

Oracle® Utilities Work and Asset Management

Installation Guide for Oracle Application Server
Release 1.9.0.3 on Windows or Linux

E24641-01

July 2011

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

Copyright ©1986, 2011, 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 software or related documentation 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 RIGHTS

Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are “commercial computer software” or “commercial technical data” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle America, Inc., 500Oracle Parkway, Redwood City, CA 94065.

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 which 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.

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 lost, costs, or damages incurred due to your access to or use of third party content, products or services.

Contents

Preface	5
Audience	5
Related Documents	5
Conventions	6
Supported Platforms and Hardware Requirements.....	7
Supported Platforms.....	7
Support for Software Patches and Upgrades.....	8
OAS Installation Guide	9
Required Installation Tasks.....	9
Target Environment.....	9
Install Components in Target Environment	10
Windows Installation Steps.....	10
1.0 Infrastructure Installation	10
2.0 Post Infrastructure Installation	16
3.0 Mid-Tier Installation	17
4.0 Post Mid-Tier Installation	22
5.0 Configure Mid-Tier Installation	23
6.0 Install Oracle Utilities Work and Asset Management	28
7.0 WAR File Extraction	29
8.0 WAR File Configuration	31
9.0 Data Source Configuration	33
10.0 Data Source for Password Reset Functionality	35
11.0 Class Paths Configuration	36
12.0 Oracle HTTP Server Configuration	37
13.0 Manage the Mid-Tier	39
14.0 Install Application Server Components	40
15.0 Install Oracle Application Server Components	44
16.0 Install Database Object Components	47
17.0 Load Clean or New Database	50
18.0 Test the Installation	51
19.0 Create Reports Service	51
20.0 Run Manual Scripts	52
21.0 Configure JDBC Driver	53
Linux Installation Steps	54
Support Documentation	54
Considerations.....	55
Linux Specific Installation Steps.....	56
22.0 Install Application Server Components	56
23.0 Install Oracle Application Server Components	57
Latin-American Spanish Language Support.....	57
Latin-American Spanish Language Support OS Requirements.....	57

Config Properties	57
Locale Codes.....	57
Additional Localization Settings	58
Post Installation Considerations	58

Preface

This guide provides information needed to install Oracle Utilities Work and Asset Management.

Audience

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

Related Documents

For more information on this release, refer to the following related documentation.

- *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*

- *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>*

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, Mobile and Charts are not supported on Linux. The supporting software required to run these add-ons (such as rfggen and IIS) does not work with 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, 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.

OAS Installation Guide

This document provides information and steps needed to install Oracle Utilities Work and Asset Management Release 1.9.0.3. Please refer to the appropriate sections based on whether you are installing on Windows or Linux:

- [Windows Installation Steps](#)
- [Linux Installation Steps](#)

Review this entire guide before you begin your installation. Please also note the following:

- This guide applies for new installations on an OAS server.
- 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 installation must have sufficient DBA privileges. This can be added using:

```
grant create type to <synergen_schema_owner>;
```

Required Installation Tasks

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

- Review the entire Installation Guide
- Review supporting Documentation as needed. (See the [Related Documents](#) section in the Preface for references.)
- Complete the [Windows](#) or [Linux](#) Installation Tasks as appropriate to your operating system application server.

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, SIA instance, Chart Server instance) configured for a 'purpose' such as 'training', 'test', 'production', etc. The installation program asks 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

Windows Installation

During the installation, you will be asked to run the installation program which will prompt you to select the component that you wish to install.

Installation Program: 'setup.exe' located in the folder where you have unzipped the downloaded service pack files.

The following must be installed:

- SIA Application Server 1.9.0.3
- Oracle Application Server v11g
- Database Objects 1.9.0.3

You can install the components in any order you choose, but each target environment needs to have all components installed and you can only install one component at a time.

Linux Installation

If you are installing on Linux, please note that most of the installation steps are the same. Exceptions are detailed in the section titled "[Linux Installation Steps](#)."

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

1. Extract the contents of WAM19030.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 was used when creating the OC4J in the Mid-Tier configuration step.

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.

Windows Installation Steps

Deploying a fully configured Oracle Application Server 10g consists of two phases. The first phase installs the Infrastructure components and the second phase installs the Mid-Tier components.

Please fill out the values exactly as identified in this document. This ensures consistent naming across customer implementations and aids in troubleshooting. When prompted for passwords, please make note of them and ensure they are consistent throughout the install.

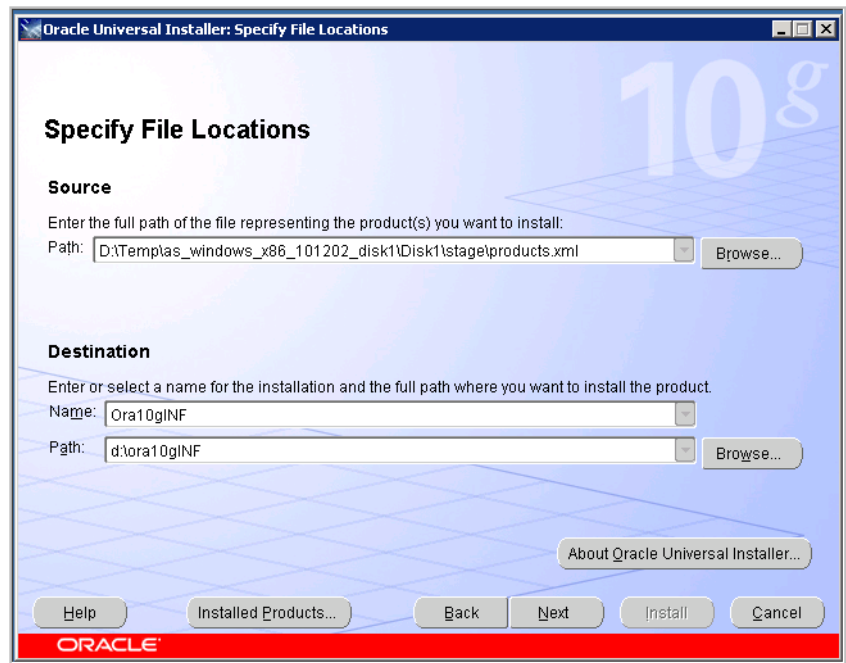
1.0 Infrastructure Installation

- 1.1 Run the Oracle Installer from the Oracle Application Server CD.
- 1.2 Click Next on the initial 'Welcome' screen.
- 1.3 The Specify File Locations page opens.

Modify the following and click Next.

Destination

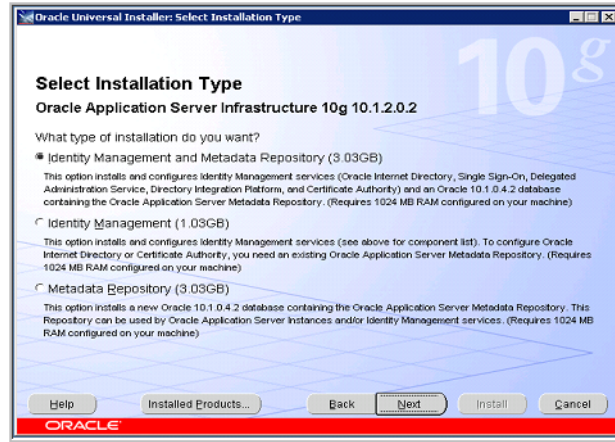
- Name: *Ora10gINF*
- Path: <drive letter:>\ora10gINF



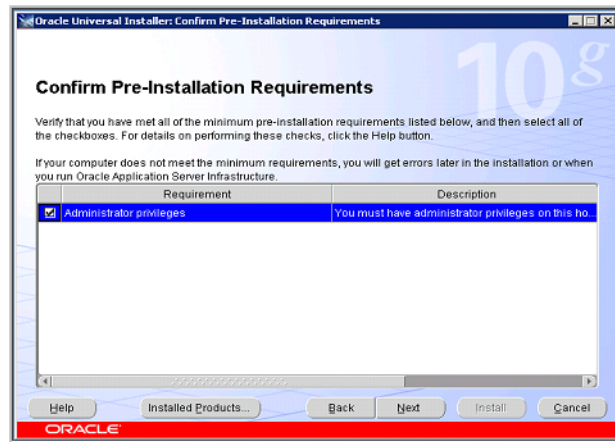
1.4 When asked to choose the product to install, select 'Oracle Application Server Infrastructure 10g'. Click Next.



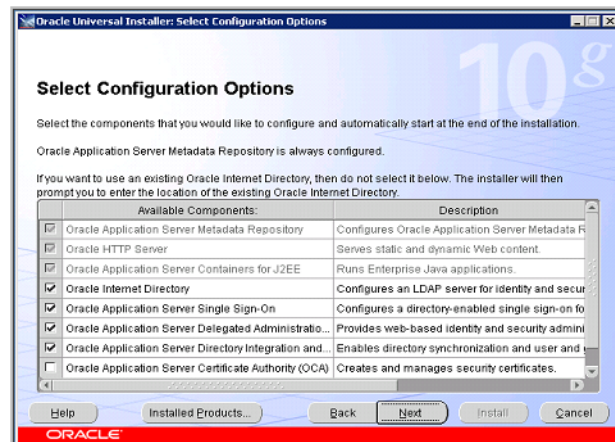
- 1.5 Select the 'Identity Management and Metadata Repository' option as the installation type. Click Next.



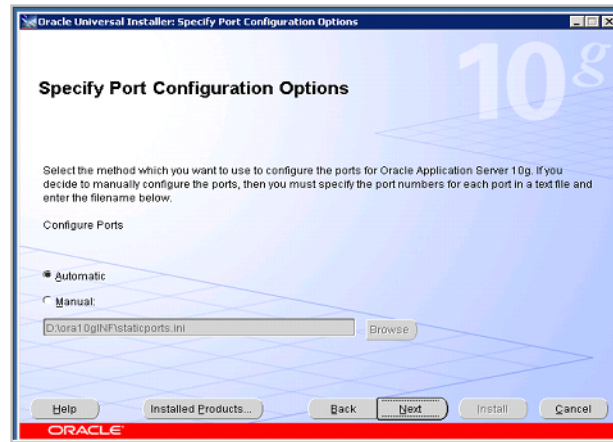
- 1.6 Confirm that the user performing the install has administrator privileges. Click Next.



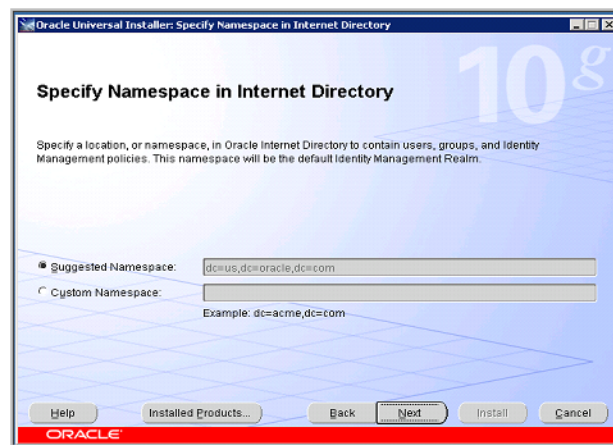
- 1.7 Select configuration options as seen in the screenshot. Click Next.



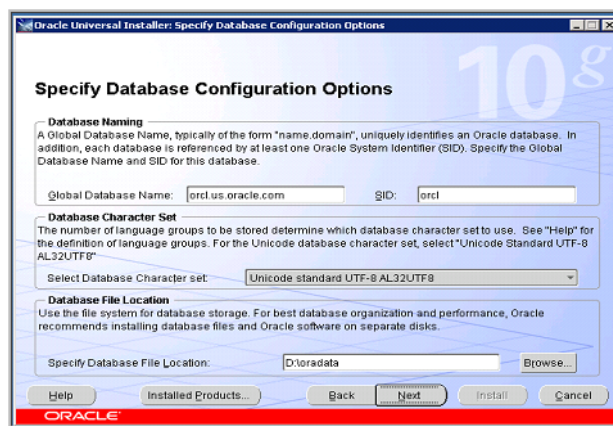
1.8 Select Automatic as the port configuration option. Click Next.



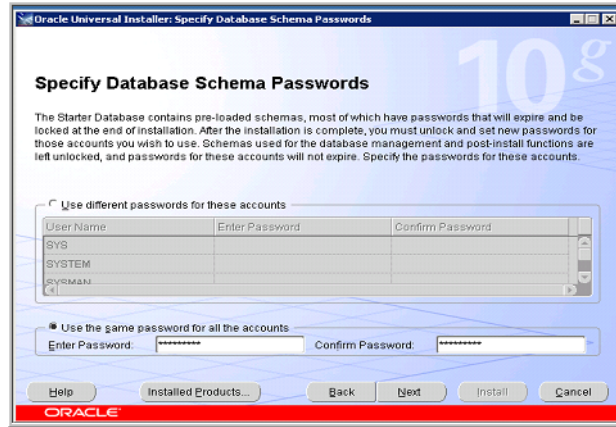
1.9 On the Specify Namespace page, select 'Suggested Namespace' and click Next.



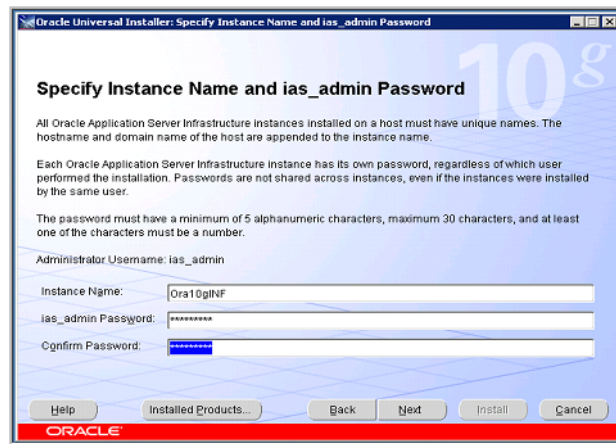
1.10 On the Specify Database Configuration Options page, set the 'Global Database Name' by adding a valid domain name to the 'orcl.' value and change the drive letter for the 'Database File Location' to reflect the installation directory. Click Next.



1.11 On the Specify Database Schema Passwords page, choose either option for specifying database passwords. Click Next.



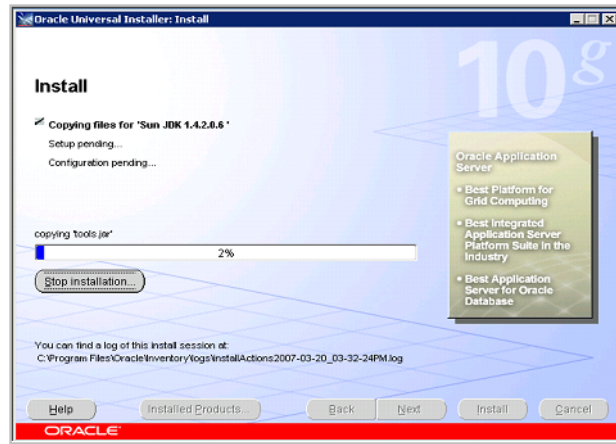
1.12 On the following screen, specify the instance name as Ora10gINF and enter a valid password (note down these values for future). Click Next.



1.13 Review the summary of what will be installed and click Install.



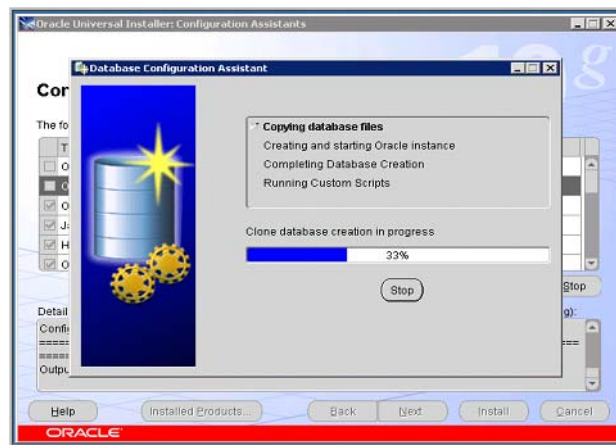
1.14 The install process begins.



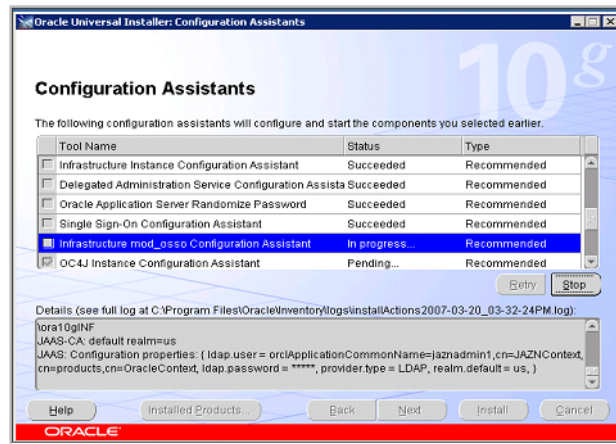
1.15 You are prompted for the location of Disk2. Navigate to it using Browse and click OK.

1.16 You are then prompted for the location of Disk3. Navigate to it using Browse and click OK.

1.17 The database creation commences based on attributes provided earlier in the installation wizard.



1.18 After the database step is completed, the Configuration Assistants screen shows the status of the Infrastructure components as they are installed.



- 1.19 At the completion of installation, make note of the URL at the bottom of the screen. This URL enables access to the EM console to manage the Infrastructure environment.

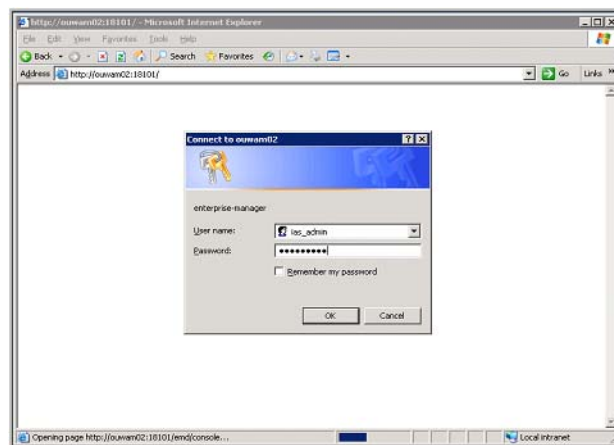


- 1.20 Click 'Exit' and then 'Yes' on the confirmation window.

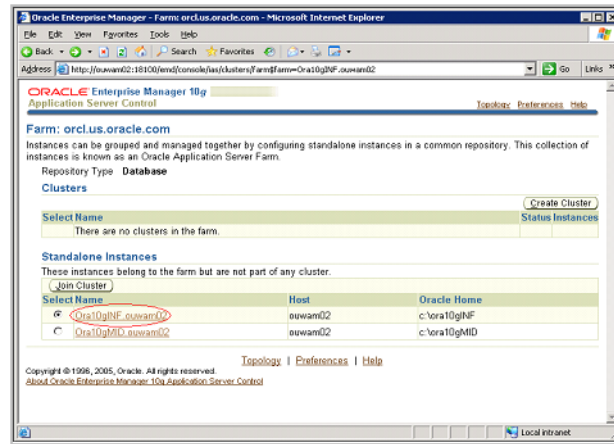
2.0 Post Infrastructure Installation

After the Infrastructure installation is complete, log into the Oracle Application Server 10g Enterprise Manager Console to validate that required services are up and running.

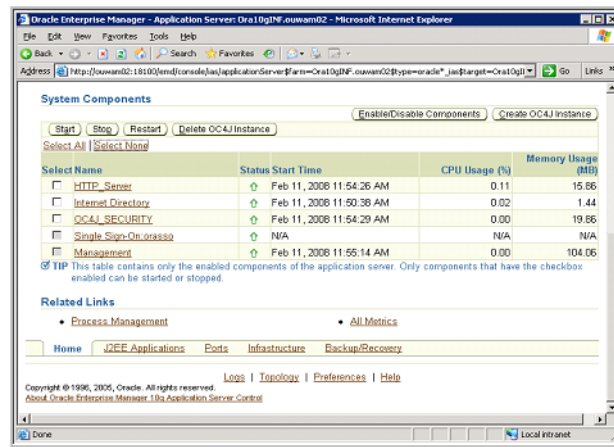
- 2.1 Open Internet Explorer and enter the URL from the Infrastructure summary screen. A login window opens.
- 2.2 Enter in the `ias_admin` user and password defined during the Infrastructure installation.



2.3 Click the link that contains the Oracle Home ending in 'INF'.



2.4 The system components and their status after a successful Infrastructure installation is displayed.



3.0 Mid-Tier Installation

Before you install the Mid-Tier components, you must have successfully installed Oracle Application Server 10g Infrastructure.

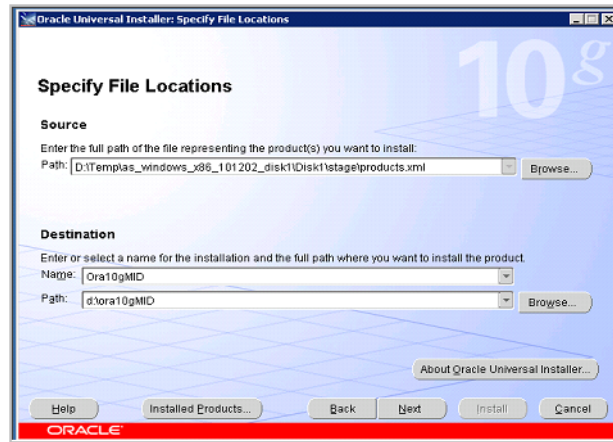
The Mid-Tier install provides the forms and reports function used by Oracle Utilities Work and Asset Management application. Even though the Mid-Tier can be installed on a different server from the infrastructure, it is not necessary to do so. Further, all testing and certification has been performed with both Infrastructure and Mid-Tier components on the same server. Please note that an install of the Mid-Tier requires a successful install of the Infrastructure, otherwise the Mid-Tier install will fail.

- 3.1 Run the Oracle Installer from the Oracle Application Server CD.
- 3.2 Click Next on the initial 'Welcome' screen.
- 3.3 On the Specify File Locations page, modify the following parameters and click Next.

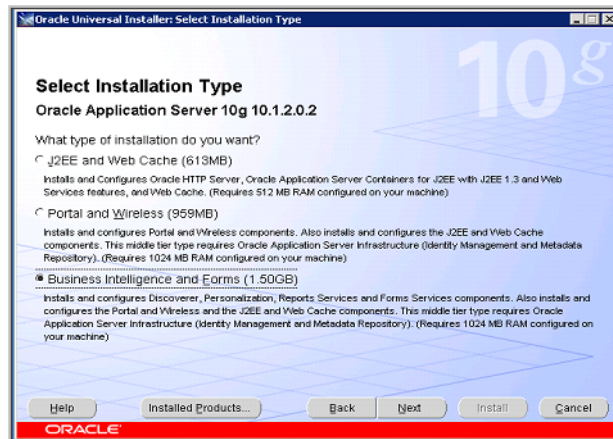
Destination:

- Name: *Ora10gMID*

- Path: <drive letter:>\ora10gMID

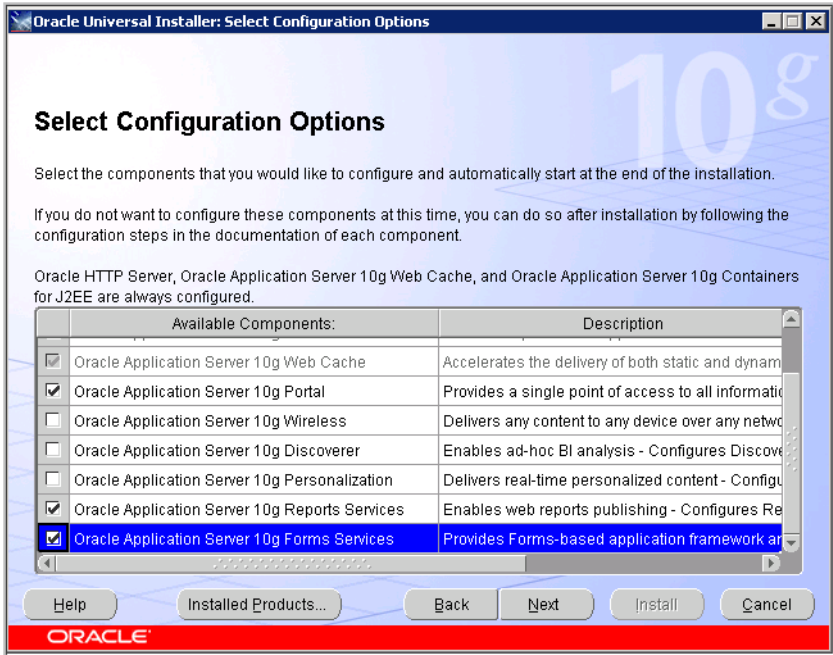


- 3.4 When asked to select the product to install, select “Oracle Application Server 10g” option. Click Next.
- 3.5 Select ‘Business Intelligence and Forms’ option as the installation type. Click Next.



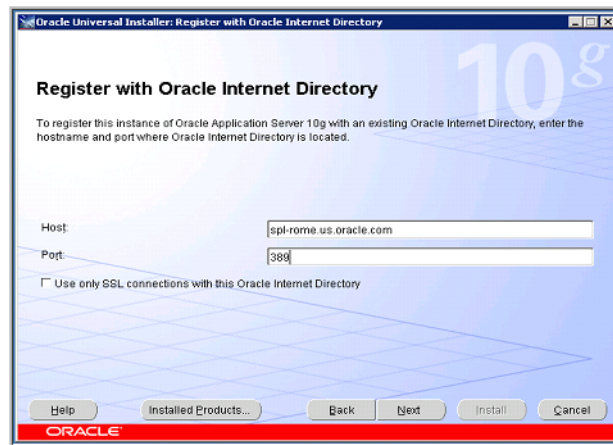
- 3.6 Confirm that the user performing the install has administrator privileges and click Next.

- 3.7 On the Select Configuration Options page, select the items as seen in the screenshot below. Click Next.

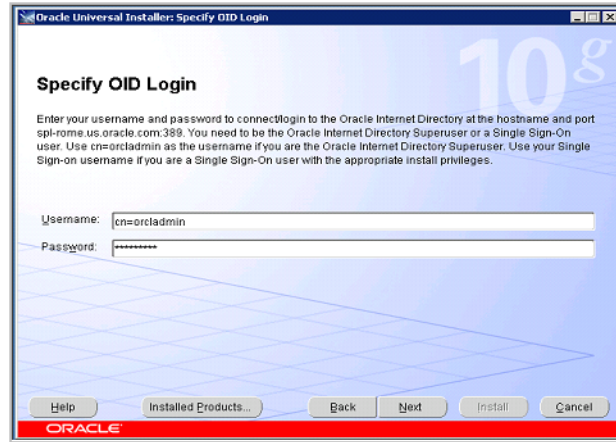


- 3.8 Select Automatic as the port configuration option. Click Next.

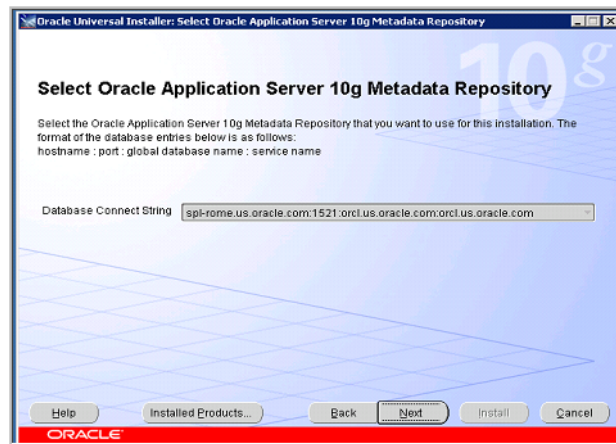
- 3.9 On the Register with Oracle directory page, enter the server name where the Infrastructure components were installed and “389” as the port. Click Next.



3.10 On the Specify OID Login page, enter the password established when specifying the instance name and password for the Infrastructure install. Click Next.



3.11 Confirm the Database Connect String on the Select OAS Metadata Repository page. Click Next.



3.12 On the Provide Outgoing Mail Server Information page, leave the value blank as this mail service is not used and click Next.



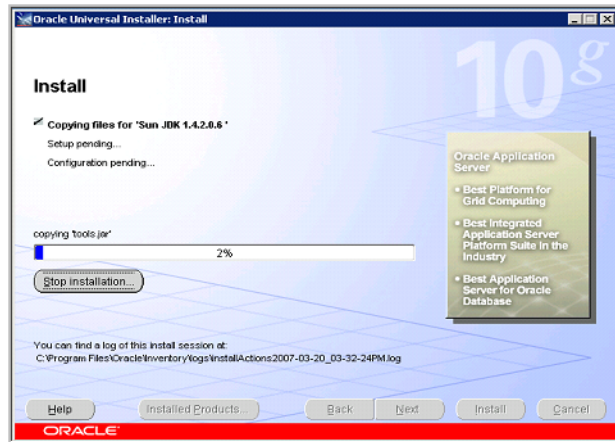
3.13 Specify the instance name as Ora10gMID and enter the password (note these values), and click Next.



3.14 Review the installation summary and click Install.

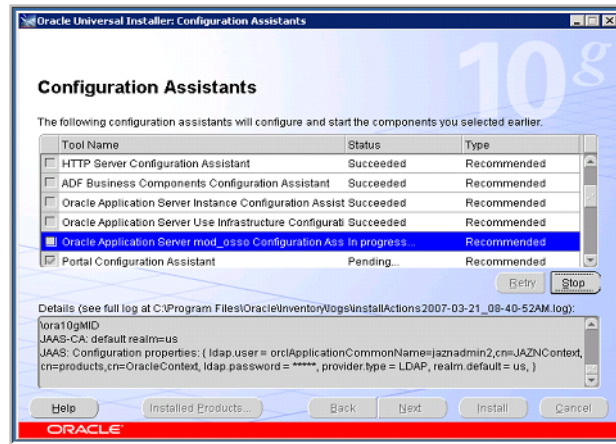


3.15 The install process begins.

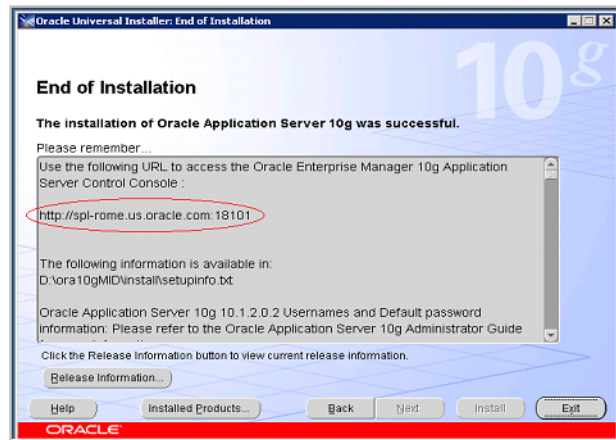


3.16 You are prompted for locations of Disk2 and Disk3. Navigate to these locations using Browse and click OK.

3.17 The Configuration Assistants screen shows the status of the Mid-Tier components as they are installed.



3.18 The final page is displayed after completion of the Mid-Tier components installation. Make note of the URL. This URL enables access to the EM console to manage the Mid-Tier environment.



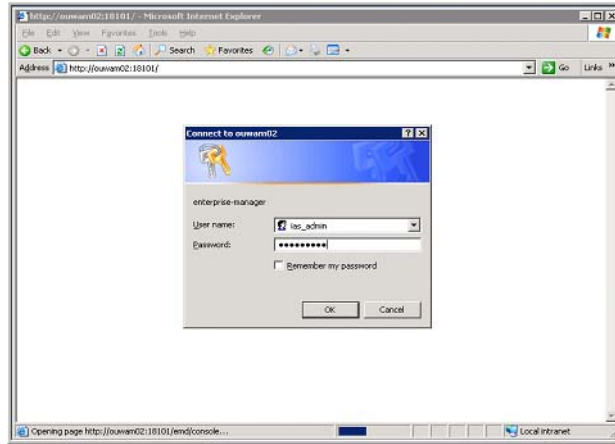
3.19 Click Exit and Yes on the confirmation window.

4.0 Post Mid-Tier Installation

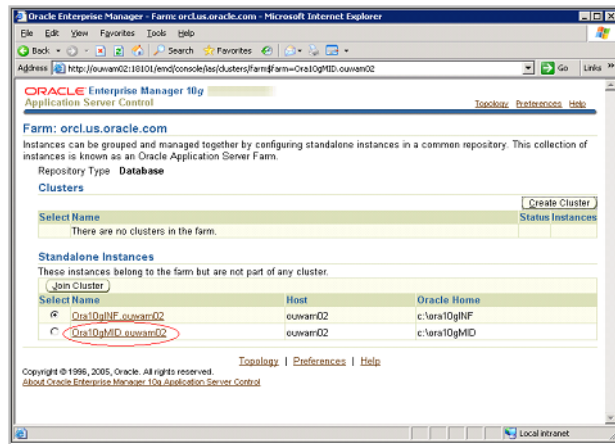
After the Mid-Tier installation is complete, log into the Oracle Application Server 10g Enterprise Manager Console to validate that required services are up and running.

4.1 Open Internet Explorer and enter in the URL from the Mid-Tier summary screen. A login window opens.

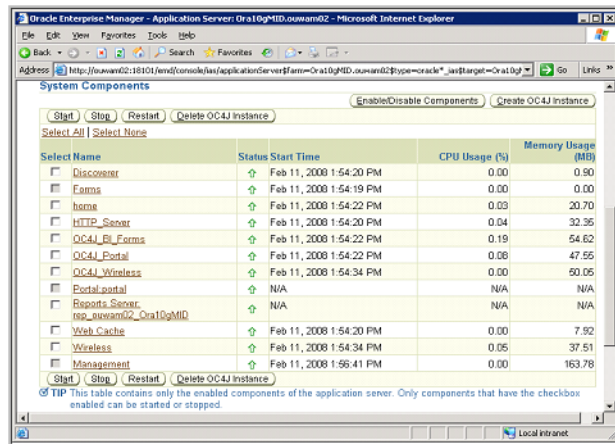
4.2 Enter in the ias_admin user and password defined during the Mid-Tier installation.



4.3 Click the link that has the Oracle Home ending in 'MID'.



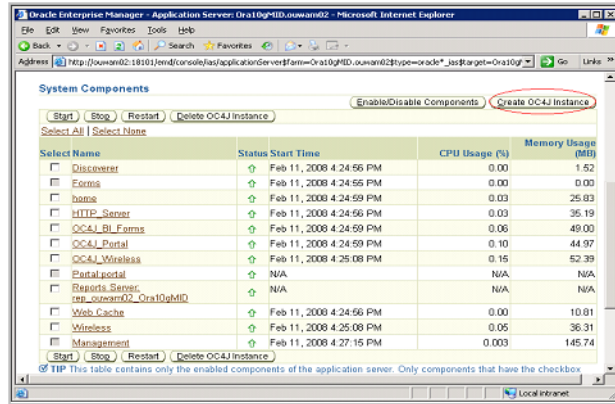
4.4 The System Components page displays the list of system components and their status after a successful Mid-Tier install.



5.0 Configure Mid-Tier Installation

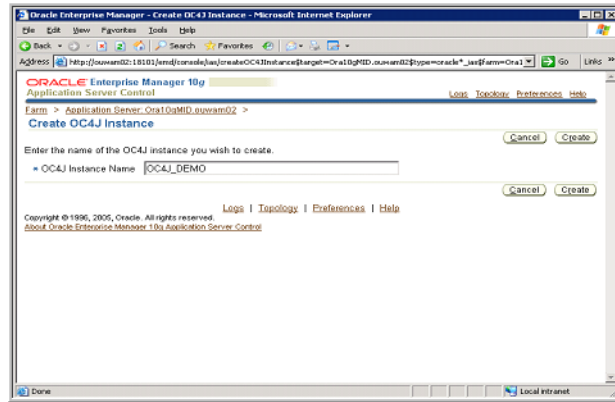
5.1 Log into the Oracle Application Server 10g Enterprise Management console and chose the Mid-Tier link.

5.2 On the System Components page, click Create OC4J Instance.



5.3 On the Create OC4J Instance page, enter in the OC4J Instance Name. Precede the instance name with 'OC4J_' in upper case and click Create.

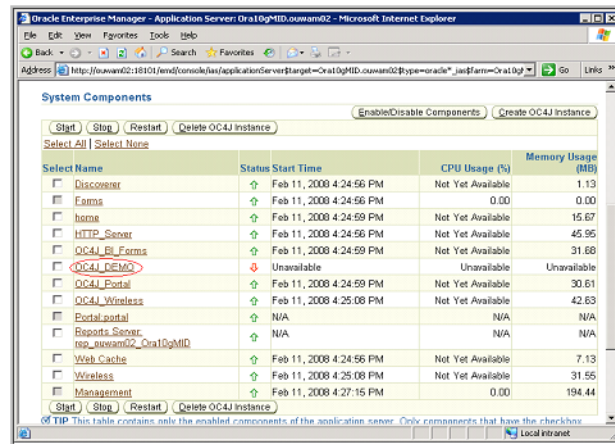
Note that the instance name is case sensitive and all subsequent entries must follow the same case.



5.4 The system displays the status of the creation.

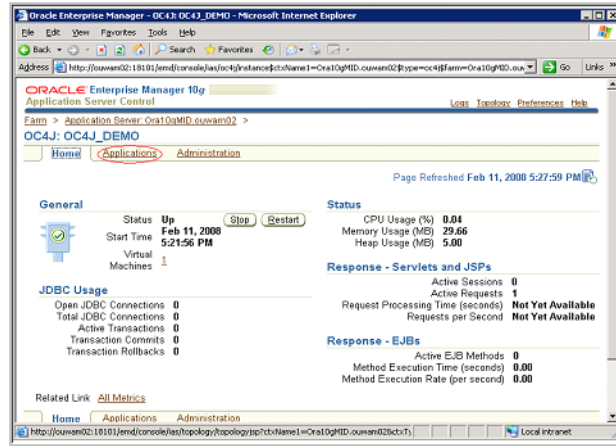
5.5 A confirmation message is displayed after creation of the OC4J instance. Click OK on the confirmation page.

5.6 On the System Components page, click the new OC4J instance link created in the preceding step and press Start.

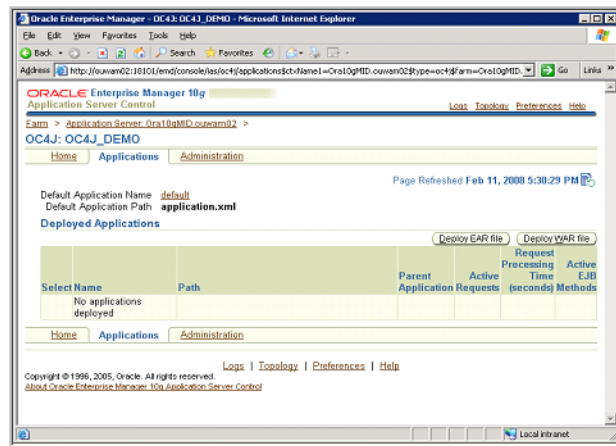


5.7 The progress of this operation is displayed. A confirmation is displayed on successful start of the new OC4J instance. Click OK on the confirmation page.

5.8 On the OC4J page click the Applications link.



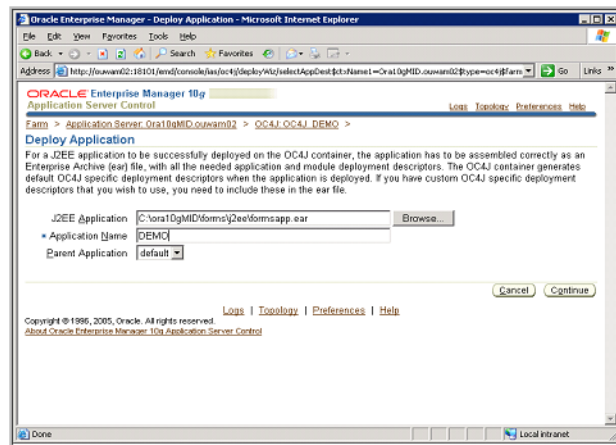
5.9 Under the Deployed Applications sub page, click the Deploy EAR file button.



On the Deploy Application page, click Browse and navigate to the <drive letter>:\ora10gMID\forms\j2ee folder and choose the file 'formsapp.ear'.

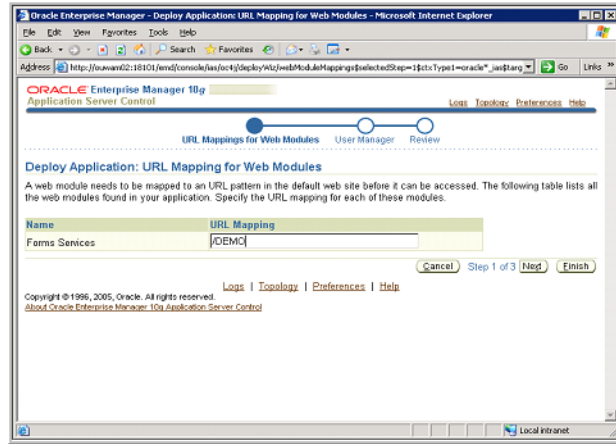
5.10 Enter in the instance name in the 'Application Name' field. Click Continue.

Note: This value is case sensitive.



5.11 On the URL Mapping for Web Modules page, enter the instance name that has been defined previously (with the forward slash (/)) against Form: Services field. Click Finish.

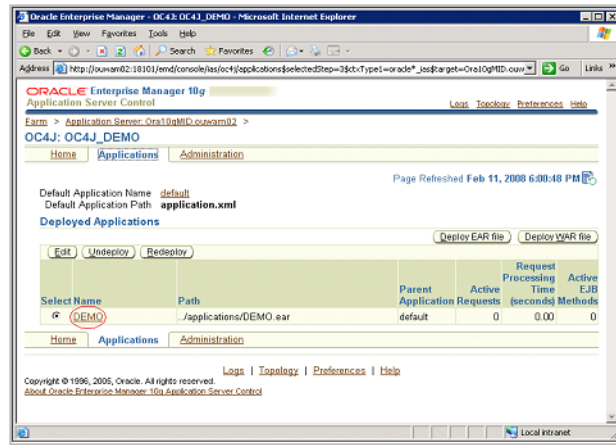
This value is case-sensitive.



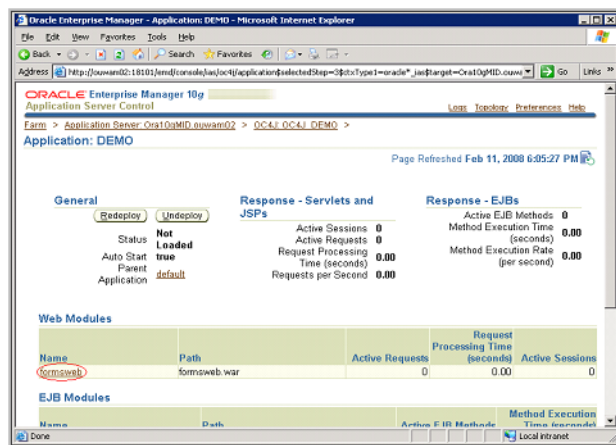
5.12 On the Review screen, click Deploy.

5.13 The Deployment status and confirmation is shown. Click OK.

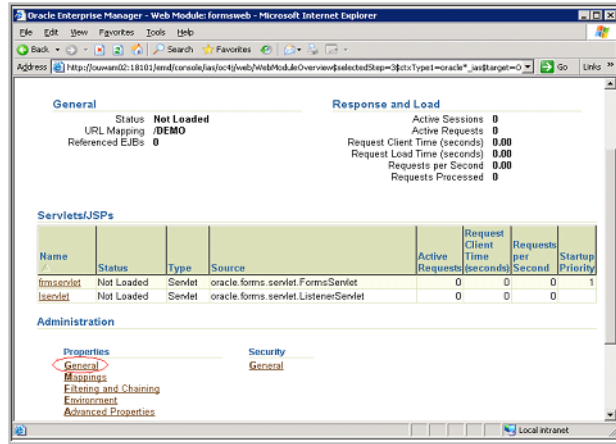
5.14 On the following screen, click the 'DEMO' link.



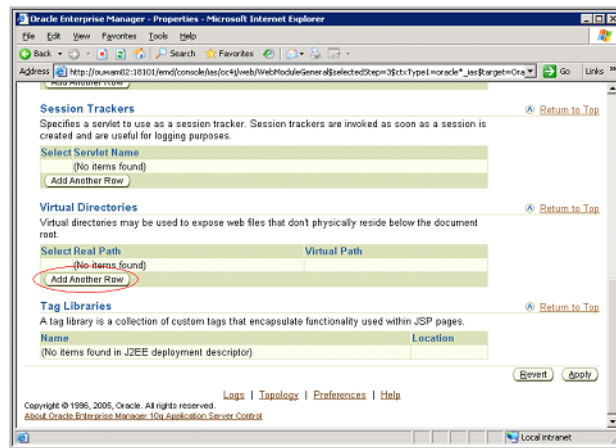
5.15 On the following screen, click the 'formsweb' link.



5.16 Scroll down and click the 'General' link.

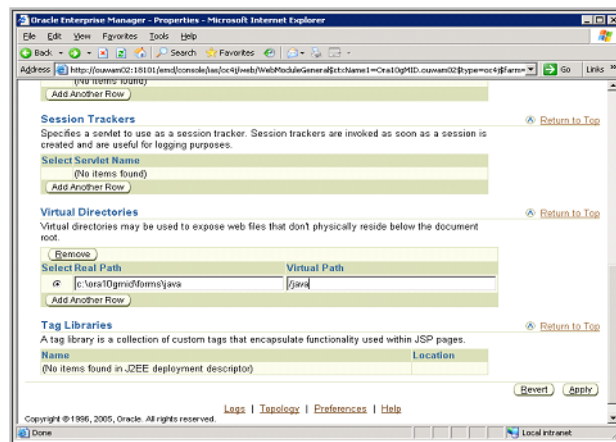


5.17 Scroll down to the section labeled Virtual Directories. Click Add Another Row.



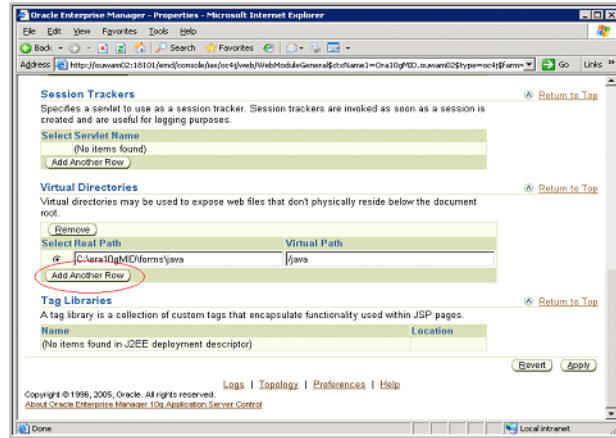
5.18 Add the following values then click Apply.

Note that the drive letter changes depending on where the Mid-Tier is installed.



5.19 The system displays a confirmation screen that the changes have been saved. Click OK.

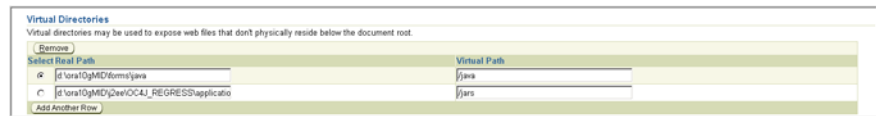
5.20 Scroll down to the section labeled ‘Virtual Directories’ (note that the above value is reflected). Click Add Another Row.



4. Add the following value into the ‘Select Real Path’ field.
Note that the drive letter changes depending on where the Mid-Tier is installed and the instance name is case sensitive. Change DEMO to reflect the instance that is being installed. All other text in the string must not be modified:

c:\ora10gmid\j2ee\OC4J_DEMO\applications\DEMOsynergen\DEMOsynergen\jars

The ‘Virtual Path’ value will be ‘/jars’:



- 5.21 The system displays the confirmation status of the configuration. Click OK and restart the instance.

6.0 Install Oracle Utilities Work and Asset Management

There are 4 phases to install a fully configured Oracle Utilities Work and Asset Management application:

1. Extract, deploy and configure Oracle Utilities Work and Asset Management web archive (WAR) files
2. Install Application Server components
3. Install Oracle Application Server components
4. Install Database scripts

The install process requires certain directory information. When asked to ‘Validate the installation directory ...’ it is recommended to accept the default folder of “\synergen”, and select a drive of your choice. **Note:** If you wish to choose a drive letter other than ‘C:’, click the ‘Browse’ button, and replace the current entry of ‘C:’ with the drive letter of your choice. If instead you choose to navigate to another drive, you need to type in the folder name ‘\synergen’.

NOTE: It is not recommended that you install to the root directory of any drive.

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

was used when creating the OC4J in the Mid-Tier configuration step.

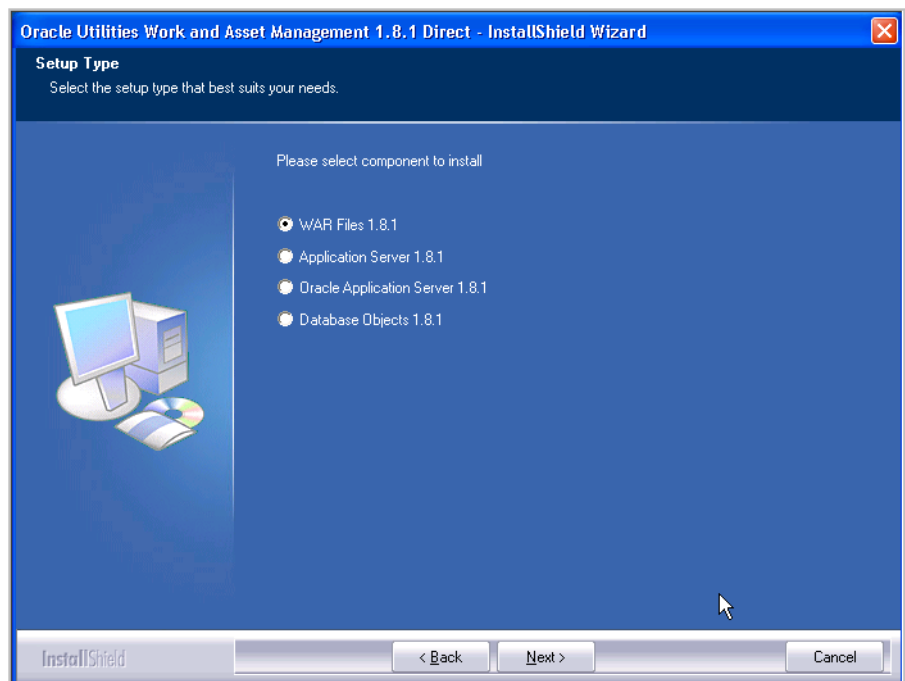
You **must** use the same case when entering the environment name in all four installation types – for example, you must enter ‘DEMO’ in all four installations, and not mix ‘DEMO’, demo and Demo in order to avoid installation errors.

7.0 WAR File Extraction

Please note: The screens shown in this section are for sample purposes only. Please refer to the screens in your install shield program and follow the on screen directions.

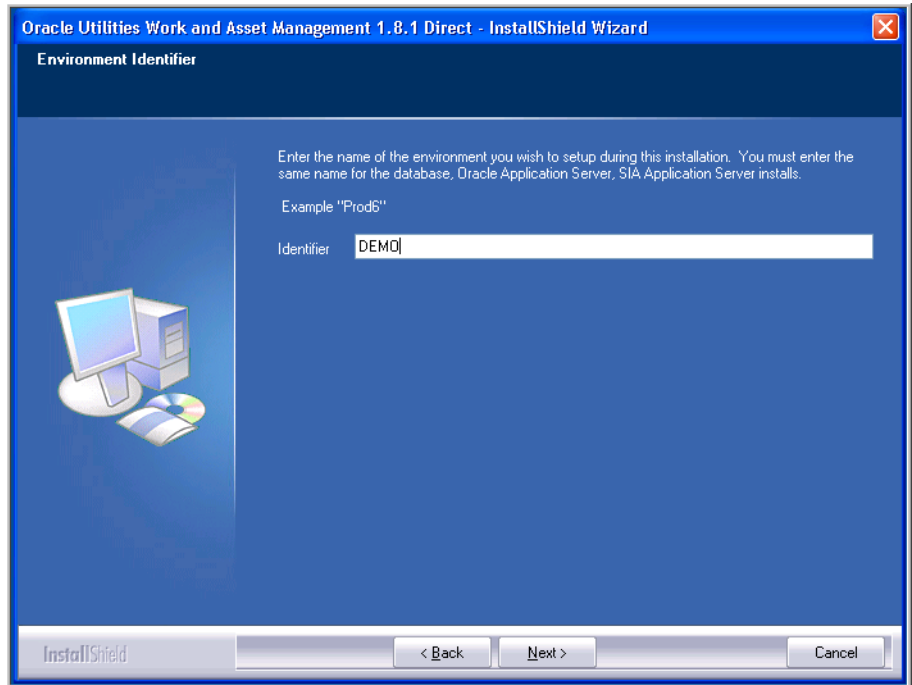
These phases are delivered via an Install shield program.

- 7.1 Navigate to where the Install shield program is saved. Click setup.exe and click Next on the Welcome screen.
- 7.2 When asked to choose the product to install, select WAR Files 1.9.0.3 and click Next.

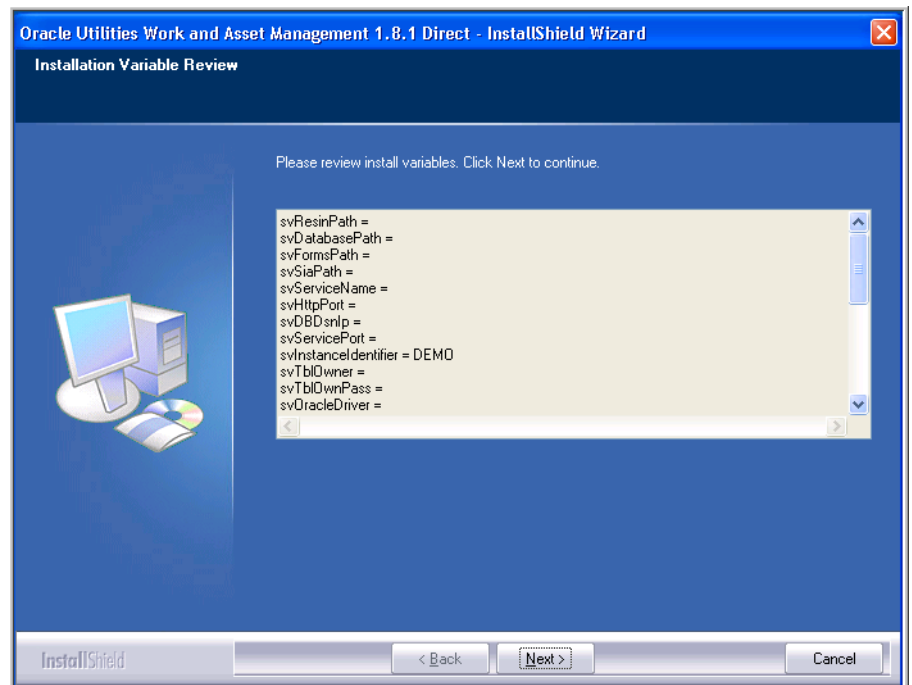


- 7.3 On the Installation Root page, if necessary modify the drive where the WAR files are to be created. Click Next.
- 7.4 On the Environment Identifier page, enter the instance that was defined when creating the OC4J instance in the Mid-Tier configuration. Click Next.

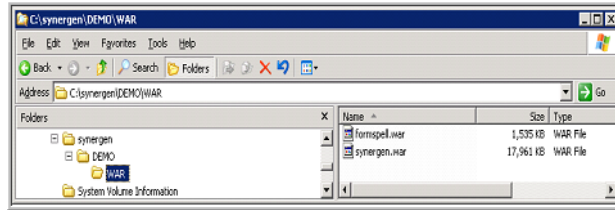
Note: This value is case-sensitive.



- 7.5 The system displays a confirmation dialog about the correct installation root directory. Click Yes if the directory is correct.
- 7.6 Click Install to start the extraction of the WAR files.
- 7.7 After the extraction is complete the system displays the following review screen. Review it and click Next and Finish on the next screen.



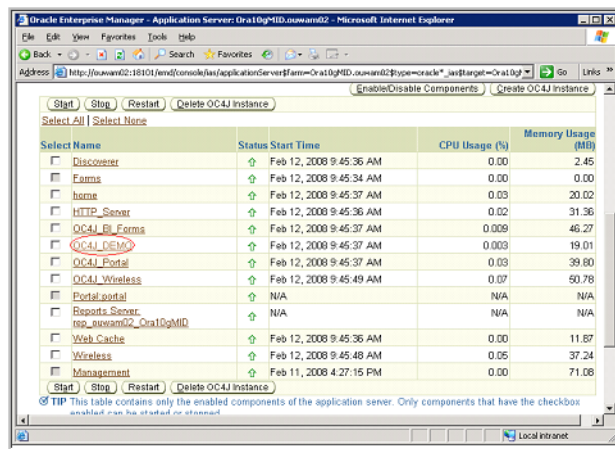
7.8 The following directory structure is created after completing the WAR installation step.



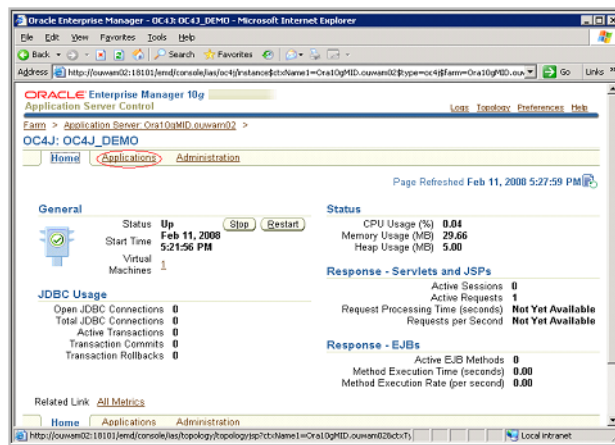
8.0 WAR File Configuration

To complete the configuration of the WAR files, log into the Oracle Application Server 10g Enterprise Management console and chose the Mid-Tier link.

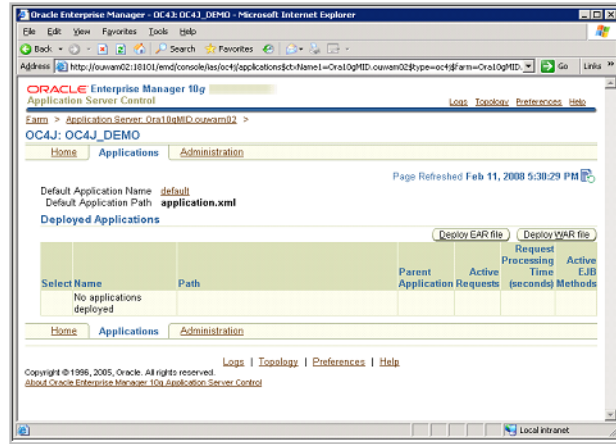
8.1 On the following screen, click the OC4J instance link that the WAR files will be applied against.



8.2 On the OC4J: OC4J DEMO page, click the Applications link.

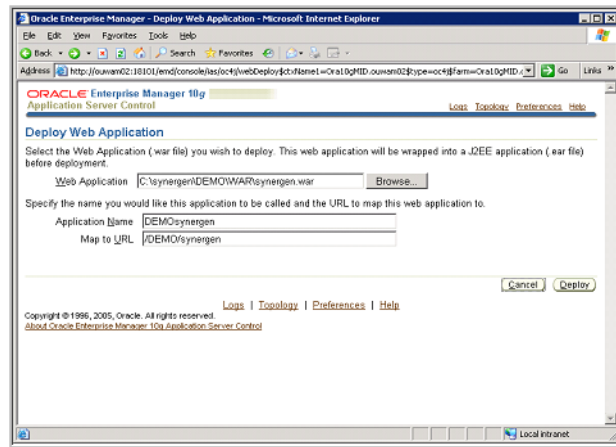


8.3 Under the Deployed Applications, click 'Deploy WAR file'.



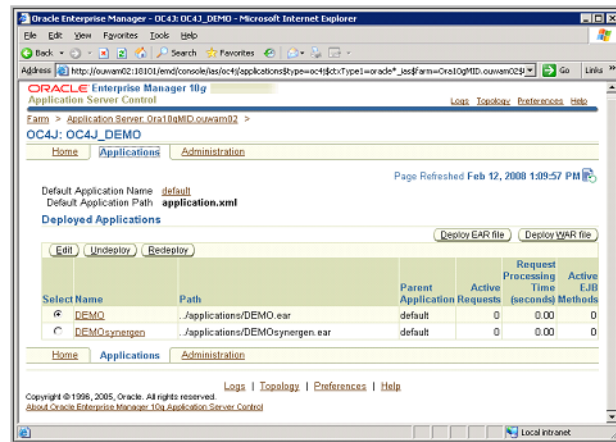
8.4 On the Deploy Web Application page, browse to where the synergen.war file is stored. In the 'Application Name', enter the instance name prepended to 'synergen'. In the 'Map to URL' field, enter a '/' + instance name + '/' + 'synergen' then click Deploy.

Note: The instance name is case-sensitive.



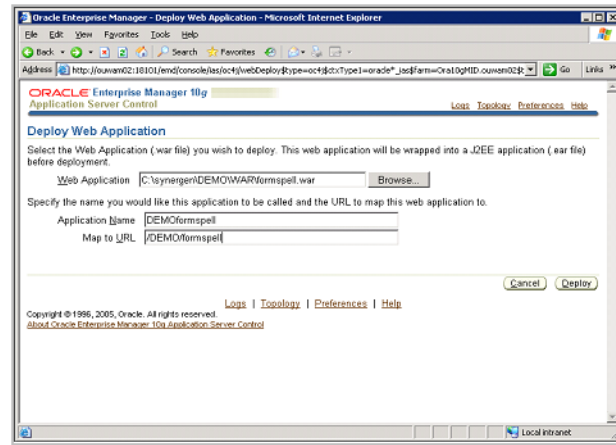
8.5 The system displays the deployment status and confirmation. Click OK on the confirmation page.

8.6 On the Deployed Applications sub page, click 'Deploy WAR file'.

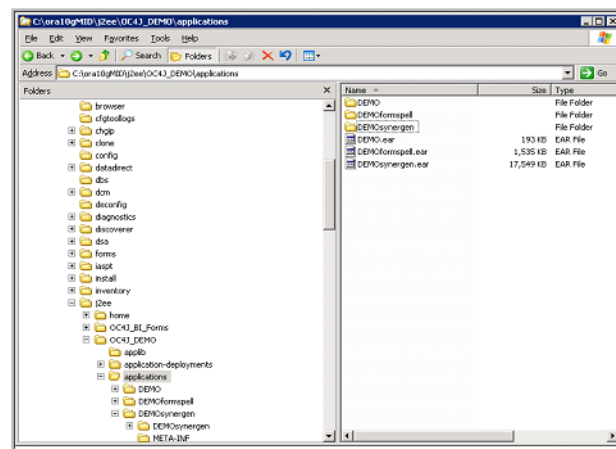


- 8.7 On the Deploy Web Application page, browse to where the formspell.war file is stored. In the 'Application Name', enter the instance prepended to 'formspell'. In the 'Map to URL' field, enter a '/' + instance name + '/' + 'formspell' then click Deploy.

The instance name is case-sensitive.



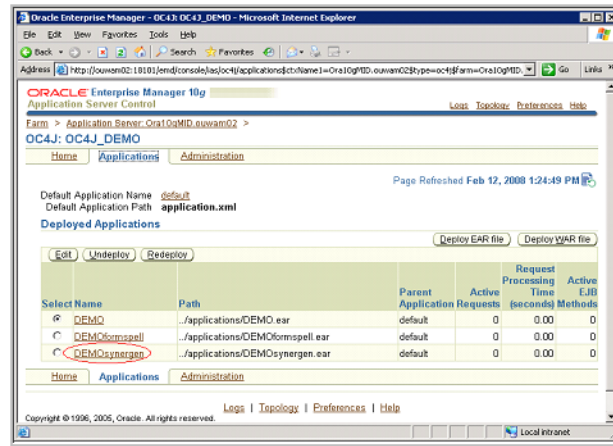
- 8.8 The system displays the deployment progress and confirmation. Click OK on the confirmation page.
- 8.9 The following folder structure has been deployed to the Mid-Tier directory for the instance.



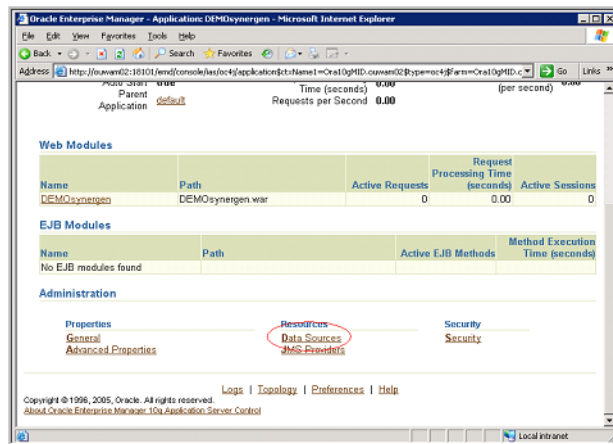
9.0 Data Source Configuration

You must make additional changes to the deployed web application. These changes include defining a datasource to point to the database and adding a classpath setting.

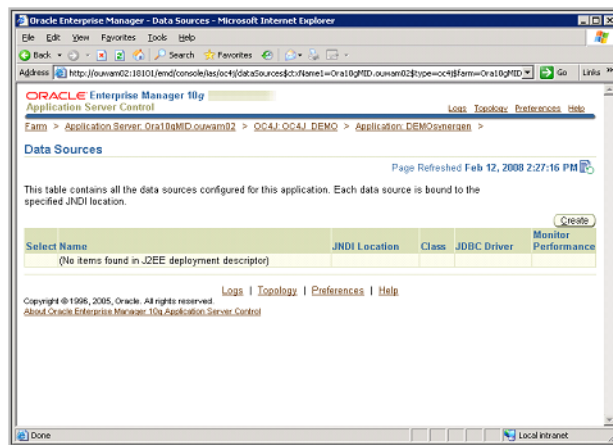
9.1 Under Deployed Applications, click the 'synergen' link.



9.2 Under Administration, scroll down and click the 'Data Sources' link.



9.3 On the Data Sources page, click Create.



5. On the Edit Data Source page, fill in the fields as indicated below with attention to the following guidelines:
 - Make a note of the database name in the JDBC URL field as this needs to match a field value in a subsequent step.
 - Enter in the values exactly as noted including the symbols: ':', '@'.

- Change the port value from 1521 to match the port value on the database installation environment.

Name = synergen

Data Source Class = com.evermind.sql.DriverManagerDataSource

JDBC URL = jdbc:oracle:thin:@<database server name>:1521:<database name>

JDBC Driver = oracle.jdbc.driver.OracleDriver

Schema = SYNERGEN

Username = XADMIN_SYNERGEN

Use Cleartext Password (the password is for the XADMIN_ user)

Location = jdbc/synergenLo

Transactional (XA) Location=jdbc/synergenXA

EJB Location=jdbc/synergen

Connection Retry Interval (seconds)=2

Max Connection Attempts=4

Cached Connection Inactivity Timeout (seconds)=900

Maximum Open Connections=60

Minimum Open Connections=5

Wait For Free Connections Timeout (seconds)=20

9.4 Scroll down and click Create on this page.

9.5 The system displays a message that the data source has been created. The system asks for a confirmation to restart the Mid-Tier server. Click Yes.

9.6 The system then displays the restart progress and confirmation status. Click OK on the confirmation page.

10.0 Data Source for Password Reset Functionality

In order to support the password reset functionality, a new data source needs to be added. Follow the same steps as above to create a new datasource using the following values with attention to the following guidelines:

- Make a note of the database name in the JDBC URL field as this needs to match a field value in a subsequent step.
- Enter in the values exactly as noted including the symbols: ‘:’, ‘@’.
- Change the port value from 1521 to match the port value on the database installation environment.

Name = alterrolesynergen

Data Source Class = com.evermind.sql.DriverManagerDataSource

JDBC URL = jdbc:oracle:thin:@<database server name>:1521:<database name>

JDBC Driver = oracle.jdbc.driver.OracleDriver

Schema = SYNERGEN

Username = [password reset user name]

Use Cleartext Password with the password being associated with the password reset user

Location = jdbc/alterrolesynergenLo

Transactional (XA) Location=jdbc/alterrolesynergenXA

EJB Location=jdbc/alterrolesynergen

Connection Retry Interval (seconds) =2

Max Connection Attempts=4

Cached Connection Inactivity Timeout (seconds) =900

Maximum Open Connections=60

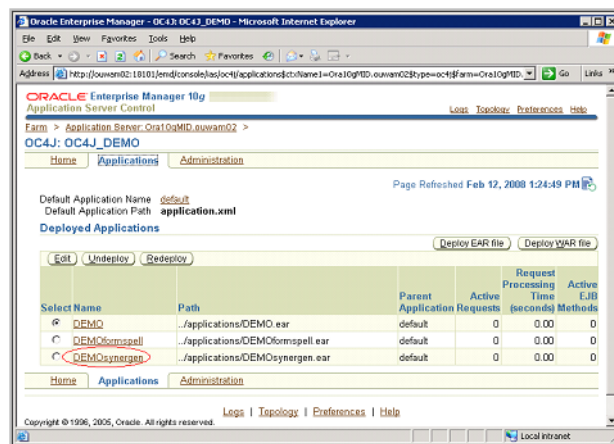
Minimum Open Connections=5

Wait For Free Connections Timeout (seconds) =20

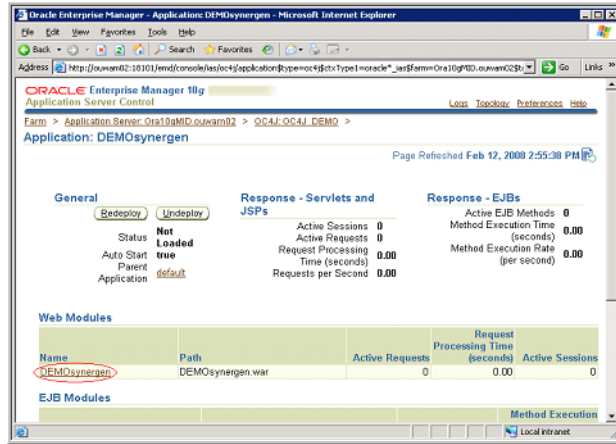
11.0 Class Paths Configuration

Configure the class paths according to the following steps.

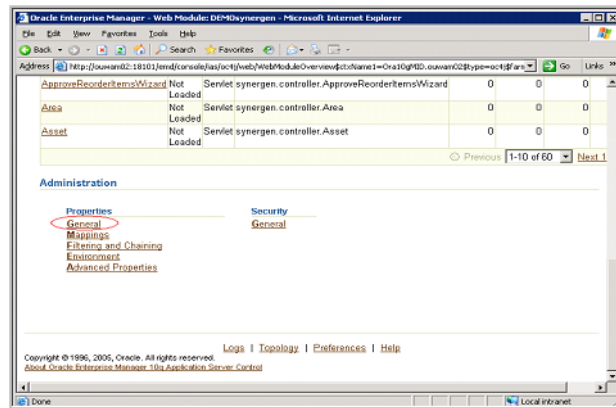
11.1 Navigate back to the Deployed Applications page and click the ‘synergen’ link.



11.2 On the Web Modules section, click the 'synergen' link.



11.3 Scroll down until the 'Administration' section is visible. Click the 'General' link.

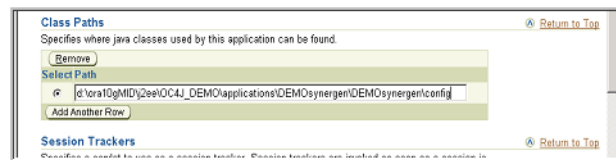


11.4 Scroll down until the 'Class Paths' section is visible. Click 'Add Another Row' and enter the following value.

<driveletter>:\ora10gMID\j2ee\OC4J_<ApplicationName>\applications\<ApplicationName>\synergen\<ApplicationName>\synergen\config

For example:

d:\ora10gMID\j2ee\OC4J_DEMO\applications\DEMOsyrgeren\DEMOsyrgeren\config



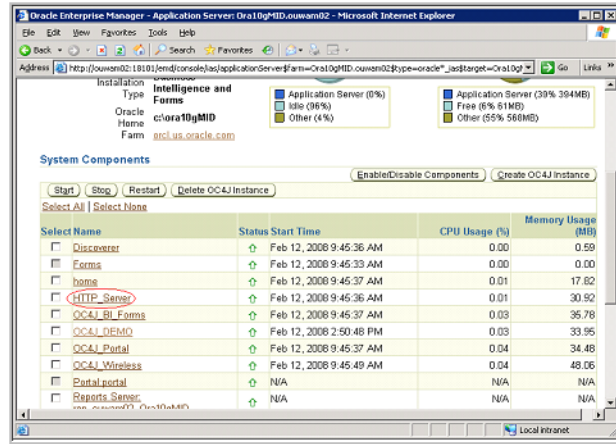
11.5 Scroll down and click Apply.

11.6 The system displays a confirmation message that the web module property changes have been saved. Click OK.

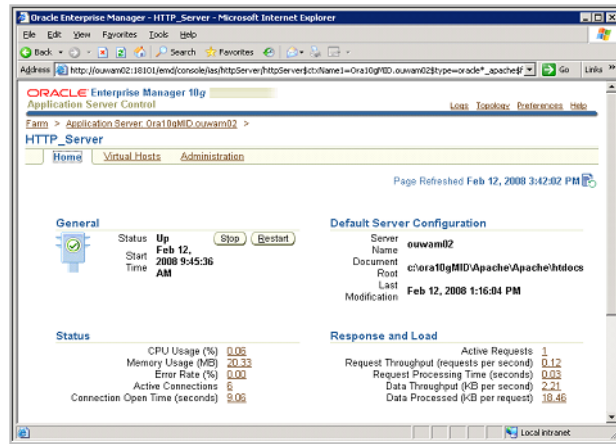
12.0 Oracle HTTP Server Configuration

Configure the HTTP Server according to the following steps:

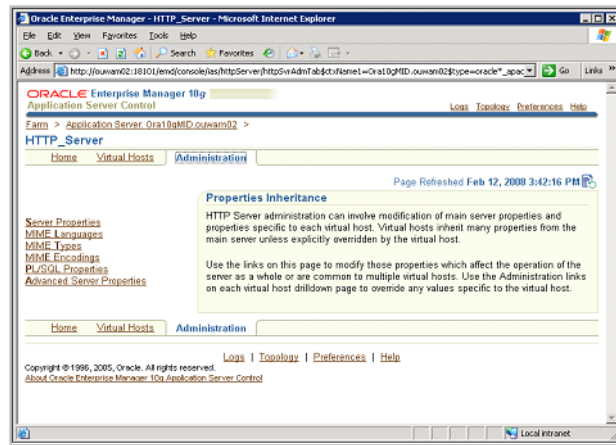
12.1 Navigate to the main Mid-Tier screen and click the 'HTTP_Server' link.



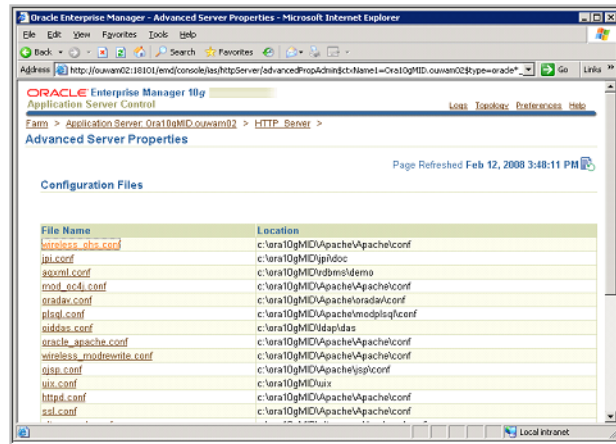
12.2 On the HTTP Server home page, click the 'Administration' link.



12.3 Under Administration, click the 'Advanced Server Properties' link.



12.4 On the Configuration Files section, click the 'httpd.conf' link. The system displays an edit screen for the httpd.conf file.



12.5 While in edit mode:

- Search for and change:
- UseCanonicalName On To: UseCanonicalName Off
- Search for and change (this value might already be set to 7779):
Listen 7778 To:Listen 7779

12.6 Click Apply.

12.7 The system displays a confirmation dialog to restart the HTTP server. Click Yes.

12.8 The system displays the restart progress and confirmation.

12.9 Click OK on the confirmation page and close the browser.

13.0 Manage the Mid-Tier

At this point, you must stop the Mid-Tier according to the process for the operating system, modify tnsnames and stop the OC4J instance.

13.1 Stop the Mid-Tier according to the process.

13.1.1 **Windows** - On a Windows environment stop the Mid-Tier by navigating to the following:

```
Start->Programs-> Oracle Application Server 10g - Ora10gMID> Stop
Ora10gMID.<servername/ip>
```

A DOS window opens showing the status. Wait until it disappears before starting the Mid-Tier.

To start the Mid-Tier on a Windows environment, navigate to the following:

```
Start->Programs-> Oracle Application Server 10g - Ora10gMID> Start
Ora10gMID.<servername/ip>
```

13.1.2 **Linux** - On a Linux environment, set the ORACLE_HOME variable to the Mid-Tier path (/home/oracle/Ora10gMID) and change directory to \$ORACLE_HOME/opmn/bin and run the following command:

```
opmnctl stopall
```

To start the Mid-Tier on a Linux environment, issue the following command:

```
opmnctl startall
```

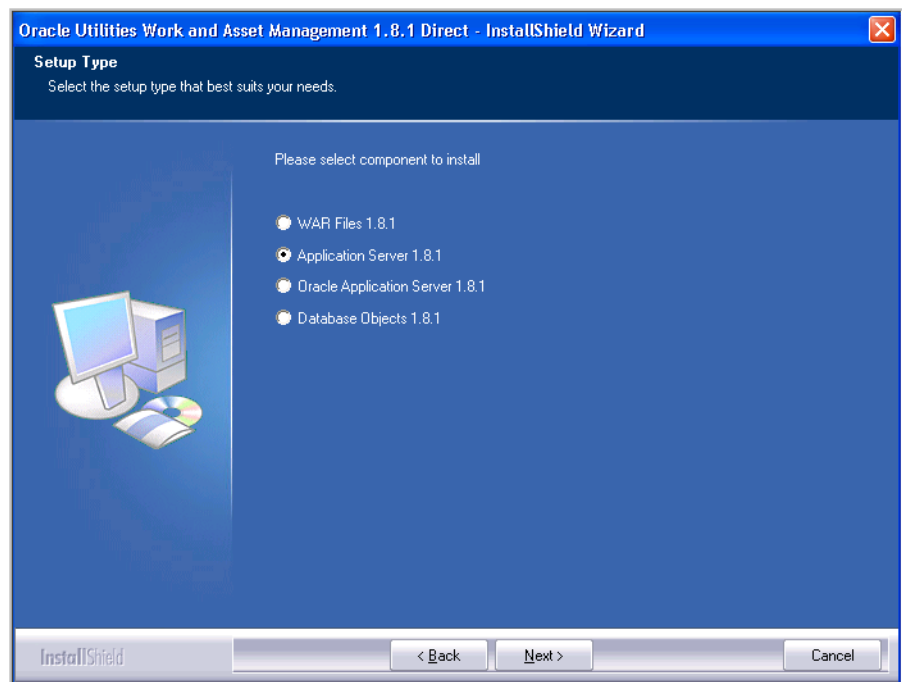

6. Make an entry in the Mid-Tier tnsnames.ora for the database that will be used for the application.
7. Log into the EM console Mid-Tier to stop the OC4J_<instance name>, if it is running, in order to continue with the application installation.

14.0 Install Application Server Components

For a Windows installation, these phases are delivered via an Install shield program. Please refer to the section titled Linux Installation for specific Linux guidelines associated with this step.

Please note: The screens shown in this section are for sample purposes only. Please refer to the screens in your install shield program and follow the on screen directions.

- 14.1 Navigate to where the Install shield program is saved. Click setup.exe and click Next from the Welcome screen.
- 14.2 When asked to choose the product to install, select 'Application Server 1.9.0.3' and click Next.

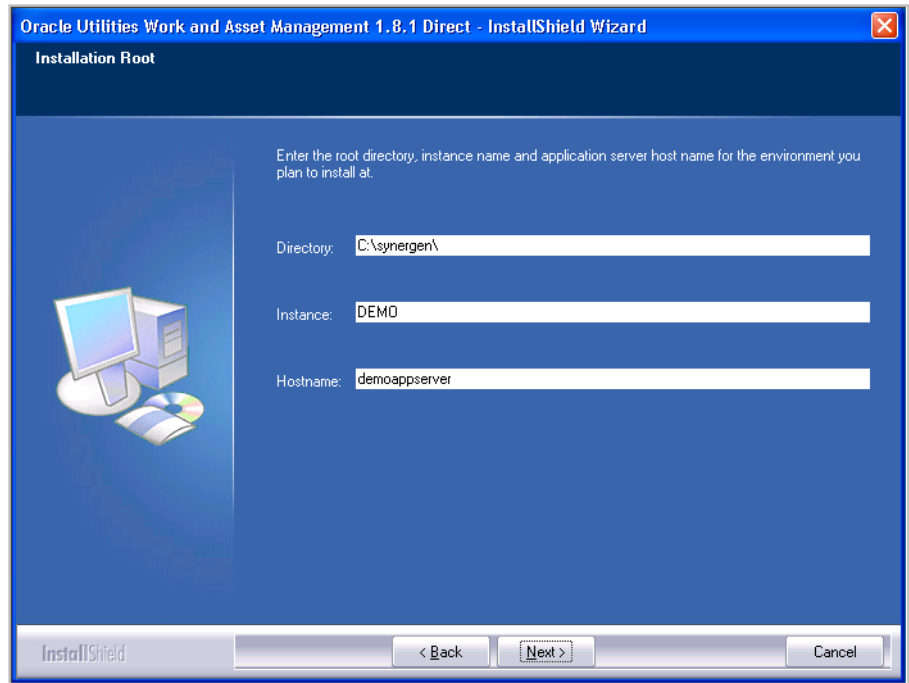


- 14.3 On the Setup Type page, confirm that the correct Mid-Tier home is selected. Click Next.

- 14.4 On the Installation Root page, enter the following and click Next.

- Directory: Change the drive letter to the desired location. Do not change anything else.
- Instance: Set this value to what has been defined in the previous steps. This value is case-sensitive.

- Hostname: Set this value to the name of the host where the installation is occurring.

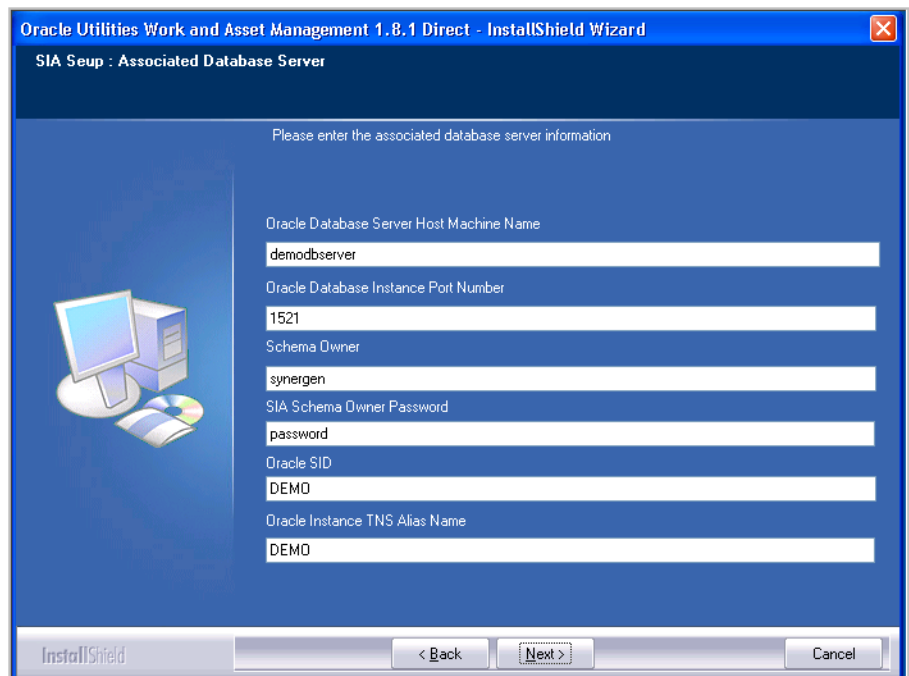


14.5 The system displays a dialog to confirm the installation Root directory. Review it and click Yes.

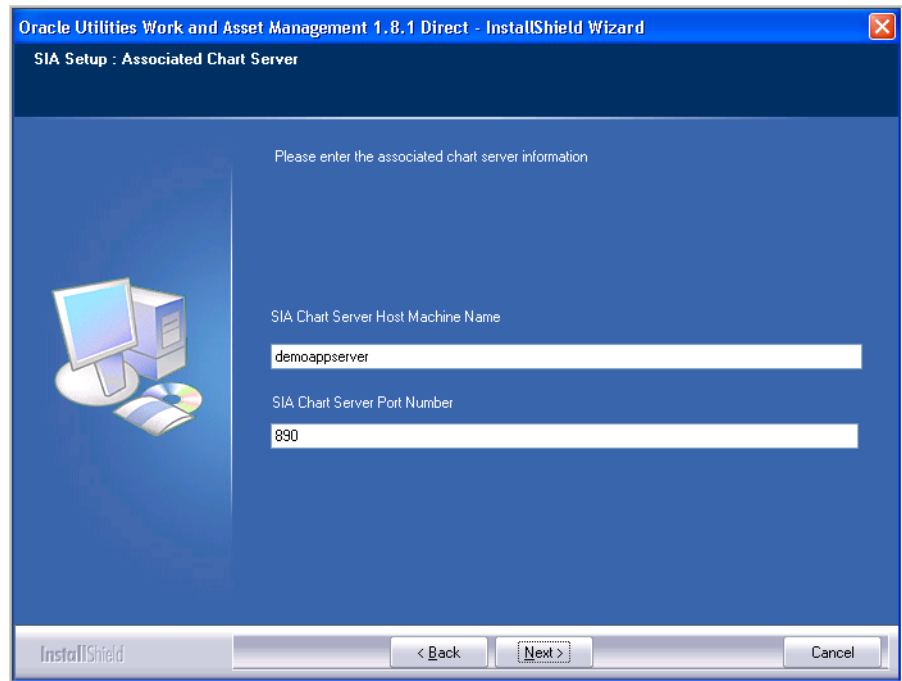
14.6 The system displays a dialog to confirm the server name. Review it and click Yes.

14.7 In the SIA Setup: Associated Database Server page, enter in the 'Oracle Database Server Host Machine Name' and the 'SIA Schema Owner Password' (this password is for the xadmin_synergen user). Modify other values as appropriate, then click Next.

NOTE: The database name, port number and SID should match the values in the string entered in the Data Source configuration during WAR configuration.

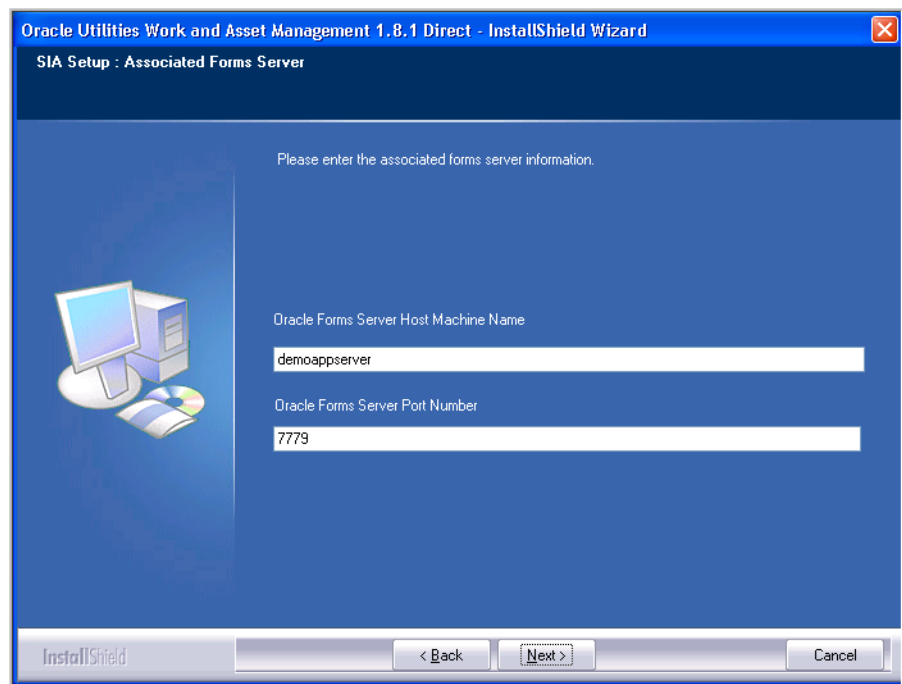


14.8 In the SIA Setup: Associated Chart Server page, enter the server name where Charts will run and click Next. Typically, this is the server where the application is going to run. The port number can be any value that is free.

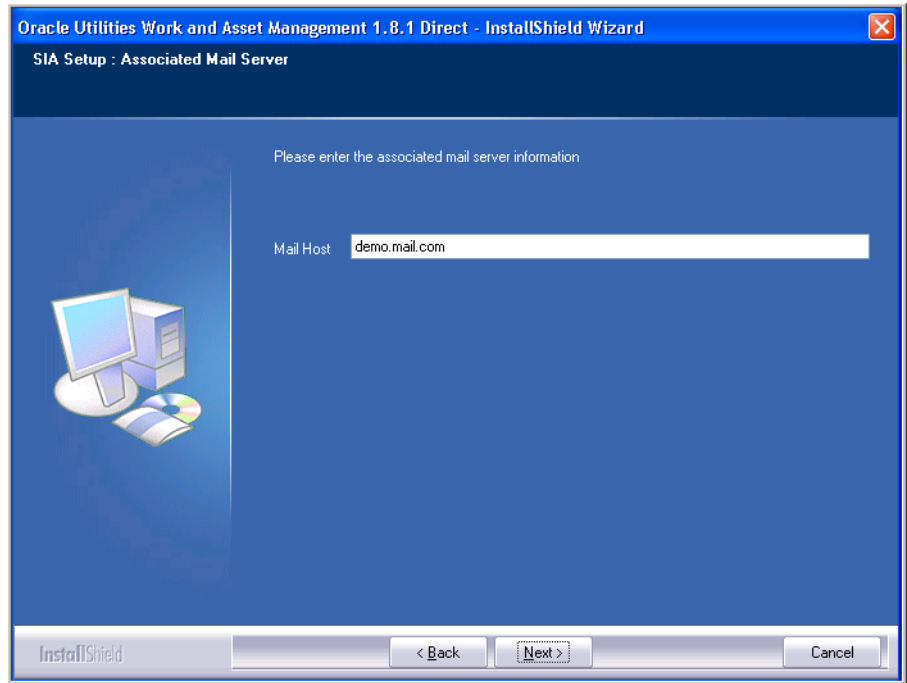


14.9 On the SIA Setup: Associated Forms Server page, enter the server name where forms will be deployed and click Next.

Typically, this is the server where the application is going to run. Do not change the port value.

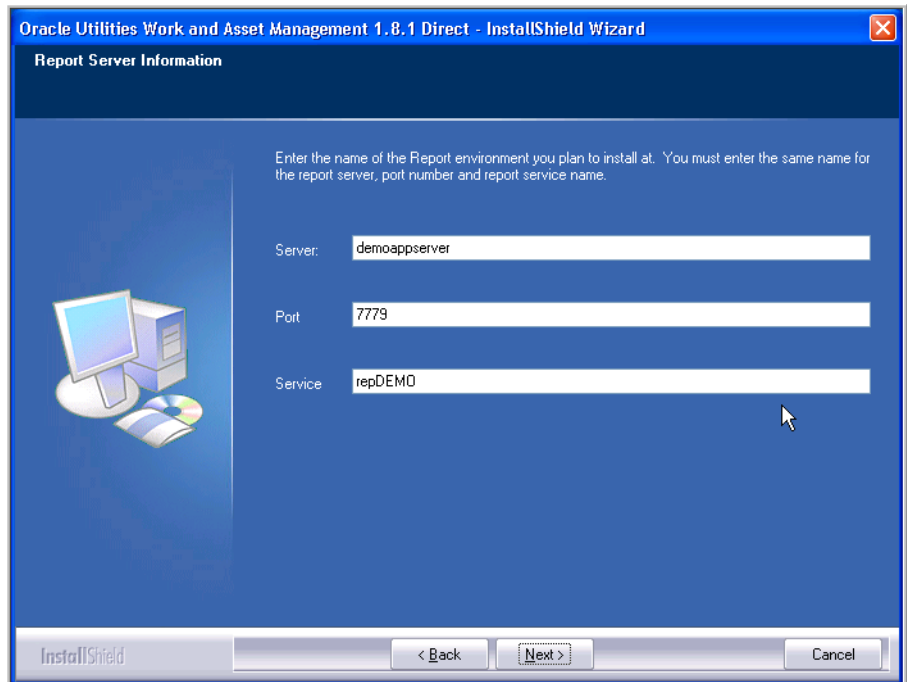


14.10 On the SIA Setup: Associated Mail Server, enter the mail server and click Next.

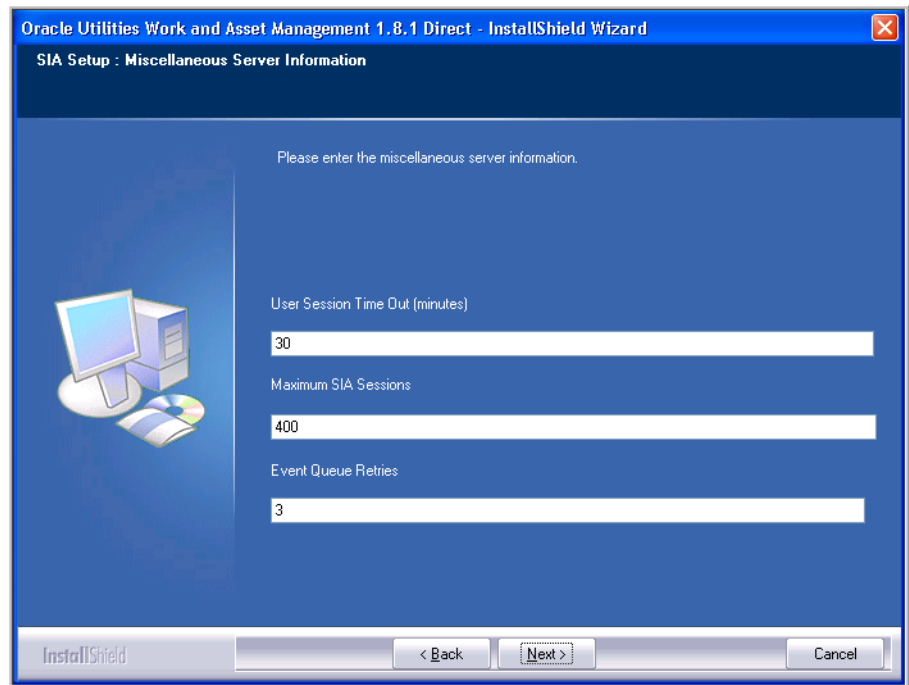


14.11 On the Report Server Information page, enter the server name where reports will run and click Next.

Typically, this is the server where the application is going to run. Do not change the port value. Change the report service name to reflect the instance name.



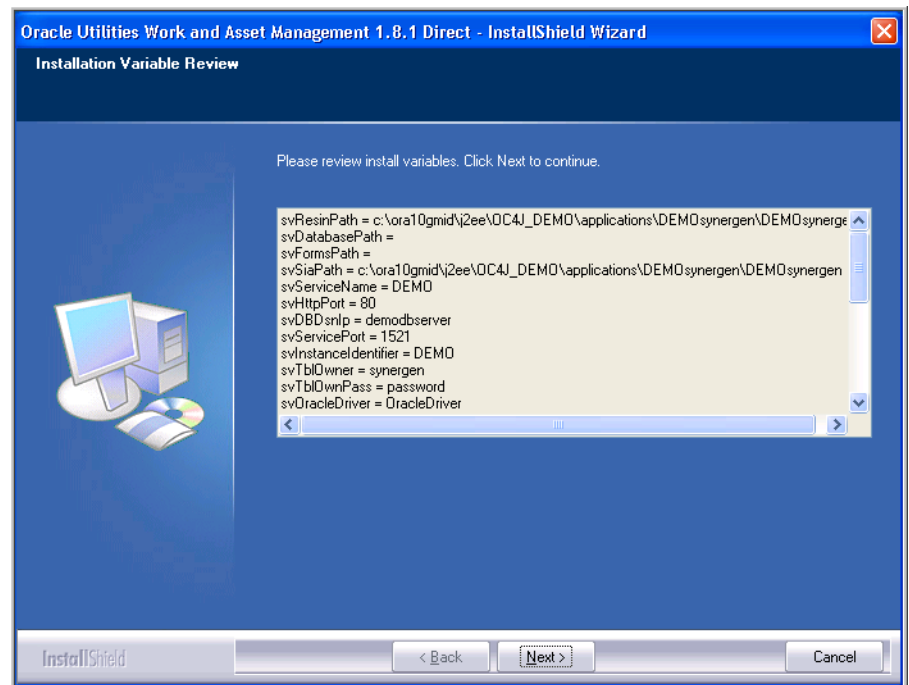
14.12 On the following, accept the default values and click Next.



14.13 On the Setup Page, click Install. This starts copying files to the Mid-Tier folder.

The system displays the install status.

14.14 Review the Installation Variables and click Next.



14.15 The installation completes successfully. Click Finish to exit the wizard.

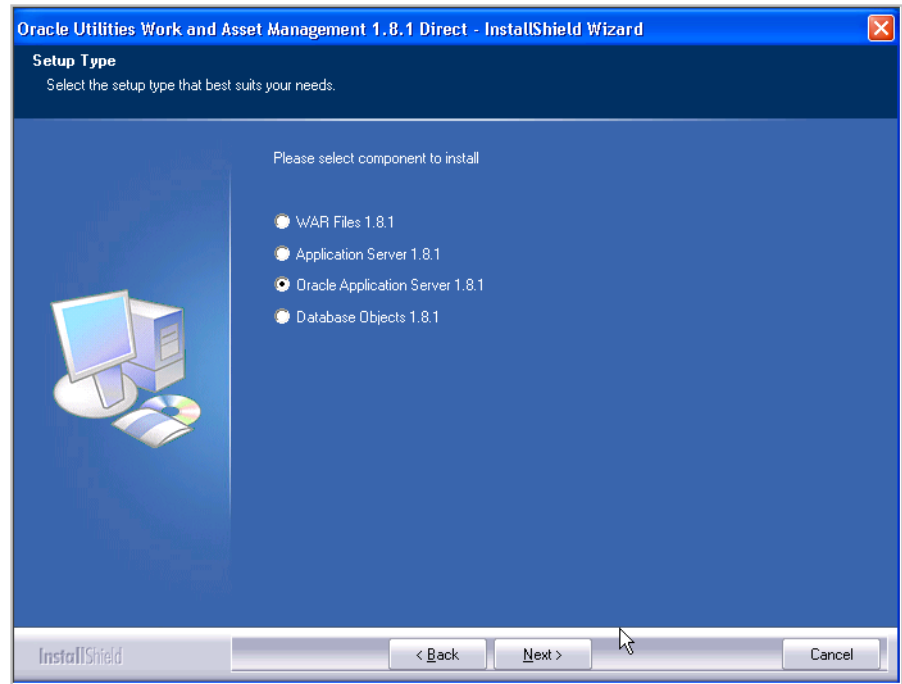
15.0 Install Oracle Application Server Components

For a Windows installation, these phases are delivered via an Install shield program. Please refer to the section titled Linux Installation for specific Linux guidelines associated with this step.

Please note: The screens shown in this section are for sample purposes only. Please refer to the screens in your install shield program and follow the on screen directions.

15.1 Navigate to where the Install shield program is saved. Click setup.exe and click Next on the Welcome screen.

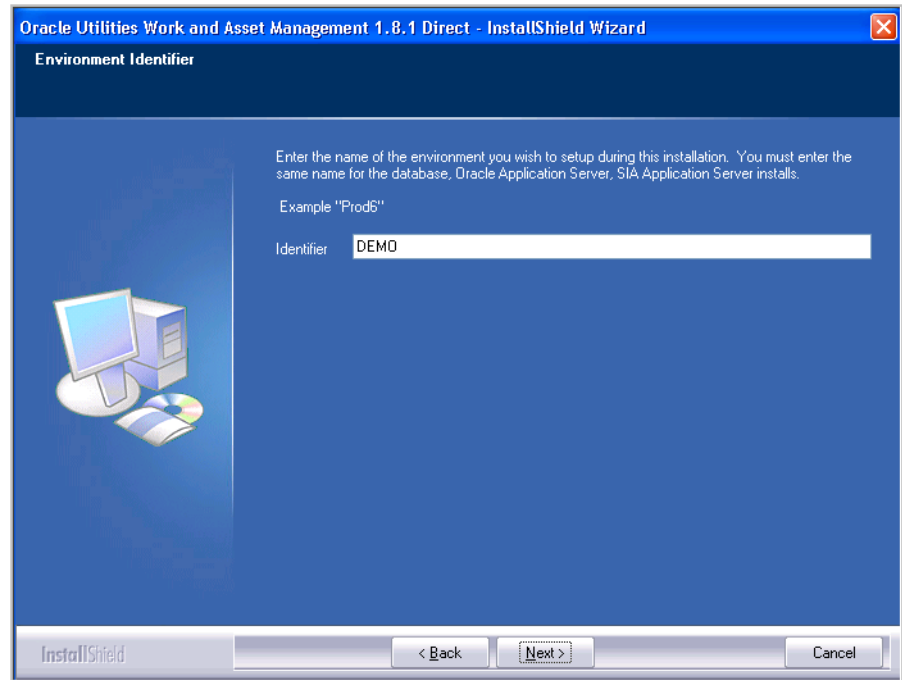
15.2 When asked to choose the product to install, click 'Oracle Application Server 1.9.0.3' and click Next.



15.3 On the Installation Root page, accept or change the drive letter and click Next. Do not change anything else.

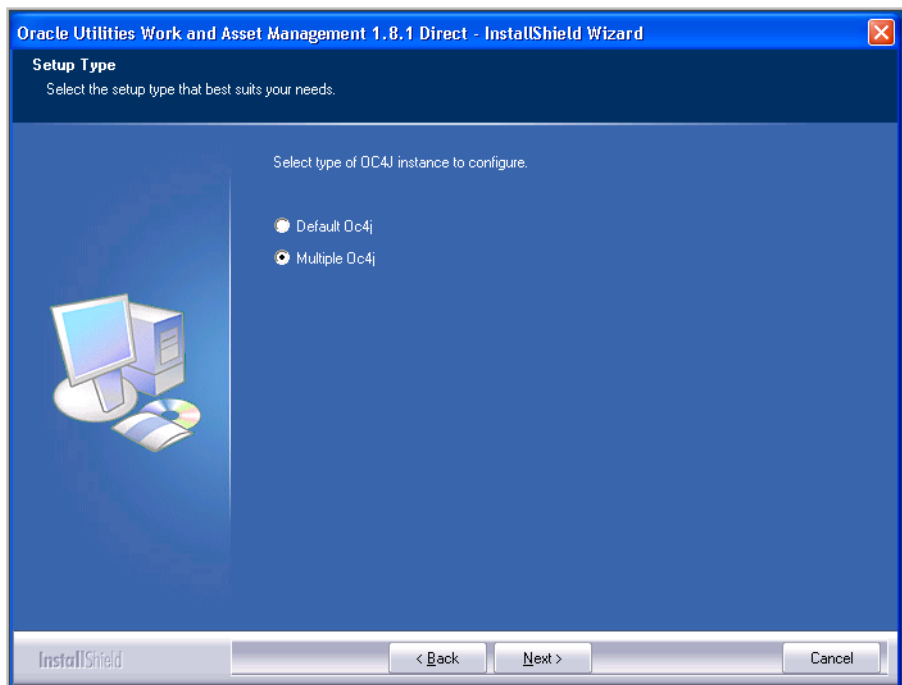
15.4 On the Environment Identifier page, enter the instance name that has been defined in the previous steps and click Next.

This value is case-sensitive.



15.5 The system displays a dialog to confirm the Installation Root directory. Review it and click Yes.

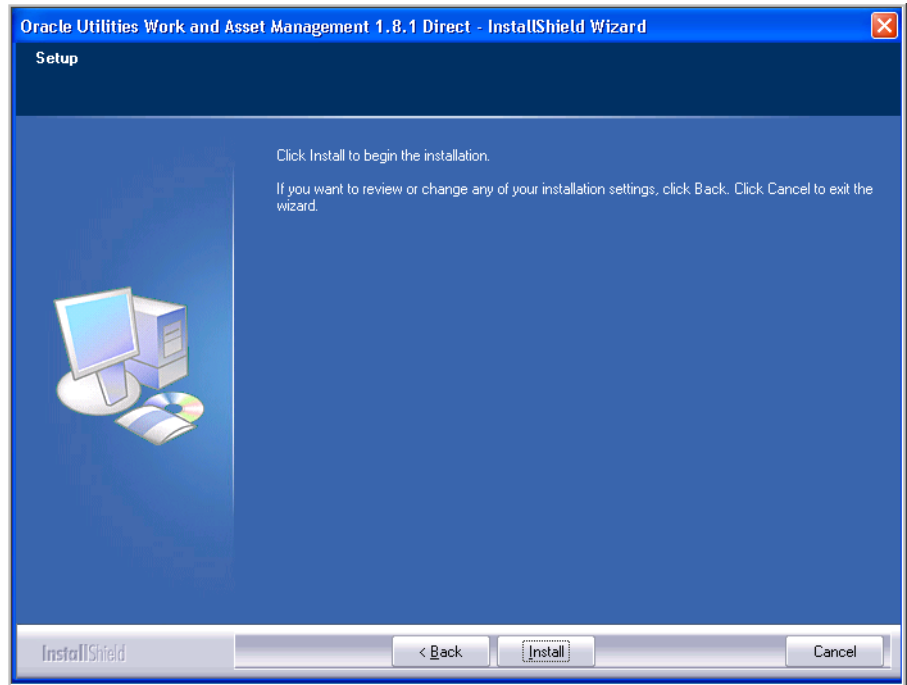
15.6 On the Setup Type page, accept the default 'Multiple Oc4j' and click Next.



15.7 On the Setup Type page, confirm the Mid-Tier home is selected and click Next.

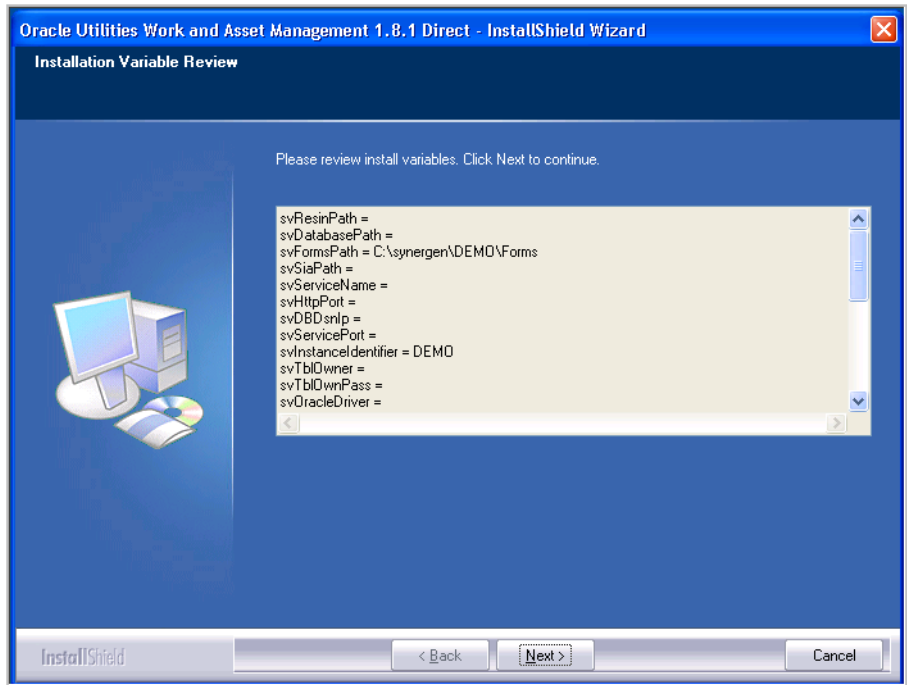
15.8 On the Setup page, click Install.

This starts copying files to the synergen folder specified above.



15.9 The system displays the Installation progress.

15.10 Review the Installation Variables page and click Next.



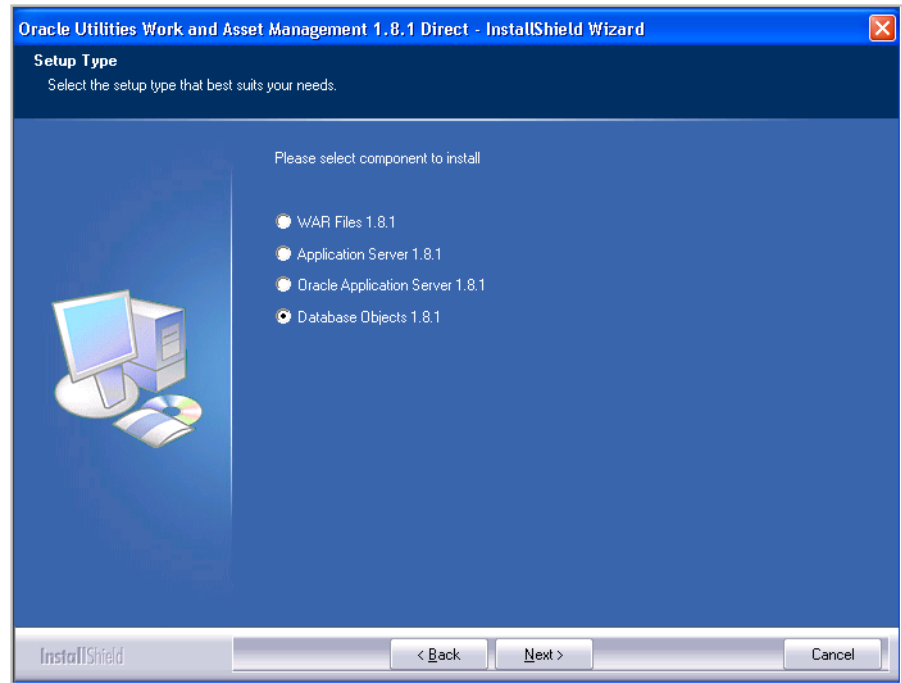
15.11 The installation completes successfully. Click Finish to exit the wizard.

16.0 Install Database Object Components

These phases are delivered via an Install shield program.

16.1 Navigate to where the Install shield program is saved and click setup.exe. Click Next from the Welcome screen.

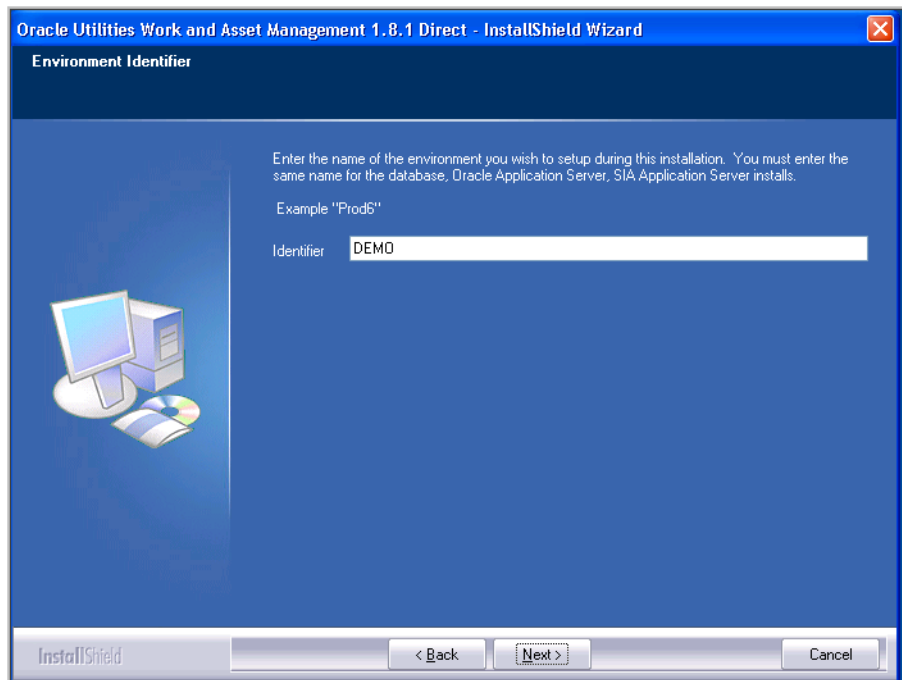
16.2 When asked to choose the product to install, select 'Database Objects 1.9.0.3' and click Next.



16.3 On the Installation Root page, accept or change the drive letter and click Next. Do not change anything else.

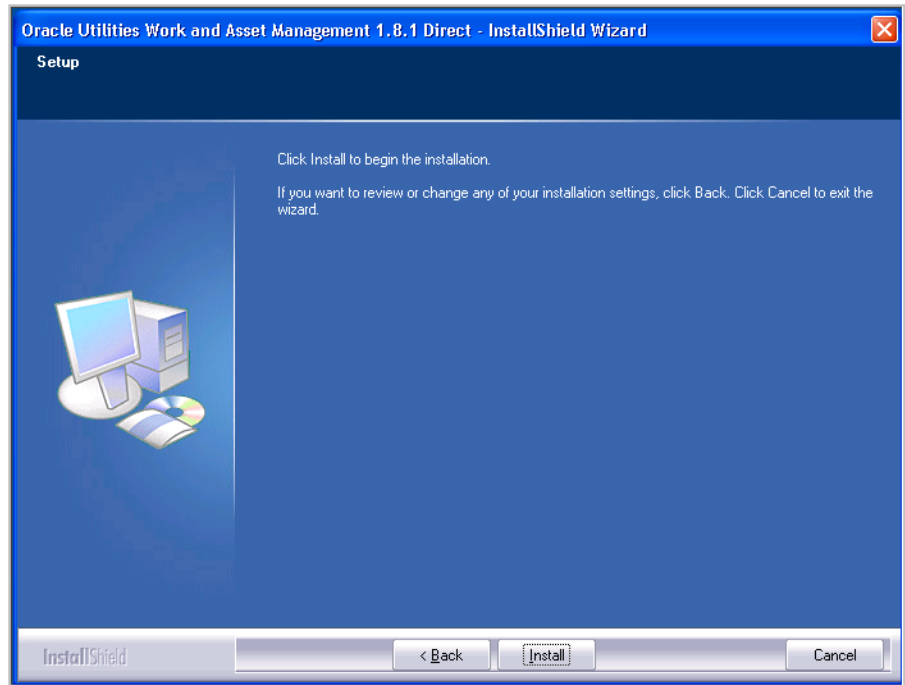
16.4 On the Environment Identifier page, enter the instance name that has been defined in the previous steps and click Next.

This value is case-sensitive.



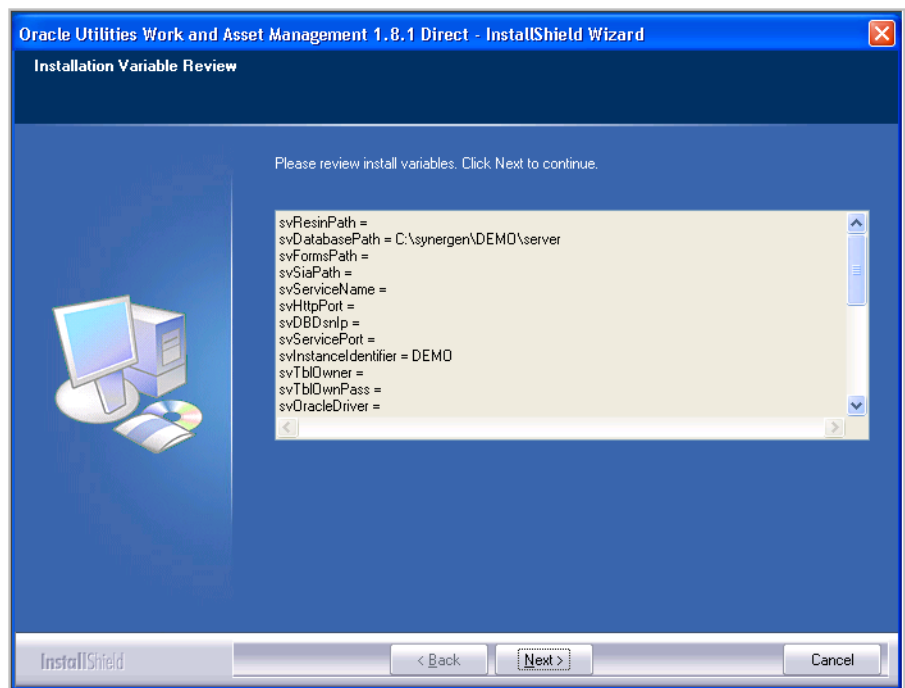
16.5 The system displays a dialog to confirm the Installation Root directory. Review it and click Yes.

16.6 On the Setup page, click Install. This starts copying files to the synergen folder specified above.



16.7 The system displays the installation progress.

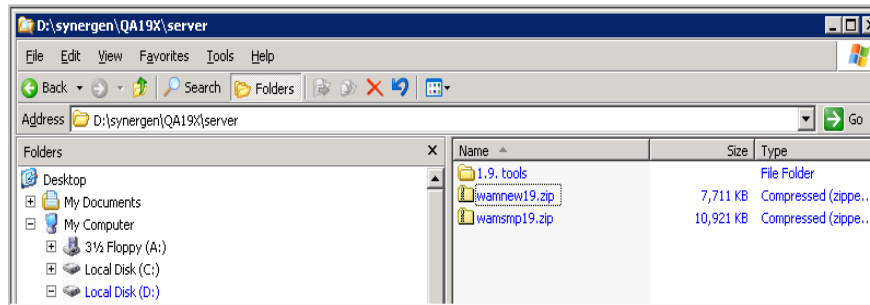
16.8 Review the Installation Variables summary and click Next.



16.9 The system completes the installation successfully. Click Finish to exit the installation wizard.

17.0 Load Clean or New Database

After the download of the server components, a directory structure is created in the folder structure defined above. The folder resembles the screen below.



Navigate to the server folder. The server folder contains a `wamnew1903.zip` file and a `wamsm1903.zip`. The `wamsm1903.zip` file contains an Oracle Work and Asset Management 1.9.0.3 database export that contains sample data. The `wamnew1903.zip` file is essentially an empty database with no sample data. In addition, there is a tools directory that will be used in the steps below.

17.1 Import the Database

In order to import this database several steps need to be executed. It is assumed that the person completing these installation steps has some familiarity with creating databases and running sql scripts.

- 17.1.1 A database must be created prior to importing this sample export.
- 17.1.2 An INDX tablespace must be created for the database prior to importing this sample export.
- 17.1.3 Run the `createuser.sql` script, found in the 1.9.0.3 tools directory, as the system user from a SQLPlus session.
- 17.1.4 Do a full import of the `wamnew1903` or `wamsm1903` database, depending on your requirements. The file must be uncompressed first.

For Linux, `(imp system/<password>@<instance> fromuser={synergen,xadmin_synergen,projuser} touser={synergen,xadmin_synergen,projuser} grants=y ignore=y buffer=50000 file=<file.exp> log=<file.log> commit=Y)`
- 17.1.5 After the import is complete, run the `servpk1903.sql` script, found in the 1.9.0.3 tools directory, as the synergen user from a SQL Plus session.
- 17.1.6 If there are objects (like `SDBP_MWM_INTEGRATION`, `PROCEDURE SDBP_CCB_SERVICE_REQ_INTERFACE`, `SDBP_JOB_ERROR_LOG`) that have not compiled, execute the `jobview.sql` script, found in the 1.9.0.3 tools directory, as the synergen system user from a SQL Plus session.
- 17.1.7 If there are objects that have the key word `PROJECT` in them that have not compiled, do the following:

- Log into a SQLPlusW session as the Synergen user.
- Run the `servpk1903.sql` script, found in the 1.9.0.3 tools directory.
- At the SQL prompt, connect as `projuser/<password>@<db name>`
- At the SQL prompt, run the `projuser_grantsyn.sql` script, found in the 1.9.0.3 tools directory.
- At the SQL prompt, connect as `synergen<password>@<db name>`

- At the SQL prompt, run the recompile.sql script, found in the 1.9.0.3 tools directory.

17.1.8 Run the cres7syn.sql script, found in the 1.9.0.3 tools directory, as the Synergen user from a SQL Plus session.

17.1.9 Run the cres7grt.sql script, found in the 1.9.0.3 tools directory, as the Synergen user from a SQL Plus session.

17.1.10 Log into a SQL Plus session as the sysdba user and execute the admin_dbms_job.pkg and admin_dbms_job.pkb located in the 1.9.0.3 tools\s60obj folder.

18.0 Test the Installation

After the database objects are successfully installed you should be able to log in to the application and open forms.

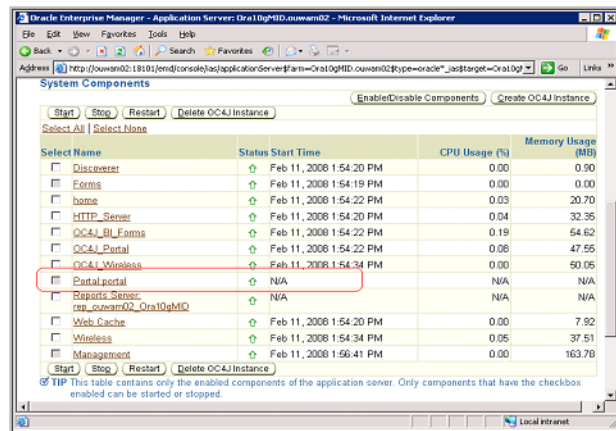
18.1 Start the OC4J instance and log into the application.

18.2 Log into the application.

18.3 Navigate to any form module to verify forms are working.

19.0 Create Reports Service

19.1 In order to create a reports service the Portal instance on the application server must be up and running.



19.2 On the application server, open a CMD window and navigate to the following folder:
<Mid-Tier>\bin.

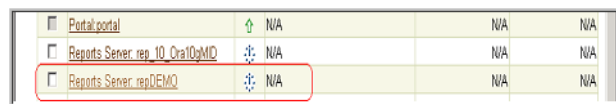
19.3 Enter the following command at the prompt:

addNewServerTarget <report server name>

where <report server name> is the desired report name that will be configured in the application.

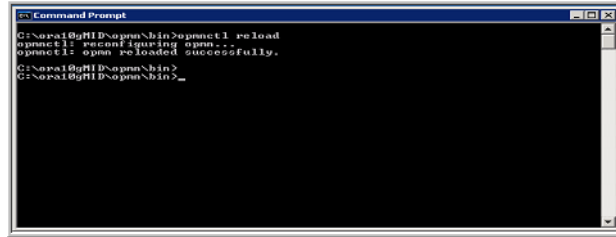
Note that the CMD will disappear after the command completes.

19.4 In the Oracle Application Server Enterprise Management Console, the report service instance is created.

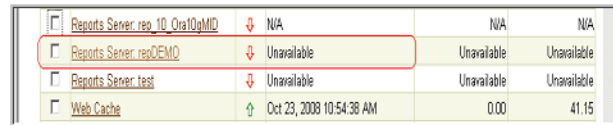


19.5 On your application server, open a CMD window and navigate to <Mid-Tier>\opmn\bin. Enter the following command at the prompt:

```
opmnctl reload
```

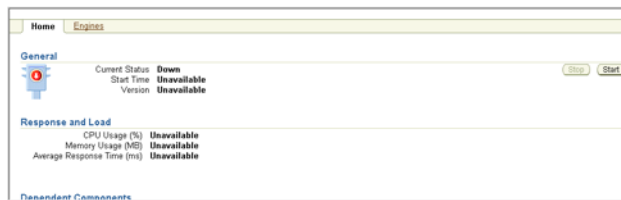


19.6 In the Oracle Application Server Enterprise Management Console, the report service instance is shut down. Click the new report service instance.



Reports Server: rep_10_Oral0gMD	↓	N/A	N/A	N/A
Reports Server: rep0DEMO	↓	Unavailable	Unavailable	Unavailable
Reports Server: test	↓	Unavailable	Unavailable	Unavailable
Web Cache	↑	Oct 23, 2008 10:54:38 AM	0.00	41.15

19.7 On the following screen, click the Start button to activate the report service.



19.8 Navigate to <Oracle Mid-Tier Home>\Apache\Apache\htdocs and create a new folder named 'repcache'. Make this folder shared and enable the Share Permissions to Full Control. The repcache folder is where report and export files are stored.

20.0 Run Manual Scripts

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\ createPasswordResetUser.sql”

You must set the default directory to d:\synergen\Prod6\server\Release1903\server, then run “@createPasswordResetUser.sql” – 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.

Launch SQL Plus

On the database server, launch the SQL*Plus program and connect to the target instance as the existing Synergen table owner. Use 'File/Open' to navigate to the directory where you copied the upgrade scripts; for example, for 'Prod6', navigate to d:\synergen\Prod6\server\Release1903\server and open the file createPasswordResetUser.sql, to set the default file folder for the current session.

createPasswordResetUser.sql

Run this script if you intend to allow Reset Password for your users. (See Release Notes 8481185). This script creates the database user that will be used to reset the passwords of the application users. The script is not automatically executed in the database since not all clients will take advantage of this new feature. The script prompts for the username and password for this database user. You cannot use an existing username; this must be a new user.

The created database user has roles limited to “CREATE SESSION” and “ALTER USER”.

Note: To use reset password you should have also added a new datasource to the OC4J instance during the Data Source Configuration section of this document.

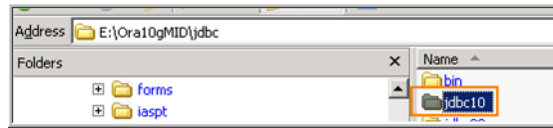
Execute the script

At the SQL> prompt, enter @createPasswordResetUser.sql

21.0 Configure JDBC Driver

21.1 The default driver installed is an older version that does not work well with connection pooling turned on. Use the latest driver provided with the WAM install by making a new folder in the < Mid-Tier>/jdbc directory called jdbc10

Note: On a Linux install this is automatically created.



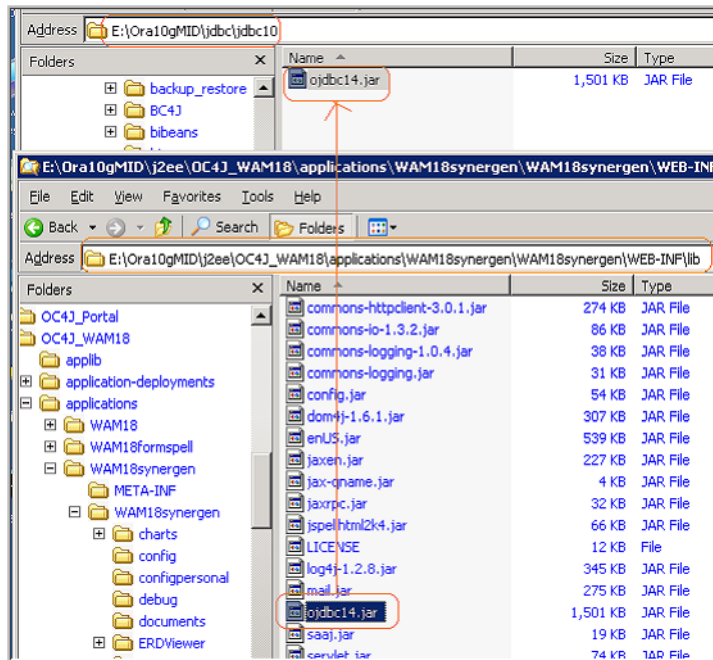
21.2 Copy file “ojdbc14.jar” from jdbc10 directory.

(Note: on a Linux install this is automatically done).

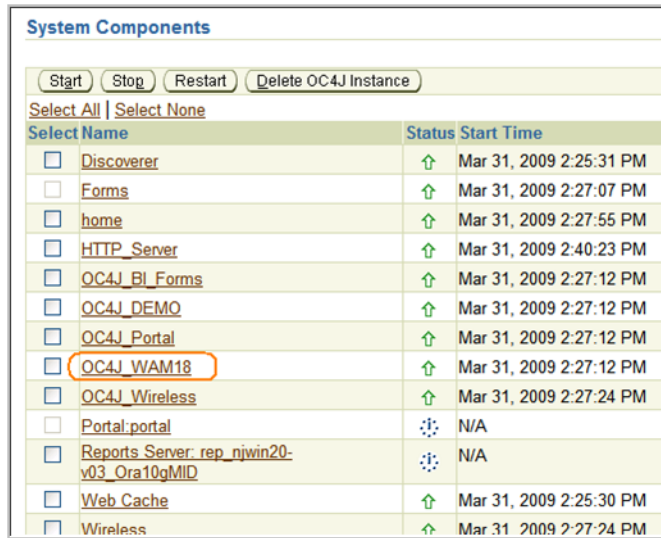
<Mid-Tier>\j2ee\OC4J_<instance>\<instance>\applications\<instance>\synergen\<instance>\synergen\WEB-INF\lib

to directory:

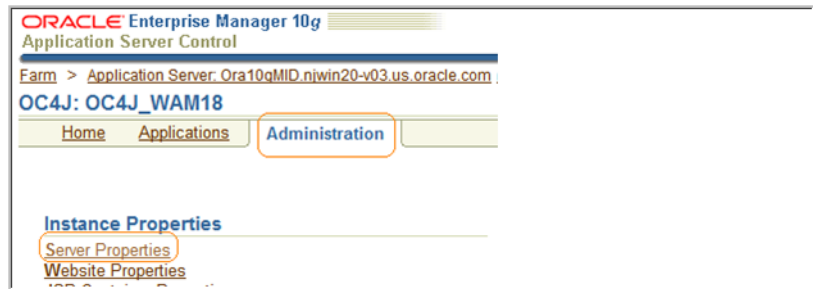
<Mid-Tier>\jdbc\jdbc10



21.3 In the Enterprise Manage Console, navigate to the instance and click on it.



21.4 On the Administration Tab, click on Server Properties.

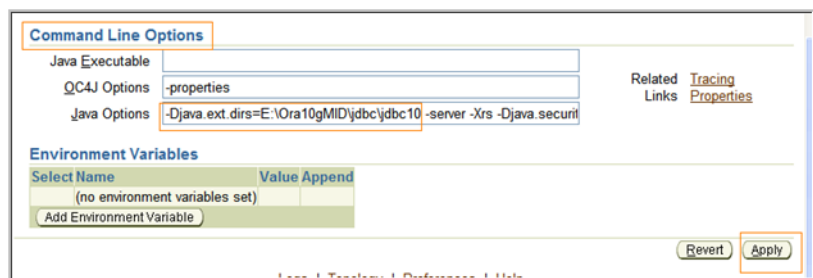


21.5 Scroll down to Command Line Options and enter the following in Java Options.

Enter

```
-Djava.ext.dirs=<Mid-Tier>\jdbc\jdbc10
```

(Note: Please enter the value manually, DO not Copy and Paste.)



21.6 Click Apply.

Linux Installation Steps

Please follow the guidelines in this section if you are installing Oracle Utilities Work and Asset Management on Linux.

Support Documentation

The following standard Oracle documentation applies for Linux installations:

-
- List of required packages - Oracle® Application Server Installation Guide 10g Release 2 (10.1.2) for Linux x86 (B19310-03) for a list of required packages.
 - Additional information on installation requirements - Doc ID 564174.1:Oracle Application Server 10g (10.1.2) Installation Requirements for Linux OEL 5 and RHEL 5

Considerations

- You should follow the general installation steps as outlined in the Windows portion of this guide then respond to the various prompts that are presented during the Infrastructure and Mid-Tier component installs that require root privilege.
- Connecting to Oracle's Unbreakable Linux Network and executing 'yum install oracle-validated' creates the oracle user and group as well as install most of the required packages that Oracle Application Server needs.
- In addition to the required packages, you must get the latest pdksh package as well as the following versions (or later):

```
openmotif21-2.1.30-11.EL5.i386.rpm
```

```
xorg-x11-libs-compat-6.8.2-1.EL.33.0.1.i386.rpm
```

- You must make the following links as the system administrator after deploying the xorg-x11 package:

```
ln -s /usr/lib/libgdbm.so.2.0.0 /usr/lib/libdb.so.2
```

```
mv /usr/lib/libXtst.so.6.1.0 /usr/lib/libXtst_so_6_1_0
```

```
mv /usr/lib/libXtst.so.6 /usr/lib/libXtst_so_6
```

```
ln -s /usr/X11R6/lib/libXtst.so.6.1 /usr/lib/libXtst.so
```

```
ln -s /usr/X11R6/lib/libXtst.so.6.1 /usr/lib/libXtst.so.6
```

```
ln -s /usr/X11R6/lib/libXtst.so.6.1 /usr/lib/libXtst.so.6.1.0
```

- You must modify the kernel.sem value to 256 3200 100 142 and reboot the server after making the changes.
- If you are installing the Oracle Application Server on a Linux x86_64 bit environment, always use 32-bit shell emulation before running the installer and any other Oracle Application Server commands or scripts as follows: # linux32 bash
- The following packages fail during the Product-specific Prerequisite Checks and can be ignored: **openmotif, gnome-libs, xscreensaver**.
- An error occurs during the install portion for both the Infrastructure and Mid-Tier that indicates the opmn process is already running. Choose 'Continue' when prompted as this is a known error.
- You do not need to install IIS prior to installing Oracle Application Server 10g on Linux.

-
- Install Oracle Application Server and WAM product as the Oracle user in Linux.

Linux Specific Installation Steps

In general the steps for installing on Windows also apply for Linux. Only the steps in the following sections differ. Please follow the guidelines indicated below:

- Install Oracle Utilities Work and Asset Management
- Configure Oracle HTTP Server
- Install Application Server Components
- Install Oracle Application Server Components

1.0 Install Oracle Utilities Work and Asset Management

The WAM installation for Linux is delivered in a tar file called 19030Direct.tar.gz. Extract the contents of 19030DIRECT.tar.gz. In the 19030DIRECT folder are 4 tar files called formsinstall.tar.gz, siainstall.tar.gz, server19030.tar.gz and WAR.tar.gz. Extract those files into the same 19030Direct folder.

There are four phases to install a fully configured Oracle Utilities Work and Asset Management application:

1. Extract, deploy and configure Oracle Utilities Work and Asset Management web archive (WAR) files.
2. Install Application Server components
3. Install Oracle Application Server components
4. Install Database scripts

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 was used when creating the OC4J in the Mid-Tier configuration step.

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.

2.0 Install Application Server Components

Execute WAMSIAInstall.sh and respond to the following prompts:

- Enter the Oracle Mid-Tier directory
- Enter the Instance Forms Name
- Enter the DB Instance Name
- Enter the Report Server Name
- Enter the Mail Server Name

3.0 Install Oracle Application Server Components

Execute WAMFormsInstall.sh and respond to the following prompts:

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

Latin-American Spanish Language Support

The following configurations should be managed immediately after installation to support a non-English install of Oracle Utilities Work and Asset Management.

Latin-American Spanish Language Support OS Requirements

The client workstation and the application server must run a Latin-American Spanish operating system to be certified for the installation of Oracle Utilities Work and Asset Management in Latin-American Spanish.

If you intend to have an English installation of Oracle Utilities Work and Asset Management running in concurrence with the Latin-American Spanish installation, you must install each on a separate application server.

Config Properties

The system uses the locale associated with the plant where users are logged in to determine language and other related settings. With a non-English install there are two additional locale-related settings in config.properties that need to be set for proper operation of the WAM application:

default_locale - Determines the locale used by the WAM application when displaying the logon page, and any other internal locale usage prior to a user logging on. If this is not provided, a default locale of en-us (US English) is assumed.

optional_default_java_locale – Determines which locale the internal Java code will use when the application code does not specify a locale. Normally this value is automatically determined by the Java runtime, based upon server environment settings, so this setting only needs to be modified if you plan to serve one language but the server has been set up as a server in a different language.

If, for example, a site wishes to serve an Argentinean Spanish language version of WAM but their server has been installed as a US English environment server, this property must be set to es-ar. Failure to do so may result in application error.

Locale Codes

Each locale code is composed of a two letter language code, a hyphen and a two letter country code. All represented in lower case. The two letter language code must come from the ISO-639 standardized list and the two letter country code must come from the ISO-3166 standardized list. Both of these standard lists can be found online.

For example:

English = en-us
Argentinean Spanish = es-ar

Note that WAM only supports the two-letter abbreviations. Later revisions of both of standards use 3 letters.

Sample websites with this information:

http://en.wikipedia.org/wiki/List_of_ISO_639-1_codes
http://en.wikipedia.org/wiki/ISO_3166-1

To modify the config.properties file:

1. Locate the config.properties file under the main application folder and open it in any plain text editor.
2. Modify default_locale and optional_default_java_locale with the appropriate locale code.

Additional Localization Settings

Please refer to the Online Help for more information on how to configure additional settings such as localized currency and field labels where needed. Configuration of the Plant module, the Field Localization view of the Modules Administration Forms module, currency codes in the Currency Exchange Rates module and the Unit of Measurement business rule control localized settings.

Phone Number Format: Note that phone number format is determined in the Plant module and should be set to "NO FORMAT" for non-English installations. This allows the system to accommodate for any phone number format.

Post Installation Considerations

After you complete the installation, review the following:

- 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_CRYPT0
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;
```

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 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.
- Stop the Oracle Application Server OC4J instance and the Chart Server 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 ...\\forms\\java folder.

Old Setting:

```
archive=frmall.jar,../synergen/jars/webutil10123.jar,../synergen/jars/jacob.jar,../synergen/jars/jspell2n_java11.jar,../synergen/jars/syn.jar,../synergen/jars/synergenpjcs.jar
```

New Setting:

```
archive=frmall.jar,frmwebutil.jar,../synergen/jars/jacob.jar,../synergen/jars/jspell2n_java11.jar,../synergen/jars/syn.jar,../synergen/jars/synergenpjcs.jar
```

- 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 (Oracle Database 11g only)- This is set to TRUE as default you must set this value to FALSE to avoid logon errors related to case sensitive passwords.
- PASSWORD_LIFE_TIME - by default, passwords expire after 180 days, however, expiration is managed within Oracle Utilities Work and Asset Management, so to avoid conflicts, this should be set to UNLIMITED.