

Oracle® Utilities Work and Asset Management

Upgrade Installation Guide

Release 1.9.0.3. on Linux OS Application Server

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Oracle® Utilities Work and Asset Management Upgrade Installation Guide for Release 1.9.0.3 on Linux OS Application Server

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Preface

This guide provides information needed to install Oracle Utilities Work and Asset Management in a Linux environment.

Audience

Oracle Utilities Work and Asset Management Upgrade Installation Guide is intended for anyone installing Oracle Utilities Work and Asset Management Release 1.9.0.3 on Linux.

Related Documents

For more information on this release, refer to the following related documentation. Please ensure that you are using the appropriate guide based on whether you are installing on Windows or Linux.

- *Oracle Utilities Work and Asset Management Configuration Guide for Release 1.9.0.3*
- *Oracle Utilities Work and Asset Management Installation Guide for OAS Release 1.9.0.3 on Linux OS Application Server - New installation on OAS/Linux OS*
- *Oracle Utilities Work and Asset Management Installation Guide for OAS Release 1.9.0.3 on Windows OS Application Server - New installation on OAS /Windows OS*
- *Oracle Utilities Work and Asset Management Installation Guide for Weblogic Release 1.9.0.3 on Linux OS Application Server - New installation on WebLogic /Linux OS*
- *Oracle Utilities Work and Asset Management Installation Guide for Weblogic Release 1.9.0.3 on Windows OS Application Server - New installation on WebLogic / Windows OS*
- *Oracle Utilities Work and Asset Management Online Help for Release 1.9.0.3*
- *Oracle Utilities Work and Asset Management Quick Install Guide for Release 1.9.0.3*
- *Oracle Utilities Work and Asset Management Release Notes Guide for Release 1.9.0.3*
- *Oracle Utilities Work and Asset Management Upgrade Install Guide for Release 1.9.0.3 on Linux OS Application Server*
- *Oracle Utilities Work and Asset Management Upgrade Install Guide for Release 1.9.0.3 on Windows OS Application Server*
- *Oracle Utilities Work and Asset Management User Guide for Release 1.9.0.3*

Conventions

The following text conventions are used:

Convention	Meaning
<i>italic</i>	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.

Supported Platforms and Hardware Requirements

This section provides information regarding the operating systems and servers on which this release has been tested and certified.

Supported Platforms

The installation has been certified to operate on many operating system, application server, and database server combinations. See below for details on the browser, operating system and application server combinations on which this release has been tested and certified. If you are consulting this matrix in between releases (including service pack and patch releases), you should contact customer support for the most up to date version.

Operating System for the Application Server	Chipset	Application Server	Database Server	Client Operating System
AIX 5.3 (64-bit) TL11 AIX 6.1 (64-bit) TL4	Power 64-bit	Not Supported	Supported Oracle Database versions include 10.2.0.4, 11.1.0.7, and 11.2.0.1, Enterprise or Standard Edition.	Windows XP x86 SP3 (32-bit)
HP-UX 11.31 (64-bit)	Itanium	Not Supported		Windows7 x86 SP1 (64-bit and 32-bit)
Oracle Enterprise Linux 5.4 (64-bit) Red Hat Enterprise Linux 5.4 (64-bit)	x86_64	Oracle Application Server v10g (10.1.2.3) Weblogic Server 10.3.4/Forms 11g 11.1.1.4		Windows Vista x86* (64-bit and 32-bit)
Sun Solaris 10 (64-bit)	SPARC	Not Supported		Oracle Enterprise Linux 5.4 (64-bit)
Windows 2008 Server Enterprise Edition SP2 (64-bit)	x86_64	Weblogic Server 10.3.4/Forms 11g 11.1.1.4		
Windows 2003 Server Enterprise Edition SP2 (64-bit and 32-bit)	x86_64 x86_32	Oracle Application Server v10g (10.1.2.3)		

Client Operating System Specific

Browsers

- Internet Explorer 7.x(32-bit) - not supported on Linux client

-
- Internet Explorer 8.x (32-bit) - not supported on Linux client
 - Mozilla Firefox 3.6.x (32-bit)
 - Mozilla Firefox 4.0 (32-bit)

Java

- Java Virtual Machine Plug-in for Browser - Sun Java Plug-in v1.6.0_26(32-bit)

Application Server Specific

Java

- JDBC Driver - 10.2.0.4

Mobile Operating Systems

- Windows Mobile 6.5

VM Products

- Oracle VM 2.2

Notes

- Oracle VM may be used to create a virtual machine for either the database or application server operating system. Refer to the Oracle VM Release 2.2 documentation for more information about using Oracle VM.
- Barcoding and Mobile are not supported on Linux.
- *Windows Vista to be de-supported in a future release.

Support for Software Patches and Upgrades

Due to the ongoing nature of software improvement, vendors will issue patches and service packs for the operating systems, application servers and database servers on top of specific versions that Oracle Utilities Work and Asset Management has been tested with.

If it is necessary to apply an upgrade, please do that in a test environment prior to updating the Oracle Utilities Work and Asset Management production environment.

Always contact Oracle Utilities Work and Asset Management support prior to applying vendor updates that do not guarantee backward compatibility.

Upgrade Installation Guide

This document provides information and steps needed to upgrade from Oracle Utilities Work and Asset Management Release 1.9.0.2 to Release 1.9.0.3 in a Linux operating system application server.

Review this entire guide with special attention to the [Installation Considerations](#) before you begin. Please also note the following:

- This guide applies for UPGRADE installations only.
If you are applying a new installation, refer to the [Related Documents](#) section in the Preface for a reference to the new installation documentation.
- This release is compiled for Oracle Application Server 10g (10.1.2.3) and will not function on an application server that is running Oracle 9i Application Server (Oracle 9i AS).
If you have customized SAPI library, it is recommended to recompile your customized library in Oracle 10g Developer Suite. If you have not previously upgraded to Oracle Application Server 10g, contact Customer Support for details.
- Refer to the [Supported Platforms and Hardware Requirements](#) section to verify hardware, software and platforms compatible with this release.
- Please note that the person completing the upgrade must have sufficient DBA privileges. This can be added using:

```
grant create type to synergen_schema_owner;
```

Required Upgrade Tasks

The following major steps are required to correctly apply the upgrade:

- Review the entire Upgrade Guide
- Complete Installation Considerations Checklist
- Upgrade WAM Application Server (SIA)
- Upgrade Oracle Application Server
- Upgrade Database server
- Upgrade Barcode (optional)
- Restart all components that were shut down prior to installation

Installation Considerations

Before you begin installation, review the following:

- Ensure that Oracle Utilities Work and Asset Management Release 1.9.0.2 is the current version in use.
- Review the *Oracle Utilities Work and Asset Management Release Notes for Release 1.9.0.3* for a listing of application changes and issues which may affect your use of the system after the upgrade.
- Provide a grant execute to the DBMS packages listed below. Log into the database as the sysdba owner and execute the commands indicated. (This must be done prior to executing manual scripts)

This adds an “execute” privilege on each package to application users (directly or through a common role). Note that only the ‘SYS’ user is capable of granting privileges to the package.

‘superuser’ is the role in the synergen schema. You can find this by executing the following sql statement in the synergen schema:

```
select key_value from sa_installation_parameters where key_name like 'SUPER%';
```

- SYS.DBMS_LOCK
Command: grant execute on dbms_lock to superuser;
- SYS.DBMS_CCRYPTO
Command: grant execute on dbms_crypto to public;
- SYS.DBMS_ASSERT
Command: grant execute on dbms_assert to public;
- If your user base requires the ability to use COPY RECORD functionality or needs to access reports from the actions list that are added in the Modules Administration - Forms module Module Reports view, you must also grant access to the all_cons_columns view using the following:

```
grant select on all_cons_columns to SUPERUSER;
```
- If you have experienced mouse focus issues, you should upgrade the Oracle Application Server to V10.1.2.3 and then apply Oracle Forms patch 9282569. This patch is a merge of patch 8727236 and other patches that were previously required to resolve forms mouse focus issues.

11G Database

- If you upgraded to Oracle Database 11g, you must run the script 7426686.sql manually.
This is to ensure that email and product integration features function properly. This script creates a default Access Control Lists (ACL) that will grant access from the database to external URLs called by the UTL_HTTP library. You must also grant "execute" permissions on UTL_HTTP to the SUPERUSER role.
See the section titled [Manual Scripts \(11G database only\)](#) on how to implement.
- Stop the Oracle Application Server OC4J instance prior to applying the upgrade. Doing so will render the application unavailable to users, so you must schedule the application of this service pack at a time when the application can be taken out of service.
- Configure formsweb.cfg- In the formsweb.cfg file make sure the "archive" setting points to the "frmwebutil.jar" instead of "webutil10123.jar".
Changing this setting ensures that the correct .jar file is referenced: frmwebutil.jar file located in the <midtierhome>/forms/java folder.
- Database Parameters of note:

These database parameters should be considered and set, if applicable, according to your business needs following installation of the upgrade.

- SEC_CASE_SENSITIVITY_LOGON - This is set to TRUE as default, however if you are on the Oracle Database 11g, you must set this value to FALSE to avoid logon errors related to case sensitive passwords.
- PASSWORD_LIFE_TIME -- by default, passwords expire after a certain time, however, expiration is managed within Oracle Utilities Work and Asset Management, so to avoid conflicts, this should be set to UNLIMITED.

Target Environment

Throughout this document, reference is made to a 'target environment'. An 'environment' is a complete *Oracle Utilities Work and Asset Management* application environment (Oracle Database instance, Oracle Application Server (forms and reports) instance, WAM Internet Architecture instance, Chart Server instance) configured for a 'purpose' such as 'training', 'test', 'production', etc. The installation program will ask you to select the target environment you wish to upgrade.

When upgrading the various components (potentially on different servers), it is essential that you select the same target environment on each server.

Install Components in Target Environment

The WAM installation for Linux is delivered in a tar file:

1. Extract the contents of WAM1903.tar.gz to a directory of your choice.
2. After this file is extracted complete these phases to upgrade:
 - Install Application Server Components
 - Install Oracle Application Server Components
 - Install Database Scripts
3. When asked to 'Enter the name of the environment you wish to setup during this installation', the name entered here will be used to create a number of items, including directory folder names, Oracle OC4J instances, database alias pointers, etc. The name must match the instance name that is used when creating the OC4J in the Mid-Tier configuration step, WAMSIAInstall.sh.

You must use the same 'case' when entering the environment name in all four installation types - for example, you must enter 'DEMO' in all four installations, and not mix 'DEMO', 'demo' and 'Demo' - otherwise, you will encounter problems in the application.

Note: Errors may be produced as the directory is created, however, if the directory is created successfully, these can be ignored.

Upgrade Steps

Complete the following steps to install the upgrade.

1.0 Stop the Oracle OC4J Instance

The target OC4J instance created in the Oracle 'mid-tier' needs to be stopped before starting the installation of *Oracle Utilities Work and Asset Management*. The upgrade requires access to several installed forms and libraries, which may be unavailable if you do not stop the target OC4J instance before continuing.

By shutting down the OC4J instance, you are also shutting down access to SIA and Oracle Forms.

To stop the Oracle OC4J Instance:

1. Open the Oracle EM web site in an internet browser
This is located on the Oracle Application Server.
 2. Select the target OC4J instance from the mid-tier section.
 3. Click “Stop” and “Yes” when prompted to confirm that you want to stop the instance.
- config.propertiesasp_urlIn the WAM1903 directory, execute the WAMSIAInstall.sh and respond to the prompts:

- Enter the Oracle Mid-Tier directory

Enter the Instance Forms Name

2.0 Upgrade the Oracle Application Server to WAM Release 1.9.0.3

In the WAM1903 directory, execute the WAMFormsInstall.sh and respond to the prompts:

- Enter the Oracle Mid-Tier directory
- Enter the WAM Forms Directory
- Enter the Instance Forms Name

3.0 Upgrade the Database Server to WAM Release 1.9.0.3

- 3.1 Copy the server folder from the WAM1903 directory onto the Database Server.

Note: For non-windows users, you should run the installation program on a windows platform, then copy the resulting directory structure ‘as is’ to your non-windows database server.

- 3.2 Execute the Database Scripts

3.2.1 Connect to the target instance

On the database server, connect to the target instance as the existing WAM table owner. Navigate to the directory where you copied the upgrade scripts.

Sample command when connecting using a remote terminal:

```
cd /wams/scripts/server/1.9.tools
==> export ORACLE_SID=WAMDEV
==> echo $ORACLE_HOME
(IF blank you need to set ORACLE_HOME)
sqlplus synergen/password@wamdev
```

3.2.2 Execute the scripts

At the SQL> prompt, enter @servpk19030.sql.

Note: you must run all WAM scripts directly from within the folder containing the scripts; you cannot run the scripts by referencing the scripts using directory paths. Our scripts dynamically generate additional scripts, and these scripts are then launched from within the session, and all scripts need to be in the same directory.

3.2.3 Enter value for user

Enter your name – this name is stored in the database to provide an audit trail of who applied the service pack.

3.3 Manual Scripts (11G database only)

The following scripts must be run manually:

Note: you must run all scripts directly from within the folder containing the scripts; you cannot run the scripts by referencing the scripts using directory paths – for example, you cannot execute “@d:\synergen\Prod6\server\ServicePack1903\server\7426686.sql” – you must set the default directory to d:\synergen\Prod6\server\ServicePack1903\server, then run “@7426686” – the reason is that our scripts dynamically generate additional scripts, and these scripts are then launched from within the session, and all scripts need to be in the same directory.

Connect to the target instance

On the database server, connect to the target instance as the existing Synergen table owner. Navigate to the directory where you copied the upgrade scripts.

3.3.1 7426686.sql

This script is necessary only if the database version is 11g. This script enables calls to systems outside the database environment.

Execute the script

At the SQL> prompt, enter @7426686.sql.

4.0 Restart all Components Shut-Down during Prior Steps

As a pre-installation task you stopped the Oracle OC4J instance and the Chart Server Website. When you have completed the application of the Service Pack, these components need to be restarted.

4.1 Restart the Oracle OC4J instance

It is recommended that you restart the entire Oracle Application Server mid-tier component. To do this, use the following commands:

Mid Tier Stop

```
emctl stop iasconsole
```

```
opmnctl stopall
```

Mid Tier Start

```
opmnctl startall
```

```
emctl start iasconsole
```

Infrastructure Stop

```
export ORACLE_HOME=/home/oracle/Ora10gInf
```

```
export ORACLE_SID=orclinf
```

```
emctl stop iasconsole
```

```
opmnctl stopall
```

shutdown db

lsnrctl stop

emctl stop dbconsole

Infrastructure Start

export ORACLE_HOME=/home/oracle/Ora10gInf

export ORACLE_SID=orclinf

lsnrctl start

start db

emctl start dbconsole

opmctl startall

emctl start iasconsole