Configure M2 Hardware Raid from UCS Central

Contents

Introduction

Prerequisites

- Requirements
- Components Used

Background Information

Configure

- Check Current Status
- Create Disk Group Policy on UCS Central
- Create a Storage Profile
- Associate to a Global Service Profile

Verify

Troubleshoot

Related Information

Introduction

This document describes how to configure the Unified Computing System (UCS)-M2-HWRAID in UCS Central Management Software.

Prerequisites

Requirements

Cisco recommends you have knowledge of these topics:

- UCS Manager
- UCS Central
- M2 Raid UCS-M2-HWRAID

Components Used

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

- Cisco UCS 64108 108-Port Fabric Interconnect in Ethernet and Fibre Channel End Host Mode
- Infrastructure bundle version: 4.2(3)
- Cisco UCS B200 M6 Server
- Server firmware version: 4.2.3(b)B
- More: UCS Hardware and Software Compatibility
  - **Adapters > RAID > Cisco Boot Optimized M.2 HW Raid Controller (Cisco)**

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.

Background Information

The UCS-M2-HWRAID holds two m.2 gumsticks; one on each side of the carrier. The UCS-M2-HWRAID and UCS-MSTOR-M2 look similar, but in this configuration example, hardware RAID.

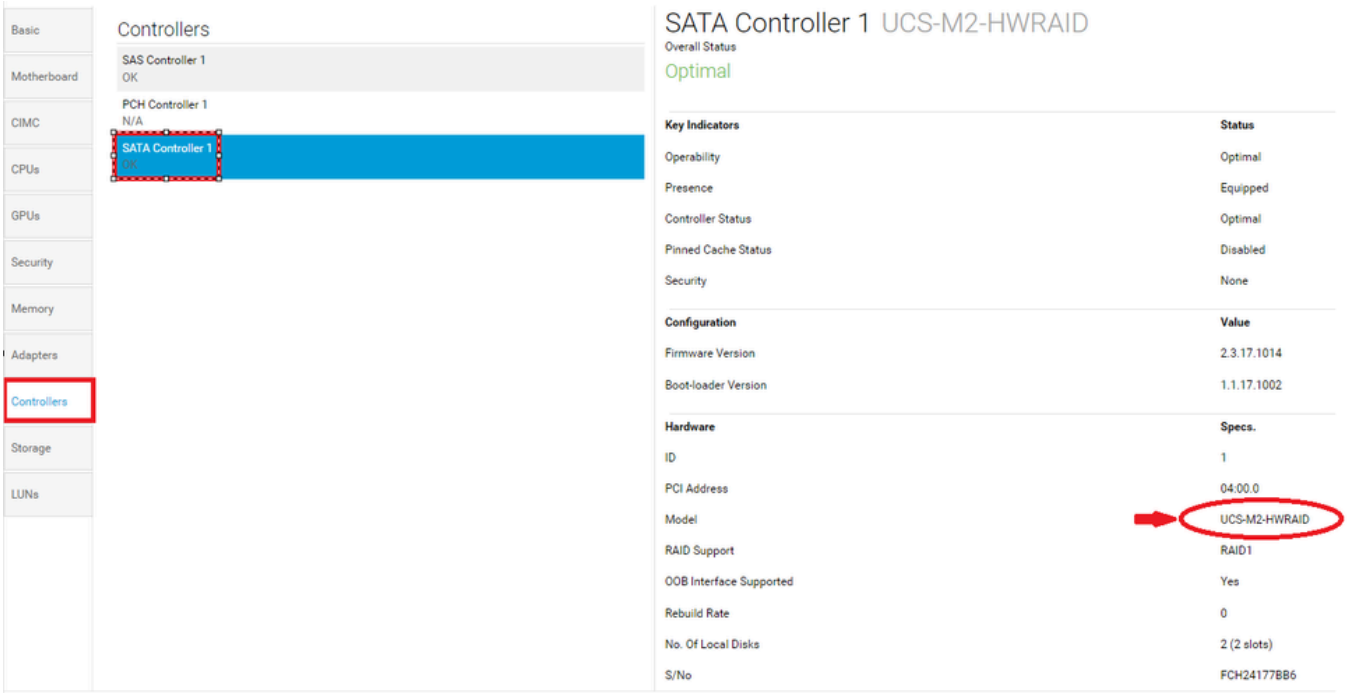
Configure

Check Current Status

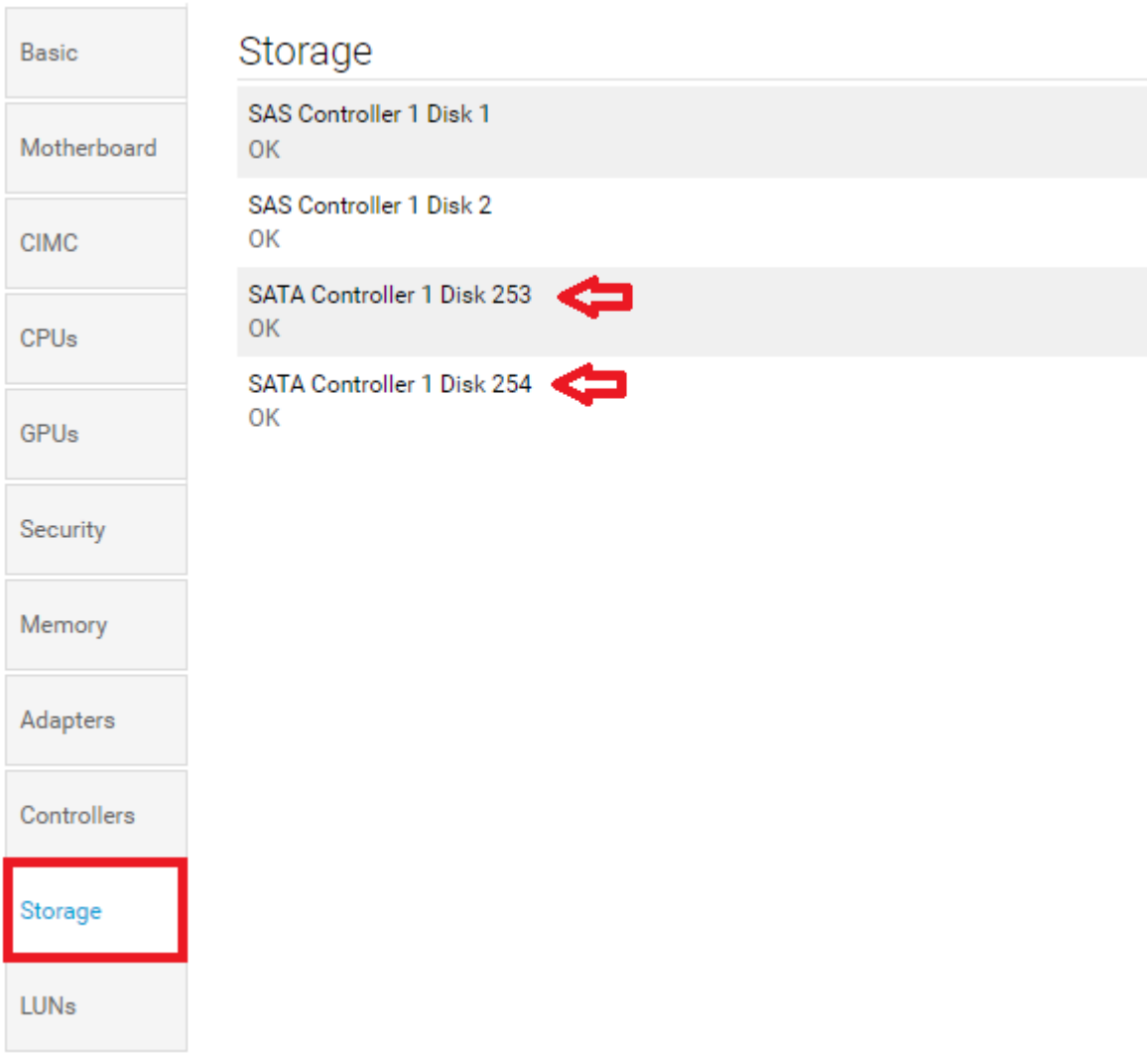
1. Check that the necessary parts are shown at server inventory.

In UCS Central, navigate to **Equipment > Servers > Server x**.

Select the **Inventory** tab at the top, **Motherboard**. Expand **Mini Storage**. Ensure that your Model shows as **UCS-M2-HWRAID** as shown in this image.

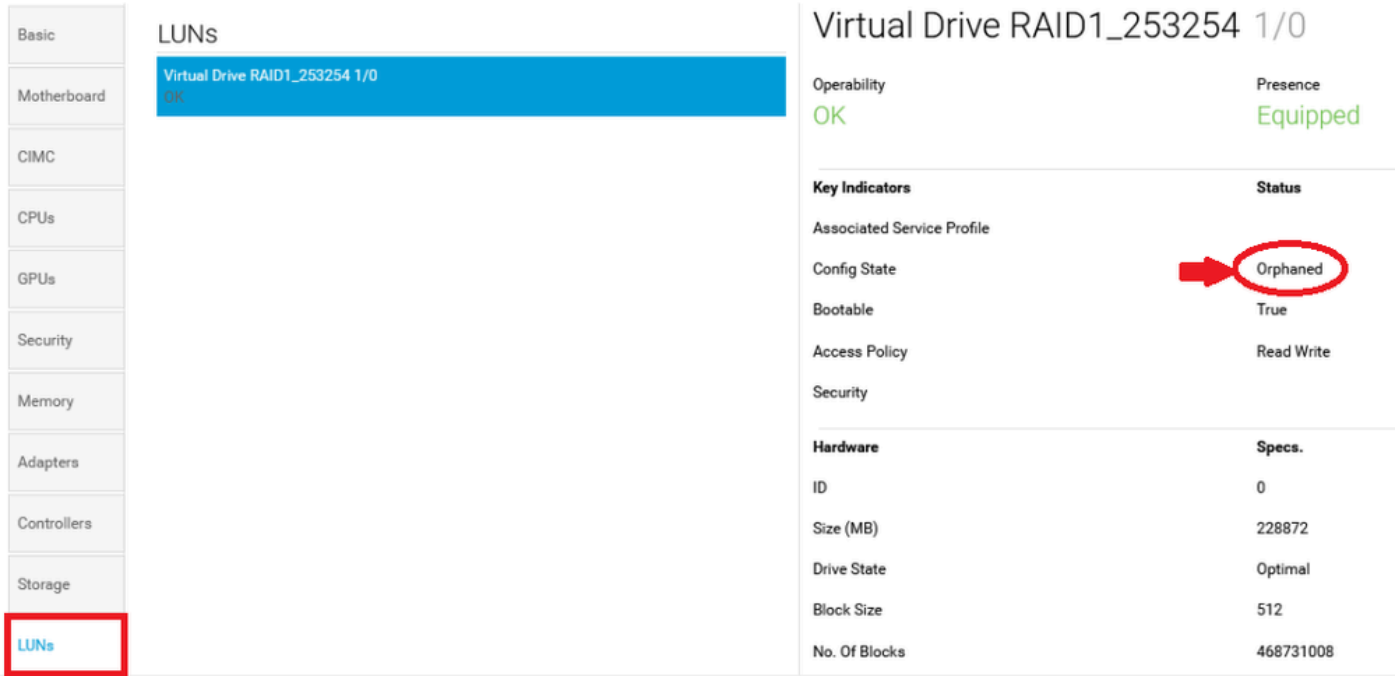


2. Check that two m.2 disks are presented, and are in operable state. This server model places m.2 disks in slots 253 and 254.



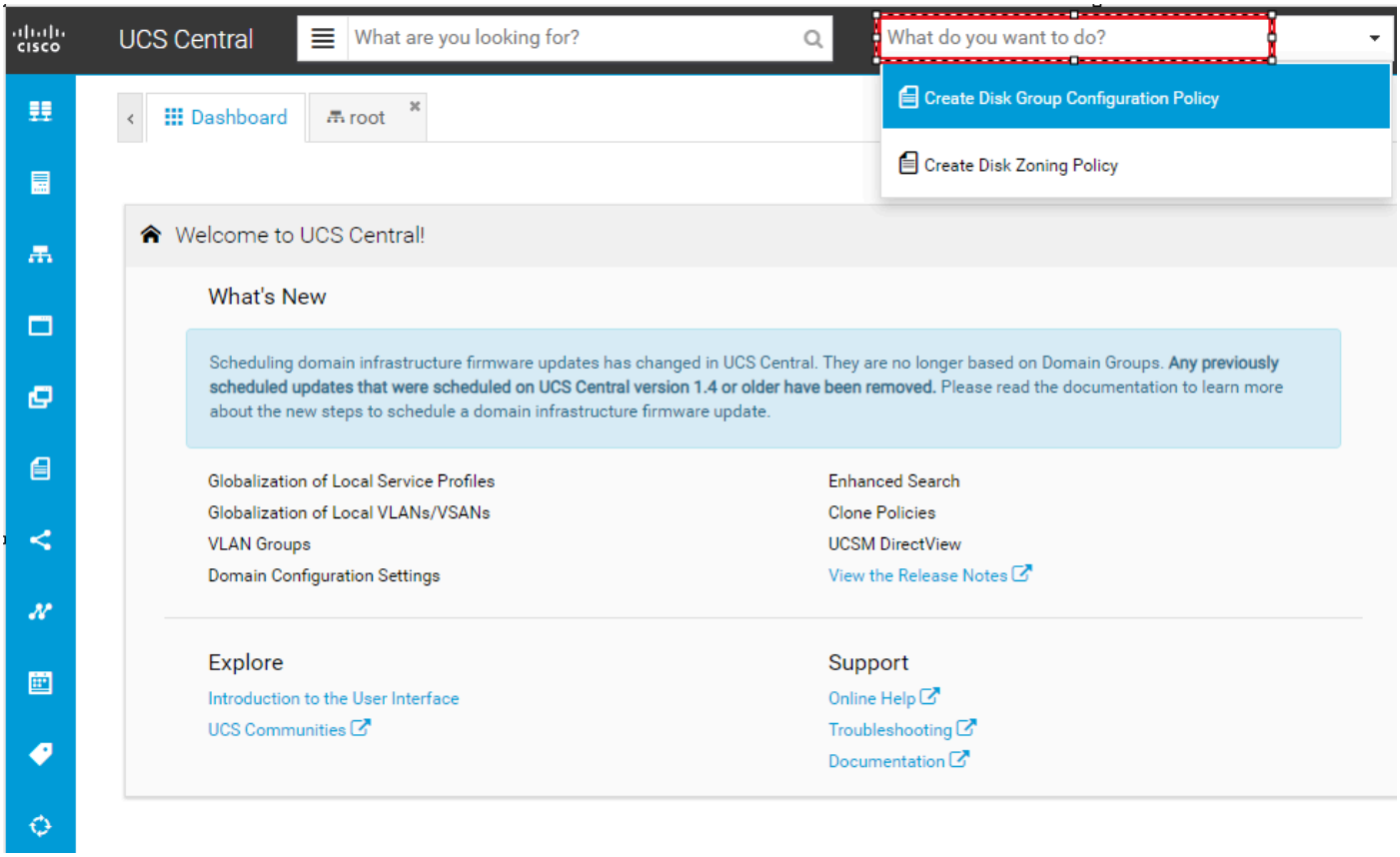
3. Check for any orphaned LUN:

Navigate to **LUNs** Tab. If you see an orphaned LUN, skip to the Troubleshooting section at the bottom before you begin the configuration.

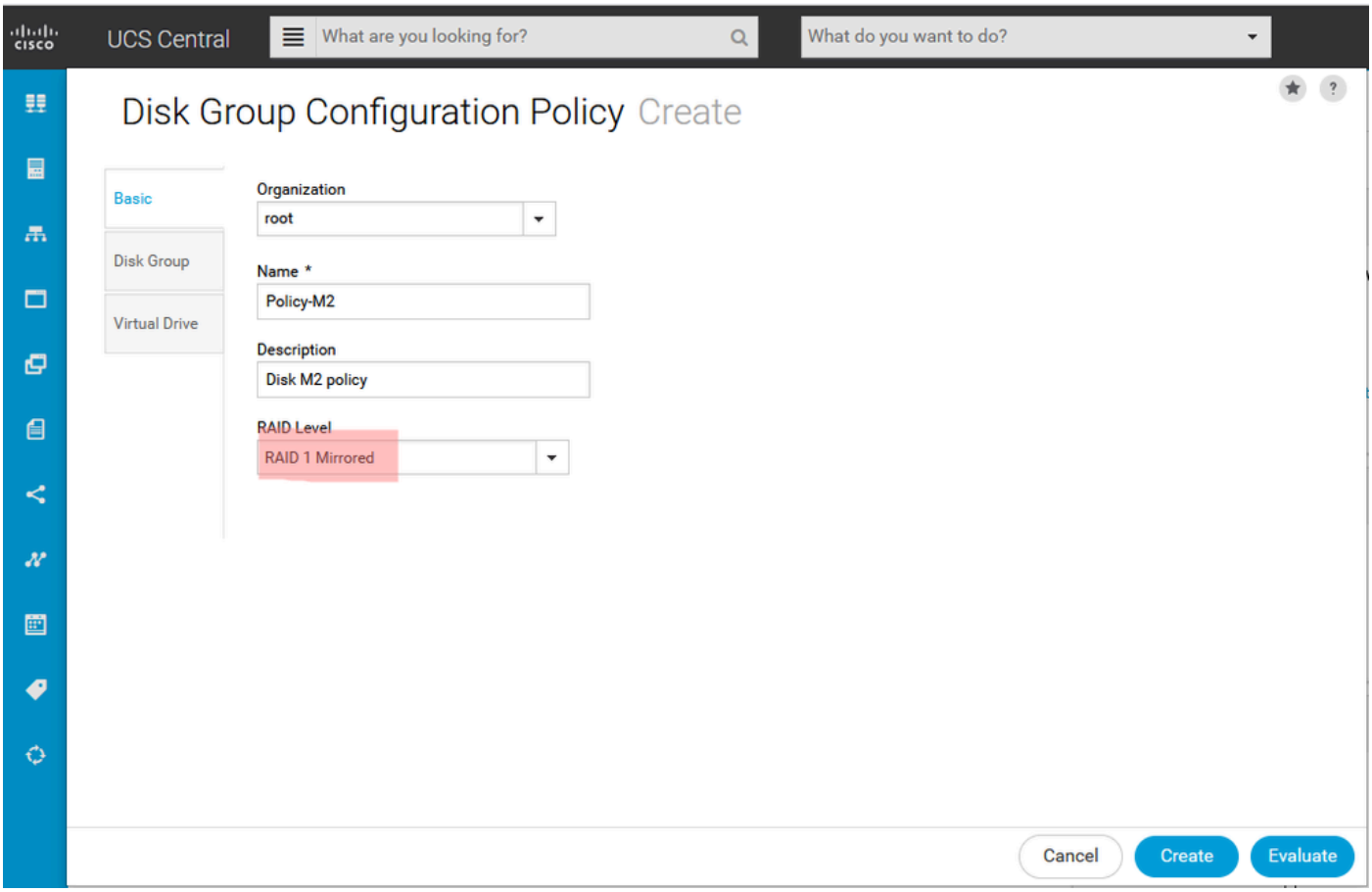


Create Disk Group Policy on UCS Central

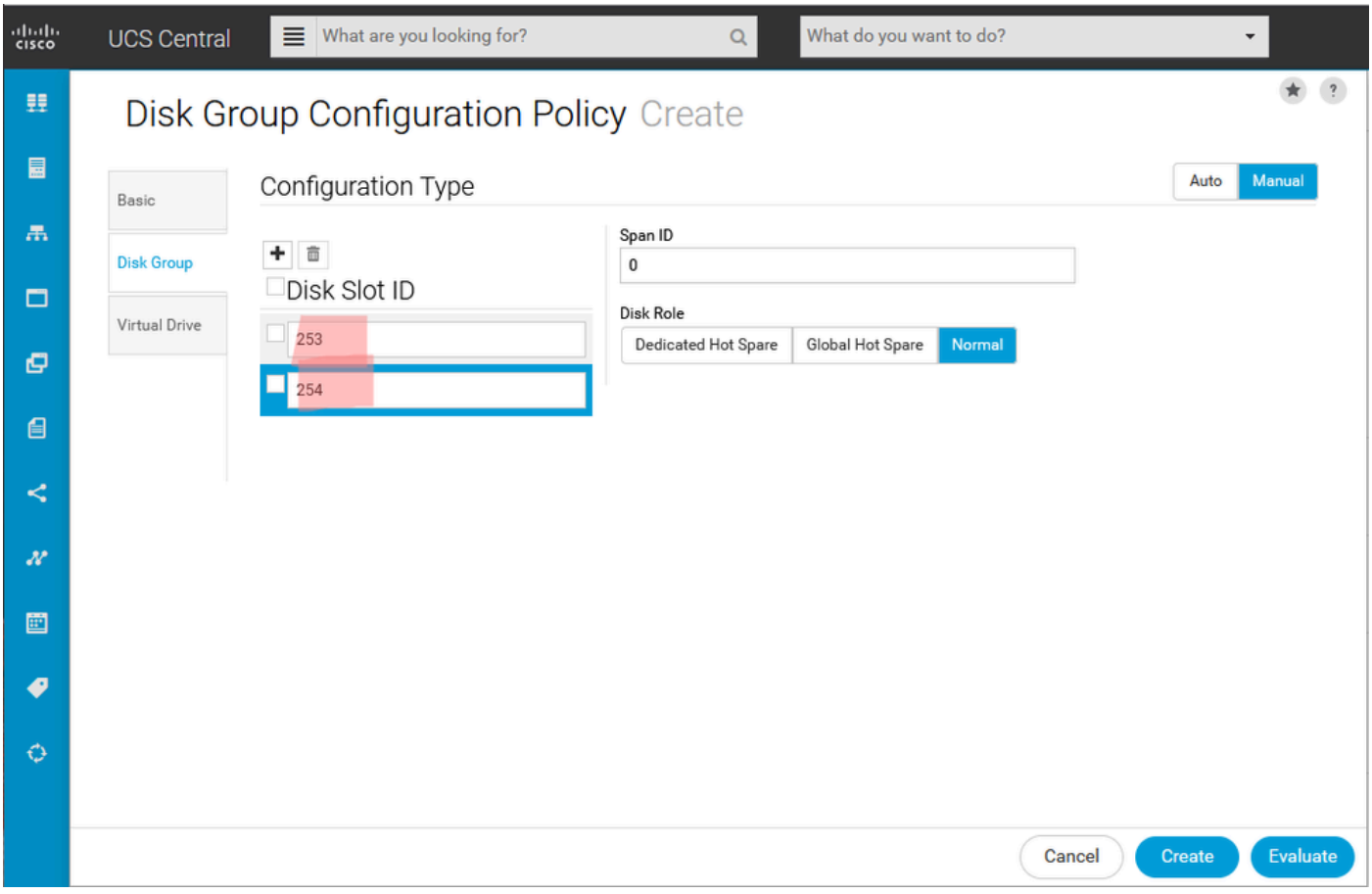
1. On UCS Central, navigate to box **What do you want to do?** and type **Create Disk Group Configuration Policy**.



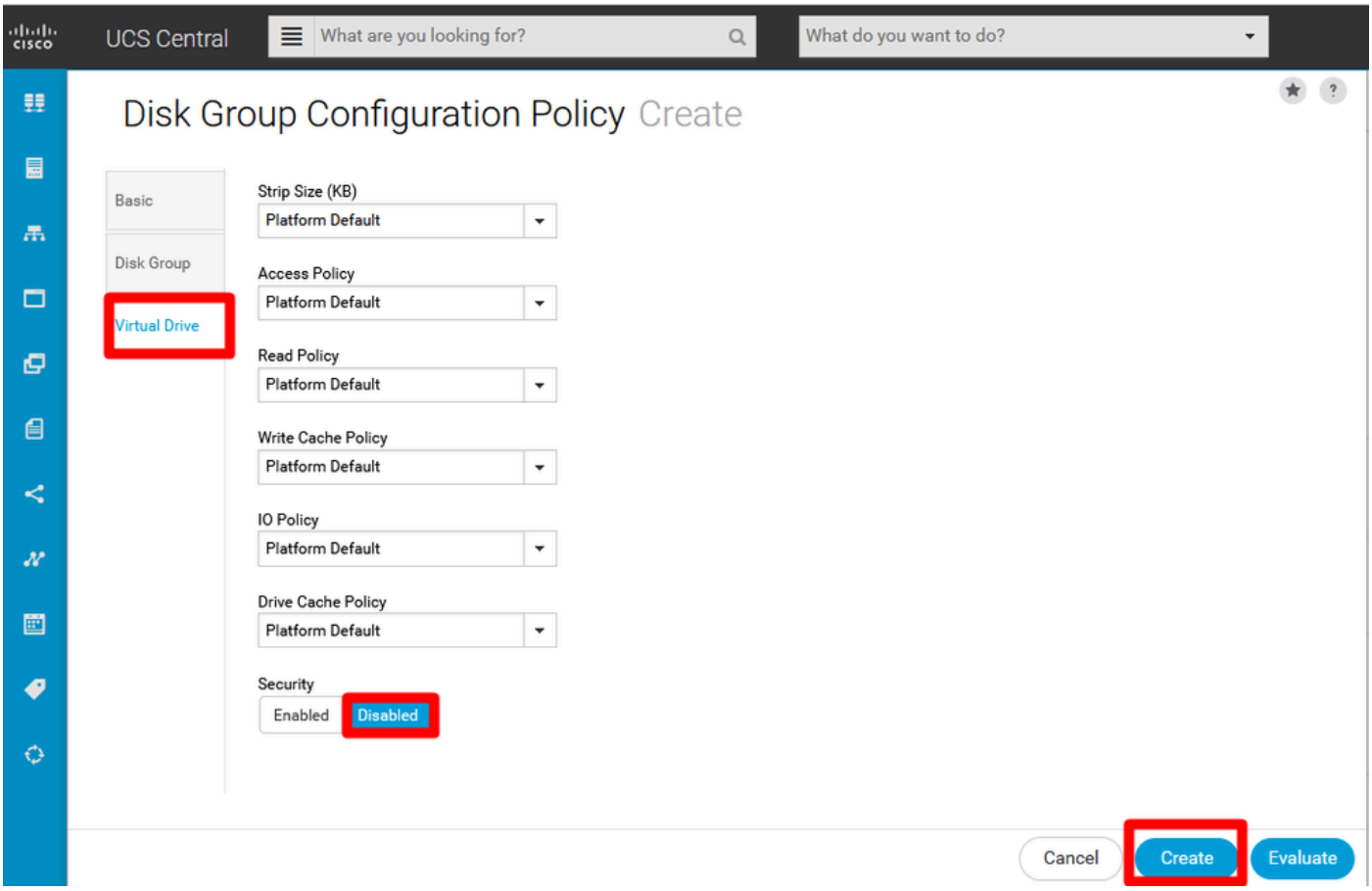
2. Select the **organization**, **name the policy**, add **description**, and select **RAID Level 1 Mirrored**.



3. Select **Disk Group**. Under **Disk Slots IDs,** type 253 and 254 for the Disk IDs for this case, and then select normal **Disk Roles**.

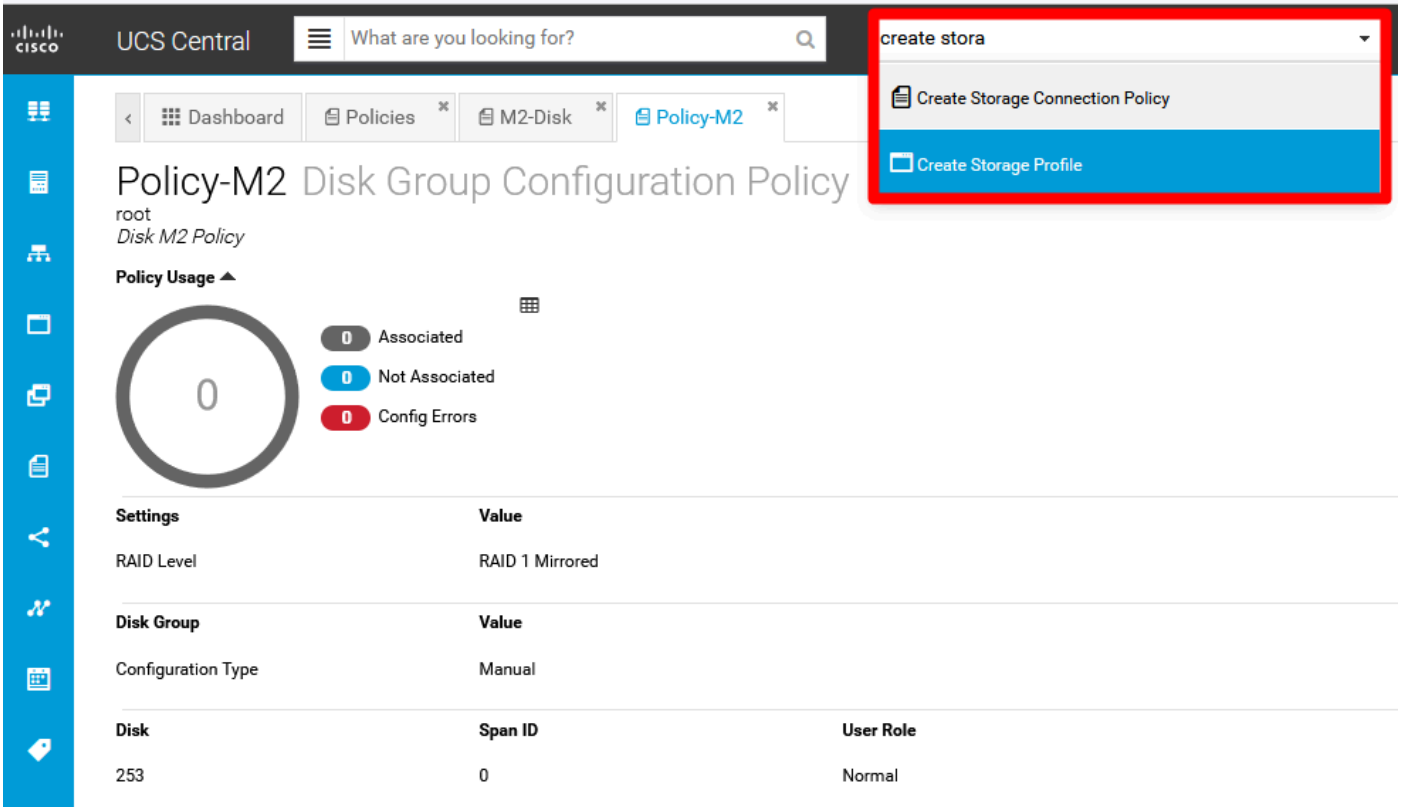


4. Select **Virtual Drive**, and confirm that all options are on Platform Default, and that Security is Disabled. Then, click the **Create** button.

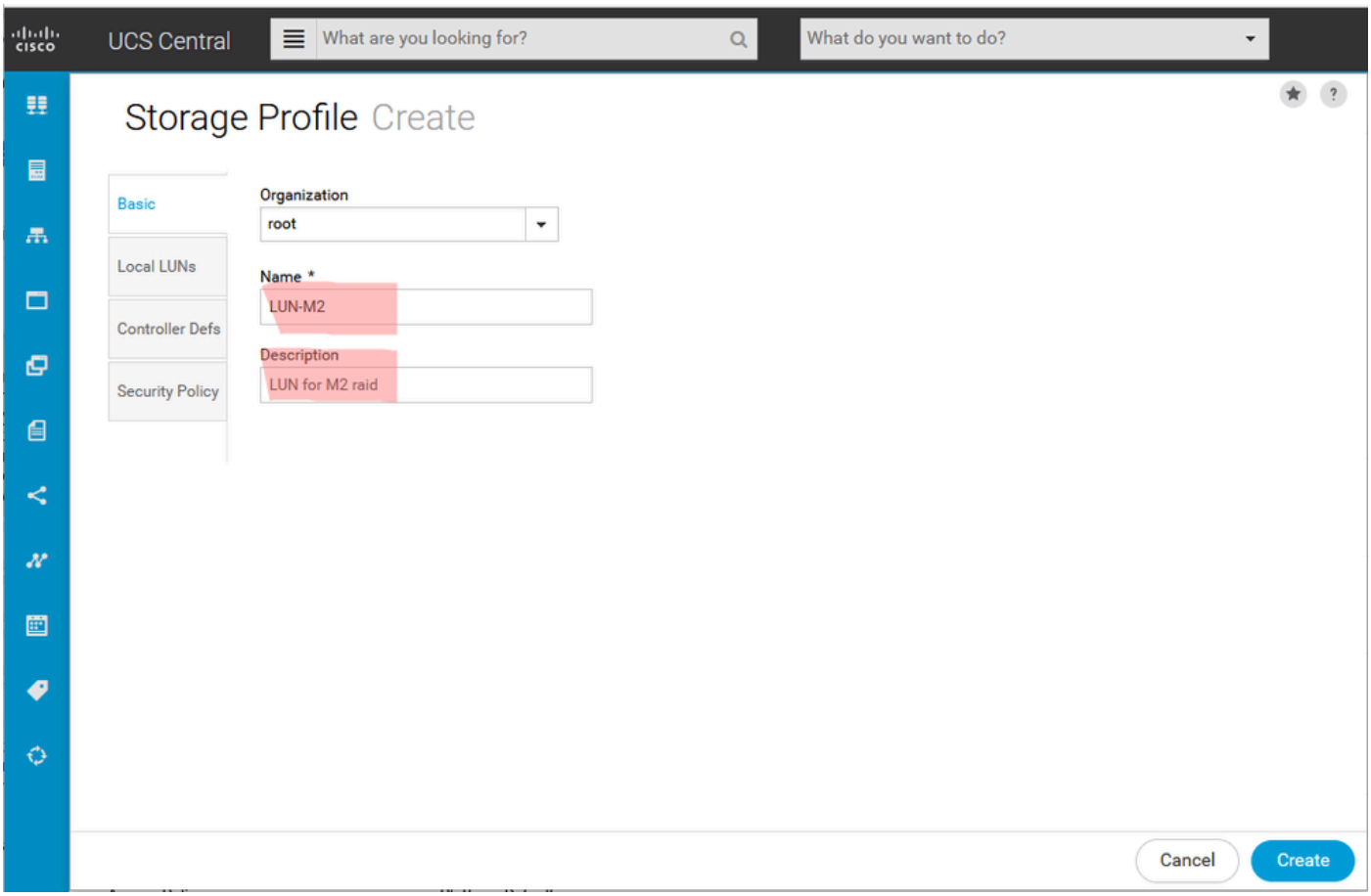


Create a Storage Profile

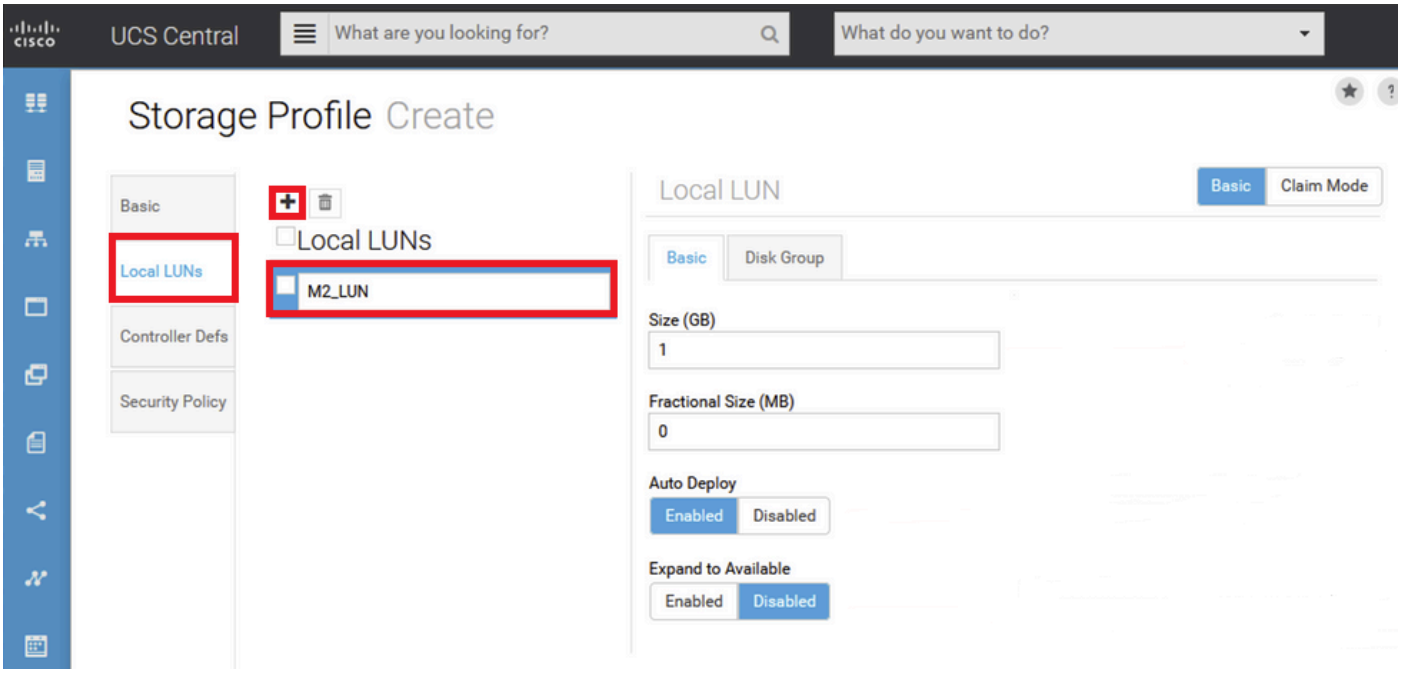
1. On UCS Central, navigate next to search box **What are you looking for?** and type **Create Storage Profile.**



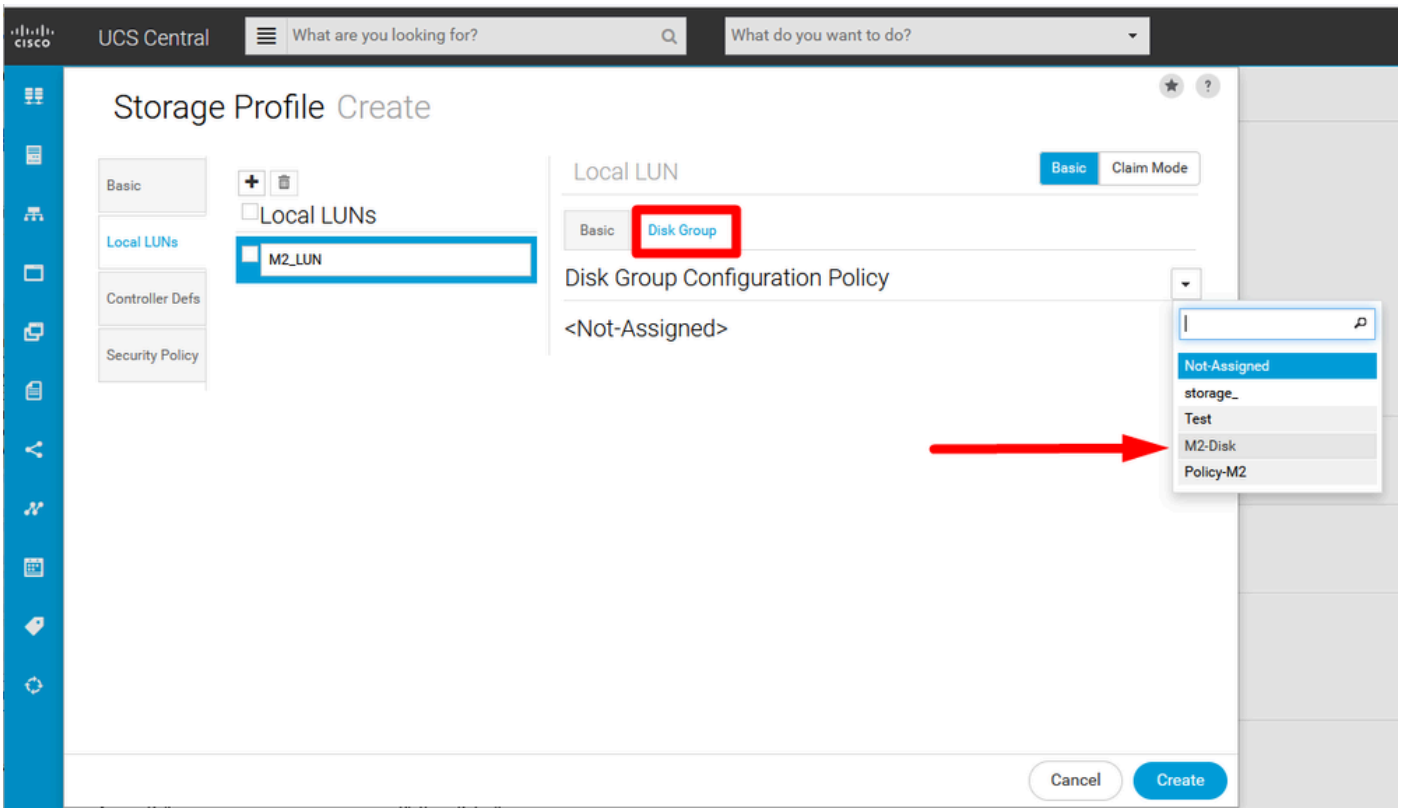
2. Name the storage profile and add a description.



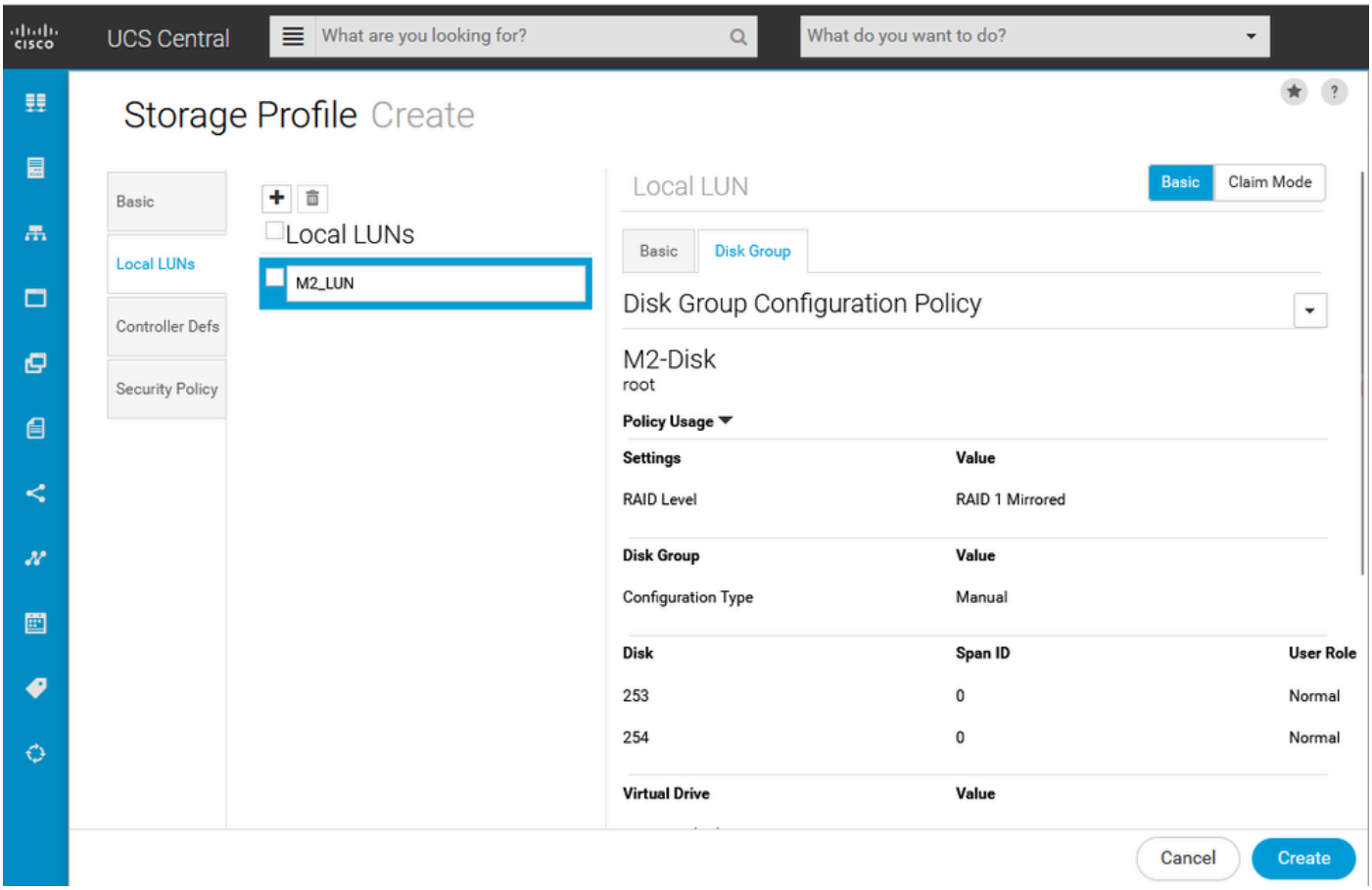
3. Select **Local LUNs**, then click **Add** button and give name to this LUN.



4. Click **Disk Group**. Click drop-down arrow and select previously created Disk Group Policy.

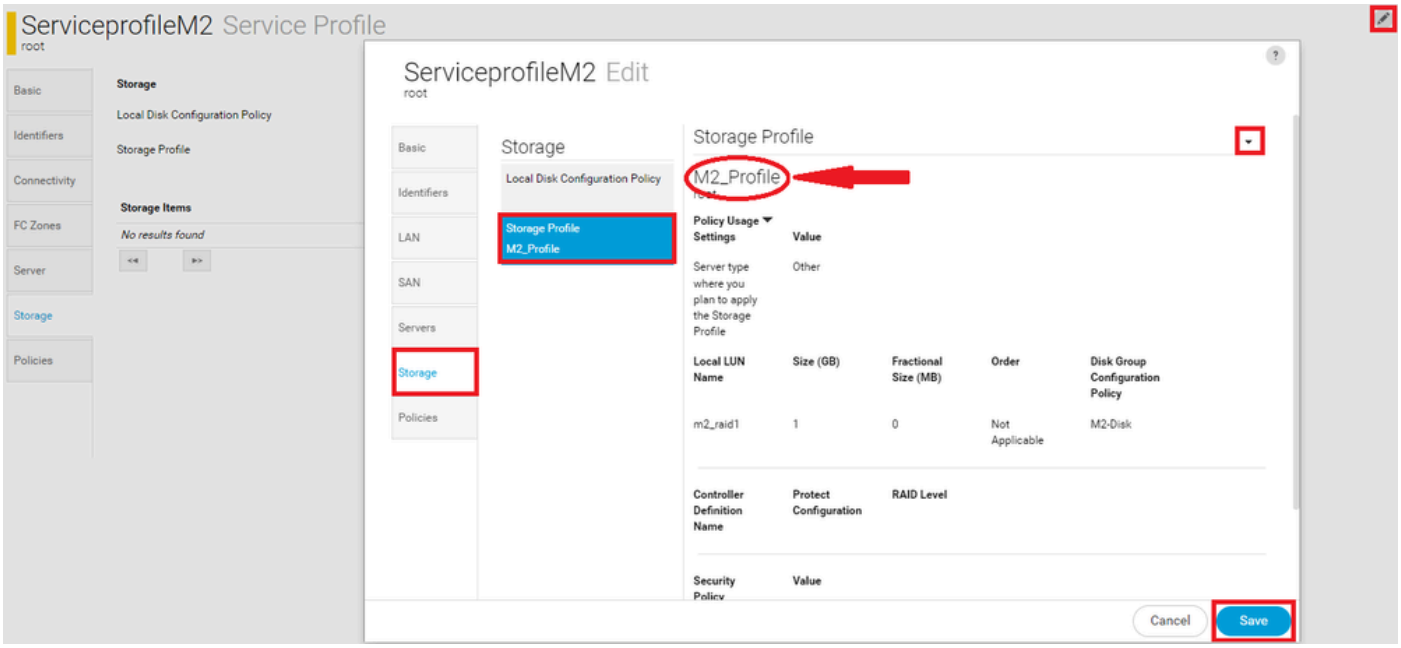


5. Controller Defs and Security policy are not required for M.2 Raid controllers. Complete configuration by selecting **Create**.

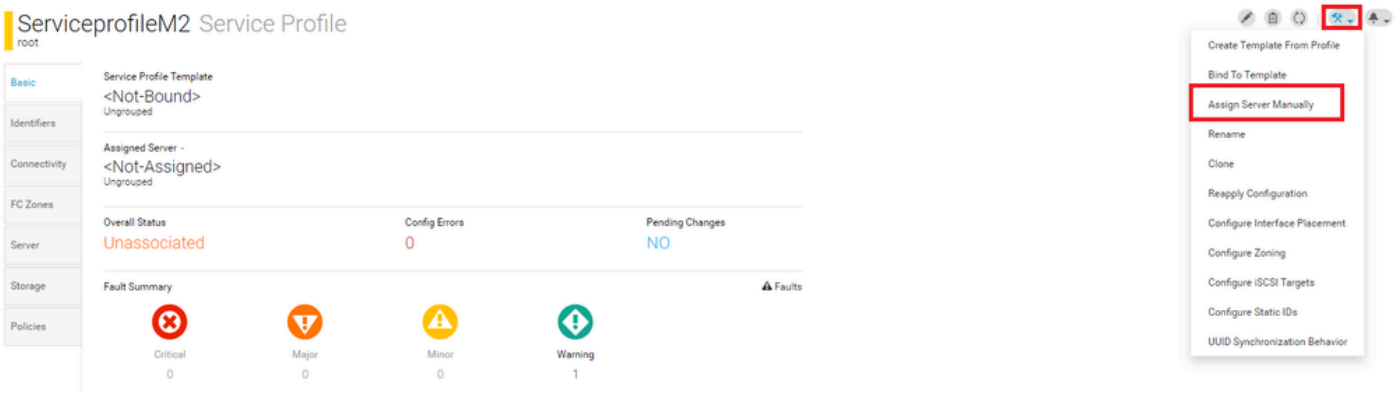


Associate to a Global Service Profile

1. Apply the recently created Storage Profile to a new or existing service profile, and **Save** configuration.

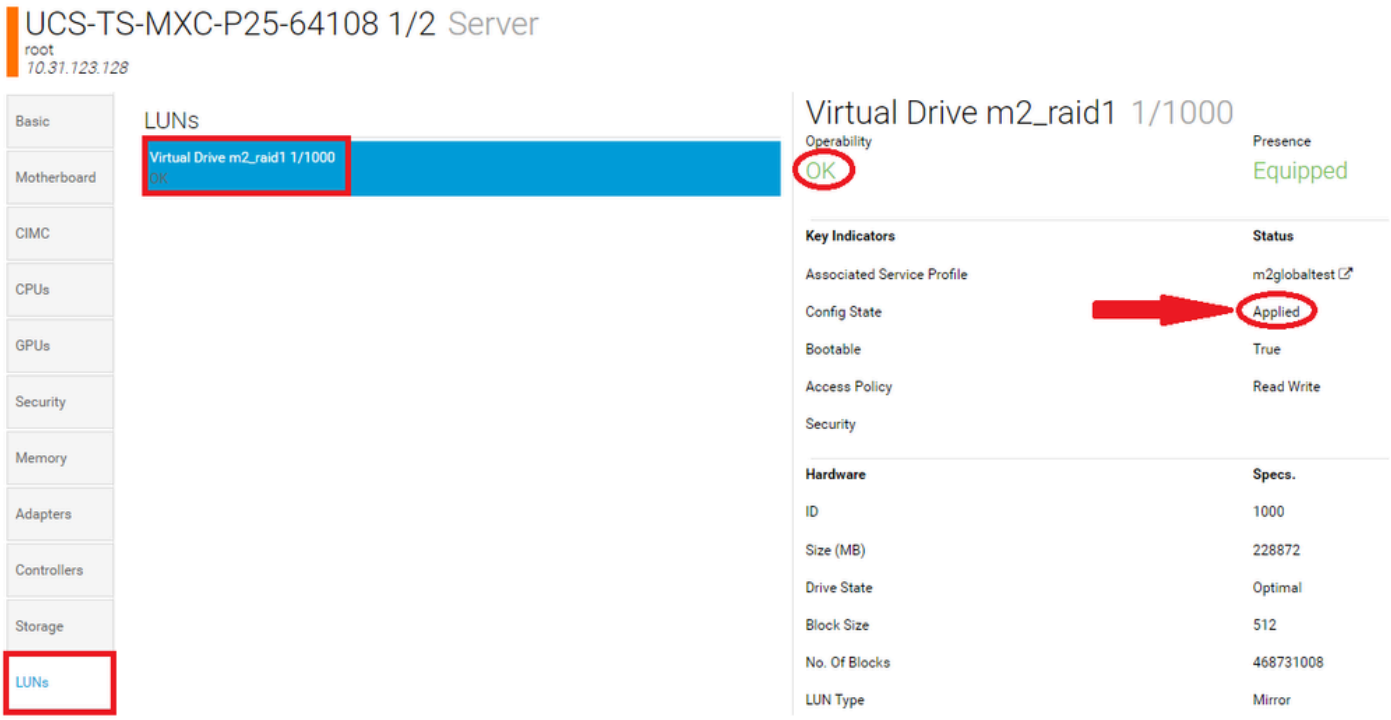


2. In case service profile is not associated yet, proceed to assign Service Profile to an existing Server.



Verify

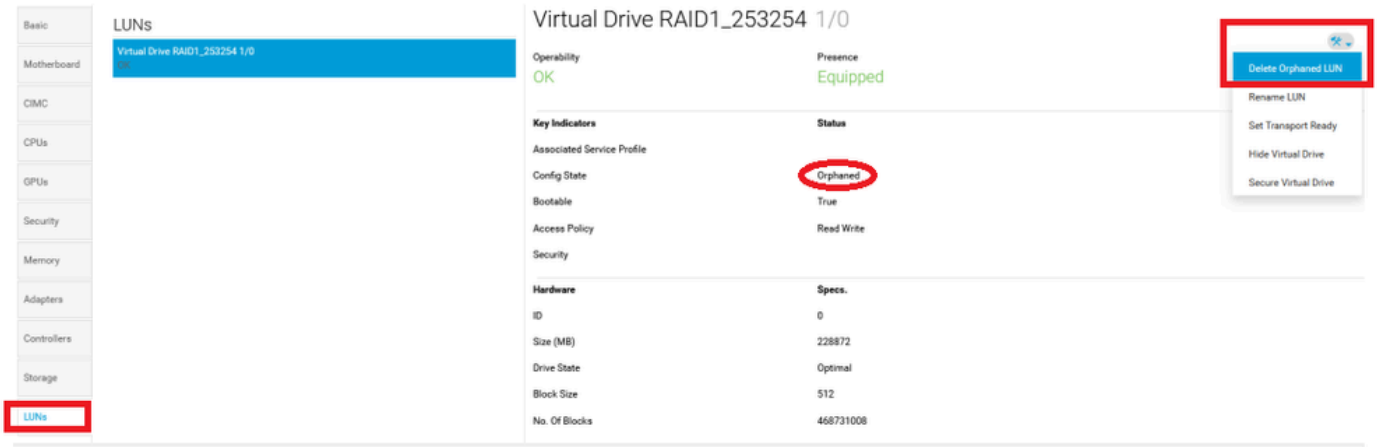
Check **ServerTab**, then select **LUNs** and make sure Virtual Drive exists and configure state is applied.



Troubleshoot

This section provides information you can use in order to troubleshoot your configuration.

When an orphaned LUN is found, select the **LUN** and**Delete**it. This removes any and all data that exists on the array as shown in this image.



Related Information

- Cisco UCS Central Storage Management Guide, Release 2.0
- Cisco UCS B200 M6 Blade Server
- Cisco Technical Support & Downloads