Oracle® Web Services Manager

Upgrade Guide 10*g* Release 3 (10.1.3.3.0) **E10095-01**

June 2007



Oracle Web Services Manager Upgrade Guide, 10g Release 3 (10.1.3.3.0)

E10095-01

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Glossary

Preface

Oracle Web Services Manager (Oracle WSM) is designed to ease the installation configuration, and management of Web services across a wide range of deployment environments.

This manual provides information to programmers and system administrators who are responsible for upgrading Oracle WSM 10g Release 2 (10.1.2) to Oracle WSM 10g Release 3 (10.1.3.3.0).

This preface provides information about the following topics:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

The audience for this guide is system administrators who are responsible for upgrading their existing Oracle WSM 10g Release 2 (10.1.2) environment to Oracle WSM 10g Release 3 (10.1.3.3.0).

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at

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Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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Related Documents

For more information, see the following documents in the Oracle Web Services Manager 10g Release 3 (10.1.3.3.0) documentation set:

- Oracle Web Services Manager Installation Guide
- Oracle Web Services Manager Deployment Guide
- Oracle Web Services Manager Extensibility Guide
- Oracle Web Services Manager Administrator's Guide

Conventions

The following text conventions are used in this document:

Convention	Meaning	
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.	
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.	
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.	

What's New in Oracle Web Services Manager 10*g* Release 3 (10.1.3.3.0)?

This chapter describes the new features in Oracle Web Services Manager (Oracle WSM).

This chapter includes the following section:

What is Oracle WSM 10g Release 3 (10.1.3.3.0)?

What is Oracle WSM 10*g* Release 3 (10.1.3.3.0)?

Oracle WSM is integrated with the Oracle SOA Suite 10g Release 3 (10.1.3.3.0) to provide all the advantages of the OC4J environment. Using Oracle WSM 10g Release 3 (10.1.3.3.0), administrators can take advantage of the combined functionality of OC4J and Oracle WSM to intercept and monitor Web service traffic.

New Features in Oracle WSM 10*g* Release 3 (10.1.3.3.0)

The new features in Oracle WSM 10g Release 3 (10.1.3.3.0) are as follows:

- Oracle WSM Server Agents for AXIS 1.4 on OC4J are supported.
- SOAP with attachments messages can be processed by Oracle WSM Gateways and Agents, where the messages are neither signed nor encrypted.
- Messages logs that are no longer needed can be purged from the Web Services Manager Control.
- Web services with Web Services Inspection Language (WSIL) documents that import other WSILs or schemas can be registered to an Oracle WSM Gateway.
- Oracle WSM Gateways can pass HTTP basic authentication requests to the Web service. In this situation, the Web service, rather than the gateway, performs the authentication.
- Custom steps in the Oracle WSM Gateway can add or modify outgoing HTTP headers.

What is Oracle WSM 10g Release 3 (10.1.3.3.0)?
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Planning the Oracle Web Services Manager **Upgrade**

This chapter provides information you need to plan your upgrade and an overview of the upgrade procedure to Oracle WSM 10g Release 3 (10.1.3.3.0).

This chapter includes the following topics:

- Oracle WSM Upgrade Paths
- System Requirements
- Planning the Upgrade from Oracle WSM 10g Release 2 (10.1.2) to Oracle WSM 10g Release 3 (10.1.3.1.0)
- Backing up Your Existing Oracle WSM Data
- Overview of the Upgrade Procedure

Understanding the Upgrade to Oracle WSM 10.1.3.3

To upgrade your Oracle WSM 10g Release 2 (10.1.2) system to Oracle WSM 10g Release 3 (10.1.3.3.0), you must first upgrade the 10.1.2 system to 10.1.3.1.0. You will be instructed to install Oracle WSM 10g Release 3 (10.1.3.3.0), then run a migration tool which will migrate the 10.1.2 data and files to 10.1.3.1.0. After the migration, there are a few post-migration tasks that must be performed to complete the upgrade to 10.1.3.1.0.

Once your system is upgraded to 10.1.3.1.0, you will be instructed to apply the Oracle Application Server 10g Release 3 (10.1.3) Patch Set 3 (10.1.3.3.0) patch. This will upgrade your system to Oracle WSM 10g Release 3 (10.1.3.3.0).

Note: In this guide, reference is made to two Oracle WSM releases with similar release numbers, 10g Release 3 (10.1.3.1.0) and 10g Release 3 (10.1.3.3.0). Please note the difference as you read through this guide.

Oracle WSM Upgrade Paths

The following are the supported Oracle WSM 10g upgrade paths:

- Version 10.1.2 to version 10.1.3.1.0
- Version 10.1.3.1.0 to version 10.1.3.3.0

The supported upgrade platforms are Microsoft Windows 2000 SP4 on Microsoft Windows 32-bit and Redhat Linux AS 3.0 on Linux x86.

> **Note:** Only upgrades of production installations of Oracle WSM are supported.

Server Agents Installed on Third-Party Application Servers

Oracle WSM 10g Release 3 (10.1.3.1.0) server agents are supported on the following application servers:

- IBM WebSphere 6.1 on Microsoft Windows Server 2000
- BEA WebLogic 9.1 on Microsoft Windows Server 2000
- Red Hat JBoss 4.0.4 on Red Hat Linux 4.0

The Oracle WSM 10g Release 3 (10.1.3.1.0) server agents will work with the upgraded Oracle WSM 10g Release 3 (10.1.3.3.0) components. However, a patch to Oracle WSM 10g Release 3 (10.1.3.3.0) for these third-party agents is not available at this time.

System Requirements

Refer to Oracle Web Services Manager Installation Guide for the system requirements to upgrade to Oracle WSM 10g Release 3 (10.1.3.3.0).

Supported Databases

The upgrade procedure only supports the Oracle Database 10g. If you are running an Oracle9i Database Server, you must upgrade the database to Oracle Database 10g before upgrading to Oracle WSM 10g Release 3 (10.1.3.1.0). See the Oracle Web Services Manager Deployment Guide for more information about the databases supported by Oracle WSM 10g Release 3 (10.1.3.1.0).

Oracle WSM 10g Release 3 (10.1.3.1.0) does not support migration of Oracle Lite database.

Planning the Upgrade from Oracle WSM 10g Release 2 (10.1.2) to Oracle WSM 10*q* Release 3 (10.1.3.1.0)

To plan the upgrade from Oracle WSM 10g Release 2 (10.1.2) to Oracle WSM 10g Release 3 (10.1.3.1.0), you need to understand the new functionality of the Oracle WSM 10.1.3.1.0 Policy Manager. The Oracle WSM 10.1.3.1.0 Policy Manager can determine the version of the requesting Oracle Web Services Manager Gateway (gateway). This changes the way in which the Oracle WSM 10.1.3.1.0 Policy Manager responds to requests from a gateway.

The following section describes how the Oracle WSM 10g Release 3 (10.1.3.1.0) Policy Manager responds to requests from Oracle WSM Gateways.

How the Oracle WSM 10*g* Release 3 (10.1.3.1.0) Policy Manager Responds to Gateway Requests

The Oracle WSM 10.1.3.1.0 Policy Manager differentiates between requests from an Oracle WSM 10.1.2 gateway and an Oracle WSM 10.1.3.1.0 gateway. When a gateway requests a service, the Oracle WSM 10.1.3.1.0 Policy Manager first determines the version of the requesting gateway. If the requesting gateway is an Oracle WSM 10.1.2 gateway, the Oracle WSM 10.1.3.1.0 Policy Manager sends a text password back to the Oracle WSM 10.1.2 gateway. If the requesting gateway is an Oracle WSM 10.1.3.1.0 gateway, the Oracle WSM 10.1.3.1.0 Policy Manager sends an obfuscated password back to the Oracle WSM 10.1.3.1.0 gateway. However, the Oracle WSM gateway does not determine the version of the Oracle WSM Policy Manager.

Therefore, you may want to upgrade all Oracle WSM 10.1.2 Policy Managers in your deployment to Oracle WSM 10.1.3.1.0 first, before you upgrade the Oracle WSM 10.1.2 gateways. By doing so, your gateways continue to function and service is not interrupted because of a mismatch in versions of the Oracle WSM Policy Manager and the gateways.

Because the number of gateways in your Oracle WSM deployment is always greater than the number of Oracle WSM Policy Managers, it is also easier to upgrade the Oracle WSM Policy Managers first. You can migrate the gateways later, at your convenience.

If you are upgrading an Oracle WSM 10.1.2 installation that has been deployed in a distributed environment, see "Upgrading from a Distributed Environment" on page 3-3 for an example of how you can perform this procedure.

Backing up Your Existing Oracle WSM Data

You must back up your existing Oracle WSM 10g Release 2 (10.1.2) data before upgrading to Oracle WSM 10g Release 3 (10.1.3.3.0). In the event of an error when migrating from Oracle WSM 10.1.2 to Oracle WSM 10.1.3.1.0, you will be able to recover your data.

Overview of the Upgrade Procedure

The following is an overview of the steps to upgrade Oracle WSM 10g Release 2 (10.1.2) to Oracle WSM 10g Release 3 (10.1.3.3.0):

- **1.** Install Oracle WSM 10g Release 3 (10.1.3.1.0).
 - You can install Oracle WSM 10g Release 3 (10.1.3.1.0) in one of the following ways:.
 - You can install Oracle WSM as part of the Oracle Application Server 10g Release 3 (10.1.3.1.0) installation. For more information, see Oracle Application *Server Installation Guide* for your platform.
 - You can install Oracle WSM as a standalone product. For more information, see Oracle Web Services Manager Installation Guide
- 2. Migrate Oracle WSM 10g Release 2 (10.1.2) to Oracle WSM 10g Release 3 (10.1.3.1.0). The migration tool migrates properties files, configuration files, and updates the database schema and, if necessary, it updates the data.
- **3.** Perform the post-migration tasks.
- Apply Oracle Application Server 10g Release 3 (10.1.3) Patch Set 3 (10.1.3.3.0).

The chapters that follow describe these steps in further detail.

Upgrading Oracle Web Services Manager

This chapter describes how to upgrade to (Oracle WSM) 10g Release 3 (10.1.3.1.0).

This chapter includes the following sections:

- Installing Oracle WSM 10g Release 3 (10.1.3.1.0)
- Migrating Oracle WSM 10g Release 2 (10.1.2)
- Post-Migration Tasks
- Upgrading from a Distributed Environment

Installing Oracle WSM 10g Release 3 (10.1.3.1.0)

You can install Oracle WSM 10g Release 3 (10.1.3.1.0) as part of the Oracle Application Server10g Release 3 (10.1.3.1.0) installation, or you can install Oracle WSM as a standalone installation. In either situation, because only upgrading production installations is supported, you must pick one of the Advanced installation options. If you are installing Oracle WSM as part of Oracle Application Server, then see Oracle Application Server Installation Guide for your platform for more information. If you are installing Oracle WSM as a standalone installation, then see Oracle Web Services *Manager Installation Guide* for more information.

When you install Oracle WSM 10g Release 3 (10.1.3.1.0), note the following:

- Oracle WSM 10g Release 3 (10.1.3.1.0) must be installed in an entirely new directory on the same computer that Oracle WSM 10g Release 2 (10.1.2) is installed. Do not install Oracle WSM 10g Release 3 (10.1.3.1.0) into the directory where Oracle WSM 10g Release 2 (10.1.2) is installed.
- If you are installing Oracle WSM as a standalone installation, first install Oracle Application Server 10g Release 3 (10.1.3.1.0) and select the option to install the J2EE Server only. Then install Oracle WSM. During the Oracle WSM installation, you are prompted to provide information about the Oracle Application Server. You must provide the details for the newly installed Oracle Application Server10g Release 3 (10.1.3.1.0).

Migrating Oracle WSM 10g Release 2 (10.1.2)

Before you perform the migration, complete the following tasks:

- Start the Oracle Application Server.
- Verify that the *ORACLE_HOME* environment variable points to Oracle Client.
- Verify that the TNS Listener is running.

Complete the following procedure to migrate your files and data from Oracle WSM 10g Release 2 (10.1.2) to Oracle WSM 10g Release 3 (10.1.3.1.0).

Note: Once you execute the command to migrate your files and data, you will not be able to use Oracle WSM 10g Release 2 (10.1.2) with the migrated data.

Note: Migration is only supported on the Microsoft Windows 32-bit and Linux x86 platforms.

To migrate Oracle WSM 10g Release 2 (10.1.2)

- 1. Locate the /owsm/ OWSM403To10131Migration.zip file on Disk 3 of the Oracle Application Server 10g Release 3 (10.1.3) Patch Set 3 (10.1.3.3.0) media. Extract the files into the ORACLE_HOME directory where you installed Oracle WSM 10.1.3.1.0.
- **2.** From the command prompt, navigate to the *ORACLE_HOME*/owsm/bin directory. ORACLE_HOME is the directory where you installed Oracle WSM 10.1.3.1.0.
- **3.** Execute the following command:

ORACLE_HOME/owsm/bin/wsmadmin migrate OWSM_10.1.2_dir

The variable *OWSM_10.1.2_dir* is the directory where Oracle WSM 10.1.2 is installed. You will be prompted to provide the OC4J Administrator password and the Oracle WSM 10.1.2 Database password.

See the Oracle Web Services Manager Deployment Guide for more information about the wsmadmin commands.

4. Restart the Oracle Application Server.

Your Oracle WSM system is now successfully migrated to Oracle WSM 10g Release 3 (10.1.3.1.0).

Post-Migration Tasks

Perform the following post-migration tasks to complete the upgrade.

Using Existing Policy Enforcement Points

You do not have to reregister any gateways or agents that were registered with the Oracle WSM Policy Manager prior to the upgrade to Oracle WSM 10g Release 3 (10.1.3.1.0).

You must reinstall and redeploy your Oracle WSM 10g Release 2 (10.1.2) agents after you upgrade to Oracle WSM 10g Release 3 (10.1.3.1.0). If you plan to apply the Oracle WSM10g Release 3 (10.1.3.3.0) patch, then you should postpone upgrading your agents until after you apply the patch.

Using Custom Policy Steps

Oracle WSM 10g Release 2 (10.1.2) custom policy steps are migrated to Oracle Web Services Manager 10g Release 3 (10.1.3.1.0) during the migration step.

Reconfiguring Proxy Servers

When you upgrade to Oracle WSM 10g Release 3 (10.1.3.1.0), you need to reconfigure any proxy servers. See Chapter 2, "Implementing Your Web Services Manager Deployment" in Oracle Web Services Manager Deployment Guide for more information.

Reconfiguring Transport Security Configurations

You will not be able to use existing transport security configurations that were created before the upgrade procedure. Any configuration to ensure transport security between the Oracle WSM 10g Release 2 (10.1.2) components are lost during the upgrade to Oracle WSM 10g Release 3 (10.1.3.1.0). Therefore, you will need to reconfigure transport security between the different Oracle WSM components in your deployment after upgrading to Oracle WSM 10g Release 3 (10.1.3.1.0). See the Oracle Web Services Manager Deployment Guide for information about securing components in Oracle WSM 10g Release 3 (10.1.3.1.0).

Removing Oracle WSM 10g Release 2 (10.1.2) Files

After you have successfully upgraded to Oracle WSM 10g Release 3 (10.1.3.1.0), you need to remove the following Oracle products:

- Oracle Application Server 10g Release 2 (10.1.2)
- Oracle WSM10g Release 2 (10.1.2)

This is performed in two separate steps. Use Oracle Universal Installer to uninstall Oracle Application Server. Then manually delete the *ORACLE_HOME* directory in which Oracle WSM10g Release 2 (10.1.2) is installed.

Deleting the Oracle WSM Database

After you migrate to Oracle WSM 10g Release 3 (10.1.3.1.0), Oracle WSM points to the Oracle WSM 10g Release 2 (10.1.2) Database. Therefore, the database created during the installation of Oracle WSM 10g Release 3 (10.1.3.1.0) is not needed, and you may delete the database.

Upgrading from a Distributed Environment

This section describes the strategy for upgrading Oracle WSM 10g Release 2 (10.1.2) in a distributed environment to Oracle WSM 10g Release 3 (10.1.3.1.0).

The first computer that must be upgraded is the computer where the Oracle WSM Policy Manager is located. See "Planning the Upgrade from Oracle WSM 10g Release 2 (10.1.2) to Oracle WSM 10g Release 3 (10.1.3.1.0)" on page 2-2, for more information about why you need to first upgrade Oracle WSM Policy Manager.

For example, one computer, Computer A, is running the Oracle WSM Policy Manager, Oracle Web Services Manager Monitor, and the Web Services Manager Control. The Oracle Web Services Manager Gateway is deployed separately, on a second computer, Computer B.

In this scenario, because the Oracle WSM Policy Manager is installed on Computer A, you need to upgrade Computer A to Oracle WSM 10g Release 3 (10.1.3.1.0) first. See Chapter 3, "Upgrading Oracle Web Services Manager" to see how to perform this procedure. After completing the migration for Computer A, you need to perform the same procedure on Computer B to upgrade Oracle WSM 10g Release 3 (10.1.3.1.0).

What's Next?

Follow the steps in Chapter 4, "Patching Oracle WSM" to patch the Oracle WSM 10g Release 3 (10.1.3.1.0) system to Oracle WSM 10g Release 3 (10.1.3.3.0).

Patching Oracle WSM

This chapter describes the tasks you must perform to patch Oracle WSM to 10g Release 3 (10.1.3.1.0) to Oracle WSM 10g Release 3 (10.1.3.3.0).

This chapter includes the following sections:

- Applying the Oracle Application Server 10g Release 3 (10.1.3) Patch Set 3 (10.1.3.3.0)
- Reinstalling Oracle WSM Agents

Applying the Oracle Application Server 10g Release 3 (10.1.3) Patch Set 3 (10.1.3.3.0)

Apply Oracle Application Server 10g Release 3 (10.1.3) Patch Set 3 (10.1.3.3.0) to Oracle WSM 10g Release 3 (10.1.3.1.0). See Oracle Application Server Patch Set Notes 10g Release 3 (10.1.3) Patch Set 3 (10.1.3.3.0) for Linux and Windows for more information about installing the patch set.

Reinstalling Oracle WSM Agents

All Oracle WSM 10g Release 3 (10.1.3.1.0) agents will continue to work with Oracle WSM 10g Release 3 (10.1.3.3.0) infrastructure components (Oracle WSM Policy Manager, Oracle WSM Monitor, and Web Services Manager Control). You are not required to reinstall the agents after you migrate your system to Oracle WSM 10g Release 3 (10.1.3.3.0). However, if you want to take advantage of the new features in Oracle WSM 10g Release 3 (10.1.3.3.0), then you must reinstall and redeploy all Oracle WSM Agents including the following:

- AXIS server agents and client agents
- J2SE client agents
- J2EE client agents
- OC4J server agents

See Chapter 6, "Installing Oracle WSM Agents," in Oracle Web Services Manager Deployment Guide for more information.

Reinstalling Oracl	ie WSM Agents
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Glossary

Globalization

The process of developing software products intended for worldwide distribution. This term combines two aspects of the work: internationalization and localization.

Internationalization

Enabling the product to be used without language or culture barriers.

Localization

Translating and enabling the product for a specific locale.

Migration

Migration is a subset of the upgrade process. Migration is the process where data and configuration files or settings are moved to a new, predetermined location during the upgrade process. The tool used to perform the migration process is referred to as the migration tool.

Patch

A patch contains binaries or files that provide bug fixes for an existing product. It provides an immediate solution to the bugs in the product. A patch can sometimes contain enhancements to product functionality. A patch is usually provided as a tool that automatically adds, replaces, and deletes the appropriate files at the correct locations.

Upgrade

The process of installing the next higher (major) version of an existing product.