

Oracle® Enterprise Manager Ops Center

Updating Your Oracle Solaris 10 Operating System

12c Release 3 (12.3.0.0.0)

E60019-01

June 2015

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. Oracle Enterprise Manager Ops Center 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](#)

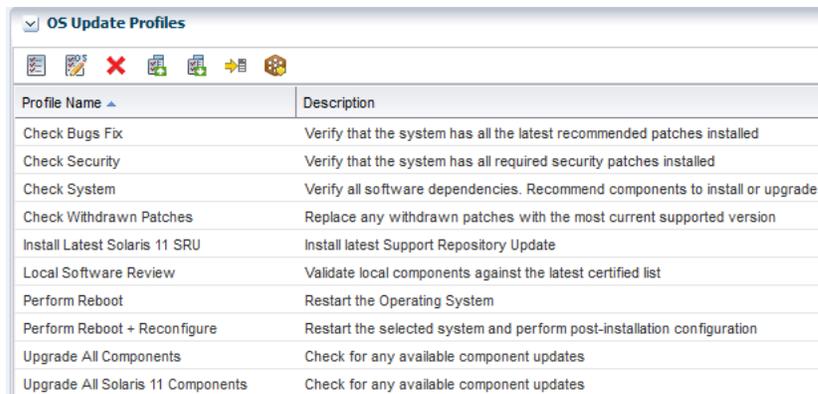
Scenario 1 - Apply a Single Update To a Single System

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

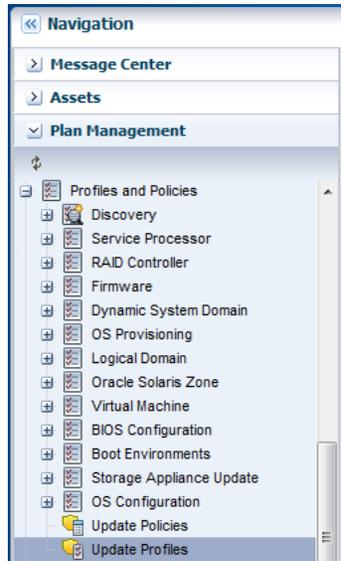
An OS Update profile defines actions that you can run. A set of system-defined profiles are available in Update Profiles.



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
Install Latest Solaris 11 SRU	Install latest Support Repository Update
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
Upgrade All Solaris 11 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**.



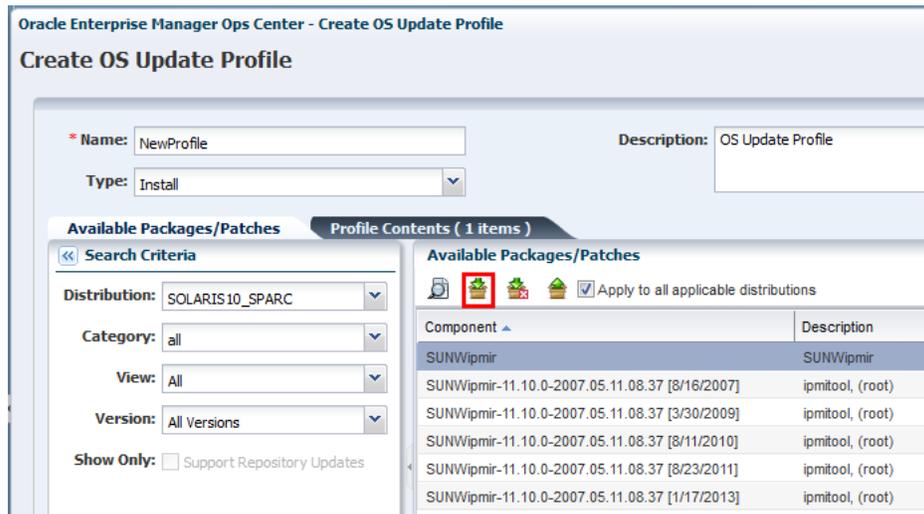
2. Click **New Profile** in the Actions pane to display the **New Profile wizard**.

3. Enter the following parameters:

- Name: enter a unique profile name.
- Description: enter the description of the profile.
- Type: select the profile type as Install.
- Distribution: select the distribution type as SOLARIS10_SPARC.

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

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

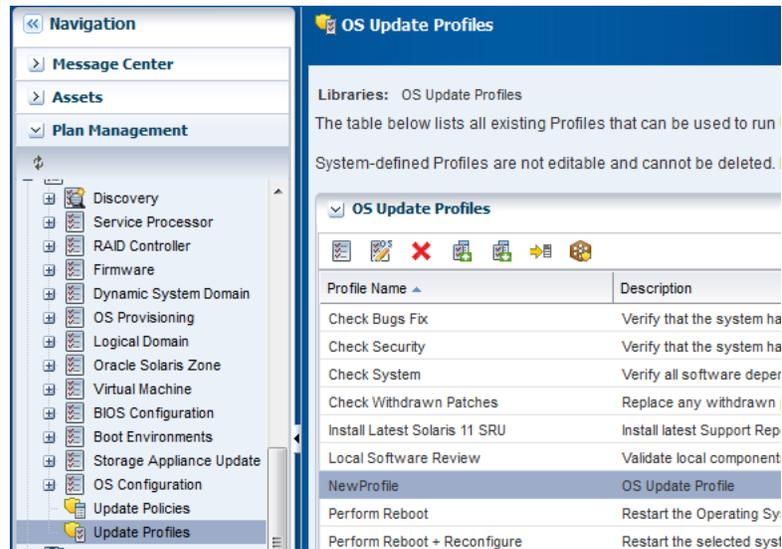


4. Click **Create OS Update Profile** to create the profile.

Run a Simulation

When creating a job, select a policy from the list of available policies. Run the job in simulation mode to determine the actions and results of a job.

1. Click **Plan Management** in the Navigation pane, expand **Profiles and Policies**, then click **Update Profiles**. In the center pane, select the profile that you created in the previous procedure.



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.

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 Actual Run

Download

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

4. In the Task section, define the profile, policy, and target for the task. Select the profile that you have created in the above procedure for the Profile column, select Ask for all for policy, and select the target from the list of available items for Targets. In this case, select *MyHost*.

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	NewProfile	Ask For All	MyHost

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. Click **Finish** to run the Update OS Simulation.

You can now run the actual job.

Job Summary

Job Name: Job_A
Run Type: Simulation with download
Task Execution Order: Sequential

Target Setting: Use the same Targets for all tasks in the job
Task Failure Policy: Complete as much of the job as possible
Boot Environment Type: Boot Environment
Run ABE Pre-action Script: Disabled

Task	Profile	policy	Targets
1	NewProfile	Ask For All	MyHost

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 with Run Type as Actual Run. This step should be done once the simulate job has completed successfully. Apart from the Run Type, this step is performed the same way as the previous procedure.

You can specify the name of the job, select the Run Type 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 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

Tasks

Task	Profile	policy	Targets
1	NewProfile	Ask For All	MyHost

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).

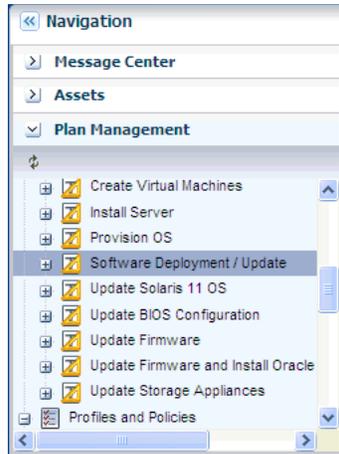
The steps that are used in this example to update an Oracle Solaris 10 operating system are:

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

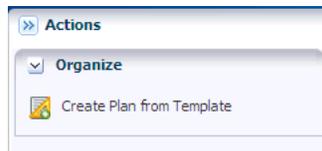
Create the Deployment Plan Using OS Update Profile

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

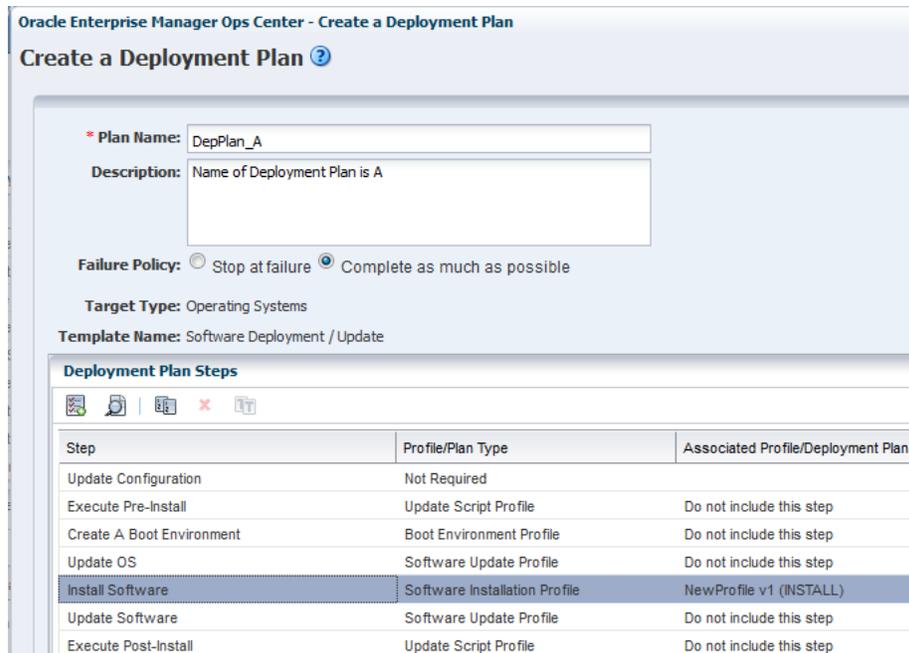
1. In the Navigation pane, under **Plan Management**, expand **Deployment Plans**. Click **Software Deployment / Update**.



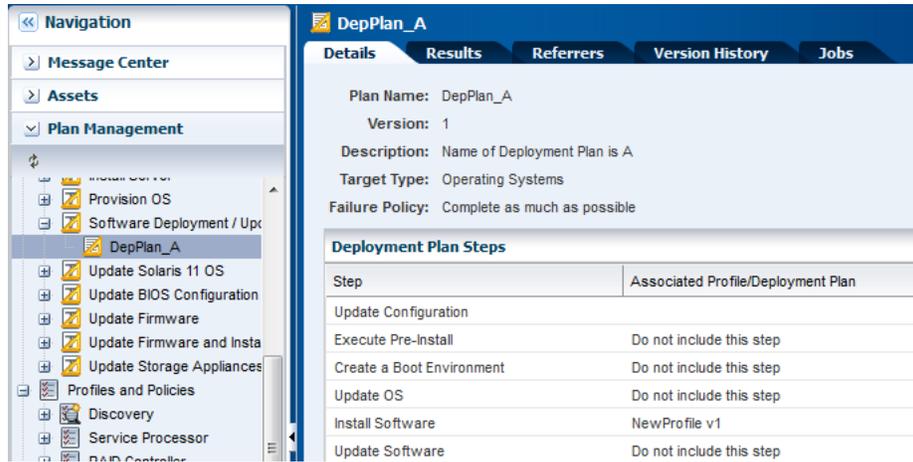
2. Click **Create Plan from Template** in the Actions Pane.



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, select the OS Update profile as the associated profile, and then click **Save**.



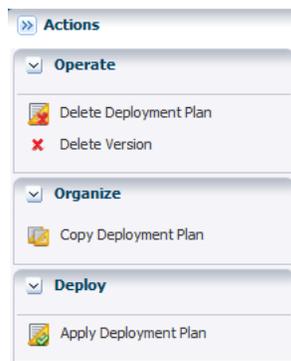
5. The deployment plan appears under the Software Deployment/Update of Deployment Plans in Plan Management.



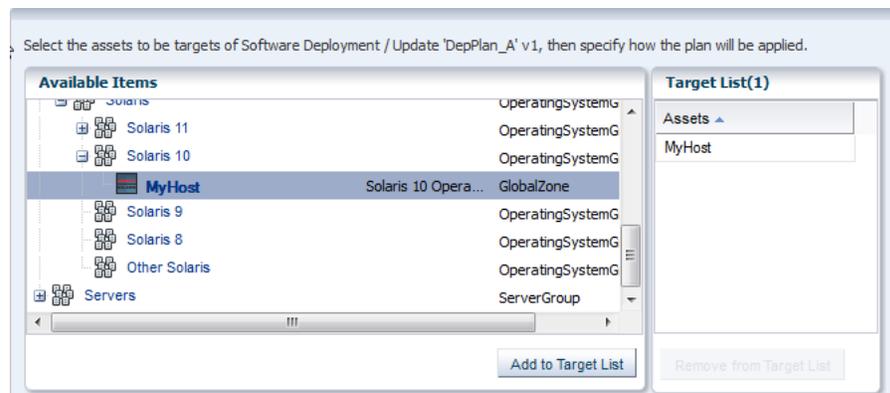
Run the Deployment Plan

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

1. In the Navigation pane, under **Plan Management**, expand **Deployment Plans**. Click **Software Deployment / Update**. Select the user-defined deployment plan.
2. Click **Apply Deployment Plan** in the **Actions** pane.

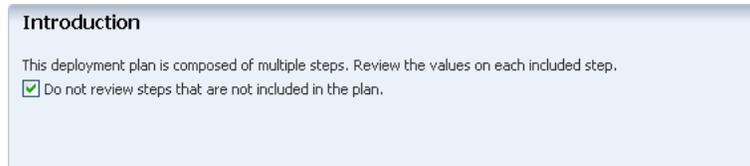


3. Select the target assets and click **Add to Target List**. Select **Apply the plan with minimal interaction**.



Click **Next** to review the values of the deployment steps.

4. Skip the Introduction step and click **Next**.

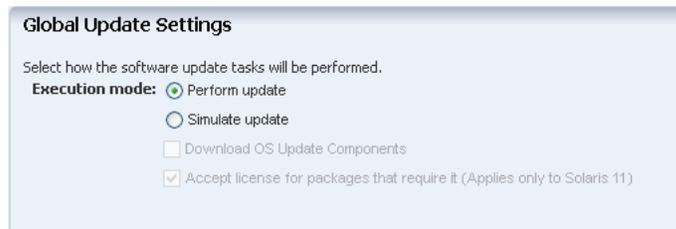


Introduction

This deployment plan is composed of multiple steps. Review the values on each included step.

Do not review steps that are not included in the plan.

5. For the Global Update Settings window: select the Execution Mode as **Perform Update** and click **Next**.



Global Update Settings

Select how the software update tasks will be performed.

Execution mode: Perform update
 Simulate update

Download OS Update Components

Accept license for packages that require it (Applies only to Solaris 11)

6. Review the profile to be applied in the Update OS Summary and click **Next** to Schedule the job.



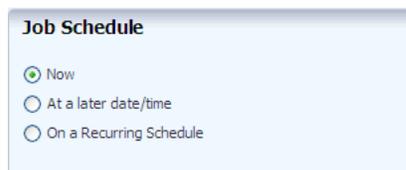
Update OS Summary

Review the values that will be applied to this step in the Deployment Plan towards undefined.

Profile to be applied: NewProfile v1

< Previous Next > Cancel

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



Job Schedule

Now
 At a later date/time
 On a Recurring Schedule

The job runs to execute the deployment plan. The patch is installed on the operating system.

What's Next?

You can manage the operating systems, create an operating system report, perform monitoring, and analytics for the operating system.

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 Configure Reference* and *Oracle Enterprise Manager Ops Center Operate Reference* documents:
 - [Plans and Profiles](#)
 - [Operating System Updates](#)
 - [Oracle Solaris Zones](#)
 - [Reports](#)
- [Oracle Enterprise Manager Ops Center Concepts Guide](#)
- Oracle Linux Support 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 end-to-end examples, see the workflows and how to documentation in the library. For deployment tasks, go to http://docs.oracle.com/cd/E59957_01/nav/deploy.htm and for operate tasks go to http://docs.oracle.com/cd/E59957_01/nav/operate.htm.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Oracle Enterprise Manager Ops Center Updating Your Oracle Solaris 10 Operating System, 12c Release 3 (12.3.0.0.0)
E60019-01

Copyright © 2007, 2015, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs,

including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.