

## **Oracle® Utilities Work and Asset Management**

Oracle Application Server Upgrade Installation Guide  
for Linux Platform

Release 1.9.0.4.11

November 2013

Oracle® Utilities Work and Asset Management Upgrade Installation Guide for Release 1.9.0.4.11 on Linux OS Application Server

Copyright ©1986, 2013, Oracle and/or its affiliates. All rights reserved.

Primary Author: TUGBU Documentation

Contributing Author: n/a

Contributor: n/a

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, 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 on 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. 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.

---

---

# Contents

<b>Preface</b> .....	<b>4</b>
Audience.....	4
Related Documents.....	4
Conventions.....	5
<b>Supported Platforms and Hardware Requirements</b> .....	<b>6</b>
Supported Platforms.....	6
Support for Software Patches and Upgrades.....	7
<b>Upgrade Installation Guide</b> .....	<b>8</b>
Required Upgrade Tasks.....	8
Installation Considerations.....	9
Target Environment.....	10
Install Components in Target Environment.....	10
Upgrade Steps.....	10
1.0 Stop the Oracle OC4J Instance.....	10
2.0 Upgrade the SIA Application Server to Release 1.9.0.4.11.....	11
3.0 Upgrade the Oracle Application Server to Release 1.9.0.4.11.....	11
4.0 Upgrade the Database Server to Release 1.9.0.4.11.....	11
5.0 Restart the OC4J Instance.....	11

---

---

# 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 upgrading to Oracle Utilities Work and Asset Management Release 1.9.0.4.11 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.

### User Documentation

In general, user documentation is only updated for major releases, however it was updated from release 1.9.04 to 1.9.0.4.6 to capture updates that were added between several patches.

- *Oracle Utilities Work and Asset Management Configuration Guide for Release 1.9.0.4.6*
- *Oracle Utilities Work and Asset Management Online Help for Release 1.9.0.4.6*
- *Oracle Utilities Work and Asset Management User Guide for Release 1.9.0.4.6*
- *Oracle Utilities Work and Asset Management Customization Guide for Release 1.9.0.4.6*

### Installation Documentation

#### Update this Release

- *Oracle Utilities Work and Asset Management Quick Install Guide for Release 1.9.0.4.11*
- *Oracle Utilities Work and Asset Management Release Notes Guide for Release 1.9.0.4.11*
- *Oracle Utilities Work and Asset Management Upgrade Install Guide for OAS Release 1.9.0.4.11 on Linux OS Application Server*
- *Oracle Utilities Work and Asset Management Upgrade Install Guide for WebLogic Release 1.9.0.4.11 on Linux OS Application Server*
- *Oracle Utilities Work and Asset Management Upgrade Install Guide for OAS Release 1.9.0.4.11 on Windows OS Application Server*
- *Oracle Utilities Work and Asset Management Upgrade Install Guide for WebLogic Release 1.9.0.4.11 on Windows OS Application Server*

---

## New Installations of 1.9.0.4

- *Oracle Utilities Work and Asset Management Installation Guide for OAS Release 1.9.0.4 on Linux OS Application Server* - New installation on OAS/Linux OS
- *Oracle Utilities Work and Asset Management Installation Guide for OAS Release 1.9.0.4 on Windows OS Application Server* - New installation on OAS /Windows OS
- *Oracle Utilities Work and Asset Management Installation Guide for Weblogic Release 1.9.0.4 on Linux OS Application Server* - New installation on WebLogic /Linux OS
- *Oracle Utilities Work and Asset Management Installation Guide for Weblogic Release 1.9.0.4 on Windows OS Application Server* - New installation on WebLogic / Windows OS

## Supporting Docs

- *Oracle Application Server: <http://www.oracle.com/technetwork/middleware/ias/documentation/index.html>*
- *Oracle Weblogic Server: <http://www.oracle.com/technetwork/middleware/weblogic/documentation/index.html>*

## Knowledge Base Articles

Please access <https://support.oracle.com> to find related knowledge base articles.

- Support for Add-ons: Article ID 1336258.1
- Changing the Default Download Directory For Forms WebUtil Client Files: Article ID 783937.1

# 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	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)
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)		Windows7 x86 SP1 (64-bit and 32-bit)
Oracle Enterprise Linux 5.4, 5.6 & 5.8 (64-bit) Red Hat Enterprise Linux 5.4, 5.6 & 5.8 (64-bit)	x86_64	Weblogic Server 10.3.4 Forms 11g 11.1.1.4		Windows Vista x86** (64-bit and 32-bit)  Oracle Enterprise Linux 5.4 (64-bit)
*Solaris 10 (64-bit)	SPARC	Not Supported		
Windows 2008 Server Enterprise Edition R2 (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)
- Mozilla Firefox 5.0 (32-bit)

---

## Java

- Java Virtual Machine Plug-in for Browser - Java Plug-in v1.6.0\_39 (32-bit) and v1.7.0.13 (32-bit)

## Application Server Specific

### Java

- JDBC Driver  
10.2.0.4 (OAS)  
11.2.0.2.0 (WebLogic)

## Integrations

- GIS - ESRI ArcGIS 10
- GIS - ESRI ArcIMS 10
- GIS - ESRI ArcMAP 9.3
- GIS - Oracle MapViewer 10.1.3.4
- Microsoft Project 2007
- Oracle Business Intelligence Publisher 11g Release 1 (11.1.1.6.0)
- Oracle Business Intelligence v2.4.0
- Oracle Integration Pack for Oracle Utilities Field Work 3.1
- RFGen (Barcode) v3.2.1.28
- 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, Mobile, and Chart server add-on applications do not run on Linux. Please refer to knowledge base article ID 1336258.1 on <https://support.oracle.com> for more information.
- Fine Grain Access functionality requires Enterprise Edition Database Server.
- \* If your database server is installed on AIX or Solaris, please refer to the database support document for these servers.
- \*\* Windows Vista to be de-supported in a future release.

## Support for Software Patches and Upgrades

Due to the ongoing nature of software improvement, outside vendors and other Oracle products 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 1.9.0.4.10 to Release 1.9.0.4.11:

- **Application Server Operating System:** Linux
- **Application Server Software:** Oracle Application Server 10g (10.1.2.3)

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
- [Stop the Oracle OC4J Instance](#)
- [Upgrade the SIA Application Server to Release 1.9.0.4.11](#)
- [Upgrade the Oracle Application Server to Release 1.9.0.4.11](#)
- [Upgrade the Database Server to Release 1.9.0.4.11](#)
- [Restart the OC4J Instance](#)



---

## Installation Considerations

Before you begin installation, review the following:

- Ensure that Oracle Utilities Work and Asset Management Release 1.9.0.4.10 is the current version in use.
- Review the *Oracle Utilities Work and Asset Management Release Notes for Release 1.9.0.4.11* 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\_crypto  
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;
```
- 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.

### 11G Database

- If you upgraded to Oracle Database 11g, you must run the script 7426686.sql manually.  
This is to ensure that e-mail and product integration features function properly. This script creates a default Access Control List (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.
- 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) 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 Oracle Utilities Work and Asset Management installation for Linux is delivered in a tar file.

1. Extract the contents of `WAM190411.tar.gz` to a directory of your choice.
2. After this file is extracted complete these phases to upgrade:
  - Install WAM Application Server Components
  - Install WAM Oracle Application Server Components
  - Install WAM Database Scripts
3. `OAS_LINUX` with `SIA UPDATE ONLY` - 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`. 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 instance, you are also shutting down access to SIA and Oracle Forms.

#### To stop the Oracle OC4J Instance:

- 1.1 Open the Oracle EM web site in an internet browser.

This is located on the Oracle Application Server.

- 1.2 Select the target OC4J instance from the mid-tier section.

- 1.3 Click "Stop" and "Yes" when prompted to confirm that you want to stop the instance.

---

## 2.0 Upgrade the SIA Application Server to Release 1.9.0.4.11

In the WAM190411 directory:

- 2.1 Execute the WAMSIAInstall.sh
- 2.2 Enter the Oracle Mid-Tier directory
- 2.3 Enter the WAM instance name and press enter.

Instance Name = DEMO

Note that the instance name is case sensitive.

## 3.0 Upgrade the Oracle Application Server to Release 1.9.0.4.11

In the WAM190411 directory:

- 3.1 Execute the WAMFormsInstall.sh.  
Enter the Oracle Mid-Tier directory
- 3.2 Enter synergen home: /home/oracle/synergenForms.
- 3.3 Enter the Instance Forms Name: WAMLX3 and press enter.

## 4.0 Upgrade the Database Server to Release 1.9.0.4.11

- 4.1 Copy the server folder from the WAM190411 directory onto the Database Server.
- 4.2 Copy the server folder onto the WAM Database Server
- 4.3 Execute the database scripts.

4.3.1 At a command prompt enter SYNERGEN @servpk190411.sql

## 5.0 Restart the OC4J Instance

As a pre-installation task you stopped the Oracle OC4J instance. When you have completed the installation, these components need to be restarted.

- 5.1 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:

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
```

```
opmnctl startall
```

```
emctl start iasconsole
```

#### Mid Tier Stop

```
emctl stop iasconsole
```

```
opmnctl stopall
```

#### Mid Tier Start

```
opmnctl startall
```

```
emctl start iasconsole
```