

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

WebLogic 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

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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 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*

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## 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)

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## 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.

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# 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:** WebLogic

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 WebLogic Server (10.3.4) and Forms 11g (11.1.1.4).  
If you have customized SAPI library, it is recommended to recompile your customized library in Forms 11g Developer Tools. If you have not previously upgraded to Weblogic Server and Forms 11g. 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 WLS\\_FORMS and WLS\\_REPORTS Servers](#)
- [Upgrade the SIA Application Server to Release 1.9.0.4.11](#)
- [Upgrade the Oracle Forms to Release 1.9.0.4.11](#)
- [Upgrade the Database Server to Release 1.9.0.4.11](#)
- [Restart the WLS\\_FORMS and WLS\\_REPORTS Servers](#)
- Complete optional installation steps, as needed.
  - [Deploy the Spell Check Application](#).  
Please refer to [Appendix A](#) for instructions.



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## 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 Utilities Work and Asset Management deployment 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 SIA Application Components
  - Install WAM Oracle Forms Components
  - Install WAM Database Scripts

## Upgrade Steps

Complete the following steps to install the upgrade.

### 1.0 Stop the `WLS_FORMS` and `WLS_REPORTS` Servers

The `WLS_FORMS` and `WLS_REPORTS` servers need 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 servers before continuing.

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

**To stop the `WLS_FORMS` and `WLS_REPORTS` servers:**

- 1.1 Log into the WebLogic console and select **Environment** > **Servers** and select the **Control** tab.
- 1.2 Check `WLS_FORMS` and `WLS_REPORTS`.
- 1.3 Click the **Shutdown** button and select "**Force Shutdown Now**".

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## 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 WAM instance name and press enter.

Instance Name = DEMO

Note that the instance name is case sensitive.

## 3.0 Upgrade the Oracle Forms to Release 1.9.0.4.11

In the WAM190411 directory:

- 3.1 Execute the WAMFormsInstall.sh.
- 3.2 Enter synergen home: /home/oracle/synergen.
- 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 WLS\_FORMS and WLS\_REPORTS Servers

As a pre-installation task you stopped the WLS\_FORMS and WLS\_REPORTS Servers. When you have completed the installation, these components need to be restarted.

**To restart the WLS\_FORMS and WLS\_REPORTS servers:**

- 5.1 Log into the WebLogic console and select **Environment** > **Servers** and select the **Control** tab.
- 5.2 Check WLS\_FORMS and WLS\_REPORTS.
- 5.3 Click the **Start** button.

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# Appendix A

If you completed the new installation for release 1.9.0.4 on WebLogic, it is possible that you did not receive the files necessary to install the spell check functionality for forms. The following sections describe how to apply this installation.

## Deploy the Spell Check Application

1. Get the formspell.war file.
  - Run setup.exe from the installation package.
  - Select the Formspell [release number] option.
  - Follow the steps in the InstallShield Wizard until complete.
  - Navigate to c:\synergen\WLS19c:\synergen\WLS19 to retrieve the formspell.war file. The file was copied to this location by the installer.
  - Follow the formspell configuration guide to set up spell check.
2. Deploy Formspell
  - Create a “formspell” folder under \$SYNERGEN\_HOME.  
Execute the command: mkdir formspell.
  - Extract formspell.war.  
Execute the command: jar -xvf formspell.war.
  - Login to the WebLogic Server Administration Console.
  - Click the Lock & Edit button.
  - Select “Deployments” under Domain Structure.
  - Click the Install button.
  - Set the current location as /home/wams/synergen.
  - Select the formspell radio button and click **Next**.
  - Select the “Install this deployment as an application” radio button and click **Next**.
  - Select cluster\_forms > part of the cluster > WLS\_FORMS and click **Next**.
  - Select the “DD Only: Use only roles and policies that are defined in the deployment descriptors” radio button.
  - Select the “I will make the deployment accessible from the following location,” enter /home/wams/synergen/formspell and click Finish.
  - In the **Change Center**, click the **Activate Changes** button.  
The system displays a confirmation screen notifying you that all changes have been activated.
  - Under **Domain Structure, ClassicDomain** (my domain home), click **Deployments**.
  - Start the service by checking the box next to “formspell”.

- Click the Lock & Edit Button then select the Configuration tab.
  - Set the Session Timeout (in seconds).  
Recommended value = 1800
  - Set the Context Root as /formspell and click Save.
  - Confirm the settings in the Save Deployment Plan screen then Click OK.
  - Click the Activate Changes button.
3. Update the files.
- Stop WLS\_FORMS and update the permissions files.  
chmod for the files: SNDSPELL.JDX and ServletLog.txt to 777 (rwx)
  - Edit the jspell.properties file:

```
[wams@njwin20-v06 WEB-INF]$ cat jspell.properties
index=/home/wams/synergen/formspell/WEB-INF/SNDSPELL.JDX
log=/home/wams/synergen/formspell/WEB-INF/ServletLog.txt
[wams@njwin20-v06 WEB-INF]$ pwd
/home/wams/synergen/formspell/WEB-INF
```

- Edit the web.xml file.

```
<param-name>properties-file</param-name>
<param-value>/home/wams/synergen/formspell/WEB-INF/jspell.properties</param-value>
```

4. Verify the deployment.
- Verify your spell checker configuration by re-starting WLS\_FORMS then navigating to the URL:  
<http://njwin20-v02.us.oracle.com:9001/formspell/jspell?text=check%20tehat%20T%20F%201>
- If the “JSpell Results” screen displays with test values, formspell setup is configured correctly.
- Verify that spell checking is turned on by opening the Installation Parameters module and reviewing the setting for the SPELL CHECK object.  
This should be set to ON.
5. Configure the Spell Check business rule.
- In the Oracle Utilities Work and Asset Management application, configure the Spell Check Business Rule with the following:

Key	YES/NO	Value
Debug Messages	YES	Set the YES/NO value to YES to send debug messages to the java console. No is the default.
Dictionary Port	YES	Set to 80. This allows a non-default value to be entered in the dictionary server value
Dictionary Server	YES	Set to YES and enter the <server>:<port> combination for the SIA server. In this example: njwin20-v02.us.oracle.com:9001/formspell
Dictionary Type	YES	Set to SERVLET.
Ignore First		Set to YES if you want to ignore irregular capitalization on the first word. NO is the default.
Ignore Irregular		Set to YES to ignore irregular words. NO is the default.
Ignore Upper		Set to YES to ignore words in all caps. YES is the default.

Test spell checking in the application by logging in and typing text in some field. Click the Spell Check icon to verify that you do not receive any errors and that the spell checker is working.