

# Oracle® Enterprise Manager Ops Center

Adding and Provisioning Hardware

12c Release 2 (12.2.0.0.0)

E48138-01

January 2014

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This guide provides an end-to-end example for how to use Oracle Enterprise Manager Ops Center.

## Introduction

This document describes one of the solutions for a set of several servers that have been discovered and are managed, but have various configurations for their service processors and RAID controllers. The goal is a set of servers with the same configuration that you can then provision with operating systems. The goal is accomplished by creating a deployment plan to do the following:

- Apply a profile for the service processor that is specific to each type of server.
- Apply a profile to configure RAID controllers. The same configuration can be used in all types and models of servers.
- Update the firmware of components such as fans or power distribution units, if necessary.

The deployment plan does not install an operating system.

See [Related Articles and Resources](#) for links to related information and articles.

## What You Will Need

You will need the following to add new hardware to your data center, to check the firmware on the new systems, and to reconfigure the servers.

- For RAID controllers, the Disk IDs or the RAID Controller IDs
- These roles: Server Deploy Admin, Asset Admin, Update Admin. If you have to add firmware images to the software library, you need the Storage Admin role. If you have to create new credentials, you need the Security Admin role.
- A software library with firmware images for the service processor, the RAID controller, and other components. For more information about software libraries and firmware images, see sources in [Related Articles and Resources](#).

## Hardware and Software Configuration

The servers are managed assets. You have at least one server with the desired BIOS configuration, Service Processor configuration, and RAID Controller configuration.

The target servers' service processors must all use ILOM 3.0 or later.

The firmware images are in the software library.

## Create a Server Hardware Deployment Plan

These are the tasks for configuring a set of servers:

- [Create a Service Processor Profile](#)
- [Create a RAID Controller Profile](#)
- [Identify the Firmware Update Profiles](#)
- [Create the Deployment Plan](#)
- [Apply the Deployment Plan](#)

## Create a Service Processor Profile

1. Expand **Plan Management** in the Navigation pane and the select **Profiles and Policies**.
2. Expand **Service Processor**.
3. Click **Create Profile** in the Action pane. Enter a name for the profile and select the type of server. This procedure names the profile as Day1 for ILOM 3.0 service processors. This selection affects the remaining steps. Click **Next**.

**Identify Profile** \* Indicates Required Field

\* Name: Day1

Description:

Create a deployment plan for this profile.

\* Subtype: Subtype  
CMM SP with ILOM 3.0  
Server SP with ILOM 3.0  
M-Series SP

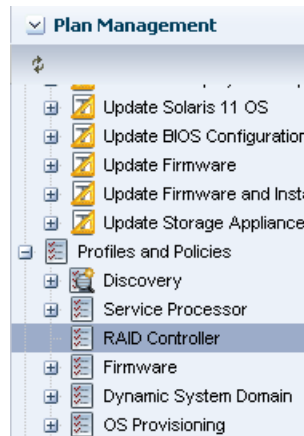
Target Type: Target Type  
Servers

4. Enter the username and password for the service processor's Administrator's account. Then enter a new password. All service processors that are configured using this profile will have this password.
5. Domain Name Service maps host names to IP addresses. To enable the service, select the **Use DNS** checkbox and then either select the **Auto DNS via DHCP** checkbox or enter the names of up to three DNS servers.
6. The service processor uses the Proxy Controller's time zone by default. You can choose another time zone, but for this general profile, accept the default action.

The Day1 profile is displayed in the Plans and Profiles section.

## Create a RAID Controller Profile

1. Expand **Plan Management** in the Navigation pane and the select **Profiles and Policies**.
2. Expand RAID Controller.



3. Click **Create Profile** in the Action pane. The first step of the profile wizard is displayed. Enter a name for the profile and accept the default action to create a deployment plan that has this profile as its step. Click **Next**.

**Identify Profile** \* Indicates Required Field

\* Name:

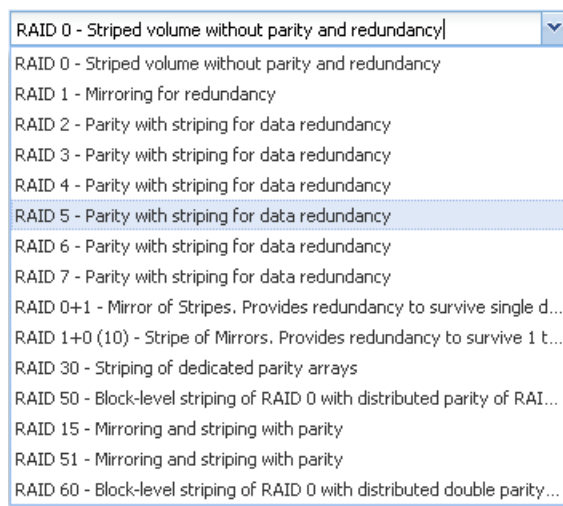
Description:

Create a deployment plan for this profile.

Subtype: Subtype  
Hardware

Target Type: Target Type  
Servers

4. Enter a name for the volume and choose its RAID level. Your options for RAID level depends on the number of available disks. The default RAID level, RAID0, is not recommended.



Depending on the RAID level you select, the minimum number of disks in the volume changes. You can accept the default values for the number of disks and its stripe size or you can modify them. Click **Next**.

**Specify RAID Configuration** \* Indicates Required Field

Specify the configuration of the Redundant Array of Independent Disks (RAID) volume.

\* RAID Volume Name: xyz

RAID Level: RAID 5 - Parity with striping for data redundancy

\* Number of Disks: 4 Minimum number of disks: 3

Stripe Size: 128 KB

5. Because the profile will be used for the RAID controllers of several servers, choose the option to allow the RAID Controller to select disks. Enter the ID of the RAID Controller. Click **Next**.

**Specify Disks** \* Indicates Required Field

Identify the physical disks that support the RAID volume or let the RAID controller use available disks.

Number of Disks: 4

Use the following disks(separated by commas):

\* Disk IDs:

Allow the RAID controller to select disks:

\* RAID Controller ID: c2

6. Review your selections and click **Finish** to submit the job.

The new profile and plan are available from the Assets pane.

## Identify the Firmware Update Profiles

When a firmware image is imported into a software library, the default action is to also create a profile and a deployment plan that provisions the image. Your software library has provisioning profiles for all the types of firmware images your site uses.

1. Expand **Plan Management** in the Navigation pane and then select **Profiles and Policies**.
2. Expand **Firmware**. The center pane lists all of the existing firmware profiles.
3. To see the contents of the profile, select it and then click the **Edit Profile** icon.

If you want to use the profile but with different attributes, select it and click **Copy Profile**.

## Create the Deployment Plan

1. Expand **Plan Management** in the Navigation pane.



2. Select **Configure Server Hardware and Install OS**. The details of this type of complex plan are displayed in the center pane. In this example, the OS installation step is not included. This creates version 1 of the plan.

**Target Type:** Hardware **Version:** 2  
**Template Name:** Configure Server Hardware and Install OS **Release Date:** 08/03/2012 3:00:19 pm EDT  
**Description:** Configure Server Hardware and install OS/Application software

**Deployment Template Composition**

Step	Required Input	Required Profile/Plan
Configure Service Processor	profile	Service Processor Profile
Configure RAID Controller	profile	RAID Controller Profile
Update Firmware	profile	Firmware Profile
Install and Update OS	plan	Install Server Plan

**Deployment Plans From Template (1)**

Plan Name	Version	Target Type	Description	Failure Policy	Last Modified
Day1	1	Servers	Prep for various OS...	Stop at failure	07/18/2012 10:45:41 am EDT

3. Click **Create Plan from Template** in the Actions pane. The Create Deployment Plan window is displayed.
4. Edit the following details of the plan:
  - **Plan Name** – The name you enter is used in the UI, for example, in the Plan Management section.
  - **Description** – Provide a description of the plan.
  - **Failure Policy** – Select the option to complete as much of the plan as possible.
5. For the Configure Service Processor step, click in the **Associated Profile/Deployment Plan** column to see the drop-down list. Select the **Service Processor** profile.
6. For the Configure RAID Controller step, select the new Configure RAID Controller profile from the list.
7. For the Update Firmware step, select the name of the image’s profile from the list.
8. For the Install OS step, keep the **Do Not Include in This Plan** entry.
9. Click **Save**. The new plan is created as version v1.

## Apply the Deployment Plan

1. Shut down each server using the **Power Off** action.
2. Click **Plan Management** section in the Navigation pane.

3. Expand **Deployment Plans** and select **Configure Server Hardware and Install OS**.
4. Select the plan that was created in the previous section.
5. Right-click the plan and click **Apply Deployment Plan**.
6. Select the targets on which you want to apply the plan.
7. Apply the plan with minimal interaction to provide only the required resource assignments. If there are any incorrect assignments from the profile, they are highlighted in red. Assign the correct resources.

## What's Next?

You now have servers with the same service processor configuration and firmware. You can now install operating systems. See the *Deploy Operating Systems Workflow* in the Deploy How To library at [http://docs.oracle.com/cd/E40871\\_01/nav/deployhowto.htm](http://docs.oracle.com/cd/E40871_01/nav/deployhowto.htm).

## Related Articles and Resources

The following chapters in the *Oracle Enterprise Manager Ops Center Feature Reference Guide* contain more information:

- Plans and Profiles
- Software Libraries

For information about firmware images, see *Keeping Your Firmware Up-to-Date* in the Operate How To library at [http://docs.oracle.com/cd/E40871\\_01/nav/operatehowto.htm](http://docs.oracle.com/cd/E40871_01/nav/operatehowto.htm).

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