

Oracle® Enterprise Manager Ops Center

Updating Your Oracle Solaris 10 Operating System

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

Introduction

Oracle Enterprise Manager Ops Center has several methods for patching or updating operating systems. The update methods vary, depending on the operating system that you are updating.

In many cases, the options and steps for managing and installing updates on Oracle Linux and Oracle Solaris 8, 9, or 10 operating systems are very similar. You can update these operating systems by using update profiles, deployment plans, system catalogs, or update reports. You can easily apply an update to a single system, but the more powerful application is being able to apply updates consistently across your data center. Update profiles define actions and how the job runs. You can use system-defined profiles, you can create your own profiles, or you can use a combination of system-defined and user-defined profiles as steps in a deployment plan.

The best method to apply a list of patches to multiple systems is to create an Update Profile. Once you create the profile, you can use it many times ensuring that the same patches in the list are applied each and every time.

This example shows how to create and use a user-defined profile as a step in a deployment plan to update your Oracle Solaris 10 operating system with updates from the Oracle Knowledge Base in My Oracle Support (MOS).

Update Actions

The software includes the following system-defined OS Update profiles for common update actions:

- Check Bugs Fix – Verifies that the system has all of the latest recommended patches installed.
- Check Security – Verifies that the system has all of the required security patches installed.
- Check System – Verifies the software dependencies and recommends components to install or upgrade.
- Local Software Review – Validates local components against the latest certified list.
- Perform Reboot – Restarts the operating system.

- Perform Reboot - Reconfigure – Restarts the operating system and performs postinstallation configuration.
- Upgrade All Components – Checks for any available component updates.

Options for Jobs

When you use an update profile, you can define how the job runs, the order, and how failures are handled:

- Run Type
 - Simulation – Checks dependencies and creates a bucket of all of the updates needed within the profile. The job does not apply the patches or packages.
 - Adding Download – Downloads all needed updates to the target systems.
 - Actual Run – Deploys the updates on the target systems.
- Target Execution Order
 - Sequential – Updates are applied in the preferred order.
 - Parallel – Updates are installed in parallel. Because scripts are independent, you can use this option to save time by executing your scripts at the same time.
- Task Failure Policy
 - Complete as much as possible – Continues the update job, even if a update or package fails.
 - Stop at Failure and notify – Stops the job on failure.

Updates

The patches and packages or images are stored in the Oracle Linux, Oracle Solaris 8-10 Software Update Library. It downloads the metadata from the Oracle Knowledge Base and saves them in the library. When you submit an update job for specific target assets, the Agent Controller on each target sends a request to the Enterprise Controller to download the latest information.

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

What You Will Need

You will need the following to update an Oracle Solaris 10 operating system:

- An Enterprise Controller that is configured for updates with an Internet connection
- An agent-managed system running Oracle Solaris 10
- Credentials for the system
- A configured Linux, Solaris 8-10 Software Update Library
- Correct role and permissions to complete this end-to-end example:
 - Update Admin – Discover and manage the asset and zone
 - Update Simulation Admin and Update permission includes – Create an update OS job, deploy or update software

- Plan/Profile Admin – Create and manage profiles and plans

Work With OS Updates

This example includes a simple and a complex scenario:

- [Scenario 1 - Apply a Single Update To a Single System](#)
- [Scenario 2 - Apply Several Updates to Several Systems](#)

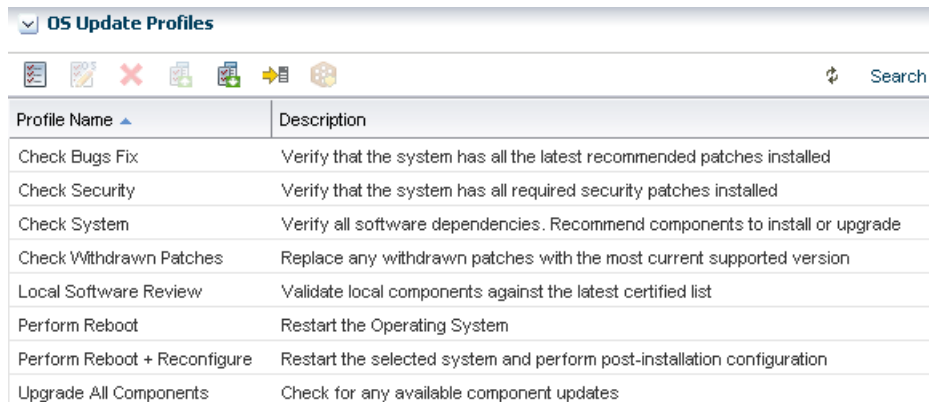
Scenario 1 - Apply a Single Update To a Single System

To install a single patch or package to a system, you can do the following:

1. [Create an OS Update Profile](#)
2. [Run a Simulation](#)
3. [Update the OS](#)

Create an OS Update Profile

An OS Update profile defines actions that you can run. A set of system-defined profiles are available in Update Profiles.

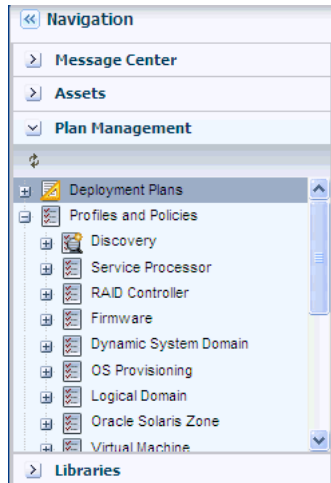


The screenshot shows a web interface titled "OS Update Profiles". It features a toolbar with various icons (document, refresh, delete, add, search) and a search box. Below the toolbar is a table with two columns: "Profile Name" and "Description".

Profile Name ▲	Description
Check Bugs Fix	Verify that the system has all the latest recommended patches installed
Check Security	Verify that the system has all required security patches installed
Check System	Verify all software dependencies. Recommend components to install or upgrade
Check Withdrawn Patches	Replace any withdrawn patches with the most current supported version
Local Software Review	Validate local components against the latest certified list
Perform Reboot	Restart the Operating System
Perform Reboot + Reconfigure	Restart the selected system and perform post-installation configuration
Upgrade All Components	Check for any available component updates

You can use these profiles, or create user-defined profiles. You can use the profile to run a job, or you can use the profile as a step in a deployment plan.

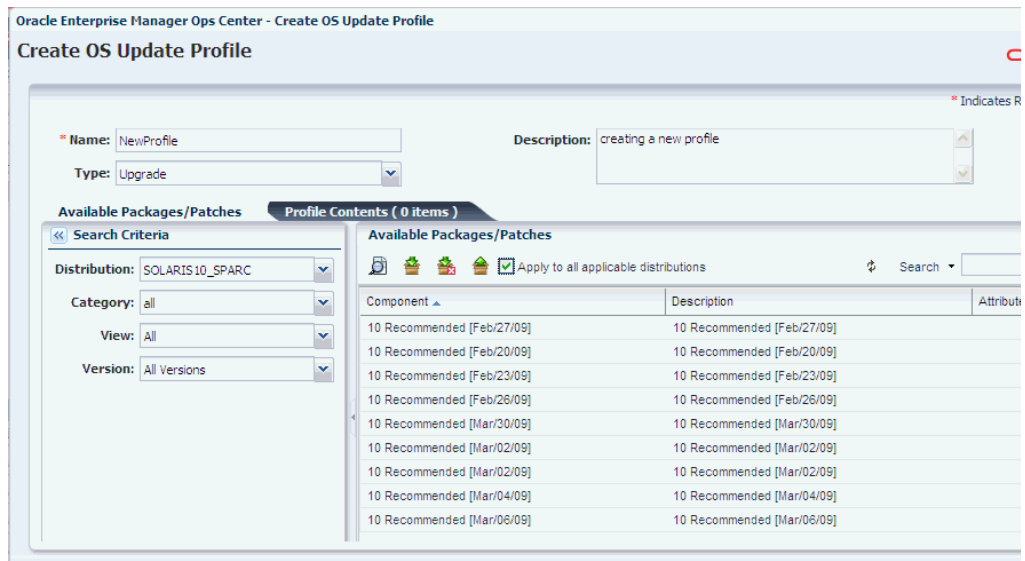
1. Click Plan Management in the Navigation pane, expand Profiles and Policies, then click Update Profiles.



2. Click New Profile in the Actions pane to display the new profile wizard.
3. Enter the following parameters:
 - Enter the name and description of the profile.
 - Select the distribution type from the Distribution drop-down list.
 - Select a Profile Type from the Type menu – either Upgrade, Install, or Script. This is used to categorize and filter the profiles later.

Locate and select a Component from the Component tree and click the Upgrade icon to add the selected component in the Profile Contents.

Select the check box 'Apply to all applicable distributions.'



4. Click Create OS Update Profile to create the profile.

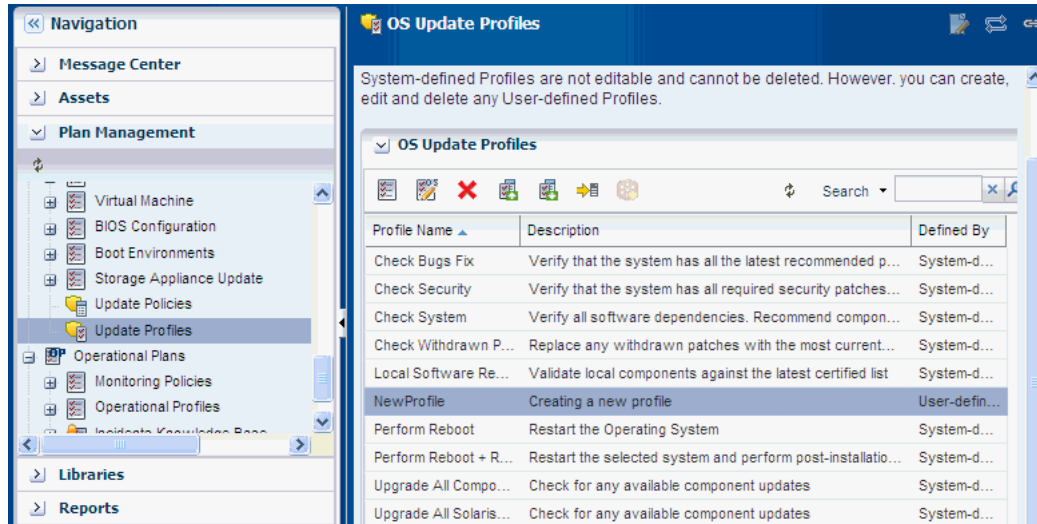
Note: If a profile exists of the similar name, then you will be asked to create a profile with a different profile name.

You cannot replace system-defined profiles.

Run a Simulation

Creating a new OS update job enables you to use custom or predefined profiles. The New Update OS Job option enables you to create customized update jobs. When creating a job, you select a policy from the list of available policies. You run the job in simulation mode which determines the actions and results of a job, and estimates the amount of time required to complete the job.

1. Click Plan Management in the Navigation pane, expand Profiles and Policies, then click Update Profiles. In the center pane, select the user-defined profile.



2. Click New Update OS Job in the Actions pane to display the wizard.
3. Enter the following parameters:
 - Enter the name of the job.
 - Select the Target setting – Use the same Targets for all tasks in the job.
 - Select a Run Type – Simulation. Click the Download check box to download the patches as part of the job simulation.
 - Select the Task Execution order – Sequential.
 - Select the Task Failure policy – Complete as much of job as possible.
4. In the Task section, define the profile, policy, and target for the task. Click the appropriate table cell for the target to display a drop-down list. Select the profiles and policies from the lists.

Job Information * Indicates Required Field

Enter a job name and select parameters. For each task, click the cell to display available options. To run the job, click Run Now. To schedule the job to run later, click Next.

* **Job Name:**

Target Setting: Use the same Targets for all tasks in the job
 Use different Targets for each task in the job

Run Type:
 Simulation
 Download
 Actual Run

Task Failure Policy: Complete as much of the job as possible
 Stop at failure and notify

Task Execution Order: Sequential
 Parallel

Boot Environment Type: Alternate Boot Environment (ABE)

Run ABE Pre-action Script: Enable

Task	Profile	policy	Targets
1	NewProfile	Ask For All	

Click Next to display the Job Schedule.

5. Select a job schedule to run the job and click Next.

Job Schedule

Now
 At a later date/time
 On a Recurring Schedule

6. View the Job Summary.

Job Summary

Job Name: Job_A **Target Setting:** Use the same Targets for all tasks in the job

Run Type: Simulation with download **Task Failure Policy:** Complete as much of the job as possible

Task Execution Order: Sequential **Boot Environment Type:** Boot Environment

Run ABE Pre-action Script: Disabled

Task	Profile	policy	Targets
1	NewProfile	Ask For All	

7. Click Finish to run the Update OS job.

Update the OS

The New Update OS Job option enables you to create customized update jobs. When creating a job, you define how the software performs the job, set the automation level of the job, and select a policy from the list of available policies. You run the job in the mode of actual job.

You can specify the name of the job, select the mode of run as Actual and click Run Now to run the job and update the operating system.

Job Information * Indicates Required Field

Enter a job name and select parameters. For each task, click the cell to display available options. To run the job, click Run Now. To schedule the job to run later, click Next.

* Job Name:

Run Type:

Simulation
 Download
 Actual Run

Task Execution Order: Sequential Parallel

Target Setting: Use the same Targets for all tasks in the job
 Use different Targets for each task in the job

Task Failure Policy: Complete as much of the job as possible
 Stop at failure and notify

Boot Environment Type: Alternate Boot Environment (ABE)

Run ABE Pre-action Script: Enable

Task	Profile	policy	Targets
1	Check System	Ask For All	

Scenario 2 - Apply Several Updates to Several Systems

When you apply a list of updates to multiple systems, you must create an Update Profile.

See [Create an OS Update Profile](#), for more information on how to create an OS Update Profile.

This example shows how you can create a custom OS Update profile and use that, along with the profile, as steps in a deployment plan. The plan will update your Oracle Solaris OS with updates from the Oracle Knowledge Base in My Oracle Support (MOS).

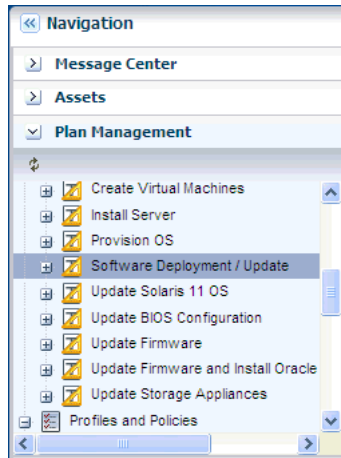
The steps that are used in this example to update an Oracle Solaris 10 operating system are:

1. [Create the Deployment Plan Using OS Update Profile](#)
2. [Run the Deployment Plan](#)

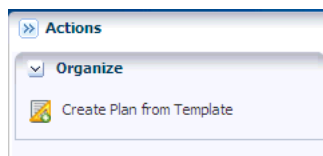
Create the Deployment Plan Using OS Update Profile

Use the Software Deployment / Update template to create a deployment plan to check and deploy the updates.

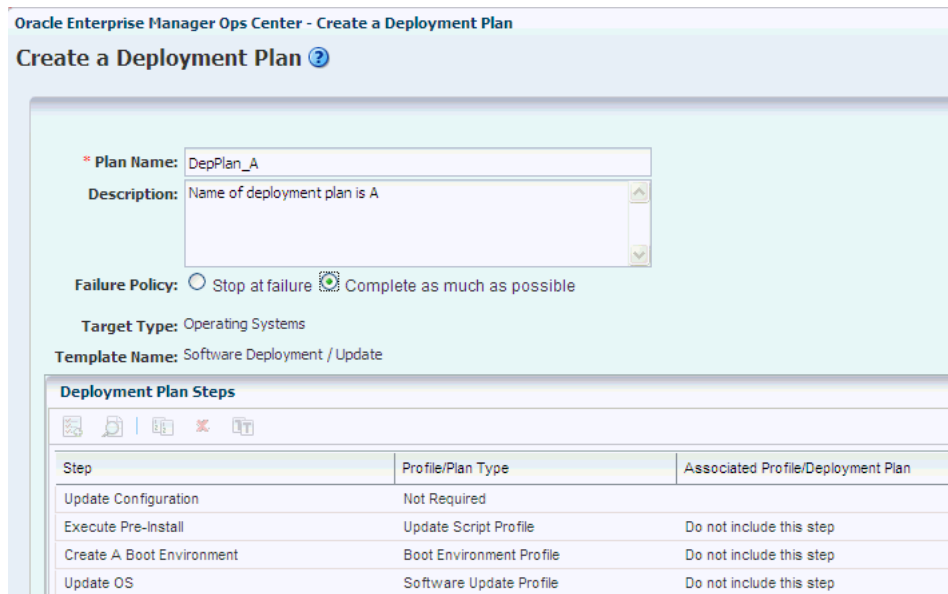
1. In the Navigation pane, under Plan Management, expand Deployment plans. Click Software Deployment / Update.



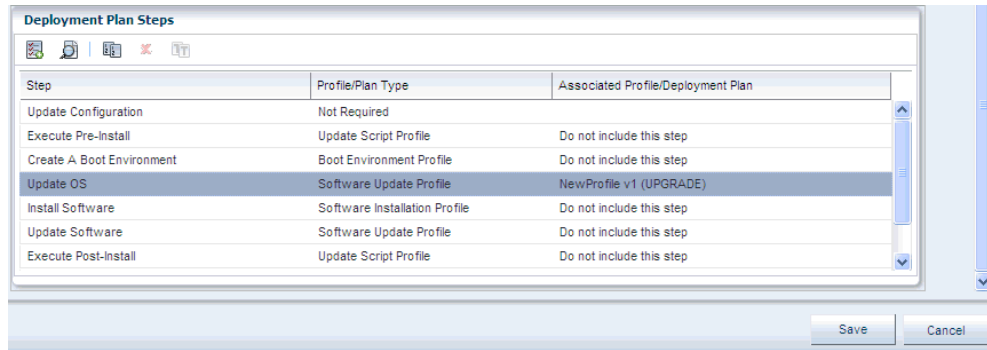
2. Click Create Plan from Template in the Actions Pane.



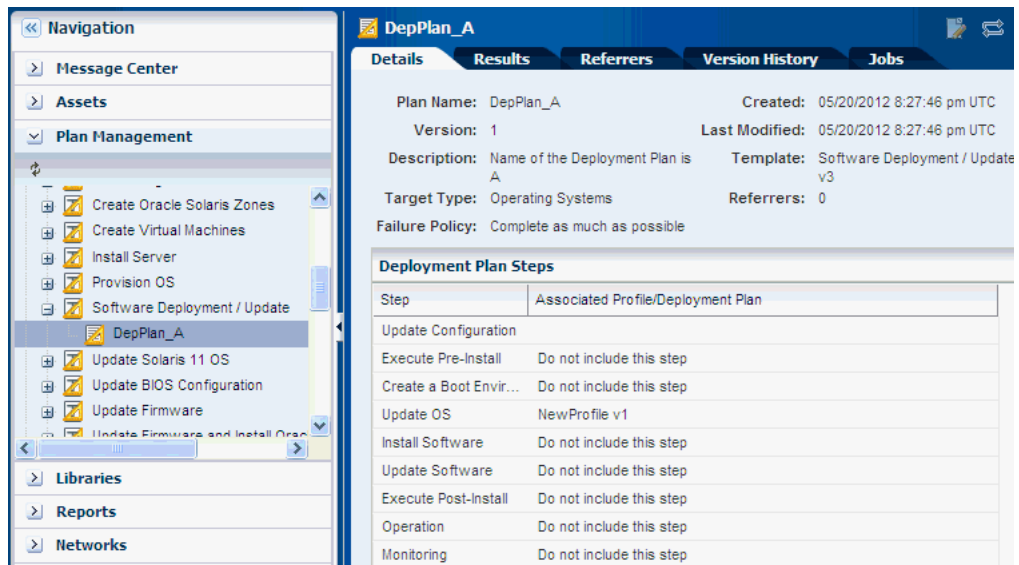
3. Enter a plan name and the plan description. Select the Failure Policy as Complete as much as possible.



4. Each step has a drop-down menu of available actions in the Associated Profiles / Deployment Plan field. On the Update OS step, click the user-defined as the associated profile, and then click Save.



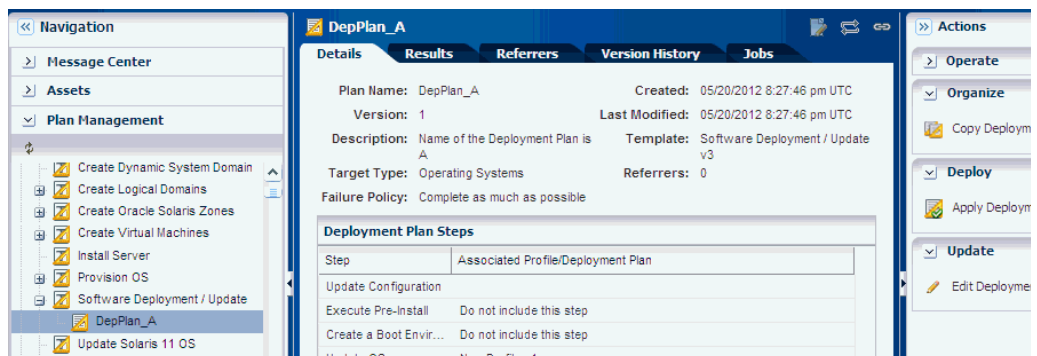
- The created deployment plan now appears under the Deployment Plan branch of Plan Management drawer of Navigation pane.



Run the Deployment Plan

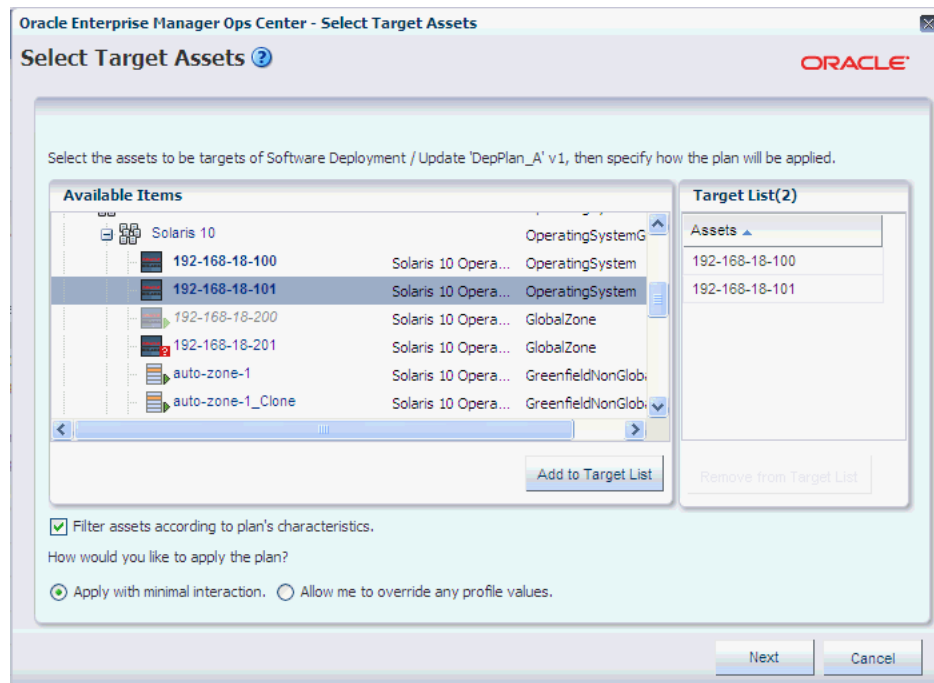
After you create the deployment plan, you must select the target asset to run the deployment plan.

- In the Navigation pane, under Plan Management, expand Deployment plans. Click Software Deployment / Update. Select the user-defined deployment plan and click Apply Deployment Plan in the Actions pane.



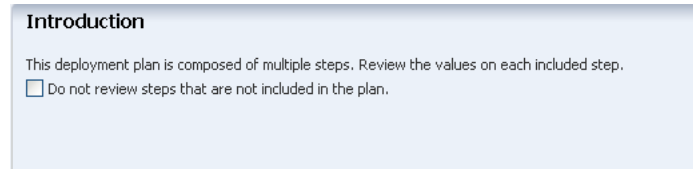
It opens a wizard to run the deployment plan.

2. Select the target assets and click Add to Target List. Select Apply the plan with minimal interaction.

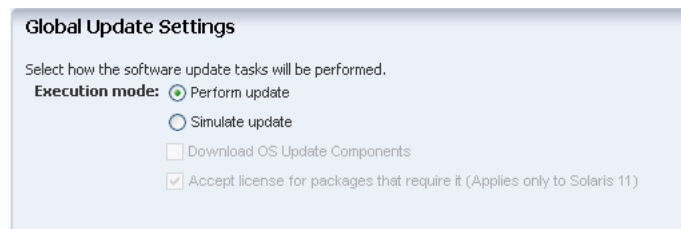


Click Next to review the values of the deployment steps.

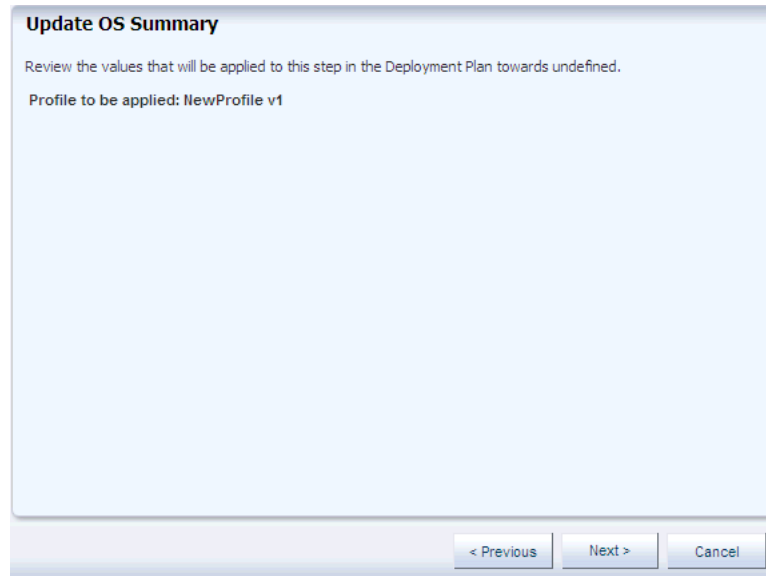
3. Skip the Introduction step and click Next.



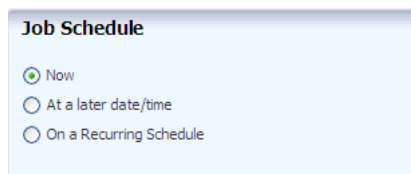
4. For the Global Update Settings window – select the Execution Mode as Perform Update and click Next.



5. You can review the profile to be applied in the Update OS Summary and click Next to Schedule the job.



6. Select Now to execute the deployment plan on the selected targets and click Apply.



After you click Apply, the job runs to execute the deployment plan.

What's Next?

You can manage the operating systems with an agent, including reports, monitoring, and analytics.

Related Articles and Resources

For more information on updating your Oracle Solaris and Linux operating systems, see the following:

- Chapters in *Oracle Enterprise Manager Ops Center Features Guide*:
 - *Plans and Profiles*
 - *Operating System Updates*
 - *Oracle Solaris Zones*
- *Oracle Enterprise Manager Ops Center Concepts Guide*
- Oracle Linux at <http://www.oracle.com/us/technologies/linux/index.html>
- Oracle Solaris 10 documentation at <http://www.oracle.com/technetwork/documentation/solaris-10-192992.html>
- For other examples, see the How To library at http://docs.oracle.com/cd/E27363_01/nav/howto.htm.

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