Oracle Utilities Business Intelligence

Installation Guide

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Oracle Utilities Business Intelligence Installation Guide

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Preface

This guide describes how to install Oracle Utilities Business Intelligence.

This preface contains these topics:

- **Audience**
- **Related Documents**
- **Conventions**

Audience

Oracle Utilities Business Intelligence Installation Guide is intended for system administrators installing Oracle Utilities Business Intelligence.

To use this document you should have:

- Experience installing and configuring application servers and other software
- Administrative privileges on the host where you are installing the software

Related Documents

For more information, see these Oracle documents:

- *Oracle Utilities Advanced Spatial and Operational Analytics Quick Install Guide*
- *Oracle Utilities Business Intelligence Database Administrator's Guide*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Meaning
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Chapter 1

Overview

This chapter provides an overview of the installation of Oracle Utilities Business Intelligence.

Installation Overview

Installing Oracle Utilities Business Intelligence involves the following steps:

1. Review the different tiers of the application architecture as described in **Chapter 2: Application Architecture Overview**.
2. Understand the hardware requirements for installing the application and the supported platforms for the application and database servers as described in **Chapter 3: Supported Platforms and Hardware Requirements**.

   Note: The installation and administration of the database server tier is described in detail in the document *Oracle Utilities Business Intelligence Database Administrator's Guide*.
3. Plan your installation as described in **Chapter 4: Planning the Installation**.
4. Install the database as described in the document *Oracle Utilities Business Intelligence Database Administrator's Guide*.
5. Install all required third-party software as described in **Chapter 6: Installing Application Server Prerequisite Software**. The required software is listed for each supported combination of operating system and application server.
6. Install the framework for the application as described in **Chapter 7: Installing the Application Server Component of Oracle Utilities Application Framework**.
7. Install Oracle Utilities Business Intelligence as described in **Chapter 8: Installing the Application Server Component of Oracle Utilities Business Intelligence**.
8. Follow the installation guidelines described in **Chapter 9: Additional Tasks**.
9. Refer to *Oracle Utilities Advanced Spatial and Operational Analytics Installation Guide* to understand the installation process for that product.

Chapter 2

Application Architecture Overview

This section provides an overview of the Oracle Utilities Business Intelligence application architecture.

Application Architecture

The Oracle Utilities Business Intelligence application is deployed on multiple tiers.

Please see the *Oracle Utilities Business Intelligence Server Administration Guide* for a more detailed description of application architecture and individual tiers.

Tier 1: Desktop/Client, or Presentation Tier

This tier is implemented in a browser-based client. Users use a desktop client Web browser to log in to and use the Oracle Utilities Business Intelligence application. Note also that a desktop machine running Microsoft Windows and the Oracle client is required to perform some of the Oracle Utilities Business Intelligence product installation steps.

Tier 2: Web Application / Business Application Server, or Business Logic Tier

This tier is implemented in a Web application or business application server. The business application component can be installed as part of the Web application server, or as a separate component. Except where explicitly noted, most of the Oracle Utilities Business Intelligence installation documentation assumes that the Web application and business application servers reside together.

Tier 3: Database, or Persistence Tier

This tier is implemented in a database server. The database server stores data maintained by the Oracle Utilities Business Intelligence application. More specifically, the database tier contains the data server files and database executables that physically store the tables, indexes, and other database objects for your system.

Chapter 3

Supported Platforms and Hardware Requirements

This section gives an overview of the tiers on which Oracle Utilities Business Intelligence is implemented, and shows each of the operating system/server combinations that it is certified for. It includes:

- **Software and Hardware Considerations**
- **Requirements by Tier**
- **Supported Platforms**
- **Support for Software Patches and Upgrades**

Software and Hardware Considerations

There are many factors that can influence software and hardware decisions. For example, your system may have to satisfy specific performance, availability, or scalability requirements, or to support running in a language other than English. These business requirements, together with the chosen system architecture, should be used in initial software and hardware planning.

Some of the questions that you should answer before beginning the installation include:

- On which hardware platform and operating system will Oracle Utilities Business Intelligence be deployed?
- On which Web server product will Oracle Utilities Business Intelligence deploy?
- On which database product will Oracle Utilities Business Intelligence deploy?
- Do you plan to deploy multiple Oracle Utilities Business Intelligence instances on the same physical server?
- How do you plan to deploy Oracle Utilities Business Intelligence?
    - Web/application/database on the same physical server
    - Web/application on one server and database on separate server
    - Each component on its own server

For detailed descriptions of various deployment architecture choices that may aid in planning, please see the document *Oracle Utilities Application Framework Architecture Guidelines,* available on My Oracle Support (Article ID 807068.1).

The final hardware and software decisions must comply with the specific requirements of Oracle Utilities Business Intelligence, as described in the rest of this chapter.

Requirements by Tier

The application is deployed on multiple Tiers:

- Tier 1, Desktop
- Tier 2, Web/Business Application Server
- Tier 3, Database Server

Tier 1, Desktop: Software and Hardware Requirements

Configuration	Processor	Memory (RAM)	Monitor Display
Minimum	Pentium IV - 2.0 GHz	1024 MB	1024X768** 16-bit Color
Recommended*	Pentium IV - 3.0+ GHz, Or any Core 2 Duo Or any Athlon X2	2048 MB	1280X1024* 32-bit Color

* The Recommended configuration improves client performance.

** To reduce the amount of scrolling required for pages that are longer than 768 or 1024 pixels, consider placing a monitor into vertical position (with narrow side on the bottom).

Web Browser Requirements

The following Operating System / Web Browser software is supported:

For OBIEE:

- • Windows XP SP3 or higher with Internet Explorer 7.0 or higher, or 8.0 or higher, or Firefox 3.6 or higher
- • Windows 7 with Internet Explorer 8.0 or higher, or Firefox 3.6 or higher

For OUBI:

- • Windows XP SP3 or higher with Internet Explorer 7.0 or higher, or 8.0 or higher
- • Windows 7 with Internet Explorer 8.0 or higher

Tier 2, Web/Business Application Server, Batch Server: Software and Hardware Requirements

Please consult the **Supported Platforms** on page 3-5 to determine which Web application servers can be used with the operating system that will be hosting this tier.

The recommendations that follow are based on a standard installation with both the Web application and business application servers on the same machine and the system running with the default values. The default values may not support a production environment. You should adjust these values according to your production needs. Refer to the Oracle Utilities Business Intelligence *Server Administration Guide* on how to change the default values. The minimum resource requirements exclude third-party software installation requirements. Refer to the third-party

vendors for specific requirements. The following sizing excludes the Oracle database server installation.

Memory Requirements

For each application server environment a minimum of 4 GB of real memory is required, plus 6 GB of swap space.

Disk Space Requirements

The approximate disk space requirements in a standard installation are as follows:

Location	Size	Usage
$SPLEBASE	5 GB minimum	This location is where the application and Framework get installed. Startup, shutdown and other online log files are stored here. The size and space that is used should be monitored because various debugging options can significantly affect the size of log files.
$SPLAPP	2 GB minimum	This location is used for storing batch log files and output from batch jobs. The size of this space should be influenced by which batches are run and how often, and the amount of debugging information that is collected.
Location of the application Web work files on the Web servers	1.5 GB minimum	This location is used by the various Web server vendors to expand the application. It should be considered when installing these products. Refer to the individual Web server documentation to determine the location of the temporary files.
Installation temporary area	4 GB	The application gets installed from this location. You need enough space to uncompress the files and install the application.
Oracle data area	4 GB minimum	This location is where the Oracle database data files are stored. The size of this space should be based on the requirements of the production environment. For an initial or demo database install 4 GB should be sufficient.

Tier 3, Database Server: Software and Hardware Requirements

See the section **Supported Platforms** on page 3-5 for supported database servers.

Supported Platforms

The installation has been tested and certified to operate on many operating system, application server, and database server combinations.

Operating Systems and Application Servers

The following table details the operating system and application server combinations on which Oracle Utilities Business Intelligence version 2.4.0 has been tested and certified.

Browser	Operating System (Client)	Operating System (Server)	Chipset	Application Server	Database
IE 7.x IE 8.x Firefox 3.x (OBIEE only)	Windows XP SP3 Windows 7	AIX 6.1 (64-bit)	Power 64-bit	WebLogic 10.3.5	Oracle 11.2.0.2
		Oracle Linux 5.6 (64-bit) Red Hat Enterprise Linux 5.6 (64-bit)	x86_64	WebLogic 10.3.5	Oracle 11.2.0.2
		Sun Solaris 10 (64-bit)	SPARC	WebLogic 10.3.5	Oracle 11.2.0.2
		Windows 2008 Server SP2 (32-bit)	x86_64	WebLogic 10.3.5	Oracle 11.2.0.2

Oracle Database Servers

Oracle Utilities Business Intelligence version 2.4.0 is supported with Oracle Database Server 11.2.0.2 on all of the operating systems listed above.

The Oracle Client 11.2.0.2 is required for the database server.

The following Oracle Database Server Editions are supported:

- Oracle Database Server Enterprise Edition

Support for Software Patches and Upgrades

Due to the ongoing nature of software improvement, vendors will issue patches and service packs for the operating systems, application servers and database servers on top of specific versions that Oracle Utilities Business Intelligence 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 Business Intelligence production environment.

The only exceptions from this rule are Hibernate and C3PO software. For these the exact versions mentioned in this guide must be installed. Please always check with Oracle Utilities Business Intelligence support prior to installing Hibernate and C3PO updates.

Always contact Oracle Utilities Business Intelligence support prior to applying vendor updates that do not guarantee backward compatibility.

Chapter 4

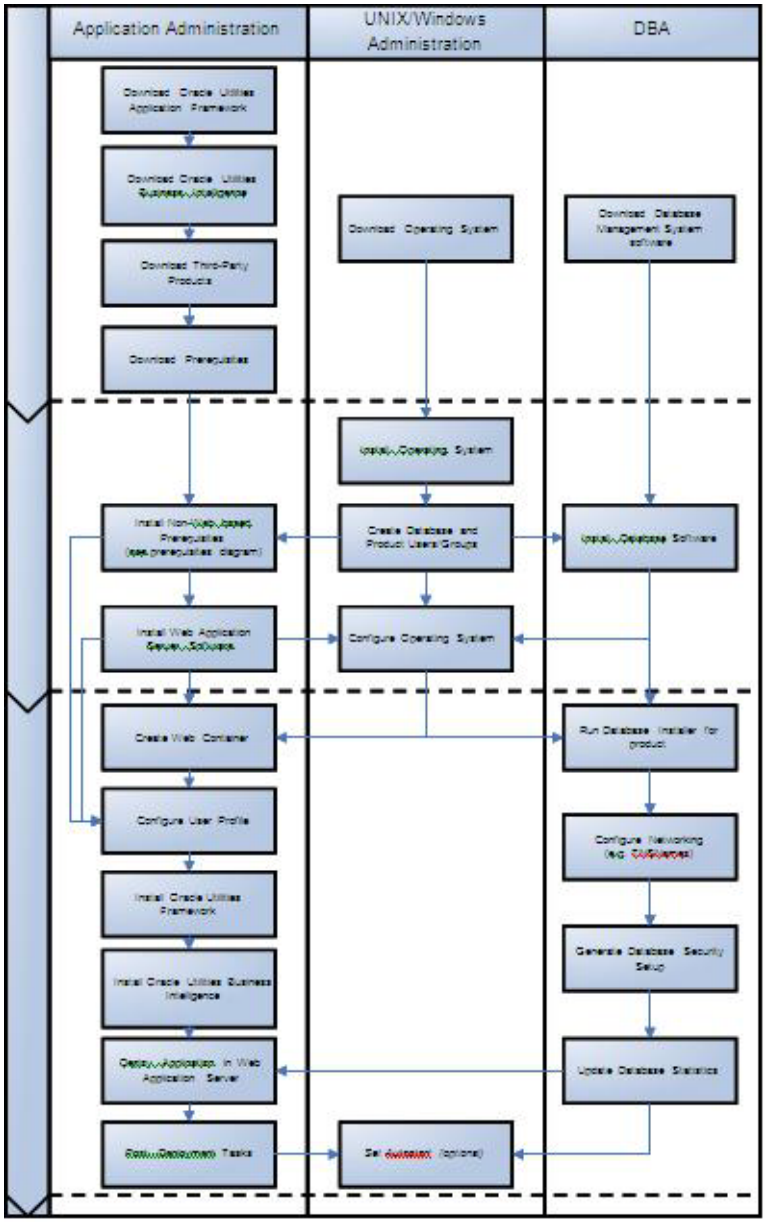
Planning the Installation

This chapter provides information for planning an Oracle Utilities Business Intelligence installation, including:

- **Installation and Configuration Overview**
- **Before You Install**
- **Installation Checklist**
- **Prerequisite Third-Party Software Overview**
- **Application Framework Installation and Configuration Worksheets**

Installation and Configuration Overview

The following diagram provides an overview of the steps that need to be taken to install and configure Oracle Utilities Business Intelligence:



Before You Install

Refer to article 1290770.1 on My Oracle Support for up-to-date additional information on Oracle Utilities Business Intelligence installation.

Installation Checklist

The following checklist will help guide you through the installation process of the application tier. The details for each step are presented in subsequent chapters.

1. Create Group/User ID.
2. Install prerequisite software (see **Prerequisite Third-Party Software Overview** on page 4-3 for more information).
   - Oracle Client 11.2.0.2 (for connecting to Oracle database)
   - Java 6
   - Hibernate 3.3.2
3. Install Web Server.
   - Oracle WebLogic 10.3.5
4. Verify that all software installed.
5. Set up environment variables.
6. Install the Oracle Utilities Application Framework.
7. Install Oracle Utilities Business Intelligence.
8. Deploy the Oracle Utilities Business Intelligence application.
9. Post installation tasks.
10. Refer to *Oracle Utilities Advanced Spatial and Operational Analytics Installation Guide* to understand the installation process for that product.

Prerequisite Third-Party Software Overview

For complete details about installing and configuring the prerequisite third-party software for your specific platform, see **Chapter 6: Installing Application Server Prerequisite Software**.

Application Framework Installation and Configuration Worksheets

During the installation and configuration of the application you will need to provide a variety of system values. These worksheets will assist you in providing that information. They should be completed before installing the application framework, as described in **Chapter 7**: **Installing the Application Server Component of Oracle Utilities Application Framework**. No Customer Install Value fields should be left blank.

> **Note**: Some Web application server information will not be available until the software installation steps have been completed as described in **Chapter 6: Installing Application Server Prerequisite Software**.

Installation Menu Functionality Overview

The main configuration menu is structured so that related variables and/or options are grouped together and are associated by a menu item number. To access a particular group of variables and options, enter the menu item number associated with that group. Each option within that group is displayed in turn on the screen, along with a prompt so that you can type the desired value for the option, if it is not the same as the default or current value.

When performing the initial installation you need to go through all menu options. The menu options may have a default value, a list of valid values and a validation check.

On each option prompt you can keep the current value by simply leaving the input line empty. In order to erase a variable value you need to enter one dot (“.”). The leading spaces will be trimmed out on each values entered.

> **Note:** When working with the menu you will see the following:
>
> - **Valid Values: [ALFANUM].** This indicates you will need to enter an alphanumeric value in the prompt.
> - **Valid Values: [NUM].** This indicates you will need to enter an numeric value in the prompt.

When all options are set, type <P> at the main menu prompt option. This will save the option values selected throughout the configuration.

During this processing the global variables are validated and the configuration file <SPLEBASE>/etc/ENVIRON.INI is created or updated. This file contains all the variables inputted and calculated. These are needed by the next part of the installation process.

To exit the configuration utility without saving any of the values entered, type <X> and 'Enter'

Installation Menu Functionality Details

The Environment Installation Utility requires that Oracle Client Home is set in the path for the user performing the installation.

Prior to running the installation utility you will need to review the supported platforms document to ensure you have all of the Third Party software installed.

In this menu if the variables are set prior to execution, that value will be defaulted by the installation utility when performing the installation.

When the installation has been completed successfully, the values will be written to an ENVIRON.INI file. When splenviron.sh / cmd is executed, it will read from the ENVIRON.INI file to set the environment variables.

In the worksheets there are three different types of values given:

- Default Values are the values that will be defaulted when running the installation utility.

- Security Values denote values that should be changed when in production.
- Example Values are values that can be used for a default installation.

> **Note:** The production environment should not be run with default values. See the Oracle Utilities Business Intelligence *Server Administration Guide* for additional information about configuring these values.

When you enter passwords you will not see the password characters on the screen because they are entered in silent mode. Passwords are encrypted when the values are entered.

Install the Oracle Client software specified in the section **Supported Platforms** prior to running any of the installation utilities.

The following prompt will appear when executing the installation utility:

```
Enter Oracle Client Home Directory (<ENTER> quit):
```

> **Note:** If the environmental variable ORACLE_CLIENT_HOME is set, the install script will validate the variable. If it passes the validation you will not be prompted for it. This is needed in order to run Perl installation utilities.

Encryption Methods

When the application server choice is WebLogic, the Oracle Utilities Application Framework installation uses the Oracle WebLogic API to encrypt the User ID and password that perform admin functions for the WebLogic application servers. Please refer to the Oracle WebLogic documentation for further information about the encryption.

The Oracle Utilities Application Framework installation also uses industry standard cryptography to encrypt passwords that are prompted within the installation.

When the application server choice is WebSphere Basic or WebSphere Network Deployment, the Oracle Utilities Application Framework installation will use industry standard cryptography to encrypt passwords that are prompted within the installation.

In each case these password are entered in the command line but the inputted values are not reflected on the screen when performing the installation.

Third Party Software Configuration

```
 ***********************************
* Environment Installation Options *
***********************************
1. Third Party Software Configuration
       Oracle Client Home Directory:
       Web Java Home Directory:
       Child JVM Home Directory:
       COBOL Home Directory:
       Hibernate JAR Directory:
       ONS JAR Directory:
       Database Home Directory:
       Web Application Server Home Directory:
       ADF Home Directory:
       OIM OAM Enabled Environment:
```

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Oracle Client Home Directory	ORACLE_CLIENT_HOME	The home directory of the Oracle Client. The application will use the Perl included under this Oracle Client. Example Location: /oracle/client/product/11.2.0.1	
Web Java Home Directory	JAVA_HOME	Java home that will be used by the Web application server. Example Location: /ouaf/java/jdk1.6.0_20	
* Child JVM Home Directory	CHILD_JVM_JAVA_HOME	Java home that will be used by the child java process that handles COBOL related requests. Example Location: /ouaf/java/jdk1.6.0_20	
* COBOL Home Directory	COBDIR	COBOL installation location directory. Example Location: /opt/SPLcobAS51WP4	
Hibernate JAR Directory	HIBERNATE_JAR_DIR	Location on the disk where the hibernate3.jar is installed.	
*ONS JAR Directory	ONS_JAR_DIR	Location on the disk where the ons-11.2.0.2.jar file is installed. **Required for Oracle RAC installation. See the Server Administration Guide for more information.	

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Database Home Directory	DATABASE_HOME	Location on the disk where database client is installed for your particular installation. Example Location for Oracle Database: /oracle/client/product/11.2.0.1 Note: This value will be the same as the previously entered for Oracle.	
Web Application Server Home Directory	WEB_SERVER_HOME	Location on the disk where the application server is installed. Example Location: WebLogic: /ouaf/middleware/wlserver_10.3 In order to validate the home directory, check if the following jar files exist in the appropriate path: $WEB_SERVER_HOME/server/lib/weblogic.jar %WEB_SERVER_HOME%\server\lib\weblogic.jar WebSphere: /ouaf/IBM/WebSphere7/AppServer WebSphere ND: /ouaf/IBM/WebSphere70ND/	
* ADF Home Directory	ADF_HOME	Location on the disk where ADF is installed. Example Location: /ouaf/jdev11_1_1_2	Press **Enter** to skip this value.
OIM OAM Enabled Environment	OPEN_SPML_ENABLED_ENV	Denotes if an environment will be integrating with Oracle Identity Manager for user propagation. Valid values: true false Defaulted value: false	

* Denotes optional Menu Options that may be required for the product installation and variables.

** In order to activate the RAC FCF, the application needs the external ons.jar file, version 11.2.0.2. This ons.jar is located under the Oracle Database Software 11.2.0.2, at the following path:

```
$ORACLE_HOME/opmn/lib/ons.jar
```

The ons.jar should be copied to the Application Server. During the OUAF installation the relevant option should be populated with the folder location of the ons.jar.

Environment Installation Options

```
50. Environment Installation Options
       Environment Mount Point:
       Log Files Mount Point:
       Environment Name:
       Database Type:
       Web Application Server Type:
       Install Application Viewer Module:
```

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Environment Mount Point	<SPLDIR>	The mount point into which the application is installed. For example: /ouaf for UNIX and C:\ouaf for Windows. This mount point MUST exist and the BI administrator user ID MUST be able to write to this directory. (This is the user ID that is created specifically to administer the (BI) environments; the default is cissys). The installation sets permissions on all subdirectories installed under this directory. See <SPLENVIRON> below for more information on how this mount point is used.	
Log File Mount Point	<SPLDIROUT>	A mount point that will contain any application output or application logs. Example value is /ouaf/sploutput for UNIX installation or C:\ouaf\sploutput for Windows. This mount point MUST exist and the BI administrator user ID MUST be able to write to this directory. (This is the user ID that is created specifically to administer the (BI) environments; the default is cissys). For each environment initialized, the application logs will be written to the directory <SPLDIROUT>/<SPLENVIRON> Note: Later in the installation the splenviron.sh (splenviron.cmd) script will set the $SPLOUTPUT (%SPLOUTPUT%) environment variable to point to:<SPLDIROUT>/<SPLENVIRON>	

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Environment Name	<SPLENVIRON>	A descriptive name to be used as both a directory name under the mount point <SPLDIR> and an environment descriptor. This value typically identifies the purpose of the environment. For example, DEV01 or CONV. On installation a directory <SPLDIR>/<SPLENVIRON> is created, under which the Oracle Utilities Application Framework and Oracle Utilities Business Intelligence software resides. When multiple environments are set up on the machine you will typically have directories such as: /ouaf/DEV01/.... /ouaf/CONV/.... Each of these contains a complete version of the Oracle Utilities Application Framework and Oracle Utilities Business Intelligence. Note: Later in the installation process, the splenviron.sh (splenviron.cmd) script will set $SPLEBASE (%SPLEBASE%) environment variable to point to <SPLDIR>/<SPLENVIRON>	
Database Type	<CMPDB>	Type of a database to connect an environment to. Valid values: oracle: Oracle Defaulted value: oracle Note: Not all database types are supported on all platforms; refer to the Supported Platforms section for details.	oracle
Web Application Server Type	<SPLWAS>	A Web Application Server for the environment to be used. The following value must be selected: Valid values: WLS: WebLogic WAS: WebSphere WASND: WebSphere ND Note: Not all Web Application servers are supported on all platforms; refer to Supported Platforms section for details.	

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Installation Application Viewer Module	<WEB_ISAPPVIEWER>	Denotes if the Application Viewer Web Module will be installed in the environment. When this value is set to false the application viewer will not be accessible in the environment. Valid values: true: Application Viewer module will be installed. false: Application Viewer module will not be installed. Defaulted value: true Note: When the value of false is selected, the Application Viewer will only be installed at a later date by a complete reinstall of the application.	

Environment Description

```
1. Environment Description
       Environment Description:
```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Environment Description	DESC	This is a free form text field to describe the purpose of the environment.	

WebLogic Business Application Server Configuration

The WebLogic parameters below and in the worksheet are for a WebLogic installation.

```
2. Business Application Server Configuration
      Business Server Host:                                <machine_name>
      WebLogic Server Name:                                  myserver
      Business Server Application Name:                      SPLService
      MPL Admin Port Number:
      MPL Automatic startup:                                 false
```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Business Server Host	BSN_WLHOST	The host name on which business application server resides. Default value: <current server name>	
WebLogic Server Name	BSN_WLS_SVRNAME	The name of the WebLogic server where the business application resides. Default value: myserver Note: If there is not a previously created WebLogic server, take the default value of "myserver".	
Business Server Application Name	BSN_APP	The name of the business application server. Default value: SPLService	
MPL Admin Port number	MPLADMINPORT	The port number for the Multi Purpose Listener (MPL) Admin Server. Example value: 6502	
MPL Automatic Startup	MPLSTART	Automatically starts the MPL Listener whenever environment starts. Default value: false	

WebLogic Web Application Server Configuration

The WebLogic parameters below and in the worksheet are for a WebLogic installation.

```
3. Web Application Server Configuration
      Web Server Host:                                    <machine_name>
       Web Server Port Number:
       Web Context Root:
       WebLogic JNDI User ID:
       WebLogic JNDI Password:
       WebLogic Admin System User ID:
       WebLogic Admin System Password:
       WebLogic Server Name:                               myserver
       Web Server Application Name:                        SPLWeb
       Application Admin User ID:
       Application Admin Password:
       Expanded Directories:                               true
       Application Viewer Module:                          true
```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Web Server Host	WEB_WLHOST	The host name on which the Web application Server resides. Default value: <current server name>	
Web Server Port Number	WEB_WLPORT	A unique port number within the system that will be assigned to the HTTP port. This is the port number that is used as a part of the client URL request to connect to the host. Example value: 6500	
Web Context Root	WEB_CONTEXT_ROOT	A context root name that allows customers to run multiple instances of Web application on the same server. Default value: ouaf	
WebLogic JNDI User ID	WEB_WLSYSUSER	The user ID the application uses to connect to the EJB component through JNDI. This is the EJB container user ID. Note: If there is no previously created WebLogic user, specify the value as "system". This is a security value.	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
WebLogic JNDI Password	WEB_WLSYSPASS	The password the application uses to connect to the EJB component through JNDI Note: If WebLogic JDNI User ID was set to system, specify the value of ouafadmin for password. This value will be saved in encrypted format. This is a security value.	
WebLogic Admin System User ID	WLS_WEB_WLSYSUSER	The user ID to log in to the Oracle WebLogic console and to administer Oracle WebLogic. The Oralce WebLogic startup and stop script also utilizes this user ID Note: The installation utility will prompt to enter “Y” to encrypt. Enter Y/y When there is a not a WebLogic user previously created, and specify a value of “system”.	
WebLogic Admin System Password	WLS_WEB_WLSYSPASS	The password to login to Oracle WebLogic console and to administer Oracle WebLogic. The Oralce WebLogic startup and stop script also utilize this password. Note: The installation utility will prompt to enter "Y" to encrypt. Enter Y/y when there is a not a WebLogic user previously created, and specify value of ouafadmin. This is a security value.	
WebLogic Server Name	WEB_WLS_SVRNAME	The name of the WebLogic server where the Web application resides. Default value: myserver Note: If there is not a previously created WebLogic server, take default value of “myserver”.	
Web Server Application Name	WEB_APP	The name of the Web application server. Default value: SPLWeb	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Application Admin User ID	WEB_SPLUSER	This is the default user ID to login to the application through the browser. Example value: SYSUSER Note: The required value for an initial install is "SYSUSER". This value is also used in communication within the XAI application. This is a security value.	
Application Admin Use-rid Password	WEB_SPLPASS	This is the password of the application admin user. Example value: sysuser00 Note: The required value for an initial install is "sysuser00". This value will be saved in encrypted format This is a Security Value.	
Expanded Directories	WEB_ISEXPANDED	When the value is "true" the Web application will be deployed in exploded directory format (no WAR files). When the value is "false", the web application will be deployed in ear file format. Valid values: true: Environment expanded (no WAR files) false: Environment with WAR/EAR files Default value: false	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Application Viewer Module	WEB_ISAPPVIEWER	When the value is "true" the application viewer will be deployed to the Web server. When the value is "false", the application viewer will not be deployed to the Web Server. Note: With either value the application viewer module will still be managed by the upgrade process. Note: When this value is set to false from the initial install menu you will not be able to change this value to true to re-enable the application viewer. Valid values: true: The application viewer module will be deployed to the Web Server false: The application viewer module will not be deployed to the Web Server Default value: true	

Database Configuration

```
4. Database Configuration
       Web Application Database User ID:
       Web Application Database Password:
       MPL Database User ID:
       MPL Database Password:
       XAI Database User ID:
       XAI Database Password:
       Batch Database User ID:
       Batch Database Password:
       Database Name
       Database Server:
       Database Port:
       ONS Server Configuration:
       Database Override Connection String:
      Oracle Client Character Set NLS_LANG:  AMERICAN_AMERICA.AL32UTF8
```

Menu Option	Name Used in this Documentation	Usage	Customer Install Value
Web Application Database User ID	DBUSER	The database user ID that has been configured on the database for the Web application server connection. This is a security value.	
Web Application Database Password	DBPASS	The database password that has been configured on the database for the Web application connection. Note: This value will be saved in encrypted format. This is a security value.	
MPL Database User ID	MPL_DBUSER	The database user ID that has been configured on the database for the MPL server connection. This is a security value.	
MPL Database Password	MPL_DBPASS	The database password that has been configured on the database for the MPL server connection. Note: This value will be saved in encrypted format. This is a security value.	
XAI Database User ID	XAI_DBUSER	The database user ID that has been configured on the database for the XAI server connection. This is a security value.	

Menu Option	Name Used in this Documentation	Usage	Customer Install Value
XAI Database Password	XAI_DBPASS	The database password that has been configured on the database for the XAI server connection. Note: This value will be saved in encrypted format. This is a security value.	
Batch Database User ID	BATCH_DBUSER	The database user ID that has been configured on the database for the batch connection. This is a security value.	
Batch Database Password	BATCH_DBPASS	The database password that has been configured on the database for the batch connection. Note: This value will be saved in encrypted format. This is a security value.	
Database Name	DBNAME	The name of the database instance that the application will be connecting to.	
Database Server	DBSERVER	Host name of the server where database resides.	
Database Port	DBPORT	Database port number on the database server used for connecting to the database	
ONS Server Configuration	ONSCONFIG	ONS Server Configuration is required for Oracle RAC FCF. See the Server Administration Guide for more information. This is an optional value.	
Database Override Connection String	DB_OVERRIDE_CONNECTION	This connection string can be used to override the database information entered above for RAC installation. Set this string to override the standard database connection string, as entered above. See the Server Administration Guide for more information. This is an optional value.	

Menu Option	Name Used in this Documentation	Usage	Customer Install Value
Oracle Client Character Set NLS_LANG	NLS_LANG	The Oracle Database Character Set. Select the Language and Territory that are in use in your country. Default value: AMERICAN_AMERICA.AL32UTF8	

General Configuration Options

Note: See the *Oracle Utilities Business Intelligence Batch Server Administration Guide* for additional details on this configuration.

```
5. General Configuration Options
       Batch RMI Port:
       Batch Mode:                                          CLUSTERED
       Coherence Cluster Name:
       Coherence Cluster Address:
       Coherence Cluster Port:
       Coherence Cluster Mode:                              dev
```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Batch RMI Port	BATCH_RMI_PORT	Unique port used by the Batch RMI	
Batch Mode	BATCH_MODE	Valid values: CLUSTERED or DISTRIBUTED Default value: CLUSTERED Note: CLUSTERED is currently the only supported mode for production environments.	
Coherence Cluster Name	COHERENCE_CLUSTER_NAME	Unique name for the batch CLUSTER Note: Value is required when batch mode is CLUSTERED.	
Coherence Cluster Address	COHERENCE_CLUSTER_ADDRESS	Unique multicast address. Note: Value is required when batch mode is CLUSTERED.	
Coherence Cluster Port	COHERENCE_CLUSTER_PORT	Unique port for the batch CLUSTER Note: Value is required when batch mode is CLUSTERED.	
Coherence Cluster Mode	COHERENCE_CLUSTER_MODE	Valid values: dev (Development) prod (Production) Default value: dev	

Advanced Menu Options

The advanced menu options are not available during installation. These options can be accessed after installation using the following commands:

Unix:

```
$SPLEBASE/bin/configureEnv.sh -a
```

Windows

```
%SPLEBASE%\bin\configureEnv.cmd -a
```

Advanced Environment Miscellaneous Configuration

```
50. Advanced Environment Miscellaneous Configuration
       Online JVM Batch Server Enabled:                    false
       Online JVM Batch Number of Threads:                 5
       Online JVM Batch Scheduler Daemon Enabled:          false
       JMX Enablement System User ID:
       JMX Enablement System Password:
       RMI Port number for JMX Business:
       RMI Port number for JMX Web:
       GIS Service Running on the same Web Server:         true
       GIS Service URL:
       GIS WebLogic System User ID:
       GIS WebLogic System Password:
       Online Display Software Home:
```

Menu Option	Name used in this Documentation	Usage	Customer Value Install
WebSphere Deployment Manager Host Name	WASND_DMGR_HOST	WebSphere Deployment Manager Host name, this value is used for WebSphere ND, when connecting to the WebSphere Deployment Manager. Note: This value will only appear for WebSphere ND.	
Online JVM Batch Server Enabled	BATCHENABLED	When starting a web application server JVM, this property can be set to "true" to allow the on-line application server to also act as a batch worker in the grid. Default value: false Note: This functionality should only be used in low volume environments.	

Menu Option	Name used in this Documentation	Usage	Customer Value Install
Online JVM Batch Number of Threads	BATCHTHREADS	The maximum number of batch processing threads to be executed within a worker JVM when no explicit Distributed Thread Pool is specified. The "DEFAULT" distributed thread pool is used by the batch-scheduling daemon when it initiates processing on batch jobs (typically added via the online system) where no thread pool is specified). Default value: 5 Note: This will be only used and activated when BATCHENABLED is set to true.	
Online JVM Batch Scheduler Daemon Enabled	BATCHDAEMON	In a distributed batch environment, this property can be set to "true" to allow a worker JVM to host the batch scheduling daemon. The daemon accepts online batch submissions requests and automatically submits the work for them. Valid values: true, false Default value: false Note: This will be only used and activated when BATCHENABLED is set to true.	
JMX Enablement System User ID	BSN_JMX_SYSUSER	Example value: user This value is optional.	
JMX Enablement System Password	BSN_JMX_SYSPASS	Example value: admin Note: This value will be saved in encrypted format. This value is optional.	
RMI Port number for JMX Business	BSN_JMX_RMI_PORT_PERFORMACE	JMX Port for Business Application Server monitoring. This needs to be set to an available port number on the machine. This value is optional.	

Menu Option	Name used in this Documentation	Usage	Customer Value Install
RMI Port number for JMX Web	WEB_JMX_RMI_PORT_PERFORMACE	JMX Port for Web application server monitoring This needs to be an available port number for the environment running on the machine. This value is optional.	
GIS Service Running on the same Web Server	GIS	Geographical information (GEOCODING) - GIS Service running on the same Web application server Valid values: true, false This value is optional.	
GIS Service URL	GIS_URL	This is the URL of the external Web server. Note: This value will be only be used when GIS is set to true. This value is optional.	
GIS WebLogic System User ID	GIS_WLSYSUSER	GIS WebLogic System User ID Note: This value will be only be used when GIS is set to true. This value is optional.	
GIS WebLogic System Password	GIS_WLSYSPASS	GIS WebLogic System Password. Note: This value will be only be used when GIS is set to true. This value is optional.	
Online Display Software Home	ONLINE_DISPLAY_HOME	The location of the Online Display Software installation directory. This value is optional.	

Advanced Environment Memory Configuration

```
51. Advanced Environment Memory Configuration
       JVM Child Memory Allocation:                        512
       JVM Child Additional Options:
       Web Application Java Initial Heap Size:             1024
       Web Application Java Max Heap Size:                 1024
       Web Application Java Max Perm Size:                 500
       Web Application Additional Options:
       Ant Min Heap Size:                                  200
       Ant Max Heap Size:                                  800
       Ant Additional Options:
       Thread Pool Worker Java Min Heap Size:              512
       Thread Pool Worker Java Max Heap Size:              1024
       Thread Pool Worker Java Max Perm Size:              768
       Thread Pool Worker Additional Options:
       Additional Runtime Classpath:
       Release Cobol Thread Memory Options:
-Dspl.runtime.cobol.remote.releaseThreadMemoryAfterEachCall=...
```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
JVM Child Memory Allocation	JVMMEMORYARG	Heap size for the JVM Child. Default value: 512	
JVM Child Additional Options	JVM_ADDITIONAL_OPT	Additional JVM options that are passed to the Child JVM. Note: For WebLogic installation only.	
Web Application Java Initial Heap Size	WEB_MEMORY_OPT_MIN	Initial heap size for the application server. Default value: 1024 Note: For WebLogic installation only.	
Web Application Java Max Heap Size	WEB_MEMORY_OPT_MAX	Maximum heap size for the application server. Default value: 1024 Note: For WebLogic installation only.	
Web Application Java Max Perm Size	WEB_MEMORY_OPT_MAXPERMSIZE	Maximum Perm Size for the application server. Default value: 500MB (Linux, Solaris) 300MB (Windows) Note: For WebLogic installation only.	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Web Application Additional Options	WEB_ADDITIONAL_OPT	Additional options that will be passed in to the web application server JVM. Optional Entry. Note: For WebLogic installation only.	
Ant Min Heap Size	ANT_OPT_MIN	Minimum Heap Size passed to ANT JVM. Default value: 200	
Ant Max Heap Size	ANT_OPT_MAX	Maximum Heap Size passed to ANT JVM. Default value: 800	
Ant Additional Options	ANT_ADDITIONAL_OPT	Additional options that are passed into the ANT JVM.	
Thread Pool Worker Java Min Heap Size	BATCH_MEMORY_OPT_MIN	Minimum heap size passed to the Thread Pool Worker. Default value: 512	
Thread Pool Worker Java Max Heap Size	BATCH_MEMORY_OPT_MAX	Maximum heap size passed to the Thread Pool Worker. Default value: 1024	
Thread Pool Worker Additional Options	BATCH_MEMORY_ADDITIONAL_OPT	Additional Memory Options passed into the Thread Pool Worker. This is an optional free form field.	
Additional Runtime Classpath	ADDITIONAL_RUNTIME_CLASSPATH	Additional Classpath Options passed in when starting the WebLogic JVM Note: For WebLogic installation only. This is an optional value.	
Release Cobol Thread Memory Options	REL_CBL_THREAD_MEM	Allow for child JVMs to be optionally configured to release thread-bound memory when each thread is returned to its thread pool. This will increase the number of memory allocations and memory free calls performed by the Microfocus runtime. It will also lower the amount of C-heap memory consumed by child JVMs. Valid values: true, false Default value: false	

Advanced Web Application Configuration

```
52. Advanced Web Application Configuration
       WebLogic SSL Port Number:
       WebLogic Console Port Number:
       WebLogic Additional Stop Arguments:
       Strip HTML Comments:                                  false
       Authentication Login Page Type:                       FORM
      Web Form Login Page:                                /loginPage.jsp
     Web Form Login Error Page:                         /formLoginError.jsp
      Web Security Role:                                    cisusers
      Web Principal Name:                                   cisusers
      This is a development environment:                    false
      Preload All Pages on Startup:                         false
      Maximum Age of a Cache Entry for Text:                28800
      Maximum Age of a Cache Entry for Images:              28800
      JSP Recompile Interval (s):                           43200
```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
WebLogic SSL Port Number:	WEB_WLSSPORT	The port number assigned to WebLogic Secure Sockets connection. This is the port number that is used for Secure Sockets connecting to the WebLogic server. The Secure Sockets implementation is disabled in the default configuration. For Production additional actions are required. Do NOT run Production with Demo certificates Refer to the WLS installation guide - Configuring Identity and Trust When this value is populated http will be disabled. Example value: 6501 Note: For WebLogic installation only. This value is optional.	
WebLogic Console Port Number	WLS_ADMIN_PORT	The port number assigned to WebLogic Console connection. This is the port number that is used for Secure Sockets connecting to the WebLogic Console server. Note: For WebLogic installation only. This value is optional.	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
WebLogic Additional Stop Arguments	ADDITIONAL_STOP_WEBLOGIC	WebLogic Additional Stop Arguments This value is required when running the WebLogic Console Port Number and the Application using SSL. Example values: -Dweblogic.security.TrustKeyStore=DemoTrust -Dweblogic.security.TrustKeystoreType=CustomTrust Note: For Production additional actions are required. Do NOT run Production with Demo certificates Refer to the WLS installation guide - Configuring Identity and Trust Note: For WebLogic installation only. Optional Value	
StripHTMLComments: false	STRIP_HTML_COMMENTS	Stripping HTML (and JavaScript) comments will increase the security of the system. Default value: false Valid values: true, false	
Authentication Login Page Type	WEB_WLAUTHMETHOD	Specifies which authentication mode should be used. To switch off OUAF Login Page enter: BASIC Valid values: FORM, BASIC Default value: FORM	
Web Form Login Page	WEB_FORM_LOGIN_PAGE	Specify the jsp file used to login into the application. Default value: /loginPage.jsp	
Web Form Login Error Page	WEB_FORM_LOGIN_ERROR_PAGE	Specify the jsp file used when there is an error when logging into the application. Default value: /formLoginError.jsp	
Web Security Role	WEB_PRINCIPAL_NAME	Specify the name of the security role. Default value: cisusers	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Web Principal Name	WEB_PRINCIPAL_NAME	Specify the name of a principal that is defined in the security realm. Default value: cisusers	
This is a development environment	WEB_ISDEVELOPMENT	If the value is "true", the Web application may be used for application development, which will trigger certain generation processes. If the value is "false" the environment will be used as a runtime environment. When you choose "true" (development environment) the startup preload pages will be disabled, and the application security will be less strict. This value also controls the amount of logging information written to the application log files. Valid values: true, false Default value: false	
Preload All Pages on Startup	WEB_PRELOADALL	This controls if the pages should be preloaded during the startup of the application or not. Valid values: true, false Default value: false	
Maximum Age of a Cache Entry for Text	WEB_MAXAGE	Default value: 28800	
Maximum Age of a Cache Entry for Images	WEB_MAXAGEI	Default value: 28800	
JSP Recompile Interval (s)	WEB_wlpageCheckSeconds	Default value: 43200	

Advanced Web Application Configuration

```
53. OIM Configuration Settings
     SPML SOAP Trace Setting:                                false
     SPML IDM Schema Name:                                   F1-IDMUser
     SPML OIM Name Space:      http://xmlns.oracle.com/OIM/provisioning
     SPML OIM Enclosing Element:                             sOAPElement
```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
SPML SOAP Trace Setting	OIM_SPML_SOAP_DEBUG_SETTING	Name of Oracle Identity Manager library for debug Default value: false Valid values: true, false	
SPML IDM Schema Name	OIM_SPML_UBER_SCHEMA_NAME	Name of Oracle Identity Manager library for schema Defautlt value: F1-IDMUser	
SPML OIM Name Space	OIM_SPML_NAME_SPACE	Default Namespace for Oracle Identity Manager integration Default value: http://xmlns.oracle.com/OIM/provisioning	
SPML OIM Enclosing Element	OIM_SPML_SOAP_ELEMENT	Default top level SOAP Element name for Oracle Identity Manager integration Default value: sOAPElement	

Chapter 5

Installing the Database

Please review Chapter 1 of this guide and then follow the steps for installing the database as described in the *Oracle Utilities Business Intelligence Database Administrator's Guide*.

Chapter 6

Installing Application Server Prerequisite Software

This chapter describes the software that needs to be installed for each of the supported operating system and application server combinations. The sections for this chapter are:

- **AIX 6.1 Application Server**
- **Oracle Linux 5.6 or Red Hat Linux 5.6 Application Server**
- **Solaris 10 Application Server**
- **Windows 2008 Application Server**

AIX 6.1 Application Server

This section describes the software requirements for operating the application using the AIX application server.

Supported Application Servers

Operating System	Chipsets	Application Server
		Oracle WebLogic 10.3.5
AIX 6.1 (64-bit)	Power 64-bit	64-bit version

Web/Application Server Tier

AIX 6.1 Operating System Running on Power5 and Power6 Architecture

UNIX Administrator User ID

The following user groups and accounts have to be created to install and administer the application:

Description	Default Value	Customer Defined Value
Oracle Utilities Business Intelligence Administrator User ID	cissys	
Oracle Utilities Business Intelligence User Group	cisusr	

Note: It is recommended that you change the default values for security reasons.

Throughout this document the administrator user id is often referred to as the "cissys" user id. You should substitute that with the customer defined user id when not using the default value. After the initial install, the software should always be managed using that user id.

By default, the cissys userid is the only one given access to the installed files.

1. Create a group called cisusr (user group).
2. Create a user called cissys. Primary group cisusr. Set the primary shell for the cissys user to Korn Shell.

The shell scripts use the ">" to overwrite shell functionality. Your operating system may be configured to not allow this functionality by default in the users shell.

To avoid file access permission problems when executing scripts, consider placing the following command into cissys profile script:

```
set +o noclobber
```

Security Configuration

Various options exists to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-executable files will have the correct user groups and to restrict the permissions available to

legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

The following users and group categories must be defined to implement this security. For demonstration purposes the following users and groups will be used. These users must be created according to industry standards (including password policies). All users should be created with a default umask of 022 to ensure files created during normal operation have the correct permissions.

Please replace these users and groups for your installation defaults:

User	Group	Description
cissys	cisusr	This user will be used to install the application and to apply patches. This user will own all the application files. The same care should be taken with this user ID as if it is 'root'. This user will be able to add, delete and modify and files within the application.
cisadm	cisusr	Administrative and Operation functions will be available to this user. This user will be able to stop and start the application and batch processes, but will not have access to modify any file other than generated log files
cisoper	-------	Low level operator. This user will only be able to read logs files and collect information for debugging and investigative purposes. Care should be taken in production to disable debugging as debugging information could contain potential sensitive data which this user should not have privy to.

Note: The Oracle Client and WebLogic should be installed as the user who will stop and start the application. For example, if you plan to run the application as the install user these components must belong to cissys.

Oracle Client 11.2.0.2

Install the Oracle Client as described in the Oracle Client installation documentation. Use the cissys account to install the Oracle Client. If another user installs the Oracle Client, make sure the cissys user ID has the proper execute permissions.

For the cissys user ID, ensure that the environment variable ORACLE_CLIENT_HOME is set up, and that ORACLE_CLIENT_HOME/perl/bin is the first Perl listed in the cissys account's PATH variable.

IBM Java Software Development Kit version 6.0 SR8 64-bit

Installation of Java is a prerequisite for using Oracle WebLogic as a Web application server.

At the time of release, AIX Java packages could be obtained from:

http://www.ibm.com/developerworks/java/jdk/aix/service.html

The web server requires the 64-bit Java platform in order to function. The main prerequisite for the web server is the version of java mentioned above.

For the Administrator userid (cissys), ensure that the environment variable JAVA_HOME is set up, and that "java" can be found in cissys' PATH variable.

Hibernate 3.3.2

You must install Hibernate before installing Oracle Utilities Business Intelligence.

Download the file hibernate-3.3.2.ga.zip (the zip file associated with the 3.3.2 GA release.) from the following link:

http://sourceforge.net/projects/hibernate/files/hibernate3/3.3.2.GA/

It is very important that you download the exact version, as the product has only been certified with this exact release.

You will need to create a permanent directory to place one of the files from hibernate-3.3.2.ga.zip. (e.g., /opt/hibernate).

Extract the file hibernate3.jar into the newly created directory (e.g., /opt/hibernate) from the hibernate-3.3.2.ga.zip zip file.

Oracle WebLogic 10.3.5 64-bit

Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application. This application server will run as a 64-bit application.

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 10.3.5.

Oracle Linux 5.6 or Red Hat Linux 5.6 Application Server

This section describes the software requirements for operating the application using the Oracle Linux or Red Hat Linux application server.

Supported Application Servers

Operating System	Chipsets	Application Server
		Oracle WebLogic 10.3.5
Oracle Linux 5.6 (64-bit) Red Hat Enterprise Linux 5.6 (64-bit)	x86_64	64-bit version

Web/Application Server Tier

Oracle Linux 5.6 or Red Hat Enterprise Linux 5.6 Operating System Running on x86_64 64-bit Architecture

UNIX Administrator User ID

The following user groups and accounts have to be created to install and administer the application:

Description	Default Value	Customer Defined Value
Oracle Utilities Business Intelligence Administrator User ID	cissys	
Oracle Utilities Business Intelligence User Group	cisusr	

Note: It is recommended that you change the default values for security reasons.

Throughout this document the administrator user id is often referred to as the "cissys" user id. You should substitute that with the customer defined user id when not using the default value. After the initial install, the software should always be managed using that user id.

By default, the cissys userid is the only one given access to the files installed.

1. Create a group called cisusr (user group)
2. Create a user called cissys. Primary group cisusr. Set the primary shell for the cissys user to Korn Shell.

The shell scripts use the ">" to overwrite shell functionality. Your operating system may be configured to not allow this functionality by default in the users shell.

To avoid file access permission problems when executing scripts, consider placing the following command into cissys profile script:

```
set +o noclobber
```

Security Configuration

Various options exists to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-executable files will have the correct user groups and to restrict the permissions available to legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

The following users and group categories must be defined to implement this security. For demonstration purposes the following users and groups will be used. These users must be created according to industry standards (including password policies). All users should be created with a default umask of 022 to ensure files created during normal operation have the correct permissions.

Please replace these users and groups for your installation defaults:

User	Group	Description
cissys	cisusr	This user will be used to install the application and to apply patches. This user will own all the application files. The same care should be taken with this user ID as if it is 'root'. This user will be able to add, delete and modify and files within the application.
cisadm	cisusr	Administrative and Operation functions will be available to this user. This user will be able to stop and start the application and batch processes, but will not have access to modify any file other than generated log files
cisoper	-------	Low level operator. This user will only be able to read logs files and collect information for debugging and investigative purposes. Care should be taken in production to disable debugging as debugging information could contain potential sensitive data which this user should not have privy to.

Note: The Oracle Client and WebLogic should be installed as the user who will stop and start the application. For example, if you plan to run the application as the install user these components must belong to cissys.

Oracle Client 11.2.0.2

Install the Oracle Client as described in the Oracle Client installation documentation. Use the cissys account to install the Oracle Client. If another user installs the Oracle Client, make sure the cissys user ID has the proper execute permissions.

For the cissys user ID, ensure that the environment variable ORACLE_CLIENT_HOME is set up, and that ORACLE_CLIENT_HOME/perl/bin is the first Perl listed in the cissys account's PATH variable.

Oracle Java Development Kit Version 6.0 Update 20 or Later, 64-bit

At time of release, Oracle Java packages could be obtained from:

http://www.oracle.com/technetwork/java/archive-139210.html

The Oracle WebLogic Server requires the 64-bit version. The main prerequisite for the Web server is the version of java mentioned above.

For the userid cissys, ensure that the environment variable JAVA_HOME is setup, and that java_home/bin and java_home/lib can be found in cissys' PATH variable.

Hibernate 3.3.2

You must install Hibernate before installing Oracle Utilities Business Intelligence.

Download the file hibernate-3.3.2.ga.zip (the zip file associated with the 3.3.2 GA release.) from the following link:

http://sourceforge.net/projects/hibernate/files/hibernate3/3.3.2.GA/

It is very important that you download the exact version, as the product has only been certified with this exact release.

You will need to create a permanent directory to place one of the files from hibernate-3.3.2.ga.zip. (e.g., /opt/hibernate).

Extract the file hibernate3.jar into the newly created directory (e.g., /opt/hibernate) from the hibernate-3.3.2.ga.zip zip file.

Oracle WebLogic 10.3.5 64-bit

Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application. This application server will run as a 64-bit application.

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 10.3.5.

Solaris 10 Application Server

This section describes the software requirements for operating the application using the Sun Solaris 10 application server.

Supported Application Servers

Operating System	Chipsets	Application Server
		Oracle WebLogic 10.3.5
Solaris 10 (64-bit)	SPARC	64-bit version

Web/Application Server Tier

Solaris 10 Operating System Running on SPARC-based 64-bit Architecture

UNIX Administrator User ID

The following user groups and accounts have to be created to install and administer the application:

Description	Default Value	Customer Defined Value
Oracle Utilities Business Intelligence Administrator User ID	cissys	
Oracle Utilities Business Intelligence User Group	cisusr	

Note: It is recommended that you change the default values for security reasons.

Throughout this document the administrator user id is often referred to as the "cissys" user id. You should substitute that with the customer defined user id when not using the default value. After the initial install, the software should always be managed using that user id.

By default, the cissys userid is the only one given access to the files installed.

1. Create a group called cisusr (user group)
2. Create a user called cissys. Primary group cisusr. Set the primary shell for the cissys user to Korn Shell.

The shell scripts use the ">" to overwrite shell functionality. Your operating system may be configured to not allow this functionality by default in the users shell.

To avoid file access permission problems when executing scripts, consider placing the following command into cissys profile script:

```
set +o noclobber
```

Security Configuration

Various options exists to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-executable files will have the correct user groups and to restrict the permissions available to

legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

The following users and group categories must be defined to implement this security. For demonstration purposes the following users and groups will be used. These users must be created according to industry standards (including password policies). All users should be created with a default umask of 022 to ensure files created during normal operation have the correct permissions.

Please replace these users and groups for your installation defaults:

User	Group	Description
cissys	cisusr	This user will be used to install the application and to apply patches. This user will own all the application files. The same care should be taken with this user ID as if it is 'root'. This user will be able to add, delete and modify and files within the application.
cisadm	cisusr	Administrative and Operation functions will be available to this user. This user will be able to stop and start the application and batch processes, but will not have access to modify any file other than generated log files
cisoper	-------	Low level operator. This user will only be able to read logs files and collect information for debugging and investigative purposes. Care should be taken in production to disable debugging as debugging information could contain potential sensitive data which this user should not have privy to.

Note: The Oracle Client and WebLogic should be installed as the user who will stop and start the application. For example, if you plan to run the application as the install user these components must belong to cissys.

Oracle Client 11.2.0.2

Install the Oracle Client as described in the Oracle Client installation documentation. Use the cissys account to install the Oracle Client. If another user installs the Oracle Client, make sure the cissys user ID has the proper execute permissions.

For the cissys user ID, ensure that the environment variable ORACLE_CLIENT_HOME is set up, and that ORACLE_CLIENT_HOME/perl/bin is the first Perl listed in the cissys account's PATH variable.

Oracle Java Development Kit Version 6.0 Update 20 or Later, 64-bit

At time of release, Oracle Java packages could be obtained from:

http://www.oracle.com/technetwork/java/archive-139210.html

The Oracle WebLogic Server requires the 64-bit version. The main prerequisite for the Web server is the version of java mentioned above.

For the userid cissys, ensure that the environment variable JAVA_HOME is setup, and that java_home/bin and java_home/lib can be found in cissys' PATH variable.

Hibernate 3.3.2

You must install Hibernate before installing Oracle Utilities Business Intelligence.

Download the file hibernate-3.3.2.ga.zip (the zip file associated with the 3.3.2 GA release.) from the following link:

http://sourceforge.net/projects/hibernate/files/hibernate3/3.3.2.GA/

It is very important that you download the exact version, as the product has only been certified with this exact release.

You will need to create a permanent directory to place one of the files from hibernate-3.3.2.ga.zip. (e.g., /opt/hibernate).

Extract the file hibernate3.jar into the newly created directory (e.g., /opt/hibernate) from the hibernate-3.3.2.ga.zip zip file.

Oracle WebLogic 10.3.5 64-bit

Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application. This application server will run as a 64-bit application.

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 10.3.5.

Windows 2008 Application Server

This section describes the software requirements for operating the application using the Windows application server.

Supported Application Servers

Operating System	Chipsets	Application Server
		Oracle WebLogic 10.3.5
Windows 2008 Server SP2 (32-bit)	x86_64	32-bit version

Web/Application Server Tier

Oracle Client 11.2.0.2

Install the Oracle Client as described in the Oracle Client installation documentation. Use the cissys account to install the Oracle Client. If another user installs the Oracle Client, make sure the cissys user ID has the proper execute permissions.

For the cissys user ID, ensure that the environment variable ORACLE_CLIENT_HOME is set up, and that ORACLE_CLIENT_HOME/perl/bin is the first Perl listed in the cissys account's PATH variable.

Oracle Java Development Kit Version 6.0 Update 20 or Later, 64-bit

At time of release, Oracle Java packages could be obtained from:

http://www.oracle.com/technetwork/java/archive-139210.html

The Oracle WebLogic Server requires the 64-bit version. The main prerequisite for the Web server is the version of java mentioned above.

For the userid cissys, ensure that the environment variable JAVA_HOME is setup, and that java_home/bin and java_home/lib can be found in cissys' PATH variable.

Hibernate 3.3.2

You must install Hibernate before installing Oracle Utilities Business Intelligence.

Download the file hibernate-3.3.2.ga.zip (the zip file associated with the 3.3.2 GA release.) from the following link:

http://sourceforge.net/projects/hibernate/files/hibernate3/3.3.2.GA/

It is very important that you download the exact version, as the product has only been certified with this exact release.

You will need to create a permanent directory to place one of the files from hibernate-3.3.2.ga.zip. (e.g., /opt/hibernate).

Extract the file hibernate3.jar into the newly created directory (e.g., /opt/hibernate) from the hibernate-3.3.2.ga.zip zip file.

Oracle WebLogic 10.3.5

Oracle WebLogic software can be downloaded from the Oracle web site.

- Download and install Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 10.3.5.

Chapter 7

Installing the Application Server Component of Oracle Utilities Application Framework

Installing the Oracle Utilities Application Framework is the prerequisite and foundation for installing a framework-based application such as Oracle Utilities Business Intelligence. This section describes the process for installing the Oracle Utilities Application Framework, including:

- **Installation Overview**
- **Preinstallation Tasks**
- **Installing Oracle Utilities Application Framework Application Server**

Installation Overview

This process replaces any previously delivered and installed version of the Oracle Utilities Application Framework Server. Before you proceed:

1. Make sure that you have installed all the required third-party software as described in **Chapter 6: Installing Application Server Prerequisite Software**.
2. Complete the database installation (refer to the Oracle Utilities Business Intelligence *Database Administrator's Guide*).
3. If you plan to upgrade a previously installed application server make a backup before you start a new installation.

The application server installation process consists of the following:

1. Oracle Utilities Application Framework installation
2. Oracle Utilities Business Intelligence application installation

As a first step of the application server installation, the framework application server installation package must be downloaded and installed. The application server environment is created and configured by the framework installation process.

Once the Oracle Utilities Application Framework installation is successfully completed and the framework application environment is created, Oracle Utilities Business Intelligence can be installed on top of the framework environment.

You can download the installation packages from the Oracle E-Delivery site.

This section describes how to install a working Oracle Utilities Application Framework application server, which can then be further configured manually to allow for production performance levels.

Application server installation packages delivered for this version are multi-platform and are ready to install on any supported platform (as described in the section **Supported Platforms** on page 3-5). You must complete the database installation before installing the application server.

Preinstallation Tasks

Hardware and Software Version Prerequisites

The section **Supported Platforms** on page 3-5 contains all of the available platforms that are required with this release of the product.

Database Installation

Verify that the database has been installed and is operational. See Oracle Utilities Business Intelligence *Database Administrator's Guide* for more information.

Installation Prerequisites

Chapter 6: Installing Application Server Prerequisite Software describes all preparations that need to be done on the server prior to installing the application server. Please read carefully the server setup requirements and make sure that all prerequisite software is installed and that all required environment variables are set. Correct server setup and proper environment variable settings are an essential prerequisite for successful environment installation.

System Architecture Overview

Oracle Utilities Application Framework V4.1.0 is a decoupled system architecture involving a Business Service Application tier and a Web Application tier. Typically both will run on the same server, but the design does allow each tier to be installed on separate servers.

The design implements a stateless session bean (EJB technology, under Java EE 5), to provide remote access to service invocations. The root Web app and XAI Web apps can be configured to access service processing locally (as in previous versions), or to make a remote EJB call to perform the service request. In the latter case, the served containers, effectively, run as very thin servlet wrappers around the remote call.

For all supported application servers except for WebLogic expanded configuration (SDK environment), the deployment is in the form of two Enterprise Archive (ear) Files: SPLService.ear and SPLWeb.ear. Web Archive (war) files are created during the installation process but are not deployed.

Copying and Decompressing Install Media

The Oracle Utilities Application Framework application server installation file is delivered in jar format for both UNIX and Windows platforms.

If you are planning to install multiple Oracle Utilities Framework environments operated by different Oracle Utilities Administrator user ids, you must complete each of the following installation steps for each Administrator userid.

1. Log in to the application server host as the Oracle Utilities Framework administrator user ID (default ceases).
2. Create a temporary directory such as c:\ouaf\temp or /ouaf/temp. (Referred to below as <TEMPDIR>.)

   This directory must be located outside any current working Oracle Utilities application environment. All files that are placed in this directory as a part of the installation can be deleted after completing a successful installation.
3. Copy the file FW-V4.1.0-MultiPlatform.jar from the delivered package to the <TEMPDIR>. If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.

4. Decompress the file:

```
cd <TEMPDIR>

jar -xvf FW-V4.1.0-MultiPlatform.jar
```

> Note: You will need to have Java JDK installed on the machine used to (un)jar the application server installation package. Please install the JDK that is supported for the install on your platform to be able to use the jar command. This is the location of Java packages: http://java.sun.com/products/archive/index.html

A sub-directory named "FW.V4.1.0" is created. It contains the installation software for the Oracle Utilities framework application server.

Set Permissions for the cistab File in UNIX

Every Oracle Utilities Application Framework environment installed on a server must be registered in the /etc/cistab file located on that server. On UNIX servers, generally only the root user ID has write permissions to the /etc directory. Since the installation process is run by the Oracle administrator user ID (cissys), this user ID may not be able to write to /etc/cistab table.

The install utility checks permissions and if it identifies a lack of the necessary permissions, it generates a script in the <TEMPDIR>/FW.V4.1.0 directory named cistab_<SPLENVIRON>.sh. Run the generated script using the root account before continuing with the installation process. The script initializes the cistab file in /etc directory (if it is the first Oracle Utilities Framework application environment on the server) and registers a new environment.

The generated script also changes the owner of /etc/cistab file to the Oracle Utilities Framework administrator user ID, so that the next time a new environment is created by the same Oracle Utilities Framework administrator user ID, you do not need to run the generated script with the root user ID. Instead the install utility itself proceeds with the registration.

If you are reinstalling an existing environment, only the validation of /etc/cistab entry is done by the install utility, no new registration occurs. The install utility interactively instructs you about every step that needs to occur in each specific case.

If you are planning to upgrade an existing environment it is your responsibility to take a backup prior to the installation process. The installation utility does not create a backup of existing environment.

Installing Oracle Utilities Application Framework Application Server

This section outlines the steps for installing the Application Framework.

Brief Description of the Installation Process

1. Log on as the Oracle Utilities Framework administrator (the default is cissys on UNIX) or as a user with Administrator privileges (on Windows).
2. Configure your application server and any third-party software required for your platform, as outlined in **Chapter 6: Installing Application Server Prerequisite Software**.

   For example, create all environment variables such as HIBERNATE_JAR_DIR, JAVA_HOME, etc.
3. Change directory to the <*TEMPDIR*>/FW.V4.1.0 directory.
4. Start the application installation utility by executing the appropriate script:

   UNIX: ksh ./install.sh

   Windows: install.cmd
5. Follow the messages and instructions that are produced by the application installation utility. Use the completed worksheets in the section **Application Framework Installation and Configuration Worksheets** on page 4-4 to assist you.
6. Installation of Oracle Utilities Framework Application Server is complete if no errors occurred during installation.

Detailed Description of the Installation Process

1. Log on to the host server as Oracle Utilities Application Framework administrator.

   Logon as cissys (on UNIX) or as a user with Administrator privileges (on Windows)
2. Configure application server and third-party software.

   Complete all steps outlined in **Chapter 6: Installing Application Server Prerequisite Software**. You will need to obtain specific information for the install.
3. Change directory to the <*TEMPDIR*>/FW.V4.1.0 directory and start the application installation utility by executing the appropriate script:

   UNIX: ksh ./install.sh

   Windows: install.cmd
4. On the Environment Installation Options menu, select item 1: Third Party Software Configuration.

   Use the completed Third Party Software Configuration worksheet to complete this step. See **Application Framework Installation and Configuration Worksheets** on page 4-4.
5. Select menu item 50: Environment Installation Options.

   Use the completed Environment Installation Options Worksheet to complete this step. See **Application Framework Installation and Configuration Worksheets** on page 4-4.

   Note: You must create the directory for output (the Log Mount Point). The installation process fails if this directory does not exist.

   - Specify the environment name and the environment directory names for a new installation on a menu screen.

- Specify the type of the database your environment will be connected to (the default will be Oracle).
- Specify the Web Application Server your environment will run with (the default will be WebLogic).
- Specify if this environment will be used for the Oracle Utilities Customer Care and Billing or Oracle Enterprise Taxation Management product. Enter **N** if this environment will be used for Oracle Utilities Business Intelligence, Oracle Utilities Mobile Workforce Management, or Oracle Utilities Meter Data Management.
- Enter **P** to accept the selected options.
- During this step, the specification of a new environment is checked for validity against /etc/cistab and the permissions on mount points and directories.

6. Configure environment parameters.
   - During this step you will configure environment parameters such as Web server hosts and ports, database name, and userid.
   - The application installation utility shows default values for some configuration options.
   - Use the completed Environment Configuration Worksheet to assist you.

     Note: Every option requires a value for a successful install. It is important to provide all values.
   - When you are done with the parameters setup, proceed with the option **P. Write Configuration File**
   - You will be warned if you did not edit a section. You may proceed if you want to keep the default settings.
   - The application installation utility copies the installation media to a new environment.
     - The installation utility copies the new version software from the temporary installation media directory to the new environment.
     - If any manual or electronic interruption occurs during this step, you can rerun the install utility from the beginning and follow the interactive instructions. The application installation utility is able to recover from such a failure.
   - The application installation utility generates environment configuration parameters:
     - The application installation utility automatically executes the script initialSetup.sh (on UNIX) or initialSetup.cmd (on Windows), located in $SPLEBASE/bin (%SPLEBASE%\bin on Windows) directory. This script populates different application template configuration files with the new environment variables values and completes the rest of the installation steps.
7. Set up environment variables.

   Once the ENVIRON.INI file is created and contains the correct environment parameters, the application installation utility starts a sub shell to the current process by executing the splenviron.sh (on UNIX) or splenviron.cmd (on Windows) script, located in $SPLEBASE/bin (or %SPLEBSE%\etc for Windows) directory. This script sets up all the necessary environment variables and shell settings for the application server to function correctly.

   From this point, a number of environment variables have been set up. Some key ones are:
   - $PATH - an adjustment to $PATH is made so that all of the environment scripts and objects will be in the path.
   - $SPLEBASE (%SPLEBASE%) - stands for <SPLDIR>/<SPLENVIRON> directory
   - $SPLOUTPUT (%SPLOUTPUT%) - stands for <SPLDIROUT>/<SPLENVIRON> directory

Note: Make sure that this directory exists. Otherwise the installation script will fail.

- $SPLENVIRON (%SPLENVIRON%) - environment name

For future operations or any post installation steps, you need to first execute the following command to connect your session to the new environment:

UNIX: $SPLEBASE/bin/splenviron.sh -e $SPLENVIRON

Windows:%SPLEBASE%\bin\splenviron.cmd -e %SPLENVIRON%

You need to execute this script each time you want to be connected to the specific environment before performing manual operations such as shutdown, startup or performing an additional application product installation.

When you have finished the install process, your current online session will be connected to the new environment.

8. Generate environment configuration parameters:

   The application installation utility executes the script initialSetup.sh (on UNIX) or initialSetup.cmd (on Windows), located in $SPLEBASE/bin (%SPLEBASE%\bin on Windows) directory. This script populates different application configuration files with the new environment variable values and completes the rest of the installation steps.

   Note: The initialSetup script encrypts the user ID and password values in the configuration files that it creates.

   See the section **Chapter 4: Planning the Installation** for settings and configuration.

9. Deployment for WebSphere:

   The installation utility will prompt you to deploy the ear files for WebSphere, if you will be installing ETM, CC&B or BI enter **N** and proceed to the next step.

10. Start up the environment

    The final step of the installation process will ask if you would like to start the environment, you should select **N** if you are planning on installing ETM, CC&B, MWM or BI on top of the Oracle Utilities Framework.

    When you select **Y**:

    The install utility executes the command:

    UNIX: spl.sh start

    Windows: spl.cmd start

    Follow the messages on the screen along with the logs in $SPLSYSTEMLOGS directory to ensure that the environment was started successfully.

    If the startup failed, identify the problem by reviewing the logs. Resolve any issues before attempting to restart the environment.

    Use the following utility to stop the environment:

    UNIX: spl.sh stop

    Windows: spl.cmd stop

Upgrade Installation

If you are upgrading from an earlier version of Oracle Utilities Application Framework the installation steps will be the same as for an initial installation. The upgrade installation process will upgrade the Oracle Utilities Application Framework version from V4.0.2 to V4.1.0.

There have been some changes in the application server prerequisite software required for this release compared to the previous versions. Before upgrading an existing installation please ensure that all the application server prerequisite software is installed. Also, a number of new configuration options have been added in this release. Please refer to **Application Framework Installation and Configuration Worksheets** on page 4-4.

If you are upgrading or installing into an existing environment that had customer modifications, the install utility will back up all your customer modifications in a temporary installation area and copy them back into the environment at the end of the upgrade process.

The configuration files of the existing environment are backed up in the directory $SPLEBASE/etc on UNIX and %SPLEBASE%\etc on Windows during installation by the install scripts to preserve any customer changes.

Chapter 8

Installing the Application Server Component of Oracle Utilities Business Intelligence

This section describes the procedure for installing Oracle Utilities Business Intelligence on top of the previously created Oracle Utilities Application Framework environment. This section includes:

- **Preinstallation Tasks**
- **Installing the Application**
- **Installing User Documentation**
- **Integrating Customer Modifications into the Upgraded Environment**
- **Operating the Application**
- **Operating the Application**

If the Framework installation was processed on previously existing Oracle Utilities Business Intelligence environment, then customer modifications relevant for this version and compliant with the proper naming conventions (as described in the *Oracle Utilities Business Intelligence Database Administrator's Guide)* have been preserved in the new environment by the Framework installation process.

Please read this section for additional details.

Preinstallation Tasks

This section describes the steps that should be taken before installing Oracle Utilities Business Intelligence.

Copying and Decompressing Install Media

The installation file is delivered in jar format for both UNIX and Windows platforms.

Oracle Utilities Business Intelligence is delivered in a separate installation package for each supported Operating System. Please refer to the **Supported Platforms** on page 3-5 for version and installation details regarding the database and operating system versions.

Download the installation package for your operating system and proceed as follows:

1. Log in to the host server as the Oracle Utilities Application Framework administrator userid (default cissys). This is the same user ID that was used to install the Oracle Utilities Application Framework.
2. Create a <TEMPDIR> directory on the host server, which is independent of any current or other working Oracle Utilities Business Intelligence application environment. This can be the same <TEMPDIR> used during the installation of the Oracle Utilities Application Framework.
3. Copy the file BI.V2.4.0-MultiPlatform.jar in the delivered package to a <TEMPDIR> on your host server. If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.
4. Decompress the file:

   ```
   cd <TEMPDIR>

   jar -xvf BI.V2.4.0-MultiPlatform.jar
   ```

For Windows installations, include the location of the JDK in your path before you execute the jar command.

For both Unix and Windows platforms, a sub-directory named BI.V2.4.0 is created. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application product.

Installing the Application

1. Change to the <TEMPDIR>/BI.V2.4.0 Directory.
2. Execute the script:

   UNIX:

   ```
   ksh ./install.sh
   ```

   Windows:

   ```
   install.cmd
   ```

   Note: On UNIX, ensure that you have the proper execute permission on install.sh
3. The Oracle Utilities Business Intelligence Application specific menu will appear.
4. When you are done with the parameter setup, proceed with the option P. Write Configure file.
5. Once the install has finished successfully, you will need to execute Post Installation steps:

Postinstallation steps:

Start up the environment. Run the following command to start the environment:

UNIX: spl.sh start

Windows: spl.cmd start

Follow the messages on the screen along with the logs in $SPLSYSTEMLOGS directory to ensure that the environment was started successfully.

If the startup failed, identify the problem by reviewing the logs. Resolve any issues before attempting to restart the environment.

You should postpone the startup process until you are done with post installation steps.

(See the note below:)

Use the following utility to stop the environment:

UNIX: spl.sh stop

Windows: spl.cmd stop

Note: The first time you start Oracle Utilities Business Intelligence, you need to log in to the WebLogic console and give system access to cisusers role. The WebLogic console application can be accessed through the following URL:

https://<hostname>:<admin port>/console

The <admin port> is the Admin Console Port Number specified under the Security Configuration menu during installation.

Upgrade Installation

If you are upgrading from an earlier version of Oracle Utilities Business Intelligence the installation steps will be same as that for an initial installation. The upgrade installation process supports upgrades for Oracle Utilities Business Intelligence versions 2.3.1.

There have been some changes in the application server prerequisite software required for this release compared to the previous versions. Before upgrading an existing installation please ensure that all the application server prerequisite software is installed. Also, a number of new configuration options have been added in this release.

If you are upgrading or installing into an existing environment that had customer modifications, the install utility will back up all of your customer modifications in a temporary installation area and copy them back into the environment at the end of the upgrade process.

The configuration files of the existing environment are backed up in the directory $SPLEBASE/etc on UNIX and %SPLEBASE%\etc on Windows during installation by the install scripts to preserve any customer changes.

Installing User Documentation

This section provides instructions for installing the Oracle Utilities Business Intelligence user documentation that is supplied with the system. Oracle Utilities Business Intelligence user documentation is provided in PDF format for printing.

The documentation is also provided in HTML format located inside the Oracle Utilities Business Intelligence application server installation package. It is automatically installed and can be launched from the user interface. The files are under the applications directory packaged in the file named help.war. User documentation is provided in English (ENG). The documentation material is divided into the following subdirectories underneath the language directory:

- B1: Oracle Utilities Business Intelligence User Guide

- F1: Oracle Utilities Application Framework Administration and Business Process Guides

Integrating Customer Modifications into the Upgraded Environment

If you are upgrading or installing into an existing environment that had customer modifications, the install utility will have backed up all your customer modifications in a temporary installation area and copied them back into the environment at the end of the upgrade process. The *Oracle Utilities Business Intelligence Database Administrator's Guide* describes the rules supported by the installation utility to preserve customer modifications. It also discusses the naming conventions for implementing custom modules.

The configuration files of the existing environment are backed up in the directory $SPLEBASE/etc on UNIX and %SPLEBASE%\etc on Windows during installation by the install scripts to preserve any customer changes. Since technologically the framework of this version differs significantly from all previous versions, all configuration files are regenerated from the new templates by the installation process and any previous customer modifications to these configuration files will need to be reapplied manually where applicable, using the backed up files as a reference.

The upgraded version of Oracle Utilities Business Intelligence base product may require significant changes to integrate into the new version. Please refer to the Oracle Utilities Business Intelligence Software Development Kit product documentation for instructions how to do that.

In case no code changes are required to be applied to the upgraded environment, it is necessary to rebuild the CM Java sources. In order to run this build, follow these steps:

1. Execute applyCM from corresponding Oracle Utilities Business Intelligence Software Development Kit version on the upgraded environment with option "-b" (full build) option. For more details, see the document 02Cookbook.doc within Oracle Utilities Business Intelligence Software Development Kit documentation:

   UNIX:

   ```
   cd $SPLEBASE
   <SDK bin folder>/applyCM.sh -b
   ```

   Windows:

```
cd %SPLEBASE%
<SDK bin folder>\applyCM.cmd -b
```

The script initialCMSetup utility is provided for your convenience to help complete the reintegration of your custom modifications into the new environment.

To execute initialCMSetup utility:

1. Login to the host server with Oracle Utilities Business Intelligence administrator userid.
2. Connect your session to the target environment with the following command:

   UNIX:

   ```
   $SPLEBASE/bin/splenviron.sh  -e $SPLENVIRON
   ```

   Windows:

   ```
   %SPLEBASE%\bin\splenviron.cmd  -e %SPLENVIRON%
   ```

3. Execute the following command:

   UNIX:

   ```
   initialCMSetup.sh
   ```

   Windows:

   ```
   initialCMSetup.cmd
   ```

Operating the Application

At this point your installation and custom integration process is complete.

Be sure to read the *Oracle Utilities Business Intelligence Server Administration Guide* for more information on further configuring and operating the Oracle Utilities Business Intelligence system.

Installing Service Packs and Patches

Periodically, Oracle Utilities releases a service pack of single fixes for its products. A service pack is an update to an existing release that includes solutions to known problems and other product enhancements. A service pack is not a replacement for an installation, but a pack consisting of a collection of changes and additions for it. The service pack may include changes to be applied to the application server, the database, or both. The service pack includes all files necessary for installing the collection of changes, including installation instructions.

Between services packs, Oracle Utilities releases patches to fix individual bugs. For information on installing patches, see knowledge base article ID 974985.1 on My Oracle Support.

Service packs and patches can be downloaded from My Oracle Support (https://support.oracle.com/).

Chapter 9

Additional Tasks

This section describes tasks that should be completed after installing Oracle Utilities Business Intelligence, including:

- **Customizing Configuration Files**
- **Integrating Existing Customer Modifications**
- **Generating the Application Viewer**
- **Building Javadoc Indexes**
- **Configuring the Environment for Batch Processing**
- **Customizing the Logo**
- **Installing and Configuring Oracle MapViewer**

Customizing Configuration Files

You may wish to make customer modifications to various configuration files. To do so, you should locate the configuration file you want to customize and edit it manually.

Configuration files are generated from delivered templates in the Oracle Utilities installation and are populated by values entered by the installation utility during the configuration process. In future upgrades of Oracle Utilities application software versions, some templates may be changed to reflect new software version requirements. In this case, the upgrade process will back up your customized configuration file and will regenerate a configuration file based on a new template. You will need to review the new configuration file and apply your customized changes back if still applicable for the new version.

For configuration files that are located in a Web application (for example, web.xml, hibernate.properties), of the Web application during installation process, you will not be able to edit the configuration files directly.

You will need to follow the procedure:

- Locate the configuration file you want to customize in the directory $SPLEBASE/etc/conf.
- Apply your changes.
- Update application war file with the latest changes by executing the command:

  UNIX: $SPLEBASE/bin/genupdatewar.sh

  Windows: %SPLEBASE%\bin\genupdatewar.cmd

Integrating Existing Customer Modifications

If the installation utility was executed on a previously existing environment, it will preserve customer modifications according to the rules described in the Oracle Utilities Business Intelligence *Database Administrator's Guide*. In most cases, additional development or configuration actions need to be taken to adjust and integrate upgraded customer modifications to the new version.

Refer to the Oracle Utilities Business Intelligence installation section of this document and to the SDK documentation for more information.

Generating the Application Viewer

You may extend Application Viewer capabilities within an environment by generating additional items. The additional items that can be generated include algorithm type and related algorithm information, maintenance object information and data dictionary information.

This section details the steps necessary to generate the additional items.

1. Shut down the environment.
2. Initialize a command shell:

   The scripts that are provided with the system need to be run from a shell prompt on the machine that you installed the application on. Before such scripts can be run the shell must be "initialized" by running the splenviron script provided with the system.

   For Windows:

   The command window should be opened on the Windows server that you installed the application on.

   In the below example you should replace the variables:

   %SPLEBASE% with the Full directory name that you installed the application into

   and

   %SPLENVIRON% with the name you gave to the environment at installation time.

   To initialize the environment type the following in your command prompt:

   %SPLEBASE%\bin\splenviron.cmd -e %SPLENVIRON%

   For example:

   ```
   D:\ouaf\TEST_ENVIRON1\bin\splenviron.cmd -e TEST_ENVIRON1
   ```

   For Unix:

   You will need to logon to your UNIX box as the Oracle Utilities Administrator (default cissys) and open a shell prompt.

   In the below example you should replace the variables

   $SPLEBASE with the Full directory name that you installed the application into

   and

   $SPLENVIRON with the name you gave to the environment at installation time.

   To initialize the environment type:

   $SPLEBASE/bin/splenviron.sh -e $SPLENVIRON

   For example:

   ```
   /ouaf/TEST_ENVIRON1/bin/splenviron.sh -e TEST_ENVIRON1
   ```

3. Execute the script to generate all information

   Execute the following command for your operating system

   UNIX:

   ```
   ksh $SPLEBASE/bin/genappvieweritems.sh
   ```

   Windows:

   ```
   %SPLEBASE%\bin\genappvieweritems.cmd
   ```

4. Restart your application

You may use the supplied scripts genwasdeploy.sh for WebSphere and genoasdeploy.sh for Oracle Application Server, or use a rapid deployment method supplied with your particular web application server.

Building Javadoc Indexes

The following script allows rebuilding the Javadocs indexes in the appViewer java module. This is necessary after Customer Modifications have been applied to an environment. (This needs to be run only if the Customer Modification includes Java Code.)

Windows:

```
%SPLEBASE%\bin\buildJavadocsIndex.cmd
```

UNIX:

```
ksh $SPLEBASE/bin/buildJavadocsIndex.sh
```

Configuring the Environment for Batch Processing

See the *Batch Server Administration Guide* for information on configuring the environment for batch processing.

Customizing the Logo

The customer may want to replace the Oracle Utilities logo image on the Main menu with another logo image. To do this, put the logo <customer_logo_file>.gif file into the directory $SPLEBASE/etc/conf/root/cm and create a new "External" Navigation Key called CM_logoImage. To do that, run the Oracle Utilities application from the browser with the parameters: http://<hostname>:<port>/cis.jsp?utilities=true&tools=true. From the Admin menu, select Navigation Key. Add the above Navigation Key with its corresponding URL Override path. The syntax for the URL path is:

For Windows: http://<host name>:<port>/<Web Context>/cm/<customer_logo_file>.gif

For UNIX: http://<host name>:<port>/<Web Context>/cm/<customer_logo_file>.gif.

The root directory may be deployed in war file format for runtime environment (SPLApp.war). Use provided utilities to incorporate your cm directory into SPLApp.war file.

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5. cglib-2.2.jar
6. classycle.1.1.jar
7. commons-beanutils-core-1.8.1.jar
8. commons-cli-1.1.jar
9. commons-codec-1.4.jar
10. commons-collections-3.1.jar
11. commons-fileupload-1.2.1.jar
12. commons-httpclient-3.0.1.jar
13. commons-io-1.3.2.jar
14. commons-lang-2.2.jar
15. ehcache-1.2.3.jar
16. log4j-1.2.15.jar
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18. serializer-2.7.1.jar
19. stax2.jar
20. velocity.1.4.jar
21. wstx-asl-3.2.1.jar
22. xalan-mod-2.7.1.jar
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