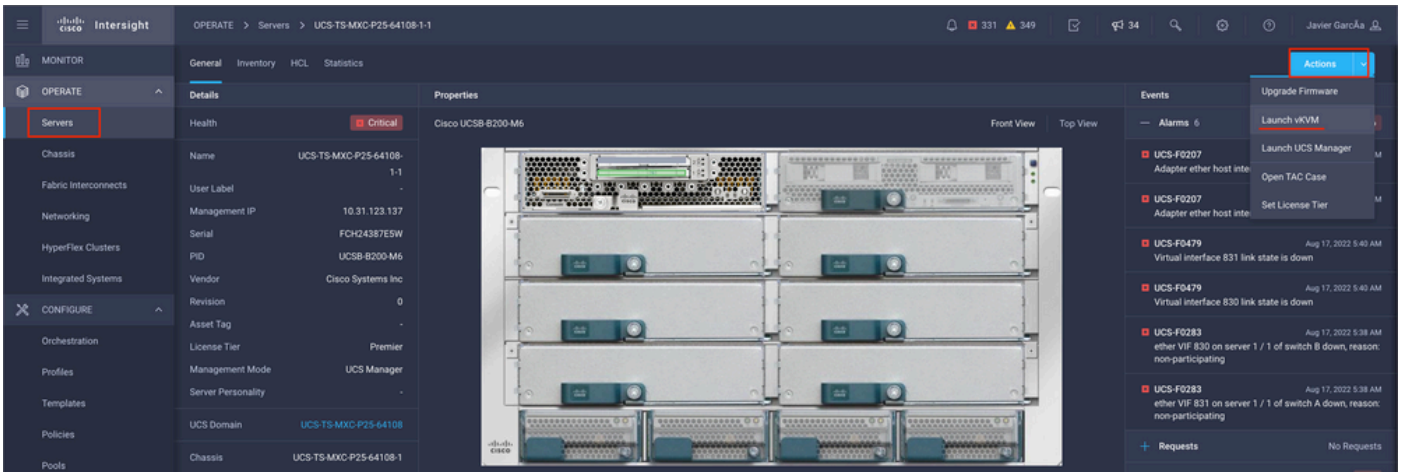
### Step 4.1 Apply the created policies.



The screenshot shows the 'Create UCS Server Profile' wizard in Step 3, 'Compute Configuration'. The left sidebar shows the progress steps: General, Server Assignment, Compute Configuration (selected), Management Configuration, Storage Configuration, Network Configuration, and Summary. The main area displays configuration options for BIOS, Boot Order, Persistent Memory, and Virtual Media. A 'Select Boot Order' panel on the right lists 13 policies, including M2-HWRAID-Boot, 27-boot-order-policy, BootfromSAN, UCSC-boot-order-policy, Boot-testing, M2-HWRAID-Bootting, test, LocalBoot, M2-HWRAID, IMM-Boot-policy, iscsi-boot-daniel, iSCSI-BootPolicy-SV, and test-BOOT-Jaz.

 **Note:** Other policies can be added if required. This article explains only the policies required to boot from local storage. Other policies can be added if required.

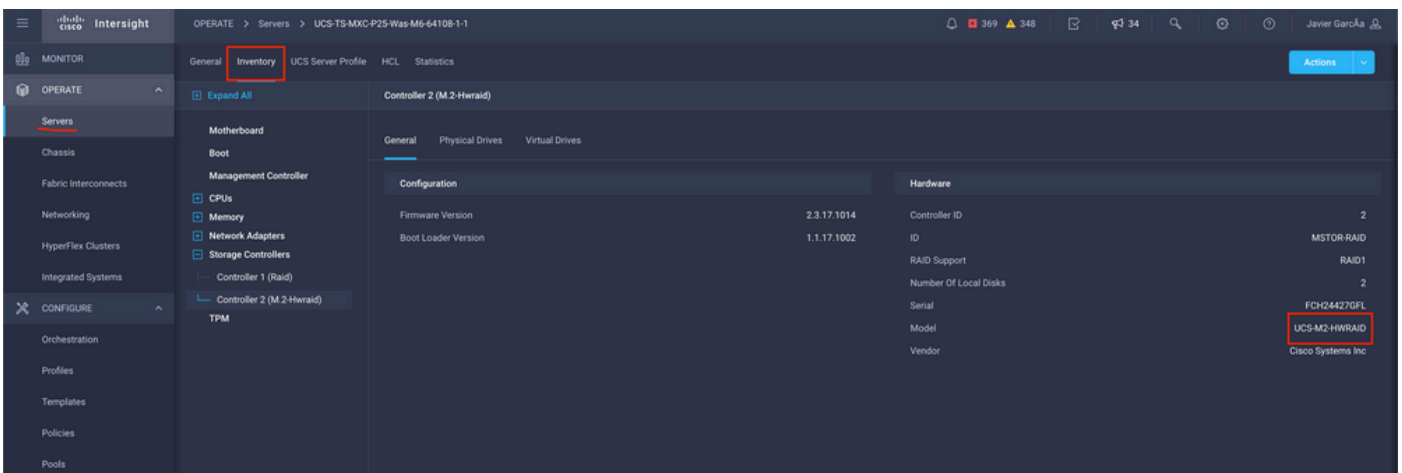
## Step 5. Install the OS through the KVM.



## Local Storage M.2 Controller

**STEP 1.** Identify the controller installed in the Server and slot ID.

Navigate to **Servers > [server name] > Inventory > Storage Controllers**. Take note of the ID.



**Step 2.** Create **Boot Order Policy**:

Navigate to **Policies > Create Policy > UCS Server > Boot Order**

(Configure Policy, Organization, Name, and Description).

Add local Disk boot option, select **Legacy** or **Unified Extensible Firmware Interface (UEFI)**.

**Device Name** is the name for reference on the Policy.

**Slot** is the ID saved from **Step 1**.

**Bootloader** fields (optional).


Add **Virtual Media** option to install the .iso image.

**Step 3.** Create **Storage Policy**

Name the **Storage Policy** and enable the **M.2 RAID Controller Configuration**.



Step 2  
**Policy Details**  
Add policy details



[All Platforms](#) | [UCS Server \(Standalone\)](#) | [UCS Server \(FI-Attached\)](#)

**General Configuration**

Use JBOD drives for Virtual Drive creation ⓘ

Unused Disks State  
No Change ▼ ⓘ


**M.2 RAID Configuration**  Enable

Slot of the M.2 RAID controller for virtual drive creation  
MSTOR-RAID-1,MSTOR-RAID-2 ▼ ⓘ

**MRAID/RAID Controller Configuration**  Enable

**MRAID/RAID Single Drive RAID0 Configuration**  Enable

#### Step 4. Deploy Server profile

 **Note:** This article explains only the policies required to boot from local storage. Other policies can be added if required.

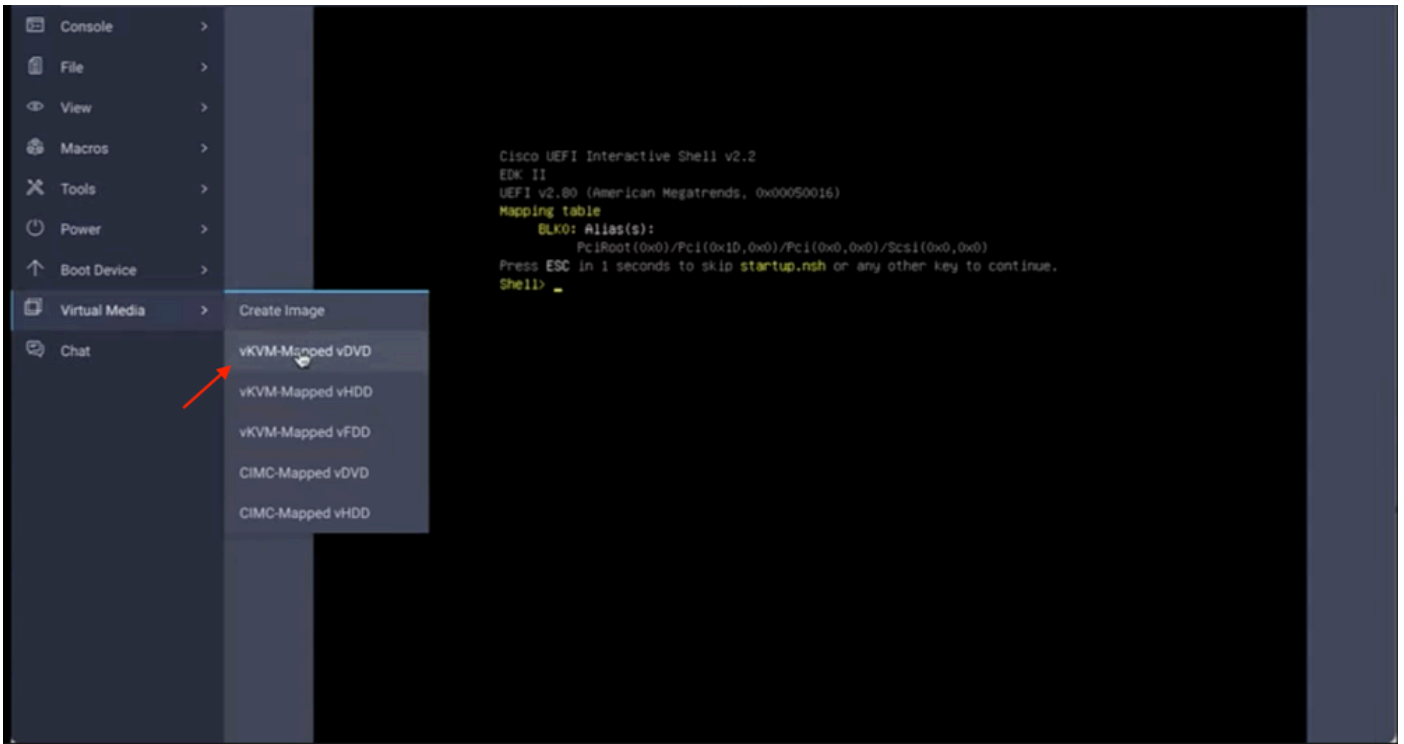
**Step 4.1** Apply the created policies.

**Step 5.** Install the OS through the KVM.

## Verify

Use this section in order to confirm that your configuration works properly.

Launch the **vKVM-Mapped vDVD**.



Verify **RAID** is displayed through OS installation.

