

Oracle Financial Services
Profitability Management
Application Pack

Installation and Configuration
Guide

Release 8.0.0.0.0



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Document Control

This section provides the revision details of the document.

Version Number	Revision Date	Changes Done
1.0	Updated January 2015	Captured installation and configuration steps for 8.0.0.0.0 Release
1.1	March 2015	Added Configurations for Java 7.
1.2	July 2015	Added Configurations for Java 8.
1.3	August 2015	Added 21133780 patch details, if installing on 8.0.1.0.0 version.
1.4	September 2015	Added an Appendix to capture details on upgrading an existing OFSAA 8.0.x Java 7 instance to Java 8
1.5	October 2015	Added a section on Configuring Internal Service (Document Upload/ Download).
1.6	April 2017	Added details of consolidated one-off patch 25777667 .

This document includes the necessary instructions to install the OFS PFT Application Pack 8.0.0.0.0 and perform the required post installation configurations. The latest copy of this guide can be accessed from [OTN library](#).

Preface

This Preface provides supporting information for the Oracle Financial Services Analytical Applications Profitability Pack Installation Guide and includes the following topics:

- Summary
- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Summary

You can find the latest copy of this document in [OTN library](#) which includes all the recent additions/revisions (if any) done till date.

Before you begin the installation, ensure that you have an access to the Oracle Support Portal with the required login credentials to quickly notify us of any issues at any stage. You can obtain the login credentials by contacting Oracle Support.

Audience

The Oracle Financial Services Analytical Applications (OFSAA) profitability pack Installation and Configuration Guide is intended for Administrators, Business User, Strategists, and Data Analyst, who are responsible for installing and maintaining the application pack components.

The document assumes you have experience in installing Enterprise components. Basic knowledge about the OFSAA PROFITABILITY pack components, OFSAA Architecture, UNIX commands, Database concepts and Web Server/ Web Application Server is recommended.

Following are the expected preparations from the administrator before starting the actual installation:

- Awareness of the OFSAA Tier Architecture. For more information, see the *Application Tiers* section.
- Decision on the appropriate OFSAA Deployment Option. For more information, refer the *Recommended Deployment Options* section.

Related Documents

This section identifies additional documents related to OFSAA Infrastructure. You can access Oracle documentation online from Documentation Library ([OTN](#)).

- [Oracle Financial Services Funds Transfer Pricing Management User Guide](#)
- [Oracle Financial Services Profitability Management User Guide](#)
- [Oracle Financial Services Enterprise Financial Performance Analytics User Guide](#)
- [Oracle Financial Services Institutional Performance Analytics User Guide](#)
- [Oracle Financial Services Retail Performance Analytics User Guide](#)

Conventions and Acronyms

Conventions	Description
AIX	Advanced Interactive executive
DEFQ	Data Entry Forms and Queries
DML	Data Manipulation Language
EAR	Enterprise Archive
EJB	Enterprise JavaBean
ERM	Enterprise Resource Management
FTP	File Transfer Protocol
GUI	Graphical User Interface
HTTPS	Hypertext Transfer Protocol Secure
J2C	J2EE Connector
J2EE	Java 2 Enterprise Edition
JDBC	Java Database Connectivity
JDK	Java Development Kit
JNDI	Java Naming and Directory Interface
JRE	Java Runtime Environment
JVM	Java Virtual Machine

1 About OFSAA and OFSAA Application Packs

This chapter includes the following topics:

- [About Oracle Financial Services Analytical Applications \(OFSAA\)](#)
- [About Oracle Financial Services Analytical Application \(OFSAA\) Pack](#)
- [About Oracle Financial Services Profitability 8.0.0.0.0 Applications Pack](#)
- [About Oracle Financial Services Analytical Applications Infrastructure \(OFSAAI\)](#)

1.1 About Oracle Financial Services Analytical Applications (OFSAA)

In today's turbulent markets, financial institutions require a better understanding of their risk-return, while strengthening competitive advantage and enhancing long-term customer value. Oracle Financial Services Analytical Applications (OFSAA) enable financial institutions to measure and meet risk adjusted performance objectives, cultivate a risk management culture through transparency, lower the costs of compliance and regulation, and improve insight into customer behavior.

OFSAA uses industry-leading analytical methods, shared data model and applications architecture to enable integrated risk management, performance management, customer insight, and compliance management. OFSAA actively incorporates risk into decision making, enables to achieve a consistent view of performance, promote a transparent risk management culture, and provide pervasive intelligence.

Oracle Financial Services Analytical Applications delivers a comprehensive, integrated suite of financial services analytical applications for both banking and insurance domain.

1.2 About Oracle Financial Services Analytical Applications (OFSAA) Pack

OFSAA applications are packaged, and released as Application Packs starting from 8.0 release. An Application Pack is a group of OFSAA products packaged together in a single installer and addresses specific functional area via its products that are grouped together. Packaging applications in a group ensures simplified installation, maintenance, development and integration in an integrated deployment.

The following figure depicts the various application packs that are available across the OFSAA Banking and Insurance domains:

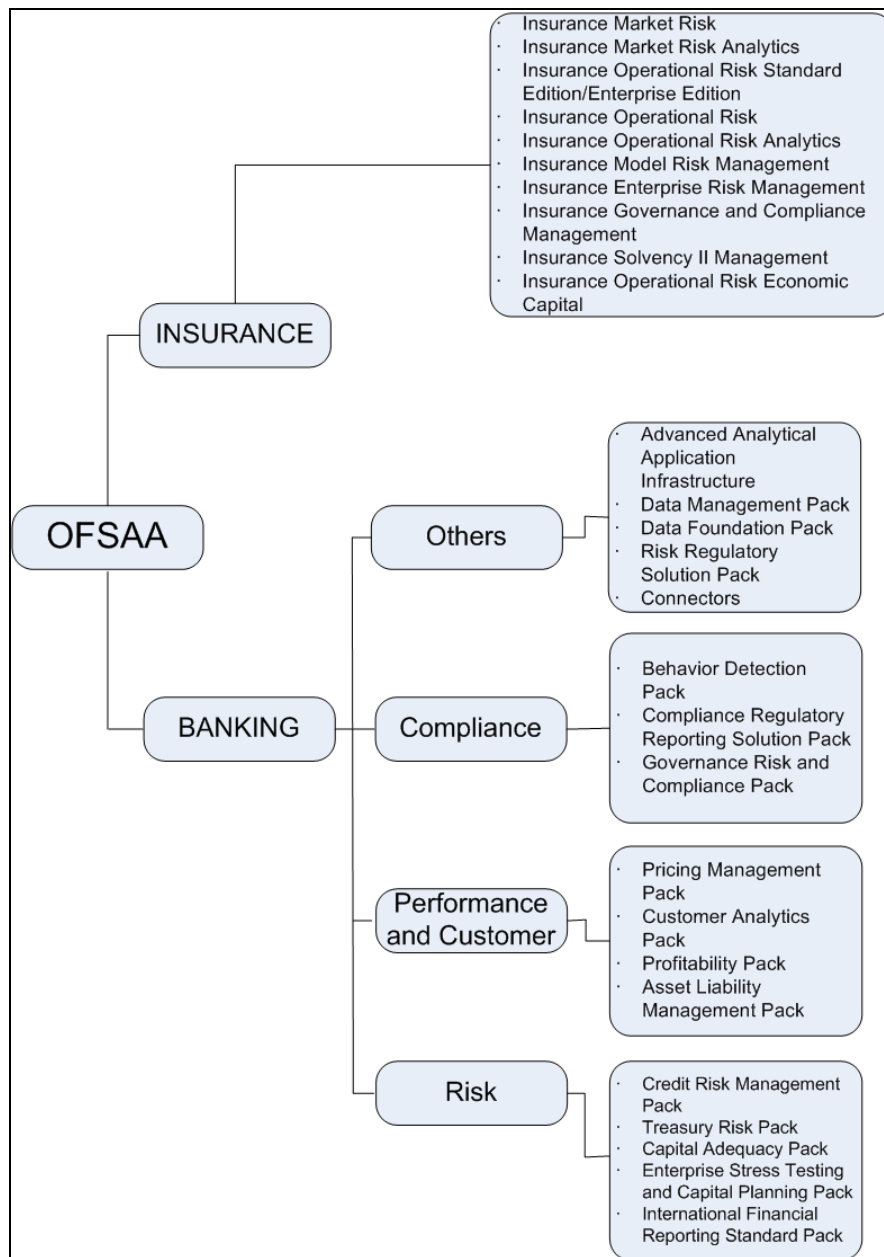


Figure 1: OFSAA Application Pack

1.3 About Oracle Financial Services Profitability 8.0.0.0.0 Applications Pack

OFS Profitability 8.0.0.0.0 Pack includes the following applications:

- **Oracle Financial Services Analytical Applications Infrastructure:** Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) powers the Oracle Financial Services Analytical Applications family of products to perform the processing, categorizing, selection and manipulation of data and information needed to analyze, understand and report on specific performance, risk, compliance and customer insight issues by providing a

strong foundation for the entire family of Oracle Financial Services Analytical Applications across the domains of Risk, Performance, Compliance and Customer Insight.

- **Oracle Financial Services Funds Transfer Pricing Management:** It enables the bank to apply various transfer pricing methods on products to calculate funds transfer price. It calculates transfer price across all product types varying in terms of characteristics like fixed rate or floating rate instruments, bullet or amortizing or fixed tenor or perpetual instruments. In addition it also supports the calculation of transfer price at account level or ledger level including migration of charge or credit to ledger if required.
- **Oracle Financial Services Profitability Management:** It helps Banks and Financial services institutions manage and monitor interest rate risk, liquidity risk, foreign currency risk and earnings risk. The application models every loan, deposit, investment portfolio individually to help institutions better understand the risks they have assumed and their sensitivity to economic conditions.
- **Oracle Financial Services Enterprise Financial Performance Analytics:** It is based upon a dedicated reporting mart built on the new Financial Services Data Model. OFSEFPA leverages several components of OBIEE technology including Dashboards and Answers. It includes various Dashboards and Reports for the user to carry out various Profitability Management based analytics.
- **Oracle Financial Services Institutional Performance Analytics:** It provides strategic insights on - Profitability of the business and the underlying customers, Product holdings and Relationship depth across the organization, Behavioral and Engagement trends of it's target segments – exposures, commitments, line utilization, assets/liabilities, deposits, withdrawals, Fees, Income, recent transactions and so on, Efficiency of investments (like marketing, partner development), Efficiency of the sales force in terms of ongoing customer revenue generation, cross-sell and up-sell, product usage and pipeline.
- **Oracle Financial Services Retail Performance Analytics:** It focalizes on Summary performance of the LOBs and overall profitability, Portfolio mix, LOB specific profitability reports to be analyzed against key dimensions like customer segments, product family, region, branch, risk scores and so on, Product holdings and Relationship depth across the LOBs, Customer Trends across performance drivers like Sales, Balances, Deposits, Product subscriptions (revenue services), Credit scores and delinquency bands, losses, and so on, Wallet Share analysis and customer lifetime value, Efficiency of investments (like marketing, branch, channel and so on) over time.

1.4 About Oracle Financial Services Analytical Applications Infrastructure (OFS AAI)

Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) powers the Oracle Financial Services Analytical Applications family of products to perform the processing, categorizing, selection and manipulation of data and information needed to analyze, understand

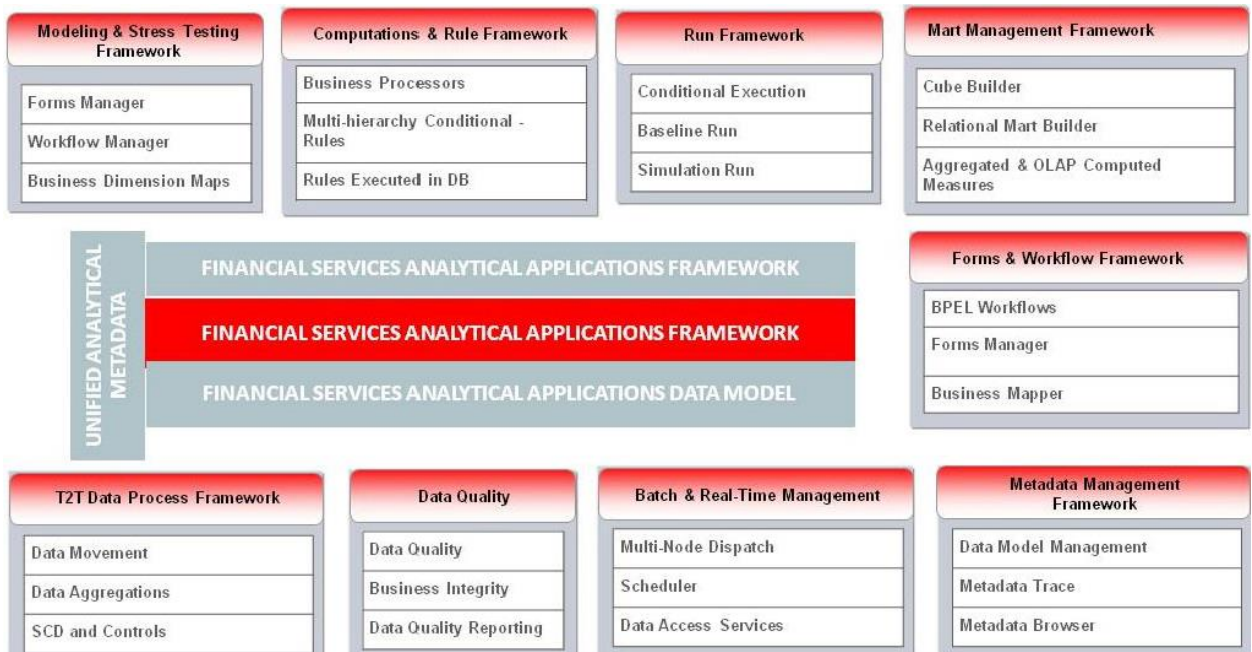
and report on specific performance, risk, compliance and customer insight issues by providing a strong foundation for the entire family of Oracle Financial Services Analytical Applications across the domains of Risk, Performance, Compliance and Customer Insight.

Components of OFSAAI

The OFSAA Infrastructure is comprised of a set of frameworks that operates on and with the Oracle Financial Services Analytical Applications Data Model and form the array of components within the Infrastructure.

The OFSAA Infrastructure components/ frameworks are installed in two layers; primarily the metadata server and Infrastructure services run on one layer, and the UI and presentation logic runs on the other. The UI and presentation layer is deployed on any of the supported J2EE Servers.

The following figure depicts the various frameworks and capabilities that make up the OFSAA Infrastructure:



OFSAA Infrastructure High Availability

The current release of the OFSAA Infrastructure supports only "Single Instance" installation for the Infrastructure components. However, the High Availability (HA) for the Database Server and/ or the Web Application Server clustering and deployment are supported in this release.

This release supports Active-Passive model of implementation for OFSAAI components. For more information, refer [Configuration for High Availability- Best Practices Guide](#).

2 Understanding OFS Profitability Application Pack Installation

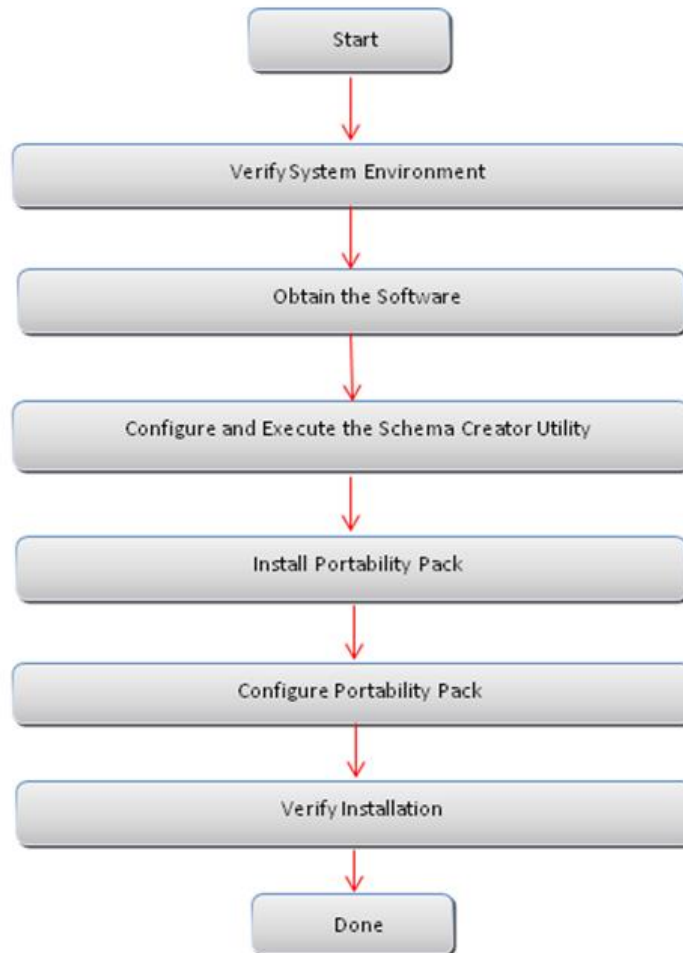
This chapter includes the following topics:

- [Installation Overview](#)
- [Deployment Topology](#)
- [Hardware and Software Requirements](#)
- [Verifying the System Environment](#)
- [Understanding Installation Modes](#)

2.1 Installation Overview

This section gives an overview of the OFS Profitability Applications Pack Installation. Following figure shows the order of procedures you need to follow:

Installation Workflow



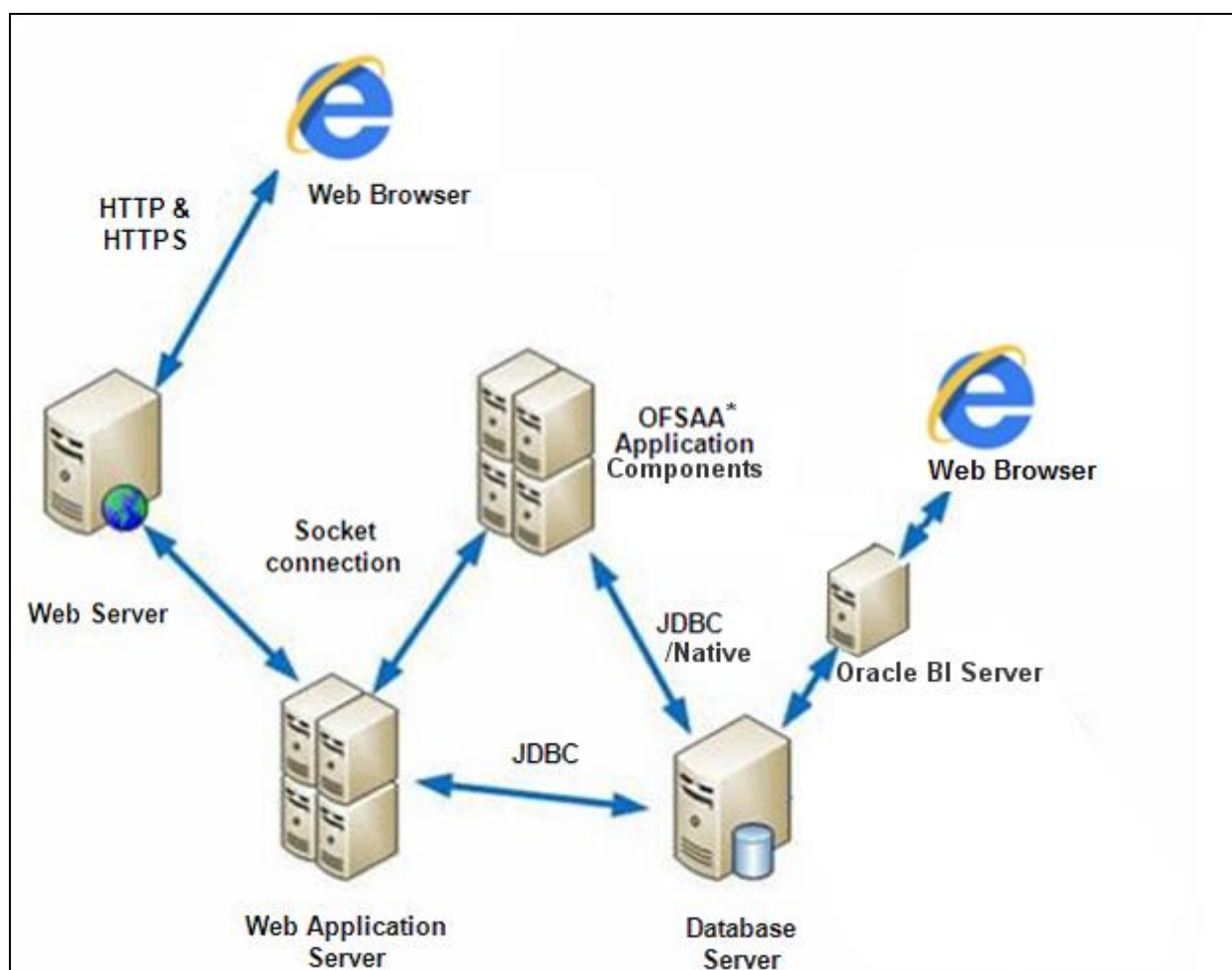
1: OFS Profitability Applications Pack Installation Tasks and Descriptions

Tasks	Details and Documentation
Verify Systems Environment	To verify that your system meets the minimum necessary requirements for installing and hosting the OFS Profitability Application Pack, see. Verifying System Environment .
Obtain the software	To access and download the OFS Profitability Application Pack, See Obtaining the software .
Configure and Execute the Schema Creator Utility	For instructions on creating the database schemas, See Configuring and Executing the Schema Creator Utility .
Install OFS Profitability Application Pack	For instructions on Installing OFS Profitability Application Pack , See Installing the OFS Profitability Pack Installer .

Tasks	Details and Documentation
Configure OFS Profitability Setup	See Post Installation Configuration and Post Deployment .

2.2 Deployment Topology

The following figure depicts the typical deployment topology implemented for OFSAA Applications.



2.3 Hardware and Software Requirements

This section describes the various Operating Systems, Database, Web Server, and Web Application Server versions, and other variant details on which this release of the Oracle Financial Services Profitability Application Pack has been qualified.

Note: OFS Profitability Application Pack installation can be performed on both Virtual and Physical servers.

2.3.1 Configurations supported for Java 7

The following table shows the minimum hardware and software requirements for installing OFS Profitability Application Pack (for Java 7).

Table 2: Configurations supported for Java 7

Requirement	Sub-Category	Value
Operating System	Oracle Linux / Red Hat Enterprise Linux (x86-64)	Oracle Linux Server release 5.3 up to 5.10 - 64 bit Oracle Linux Server release 6.0 and above - 64 bit Note: Same versions of RHEL is supported
	Oracle Solaris (SPARC)/ Solaris x86	Oracle Solaris v5.10 Update 11 and above - 64 bit Oracle Solaris v5.11 update 1 and above – 64 bit
	IBM AIX (PowerPC)	AIX 6.1 (TL 09 and above) - 64 bit
	Shell	KORN Shell (KSH)
<p>Note:</p> <ul style="list-style-type: none"> If the OS is IBM AIX 6.1 and the file size limit for the AIX user on the target server is too small, configure the size parameter setting for "Large File Support". Follow these steps: Change the file size limit for the user that initiates the transfer on the AIX system. To change the file size limit for a particular user, add or edit the fsize attribute for the user in the /etc/security/limits file on the AIX system. Change the file size limit to unlimited (fsize = -1) or to a size equal to the size of the file being transferred. This may require an restart 		

Requirement	Sub-Category	Value
		<p>of the AIX server to pick up the new configuration. For more information refer IBM Support.</p> <ul style="list-style-type: none"> If the operating system is RHEL, install the package lsb_release using one of the following commands by logging in as root user: <ul style="list-style-type: none"> yum install redhat-lsb-core yum install redhat-lsb <p>The above is required as during the installation process, the following command is executed to get the OS version and release:</p> <pre>lsb_release -r</pre> <p>Based on the returned information, the installer copies the appropriate binary and library files into the \$FIC_DB_HOME/bin and \$FIC_DB_HOME/lib folders.</p>
Java Runtime Environment	Oracle Linux / Red Hat Enterprise Linux Oracle Solaris	Oracle Java Runtime Environment (JRE) 1.7.x - 64 bit
Oracle Database Server and Client	IBM AIX	Oracle Database Server Enterprise Edition 11g Release 2 (11.2.0.3.0 +) - 64 bit RAC/ Non-RAC with/ without partitioning option Oracle Database Server Enterprise Edition 12c Release 1 (12.1.0.1.0 +)- 64 bit RAC/ Non-RAC with/ without partitioning option Oracle Client 11g Release 2 (11.2.0.3.0+) - 64 bit Oracle Client 12c Release 1 (12.1.0.1.0+) - 64 bit Oracle 11g Release 2 (11.2.0.3+) JDBC driver (Oracle thin driver) Oracle 12C Release 1 (12.1.0.1+) JDBC driver (Oracle thin driver) Oracle Distribution of R version 2.15.1, 2.15.2 or 2.15.3.(Optional) Oracle R Enterprise (Server) version 1.4. (Optional)

Requirement	Sub-Category	Value
	<p>Note: Ensure that the following patches are applied:</p> <ul style="list-style-type: none"> ▪ Oracle Server 12c, v12.1.0.1 – 17082699 ▪ Oracle Server 12c, v12.1.0.2 - 19392604, 19649591 ▪ Also for latest information, refer http://support.oracle.com/ , 12.1.0.2 Bundle Patches for Engineered Systems and DB In-Memory - List of Fixes in each Bundle (Doc ID 1937782.1) ▪ Oracle R Enterprise 1.4 requires Oracle Database Enterprise Edition 11.2.0.3/ 11.2.0.4/ 12.1.0.1. 	
OLAP	Oracle Hyperion Essbase	V 11.1.2.1+ (Server and Client) with Oracle 11g Database V 11.1.2.3+ (Server and Client) with Oracle 12c Database
	Oracle OLAP	V 11.2.0.3+ with Oracle 11g Database V 12.1.0.1+ with Oracle 12c Database
	<p>Note: Oracle Hyperion Essbase & Oracle OLAP is required only if you are using the OLAP feature of OFSAAI. For Oracle OLAP, ensure that you have configured the Oracle Database server with OLAP option.</p>	
Web Server/ Web Application Server	Oracle Linux / Red Hat Enterprise Linux Oracle Solaris IBM AIX	Oracle HTTP Server 11.1.1.1/ Apache HTTP Server 2.2.x/ IBM HTTP Server Oracle HTTP Server 11.1.1.1/ Apache HTTP Server 2.2.x/ IBM HTTP Server <ul style="list-style-type: none"> ▪ Oracle WebLogic Server 12.1.2+ (64 bit) ▪ IBM WebSphere Application Server 8.5+ with bundled IBM Java Runtime (64 bit) ▪ Apache Tomcat 8.0.x (64 bit)

Requirement	Sub-Category	Value
	Note: OFSAA Infrastructure web component deployment on Oracle WebLogic Server with Oracle JRockit is not supported.	
Desktop Requirements	Operating System	MS Windows 7/ Windows 8/ Windows 8.1
	Browser	MS Internet Explorer 9 , 10 (Compatibility Mode) and 11 (Compatibility Mode) Oracle Java plug-in 1.7.0+* (64- bit) Turn off Pop-up blocker settings. For more information, refer Internet Explorer Settings .
	Office Tools	MS Office 2007/ 2010/2013 Adobe Acrobat Reader 8 and above
	Screen Resolution	1024*768 or 1280*1024
Other Softwares	Directory Services	OFSAAI is qualified on both OPEN LDAP 2.2.29+ and Oracle Internet Directory v 11.1.1.3.0. However, it can be integrated with other directory services software like MS Active Directory.
	Note: Configuration of Directory services software for OFSAAI installation is optional. For more information on configuration, see Infrastructure LDAP Configuration. Open LDAP needs to be installed on MS Windows Server machine only.	

2.3.2 Configurations supported for Java 8

The following table shows the minimum hardware and software requirements for installing OFS PFT Application Pack (for Java 8).

Table 3: Configurations supported for Java 8

Requirement	Sub-Category	Value
Operating System	Oracle Linux / Red Hat Enterprise Linux (x86-64)	Oracle Linux Server release 5.3 up to 5.10 - 64 bit Oracle Linux Server release 6.0 and above - 64 bit Note: Same versions of RHEL is supported
	Oracle Solaris (SPARC)/ Solaris x86	Oracle Solaris v5.10 Update 11 and above - 64 bit Oracle Solaris v5.11 update 1 and above – 64 bit
	IBM AIX (PowerPC)	AIX 6.1 (TL 09 and above) - 64 bit
	Shell	KORN Shell (KSH)
<p>Note:</p> <ul style="list-style-type: none"> If the OS is IBM AIX 6.1 and the file size limit for the AIX user on the target server is too small, configure the size parameter setting for "Large File Support". Follow these steps: Change the file size limit for the user that initiates the transfer on the AIX system. To change the file size limit for a particular user, add or edit the fsize attribute for the user in the /etc/security/limits file on the AIX system. Change the file size limit to unlimited (fsize = -1) or to a size equal to the size of the file being transferred. This may require a restart of the AIX server to pick up the new configuration. For more information refer IBM Support. If the operating system is RHEL, install the package lsb_release using one of the following commands by logging in as root user: <ul style="list-style-type: none"> yum install redhat-lsb-core yum install redhat-lsb The above is required as during the installation process, the following command is executed to get the OS version and release: <pre>lsb_release -r</pre> Based on the returned information, the installer copies the appropriate binary and library files into the \$FIC_DB_HOME/bin and \$FIC_DB_HOME/lib folders. 		

Requirement	Sub-Category	Value
Java Runtime Environment	Oracle Linux / Red Hat Enterprise Linux//IBM AIX/ Oracle Solaris	Oracle Java Runtime Environment (JRE) 1.8.x - 64 bit
	IBM AIX	IBM AIX Runtime, Java Technology JRE 1.8.x - 64 bit
Oracle Database Server and Client		<p>Oracle Database Server Enterprise Edition 11g Release 2 (11.2.0.3.0 +) - 64 bit RAC/ Non-RAC with/ without partitioning option</p> <p>Oracle Database Server Enterprise Edition 12c Release 1 (12.1.0.1.0 +)- 64 bit RAC/ Non-RAC with/ without partitioning option</p> <p>Oracle Client 11g Release 2 (11.2.0.3.0+) - 64 bit</p> <p>Oracle Client 12c Release 1 (12.1.0.1.0+) - 64 bit</p> <p>Oracle 11g Release 2 (11.2.0.3+) JDBC driver (Oracle thin driver)</p> <p>Oracle 12C Release 1 (12.1.0.1+) JDBC driver (Oracle thin driver)</p> <p>Oracle Distribution of R version 2.15.1, 2.15.2 or 2.15.3.(Optional)</p> <p>Oracle R Enterprise (Server) version 1.4. (Optional)</p>
		<p>Note: Ensure that the following patches are applied:</p> <ul style="list-style-type: none"> ▪ Oracle Server 12c, v12.1.0.1 – 17082699 ▪ Oracle Server 12c, v12.1.0.2 - 19392604, 19649591 ▪ Also for latest information, refer http://support.oracle.com/ , 12.1.0.2 Bundle Patches for Engineered Systems and DB In-Memory - List of Fixes in each Bundle (Doc ID 1937782.1) ▪ Oracle R Enterprise 1.4 requires Oracle Database Enterprise Edition 11.2.0.3/ 11.2.0.4/ 12.1.0.1.
OLAP	Oracle Hyperion Essbase	V 11.1.2.1+ (Server and Client) with Oracle 11g

Requirement	Sub-Category	Value
		Database V 11.1.2.3+ (Server and Client) with Oracle 12c Database
	Oracle OLAP	V 11.2.0.3+ with Oracle 11g Database V 12.1.0.1+ with Oracle 12c Database
	<p>Note:</p> <p>Oracle Hyperion Essbase & Oracle OLAP is required only if you are using the OLAP feature of OFSAAI. For Oracle OLAP, ensure that you have configured the Oracle Database server with OLAP option.</p>	
Web Server/ Web Application Server	Oracle Linux / Red Hat Enterprise Linux /IBM AIX Oracle Solaris	Oracle HTTP Server 11.1.1.1/ Apache HTTP Server 2.2.x/ IBM HTTP Server Oracle 11g and 12c Database: <ul style="list-style-type: none"> ▪ Oracle WebLogic Server 12.1.3+ (64 bit) ▪ Apache Tomcat 8.0.x (64 bit) <p>Note: IBM WebSphere 8.5.x (Full Profile) on Java 8 is not available.</p>
	<p>Note:</p> <p>OFSAAI Infrastructure web component deployment on Oracle WebLogic Server with Oracle JRockit is not supported.</p> <p>For deployment on Oracle WebLogic Server 12.1.3+ (64 bit) with Java 8, download and install patch 18729264 from http://support.oracle.com/</p>	
Desktop Requirements	Operating System	MS Windows 7/ Windows 8/ Windows 8.1
	Browser	MS Internet Explorer 9 , 10 (Compatibility Mode) and 11 (Compatibility Mode) Oracle Java plug-in 1.7.0+* (64- bit) Turn off Pop-up blocker settings. For more information,

Requirement	Sub-Category	Value
		refer Internet Explorer Settings .
	Office Tools	MS Office 2007/ 2010/2013 Adobe Acrobat Reader 8 and above
	Screen Resolution	1024*768 or 1280*1024
Other Software	Directory Services	OFSAAI is qualified on both OPEN LDAP 2.2.29+ and Oracle Internet Directory v 11.1.1.3.0. However, it can be integrated with other directory services software like MS Active Directory.
	Note:	Configuration of Directory services software for OFSAAI installation is optional. For more information on configuration, see Infrastructure LDAP Configuration. Open LDAP needs to be installed on MS Windows Server machine only.

Note: To upgrade an existing OFSAA 8.0.x Java 7 instance to Java 8, refer [Appendix T](#).

OFS PFT Application Pack recommends the following software combinations for deployment:

Table 4: Recommended software combinations

Operating System	Database	Web Application Server	Web Server	R
Oracle Linux 5.3 up to 5.8/ 6.0 and above	Oracle Database	Oracle WebLogic Server/ Apache Tomcat Server	Oracle HTTP Server/ Apache HTTP Server	3.0.1
Oracle Solaris 5.10/ 5.11	Oracle Database	Oracle WebLogic Server/ Apache Tomcat Server	Oracle HTTP Server/ Apache HTTP Server	3.0.1

IBM AIX 5.3/ 6.1	Oracle Database	IBM WebSphere Application Server/ Apache Tomcat Server	IBM HTTP Server/ Apache HTTP Server	3.0.1
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2.4 Verifying the System Environment

To verify if your system environment meets the minimum requirements for the installation, a Pre-Install Check utility (Environment Check) is available within the Install Kit archive file. This utility can also be obtained separately by contacting Oracle Support.

Though the system environment verification is an integral and automated part of the installation of this software product, Oracle strongly recommends running this utility prior to beginning the installation as part of your organization's "Installation Readiness Verification Process".

NOTE: For more details on download and usage of this utility, see *Oracle Financial Services Analytical Applications Infrastructure Environment Check Utility Guide* given in the Related Documents section.

2.5 Understanding Installation Modes

The following modes of installation are available for the OFS Profitability Application Pack.

2.5.1 GUI Mode

This mode launches the product installation in a **Graphical User Interface (GUI) Mode**. You need to enter the required information on various panels within the UI in a user interaction format at various stages.

NOTE: Refer [Configuration for GUI Mode Installation](#) for details on configuration required for GUI Mode installation.

2.5.2 SILENT Mode

This mode mandates updating the installation configuration files with required details and performs installation in a "SILENT" non user interactive format.

3 Preparing for Installation

This chapter provides necessary information to review before installing the OFS Profitability Pack v8.0.0.0.0.

This chapter includes the following topics:

- [Installer and Installation Prerequisites](#)
- [Obtaining the Software](#)
- [Common Installation Activities](#)

3.1 Installer and Installation Prerequisites

The following table mentions the list of prerequisites required before beginning the installation for OFS Profitability Application Pack. The Installer/ Environment Check utility notifies you if any requirements are not met.

Installer and Installation Prerequisites

Requirement	Sub-Category	Expected Value
Environment Settings	Java Settings	<p>PATH in <code>.profile</code> to be set to include the Java Runtime Environment absolute path. The path should include java version (java 6, java 7 or java 8) based on the configuration.</p> <p>Note: Ensure the absolute path to JRE/bin is set at the beginning of PATH variable.</p> <p>For example, <code>PATH=/usr/java/jre1.6/bin:\$ORACLE_HOME/bin:\$PATH</code></p> <p>Ensure no SYMBOLIC links to JAVA installation is being set in the PATH variable.</p>
	Oracle Database Settings	<p>TNS_ADMIN to be set in <code>.profile</code> pointing to appropriate tnsnames.ora file</p> <p>ORACLE_HOME to be set in <code>.profile</code> pointing to appropriate Oracle Client installation</p> <p>PATH in <code>.profile</code> to be set to include appropriate \$ORACLE_HOME/bin path.</p> <p>Ensure to add an entry (with SID/ SERVICE NAME) in</p>

Requirement	Sub-Category	Expected Value
		the tnsnames.ora file on the OFSAA server.
	Oracle Essbase Settings	ARBORPATH, ESSBASEPATH, HYPERION_HOME to be set in the <code>.profile</code> pointing to an appropriate Oracle Essbase Client installation. Note: These settings are required only if you want to use Oracle Hyperion Essbase OLAP features.
OS/ File System Settings	File Descriptor Settings	Greater than 15000
	Total Number of Process Settings	Greater than 4096
	Port Settings	Default port numbers to be enabled on the system are 6500, 6501, 6505, 6507, 6509, 6510, 6666, 9999, and 10101.
	<code>.profile</code> permissions	User to have 755 permission on the <code>.profile</code> file.
	Installation Directory	A directory where the product files will be installed/ copied. Set 755 permission on this directory. This directory needs to be set as FIC_HOME.
	Staging Area/ Metadata Repository	A directory to hold the application metadata artifacts and additionally act as staging area for flat files. The directory should exist on the same system as the OFSAA Installation. This directory can be configured on different mount or under a different user profile. Set 777 permission on this directory.

Requirement	Sub-Category	Expected Value
	Download Directory	A directory where the product installer files will be downloaded/ copied. Set 755 permission on this directory.
	OS Locale	<ul style="list-style-type: none"> Linux: en_US.utf8 AIX: EN_US.UTF-8 Solaris: en_US.UTF-8 <p>To check the locale installed, execute the following command:</p> <pre>locale -a grep -i 'en_US.utf'</pre>
Database Settings	Database Instance Settings	NLS_CHARACTERSET to be AL32UTF8 NLS_LENGTH_SEMANTICS to be BYTE OPEN CURSORS limit to be greater than 1000
Web Application Server	WebSphere/ WebLogic/ Tomcat	Web Application Server should be installed and profile /domain created. You will be prompted to enter the WebSphere Profile path or WebLogic Domain path or Tomcat Deployment path during OFSAAI installation. Note: Refer Appendix A for WebSphere Profile Creation and WebLogic Domain Creation. For deployment on Oracle WebLogic Server 12.1.3+ (64 bit) with Java 8, download and install patch 18729264 from http://support.oracle.com/
Web Server	Apache HTTP Server/ Oracle HTTP Server/ IBM HTTP Server	This is an optional requirement. HTTP Server Installation to be present. You will be required to enter the Web Server IP/ Hostname and Port details during installation. Note: Refer Appendix A for Web Server installation.
Others	Oracle R/ Oracle R Enterprise	This is an optional requirement. Refer section Installation of Oracle R distribution and Oracle R Enterprise (ORE) for more details.

Requirement	Sub-Category	Expected Value
	OFSAA	<ul style="list-style-type: none"> For installation on Java 8, login to http://support.oracle.com/ and search for 21160684 under the Patches & Updates tab. This is applicable only when you have installed 8.0.0.0.0 OFSAAI pack and not required for 8.0.0.1.0. For installation of this release on an existing OFSAA instance where the underlying OFSAA Infrastructure (OFS AAI) version is upgraded to version 8.0.1.0.0, login to http://support.oracle.com/ and search for 21133780 under the Patches and Updates tab. For installation of this release on an existing OFSAA instance where the underlying OFSAA Infrastructure (OFS AAI) version is upgraded to version 8.0.2.0.0, login to http://support.oracle.com/ and search for 21657319 under the Patches and Updates tab. Download the consolidated one-off patch 25777667 from https://support.oracle.com/.

NOTE: Ensure that the tablespace(s) used for the database user(s) is set to AUTOEXTEND ON.

3.2 Obtaining the Software

This release of OFS Profitability Application Pack v8.0.0.0.0 can be downloaded from the Oracle Software Delivery Cloud (<https://edelivery.oracle.com>). You need to have a valid Oracle account in order to download the software.

3.3 Common Installation Tasks

The following are the common pre-installation activities that you need to carry out before installing the OFS Profitability Application Pack.

This section includes the following topics:

- [Configuration for GUI Mode Installation](#)
- [Identifying the Installation, Download and Metadata Repository Directories](#)
- [Download and copy the OFS Profitability Application Pack Installer](#)
- [Copying and Extracting the Software](#)
- [Setting up the Web Server/ Web Application Server](#)
- [Installation for Oracle R distribution and Oracle R Enterprise \(ORE\)](#)

3.3.1 Configuration for GUI Mode Installation

To install OFS Profitability Application Pack in GUI mode, you need to ensure the following software and configurations are available:

- Install and configure any PC X Server software such as Open Text Exceed (formerly Hummingbird Exceed) on the user desktop system from which the installation is triggered.

Configure DISPLAY variable.

- Ensure to set the DISPLAY variable on the system on which the OFSAA will be installed, to point to the user desktop system where the PC X Server software has been installed.

Syntax:

```
export DISPLAY=hostname:n.n1
```

where hostname is the IP Address/ Host Name of the user desktop system and n is the sequence number (usually 0).

For example, 10.11.12.13:0.0 or myhostname:0.0

3.3.2 Identifying the Installation, Download and Metadata Repository Directories

For installation of any OFSAA Application Pack, the following folders/ directories required to be created.

- **OFSAA Download Directory** (Optional) - Create a download directory and copy the OFSAA Application Pack Installer File (Archive). This is the directory where the downloaded installer/ patches can be copied.
- **OFSAA Installation Directory** (Mandatory) – Create an installation directory. This is the directory where the installer installs or copies the product files. FIC_HOME variable to be set in the `.profile` pointing to this OFSAA Installation Directory.
- **OFSAA Staging/ Metadata Repository Directory** (Mandatory) – Create a Staging/ Metadata Repository Directory. This is the directory where you should copy data loading files, save data extracts and so on. Additionally, this folder also maintains the OFSAA metadata artifacts. This is commonly referred as "FTPSHARE".

NOTE: Ensure the user permission is set to 755 on the Installation and Download Directory.

Ensure the user permission is set to 777 on the Staging Directory.

3.3.3 Download and copy the OFS Profitability Applications Pack Installer

To download and copy the OFS Profitability Applications Pack Installer, follow these steps:

-
- To download the OFS Profitability Application Pack, you need to login to the Oracle Software Delivery Cloud (<https://edelivery.oracle.com>). You need to have a valid Oracle account in order to download the software.
 - Copy the downloaded installer archive to the Download Directory (in Binary Mode) on the setup identified for OFSAA installation.

3.3.4 Copying and Extracting the Software

Once you obtain the installer, copy the installer (in BINARY mode) to the system on which the OFSAA Infrastructure components will be installed.

NOTE: You must be logged in to the UNIX operating system as a non-root user.

1. Download the unzip utility (OS specific) `unzip_<os>.Z` and copy it in Binary mode to the directory that is included in your PATH variable. If you already have the unzip utility to extract the contents of the downloaded archive, skip to the next step.
2. Uncompress the unzip installer file using the command:

```
uncompress unzip_<os>.Z
```

NOTE: In case you notice an error message "uncompress: not found [No such file or directory]" when the package is not installed, contact your UNIX administrator.

3. Give EXECUTE permission to the file using the command:

```
chmod 751 unzip_<os>
```

For example, `chmod 751 unzip_sparc`

4. Extract the contents of the Oracle Financial Services Advanced Analytical Applications Infrastructure Application Pack 8.0.0.0.0 to Download Directory using the following command:

```
unzip OFS_PFT_PACK.zip
```

NOTE: DO NOT rename the Application Pack installer folder name on extraction from the archive.

5. Give following permission to the installer folder. Navigate to the Download Directory and execute the command:

```
chmod -R 755 OFS_PFT_PACK
```

3.3.5 Setting up the Web Server/ Web Application Server

For setting up the environment based on your selected Web Server/ Web Application Server, refer to [Appendix A](#) for more information.

3.3.6 Installation of Oracle R distribution and Oracle R Enterprise (ORE)

This is an optional step and required only if you intend to use Oracle R scripting in the Oracle Financial Services Enterprise Modeling Application. Follow these steps:

Install Oracle R Distribution and Oracle R Enterprise (Server Components) on the Oracle Database server. See Oracle® R Enterprise Installation and Administration Guide for Windows, Linux, Solaris and AIX, Release 1.4 at [Oracle R Enterprise Documentation Library](#).

- Oracle R Distribution versions supported- Oracle Distribution of R version 3.0.1.
- ORE version supported- Oracle R Enterprise (Server) version 1.4.

NOTE: Oracle R Enterprise 1.4 requires Oracle Database Enterprise Edition 11.2.0.3/ 11.2.0.4/ 12.1.0.1.

NOTE: If you are using ORE 1.4.1 and Oracle R 3.1.1 with Oracle Financial Services Enterprise Modeling, you need to set the session timezone in 'R_HOME/etc/Rprofile.site' file on the database server, where R_HOME is the home directory of the R instance on which ORE server packages are installed. Alternatively, you may set session timezone in scripts registered within OFS EM by using the 'Sys.env(TZ=<time zone>)' R function.

4 Installing OFS Profitability Application Pack

This chapter describes the steps to be followed to install the OFS Profitability pack.

This chapter includes the following sections:

- [Schema Creator Utility](#)
- [Configuring and Executing the Schema Creator Utility](#)
- [Installing the OFS Profitability Applications Pack](#)

4.1 Schema creator utility

Creating database users/ schemas is one of the primary steps in the complete OFSAA installation. This release of OFSAA provides a utility to quickly get started with the OFSAA 8.0 installation by allowing easier and faster creation of database User(s)/ Schema(s), assign the necessary GRANT(s) and so on. Additionally, it also creates the required database objects in these schemas.

This section includes the following topics:

- [About Schema Creator utility](#)
- [Execution Modes in Schema Creator Utility](#)
- [Execution Options in Schema Creator Utility](#)

4.1.1 About Schema Creator utility

The schema creator utility should be configured and executed mandatorily every time prior to installation of any OFSAA Application Pack.

The following are the types of schemas that can be configured in the OFSAA:

- **CONFIG** – Denotes the unique OFSAA setup configuration schema. It contains entities and other objects required for OFSAA setup information.

NOTE: There can be only one CONFIG schema per OFSAA instance.

- **ATOMIC** – Denotes the schema that contains the data model entities. One ATOMIC schema is attached to one Information Domain.

NOTE: For some application packs, there can be multiple ATOMIC schemas per OFSAA Instance, but the Profitability Pack supports only one atomic schema per OFSAA instance.

- **SANDBOX** – Denotes the schema that contains the data for all Sandbox executions. One SANDBOX schema is attached to one Sandbox Information Domain.

NOTE: This Schema type is not applicable for OFS Profitability Application Pack. There can be multiple SANDBOX schemas per OFSAA Instance and a Sandbox Information Domain can have only one SANDBOX schema.

- **ADDON** – Denotes any additional schema used by the OFSAA Applications.

NOTE: This Schema type is not applicable for OFS Profitability Application Pack.

4.1.2 Execution Modes in Schema Creator Utility

The Schema Configuration Utility supports the following modes of execution:

- **Online Mode:** In the Online mode, the utility connects to the database and executes the DDLs for Users, Objects and Grants. If you have the SYSDBA privileges you can execute the Schema Creator Utility in Online mode and thereby create the Users, Objects and Grants during the execution process.

NOTE: To execute the utility in Online mode, you need to connect as “<User> AS SYSDBA”.

- **Offline Mode:** In the Offline mode, the utility generates SQL script with all the required DDLs for Users, Objects and Grants. This script needs to be executed by the DBA on the appropriate database identified for OFSAA usage. If you do not have the SYSDBA privileges, you can execute the Schema Creator Utility in Offline mode and generate the script file that contains the Schemas, Objects and Grants, information. Subsequently, a SYSDBA user can execute the script file manually.

NOTE: 1. To execute the utility in Offline mode, you need to connect as any user with following grants(alternatively, you can also connect as a user with SYSDBA privileges):

```
SELECT ON DBA_ROLES
SELECT ON DBA_USERS
SELECT ON DBA_DIRECTORIES
SELECT ON DBA_TABLESPACES
CREATE SESSION
```

For more details refer, [Executing the Schema Creator Utility in Offline Mode](#)

2. If there are any errors during the script execution, reconfigure the OFS_PFT_SCHEMA_IN.XML file and execute the utility. This regenerates the

scripts with corrected information. For more information, refer [Configuring OFS_PFT_SCHEMA_IN.XML](#).

NOTE: Do not modify the `OFS_PFT_SCHEMA_OUT.XML` file generated after the execution of this utility.

4.1.3 Execution Options in Schema Creator Utility

Depending on the option you choose to run the OFSAA Application Pack Installer, you need to choose the schema creator utility execution option. To run the OFSAA Application Pack installer in SILENT mode, it is mandatory to execute the schema creator utility with `-s` option.

Note: If the schema creator utility is executed **without** the option `-s`, it is mandatory to run the OFSAA Application Pack Installer in GUI mode.

4.2 Configuring and Executing the Schema Creator Utility

This section includes the following topics:

- [Prerequisites](#)
- [Configuring the Schema Creator Utility](#)
- [Executing the Schema Creator Utility](#)

4.2.1 Prerequisites

The following prerequisites must be ensured before configuring the Schema Creator Utility:

- You must have the Oracle User ID/Password with SYSDBA privileges.
- You must have the JDBC Connection URL for RAC/Non RAC database.
- The HOSTNAME/IP of the server on which OFSAA is getting installed.
- For Java 8, navigate to `OFS_PFT_PACK/bin/` and modify the value for property `JAVA_VERSION` to 1.8 in the `VerInfo.txt` file and save the changes.

Note: If this release of the OFS PFT Application Pack version 8.0.0.0.0 is being installed on an OFSAA setup where the underlying OFSAA Infrastructure (OFS AAI) version is upgraded to version 8.0.1.x.x, download and install the patch for schema creator utility (Bug 21133780) by following the instructions in the `Readme.txt` packaged in it prior to executing the utility.

If this release of the OFS AAI Application Pack version 8.0.0.0.0 is being installed on an OFSAA setup where the underlying OFSAA Infrastructure (OFS AAI) version is upgraded to version 8.0.2.x.x, download and install the patch for schema creator utility (Bug 21657319) by following the instructions in the `Readme.txt` packaged in it prior to executing the utility.

4.2.2 Configuring the Schema Creator Utility

To configure the Schema Creator Utility, follow these steps:

1. Log in to the system as non-root user.
2. Navigate to the following path: `OFS_PFT_PACK/schema_creator/conf`.
3. Edit the `OFS_PFT_SCHEMA_IN.xml` file in a text editor.
4. Configure the elements as described in the [Configuring OFS_PFT_SCHEMA_IN.XML](#).
5. Save the `OFS_PFT_SCHEMA_IN.xml` file.

4.2.3 Executing the Schema Creator Utility

This section includes the following topics:

- [Executing the Schema Creator Utility in Online Mode](#)
- [Executing the Schema Creator Utility in Offline Mode](#)
- [Executing the Schema Creator Utility with `-s` option](#)

Note: If you intend to use Oracle OLAP feature, execute the following grant on all ATOMIC schema(s) `grant olap_user to &database_username`

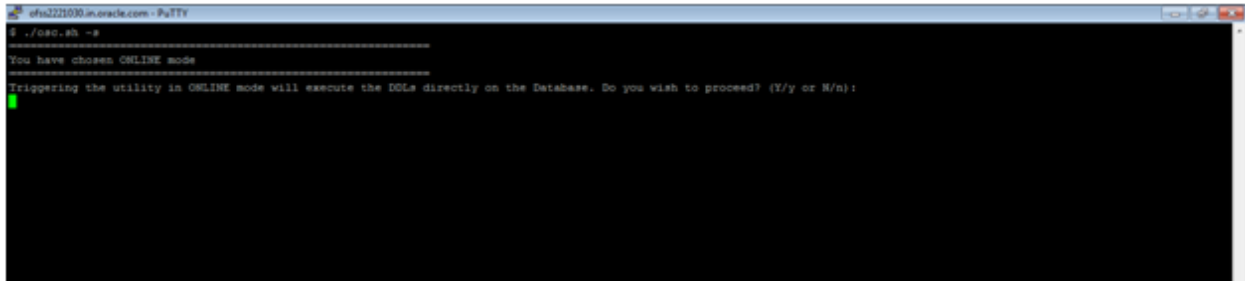
4.2.3.1 Executing the Schema Creator Utility in Online Mode

In Online Mode, the Schema Creator Utility will create all the Schemas, Schema Objects, Tablespaces, Grants, and Roles in the database during the execution process.

To execute the Schema Creator Utility in Online Mode, follow these steps:

1. Log in to the system as non-root user.
2. Navigate to the following folder path: `OFS_PFT_PACK/schema_creator/bin/`
3. Execute the following command.

```
./osc.sh
```
4. The following message is displayed: *You have chosen ONLINE mode. Triggering the utility in ONLINE mode will execute the DDLs directly on the Database. Do you wish to proceed? (Y/y or N/n).*



5. Enter Y/y to proceed.
6. Enter the DB Username with SYSDBA Privileges.
For example: SYS as SYSDBA.
7. Enter the User Password.

```
$ ./osc.sh
=====
You have chosen ONLINE mode
=====
Triggering the utility in ONLINE mode will execute the DDLs directly on the Database. Do you wish to proceed? (Y/y or N/n):
Y
=====
Java Validation Started ...
Java found in : /scratch/ofsaajdk1.6.0_25/jre/bin
JAVA Version found : 1.6.0_25
JAVA Bit Version found : 64-bit
Java Validation Completed. Status : SUCCESS
=====
DB specific Validation Started ...
Enter the DB User Name With SYSDBA Privileges:
sys as sysdba
Enter the User Password:
Oracle Client version : 11.2.0.3.0. Status : SUCCESS
Oracle Server version Current value : 11.2.0.3.0. Status : SUCCESS
DB specific Validation Completed. Status : SUCCESS
=====
```

8. The console runs the initial validation checks and then displays the following message:
You have chosen to install this Application Pack on <Name of the Atomic Schema>ATOMIC schema. Do you want to proceed? (Y/N).
You have chosen to install this Application Pack on <Name of the Infodom>. Do you want to proceed? (Y/N).

```

Java Validation Started ...
Java found in : /usr/java/jdk1.6.0_25/bin
JAVA Version found : 1.6.0_25
JAVA Bit Version found : 64-bit
Java Validation Completed. Status : SUCCESS
=====
DB specific Validation Started ...
Enter the DB User Name With SYSDBA Privileges:
sys as sysdba
Enter the User Password:
Oracle Client version : 11.2.0.3.0. Status : SUCCESS
Oracle Server version Current value : 11.2.0.1.0. Status : SUCCESS
DB specific Validation Completed. Status : SUCCESS
=====
Schema Creation Started
=====
Checking OFSAA installation...
OFSAA installation not found.
Validating the dat file OFS_PFT_CFG.dat started...
Successfully validated OFS_PFT_CFG.dat file
Validating the input XML file../scratch/ofsaebas/installer/OFS_PFT_PACK/schema_creator/conf/OFS_PFT_SCHEMA_IN.xml
Input XML file validated successfully.
=====
Validating Connection URL ...jdbc:oracle:thin:@ofss222763:1521:FTPDEV
Successfully connected to User - sys as sysdba URL - jdbc:oracle:thin:@ofss222763:1521:FTPDEV
Connection URL successfully validated...
You have chosen to install this Application Pack on "dev_ofsaaatm" ATOMIC schema. Do you want to proceed? (Y/N)
Y
You have chosen to install this Application Pack on INFODOM "ofspftinfo". Do you want to proceed? (Y/N)
Y
=====
Executing TableSpace Scripts started...

```

9. Enter Y/y to start the schema creation.

Or

Enter N/n if you want to quit executing the schema creation.

```

Executing TableSpace Scripts started...
Executing TableSpace Scripts completed...
=====
Creating Schemas started...
CONFIG User dev_ofsaaconf successfully created on Default TableSpace : USERS on Temp TableSpace : TEMP
Grants creation scripts execution started...
Grants creation scripts execution completed...
Successfully connected to User - dev_ofsaaconf URL - jdbc:oracle:thin:@ofss222763:1521:FTPDEV
Scripts execution for CONFIG schema started ...
Scripts execution for CONFIG schema completed ...
User dev_ofsaaconf details updated into the dbmaster table
User dev_ofsaaatm details updated into the dbmaster table
User dev_ofsaaatm is successfully created on Default TableSpace : USERS on Temp TableSpace : TEMP
User dev_ofsaaatm already exists in dbmaster table.
User dev_ofsaaatm already exists in dbmaster table.
User dev_ofsaaatm already exists in dbmaster table.
User dev_ofsaaatm already exists in dbmaster table.
Creating Schemas completed ...
=====
Roles creation scripts execution started ...
Roles creation scripts execution completed ...
=====
Grants creation scripts execution started...
Grants creation scripts execution completed...
=====
Schemas Creation Completed
=====
Schema Creator executed Successfully.Please proceed with the installation.

```

NOTE: On successful execution of schema creator utility, the console displays the following status message:
Schema Creator executed successfully. Please proceed with the installation.

Refer log file in OFS_PFT_PACK/schema_creator/logs folder for execution status. In case of any errors, contact *Oracle Support*.

4.2.3.2 Executing the Schema Creator Utility in Offline Mode

In Offline Mode, the Schema Creator Utility will create an output in SQL file format. This script has to be executed manually by logging as database user with SYSDBA privileges. The SQL file will contain the scripts for creation of Schemas, Schema Objects, Tablespaces, Grants, and Roles.

Prerequisites:

- Database user with following privileges:
 - SELECT ON DBA_ROLES
 - SELECT ON DBA_USERS
 - SELECT ON DBA_DIRECTORIES
 - SELECT ON DBA_TABLESPACES
 - CREATE SESSION

NOTE: Explicit Grants to the user are required. Grants assigned through Roles are not supported.

To execute the schema creator utility in the offline mode, follow these steps:

1. Log in to the system as non-root user.
2. Navigate to the following path: `OFS_PFT_PACK/schema_creator/bin`
3. Execute the `osc.sh` file using the following command:

```
./osc.sh -o
```

4. The following message is displayed:
You have chosen OFFLINE mode. Triggering the utility in OFFLINE mode will generate the script. Do you wish to proceed? (Y/y or N/n).
5. Enter Y/y to proceed.
6. Enter the DB Username with `SELECT` privileges.
7. Enter the User Password.

```

osc.sh
$ ./osc.sh -o
.profile executed
=====
You have chosen OFFLINE mode
=====
Triggering the utility in OFFLINE mode will generate the script. Do you wish to proceed? (Y/y or N/n):
y
=====
Java Validation Started ...
Java found in : /scratch/ofsaa/jdk1.6.0_25/bin
JAVA Version found : 1.6.0_25
JAVA Bit Version found : 64-bit
Java Validation Completed. Status : SUCCESS
=====
DB specific Validation Started ...
Enter the DB User Name with the following privileges:
1. CREATE SESSION
2. SELECT on DBA_ROLES
3. SELECT on DBA_USERS
4. SELECT on DBA_DIRECTORIES
5. SELECT on DBA_TABLESPACES
Enter the User Name:
sys as sysdba
Enter the User Password:
Oracle Client version : 11.2.0.3.0. Status : SUCCESS
Oracle Server version Current value : 11.2.0.3.0. Status : SUCCESS
DB specific Validation Completed. Status : SUCCESS
=====

```

8. The console runs the initial validation checks and displays the following message:
You have chosen to install this Application Pack on <Name of the Atomic Schema>ATOMIC schema. Do you want to proceed? (Y/N).
You have chosen to install this Application Pack on <Name of the Infodm>. Do you want to proceed? (Y/N).

```
Java Validation Started ...
Java found in : /usr/java/jdk1.6.0_25/bin
JAVA Version found : 1.6.0_25
JAVA Bit Version found : 64-bit
Java Validation Completed. Status : SUCCESS
=====
DB specific Validation Started ...
Enter the DB User Name With SYSDBA Privileges:
sys as sysdba
Enter the User Password:
Oracle Client version : 11.2.0.3.0. Status : SUCCESS
Oracle Server version Current value : 11.2.0.1.0. Status : SUCCESS
DB specific Validation Completed. Status : SUCCESS
=====
=====
Schema Creation Started
=====
Checking OFSAA installation...
OFSAA installation not found.
Validating the dat file OFS_PFT_CFG.dat started...
Successfully validated OFS_PFT_CFG.dat file
Validating the input XML file../scratch/ofsaebas/installer/OFS_PFT_PACK/schema_creator/conf/OFS_PFT_SCHEMA_IN.xml
Input XML file validated successfully.
=====
Validating Connection URL ...jdbc:oracle:thin:@ofss222763:1521:FTPDEV
Successfully connected to User - sys as sysdba URL - jdbc:oracle:thin:@ofss222763:1521:FTPDEV
Connection URL successfully validated...
You have chosen to install this Application Pack on "dev_ofsaaatm" ATOMIC schema. Do you want to proceed? (Y/N)
Y
You have chosen to install this Application Pack on INFODOM "ofspftinfo". Do you want to proceed? (Y/N)
Y
=====
Executing TableSpace Scripts started...
```

-
9. Enter Y/y to start the script generation.

Or

Enter N/n if you want to quit the script generation.

```
Executing TableSpace Scripts started...
Executing TableSpace Scripts completed...
=====
Creating Schemas started...
CONFIG User dev_ofsaaconf successfully created on Default TableSpace : USERS on Temp TableSpace : TEMP
Grants creation scripts execution started...
Grants creation scripts execution completed...
Successfully connected to User - dev_ofsaaconf URL - jdbc:oracle:thin:@ofss222763:1521:FTPDEV
Scripts execution for CONFIG schema started ...
Scripts execution for CONFIG schema completed ...
User dev_ofsaaconf details updated into the dbmaster table
User dev_ofsaaatm details updated into the dbmaster table
User dev_ofsaaatm is successfully created on Default TableSpace : USERS on Temp TableSpace : TEMP
User dev_ofsaaatm already exists in dbmaster table.
User dev_ofsaaatm already exists in dbmaster table.
User dev_ofsaaatm already exists in dbmaster table.
User dev_ofsaaatm already exists in dbmaster table.
Creating Schemas completed ...
=====
Roles creation scripts execution started ...
Roles creation scripts execution completed ...
=====
Grants creation scripts execution started...
Grants creation scripts execution completed...
=====
                          Schemas Creation Completed
=====
Schema Creator executed Successfully.Please proceed with the installation.
```

NOTE: On successful execution of schema creator utility, the console displays the following status message:
Schema Creator executed successfully. Please execute scratch/ofsaaapp/OFS_PFT_PACK/schema_creator/sysdba_output_scripts.sql before proceeding with the installation.

10. Navigate to the directory: OFS_PFT_PACK/schema_creator.
11. Login to SQLPLUS with a user having SYSDBA Privileges.
12. Execute the sysdba_output_scripts.sql file using the following command:

```
SQL>@sysdba_output_scripts.sql
```

Alternatively, you can copy the sysdba_output_scripts.sql file and SQLScripts folder to a remote server and execute sysdba_output_scripts.sql file, after providing appropriate execute permissions.

NOTE: Refer log sysdba_output_scripts.log file for execution status. In case of any errors, contact Oracle Support. This log would be empty if there are no errors in the execution.

4.2.3.3 Executing the Schema Creator Utility with `-s` option

If you want to run the OFSAA Application Pack Installer in SILENT mode, it is mandatory to execute the schema creator utility with `-s` option.

To execute the utility with `-s` option, follow these steps:

1. Edit the file `OFS_PFT_PACK/schema_creator/conf/OFS_PFT_SCHEMA_IN.xml` in text editor.
2. Set the value for attribute "INFODOM" of `<SCHEMA>` tag(s) to specify a specific Information Domain name. By default, the value is empty and the utility will derive the Information Domain name. If the attribute value is set, the utility/ installer will configure the Information Domain against this `<SCHEMA>`.
3. Execute the utility with `-s` option.

For Example: `./osc.sh -s`.

NOTE: If the utility is executed without the `-s` option, it is mandatory to launch the OFSAA Application Pack Installer in GUI mode.

```
/scratch/ofsaebas/installer/OFS_PFT_PACK/schema_creator/bin>./osc.sh -s
YOU ARE EXECUTING profile...
80 PFT Media Pack ofsaebas Setup
=====
You have chosen ONLINE mode
=====
Triggering the utility in ONLINE mode will execute the DDLs directly on the Database. Do you wish to proceed? (Y/y or N/n)
:
Y
=====
Java Validation Started ...
```

NOTE: To execute the utility in OFFLINE mode with SILENT option, enter following command: `/osc.sh -o -s`.

4.3 Installing the OFS Profitability Applications Pack

Follow the instructions in this section to install the OFS Profitability Applications Pack depending on the mode of installation.

This section includes the following topics:

- [GUI Mode Installation](#)
- [SILENT Mode Installation](#)
- [Verifying the Log File](#)

4.3.1 GUI Mode Installation

Note: Ensure you have followed the steps as mentioned in the *Configuration for GUI Mode Installation* section prior to proceeding with the next steps.

-
1. Log in to the system as non-root user.
 2. Identify a directory for installation and set the same in the user .profile file as follows:

```
ORACLE_HOME=<oracle_installed_dir>  
TNS_ADMIN=$ORACLE_HOME/network/admin export TNS_ADMIN  
FIC_HOME=<ofsaa_install_dir>
```

3. Execute the user .profile.
4. Navigate to path: OFS_PFT_Pack.
5. Edit the OFS_PFT_PACK/schema_creator/conf/OFS_PFT_SCHEMA_IN.xml file to set the appropriate attribute values.

Note: Refer Configuring <<APP Pack>>_SCHEMA_IN.XML file for details on configuring this XML file.

6. Execute the schema creator utility.

Note: This step is mandatory and should be executed before every OFSAA Application Pack installation.

Refer Executing the Schema Creator Utility for more details.

7. Navigate to the path: OFS_PFT_PACK/bin.
8. Execute ./setup.sh GUI in the console.

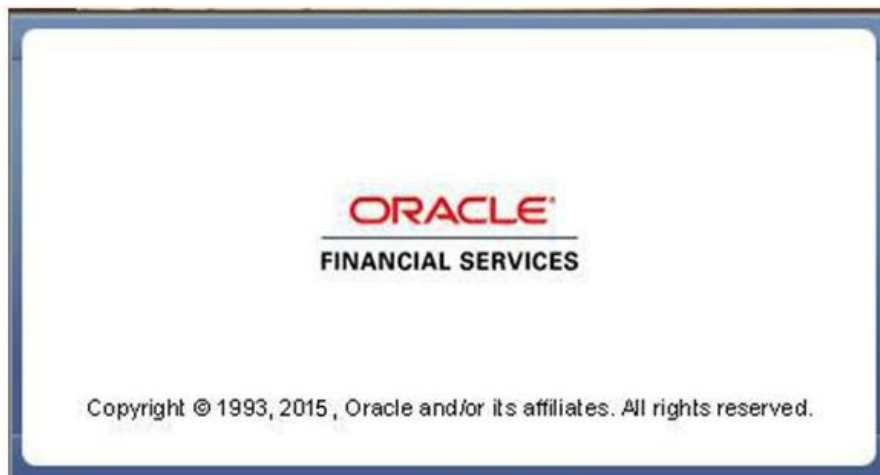
Validating the installation

```
xterm
$ ls
a1me a1me1 a1me10 a1me2 a1me3 a1me4 a1me5 a1me6 a1me7 a1me8 a1me9 a1me9 d1mps lost-found ofsaapp ofsaadb ofsaaweb ofsaebas ofsaobie optena oracle surm
$ chmod -R 777 ofsaaweb
$ cd ofsaaweb/DFS_PFT_PACK/bin/
$ ls
install.jar OFSAH1.jar pack_install.bin setup.sh
$ ./setup.sh GUI
ls: ../conf/*.xml: No such file or directory
Pre-Install check terminated ...
$ pwd
/scratch/ofsaweb/DFS_PFT_PACK/bin
$ ./setup.sh GUI
FIC_HOME : /scratch/ofsaweb/Installations/PFTPACK
Environment check utility started...
=====
Java Validation Started ...
Java found in : /usr/java/jdk1.6.0_45/bin
JAWM Version found : 1.6.0_45
JAWM Bit Version found : 64-bit
Java Validation Completed, Status : SUCCESS
=====
Environment Variables Validation Started ...
ORACLE_HOME : /scratch/oracle/app/product/12.1.0/client_1
TNS_ADMIN : /scratch/oracle/app/product/12.1.0/client_1/network/admin
Environment Variables Validation Completed, Status : SUCCESS
=====
OS specific Validation Started ...
Unix shell found : /bin/ksh, Status : SUCCESS
Total file descriptors : 15240, Status : SUCCESS
Total number of process : 15240, Status : SUCCESS
OS version : 5, Status : SUCCESS
OS specific Validation Completed, Status : SUCCESS
=====
DB specific Validation Started ...
Oracle Client version : 12.1.0.1.0, Status : SUCCESS
CREATE SESSION has been granted to user, Status : SUCCESS
CREATE PROCEDURE has been granted to user, Status : SUCCESS
CREATE VIEW has been granted to user, Status : SUCCESS
CREATE TRIGGER has been granted to user, Status : SUCCESS
CREATE MATERIALIZED VIEW has been granted to user, Status : SUCCESS
CREATE TABLE has been granted to user, Status : SUCCESS
CREATE SEQUENCE has been granted to user, Status : SUCCESS
SELECT privilege is granted for V_$init_parameters view, Current value : SELECT, Status : SUCCESS
NLS_LENGTH_SEMANTICS : BYTE, Current value : BYTE, Status : SUCCESS
NLS_CHARACTERSET : AL32UTF8, Current value : AL32UTF8, Status : SUCCESS
SELECT privilege is granted for V_$parameter view, Current value : SELECT, Status : SUCCESS
Open cursor value is greater than 1000, Current value : 1200, Status : SUCCESS
Oracle Database Partitioning feature is enabled, Current value : Partitioned, Status : SUCCESS
SELECT privilege is granted for USER_TS_QUOTAS view, Current value : SELECT, Status : SUCCESS
Schema is granted with at least 500 MB table space, Current value : 1.0737E+10, Status : SUCCESS
Oracle Server version Current value : 12.1.0.1.0, Status : SUCCESS
DB specific Validation Completed, Status : SUCCESS
=====
Environment check utility Status : SUCCESS
=====
Starting installation...
Preparing to install...
Extracting the installation resources from the installer archive...
Configuring the installer for this system's environment...

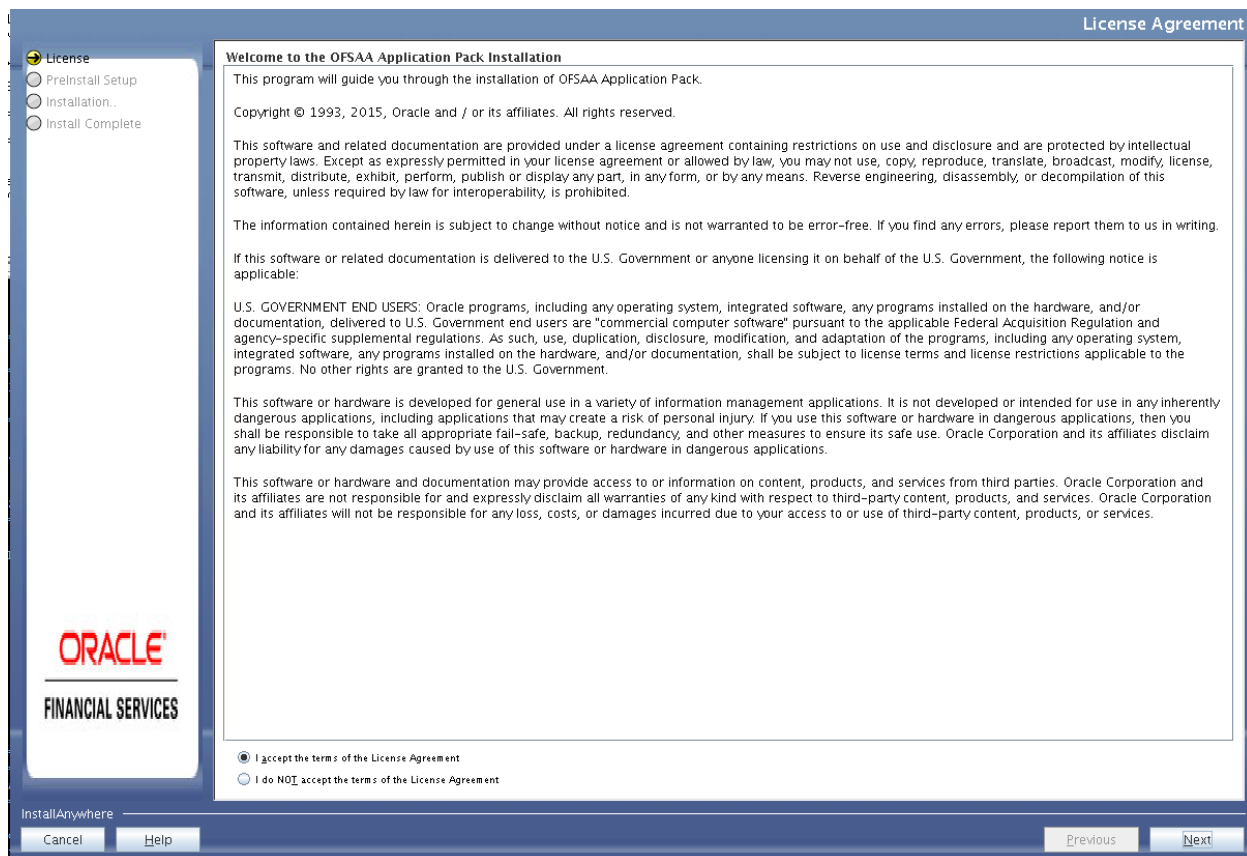
Launching installer...

=====
CTRL characters removal started ...
CTRL characters removal over ...
Windows executable files removal started ...
Windows executable files removal over ...
We are now in /scratch/ofsaweb/Installations ...
=====
Installation completed...
=====
$
$ █
```

Initialization Window



License Agreement

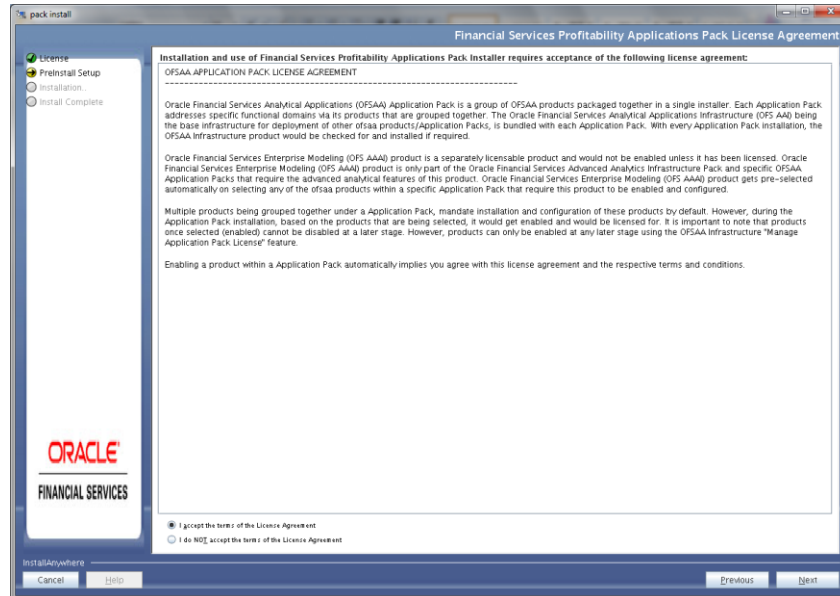


9. Select **I accept the terms if the License Agreement option.**

10. Click **Next**. The Application Pack details are displayed:

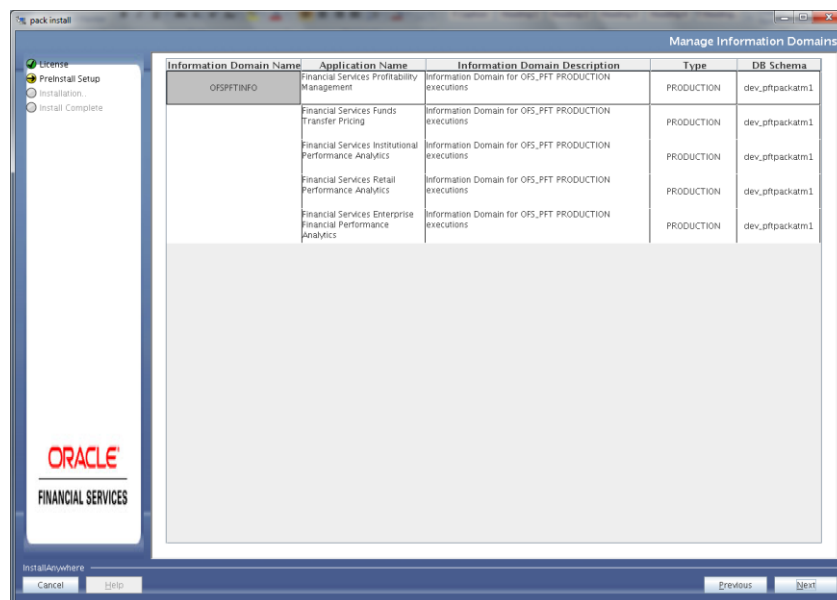


11. Select the product to enable for which you have already obtained license. Refer to Appendix for enabling additional products post the App pack installation at a later time.
12. Click **Next**. The License Agreement page is displayed.



13. Select **I accept the terms if the License Agreement** option.
14. Click **Next**.

The Manage Information Domain page is displayed.



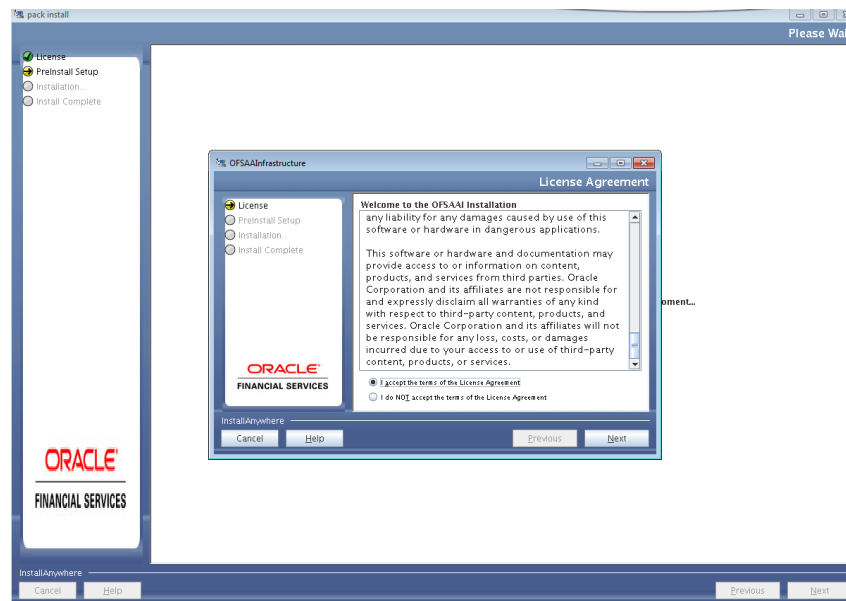
-
15. Edit the Information Domain Name if it is a new Information domain and you wish to change the name of the information domain name.

In case of subsequent Application Pack installation on the same Information Domain, the Information Domain Name is not editable.

Permissible length is 10 characters and only alphanumeric characters allowed. No special characters allowed.

16. Click **Next**.

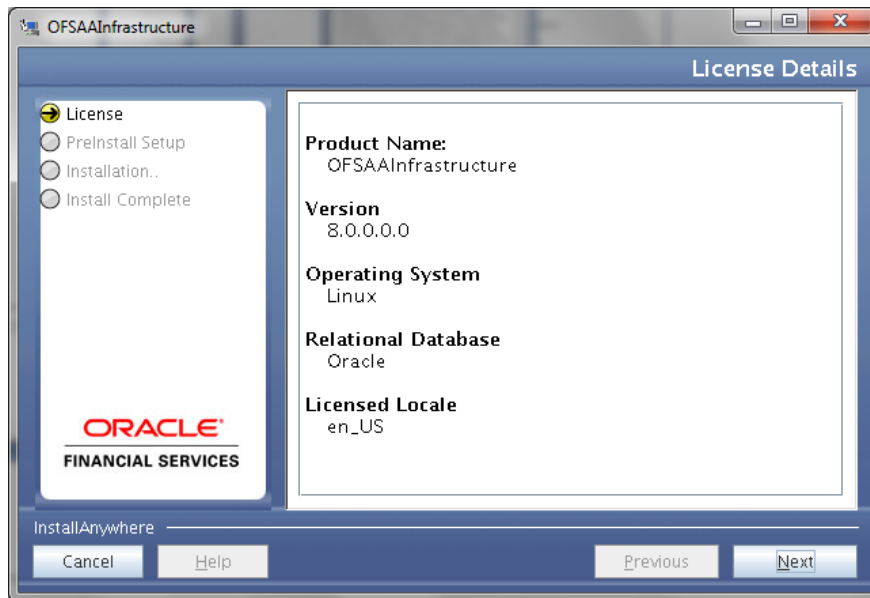
The following window is displayed.



17. Select **I accept the terms if the License Agreement** option.

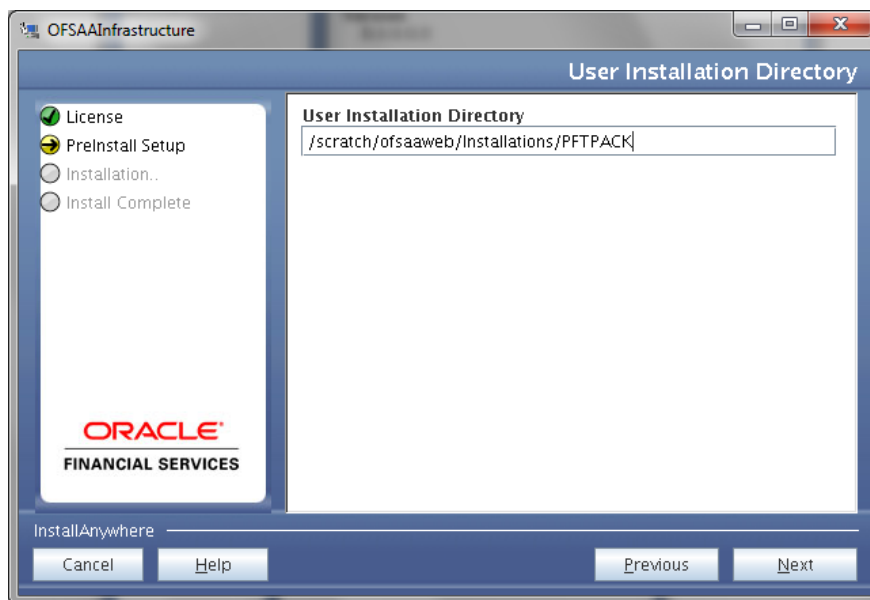
18. Click **Next**.

License Details



19. Click **Next**. The *User Installation Directory* window is displayed.

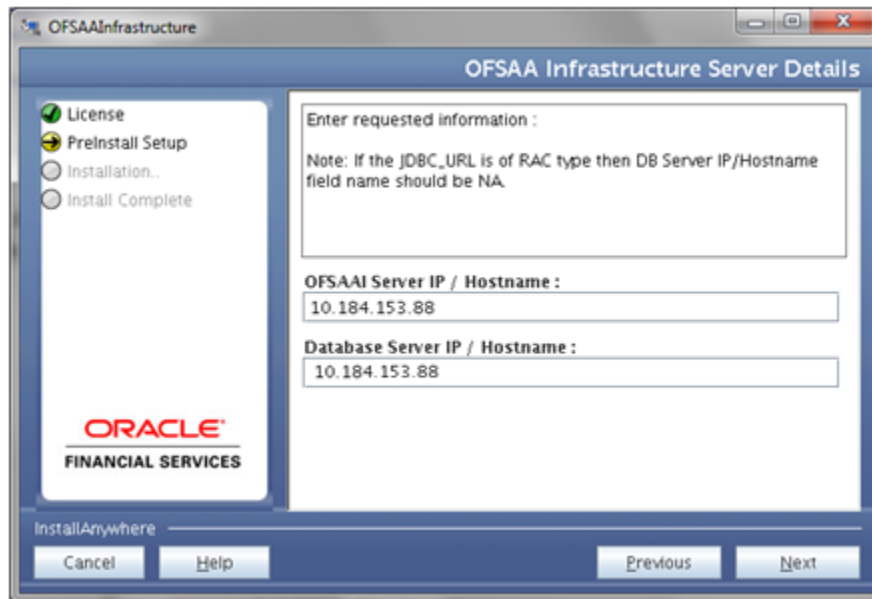
User Installation Directory



20. Enter the installation directory path. This is the directory you have set in the user .profile file in step 2.

21. Click **Next**. The *OFSAA Infrastructure Server Details* window is displayed.

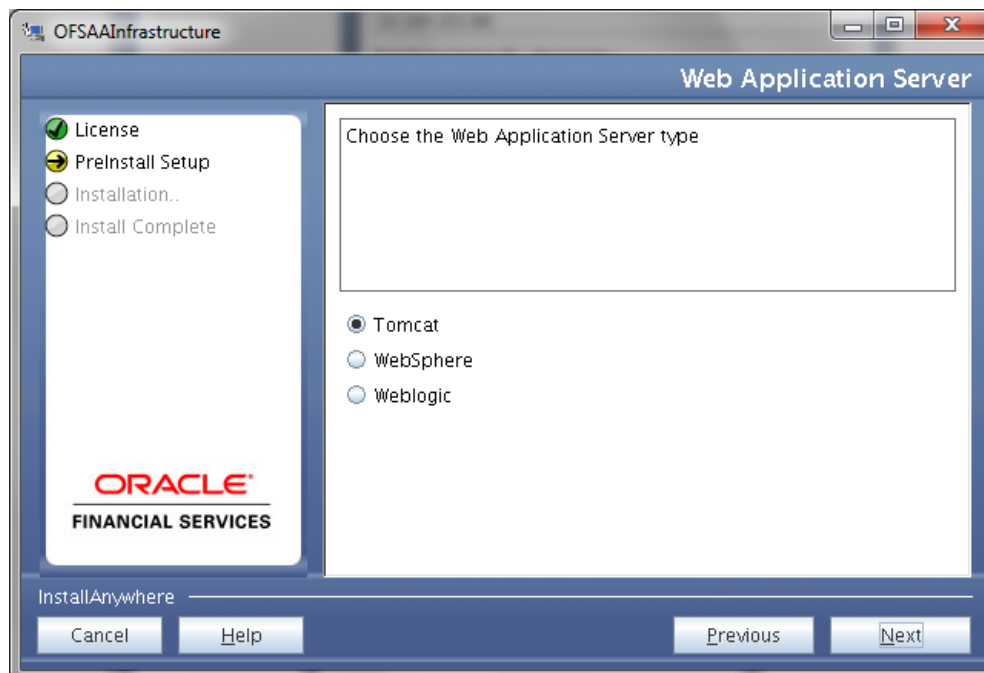
OFSAA Infrastructure Server Details



22. Enter the IP address or hostname of the OFSAAI server and Database server.

23. Click **Next**. The *Web Application Server* window is displayed.

Web Application Server

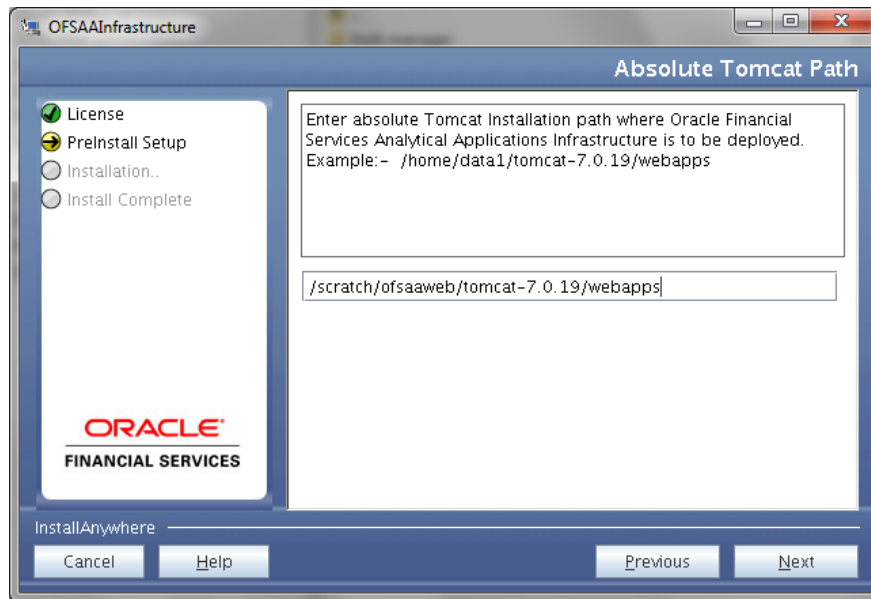


24. Select the appropriate Web Application server type. The options are Tomcat, WebSphere and WebLogic.

25. Click **Next**. Based on the selection, corresponding screens are displayed.

*For Tomcat: The **Absolute Tomcat Path** window is displayed.*

Absolute Tomcat Path



- Enter the Tomcat installation path (till /webapps) where OFSAAI will be deployed.

For WebSphere: The WebSphere Setup Details window is displayed.

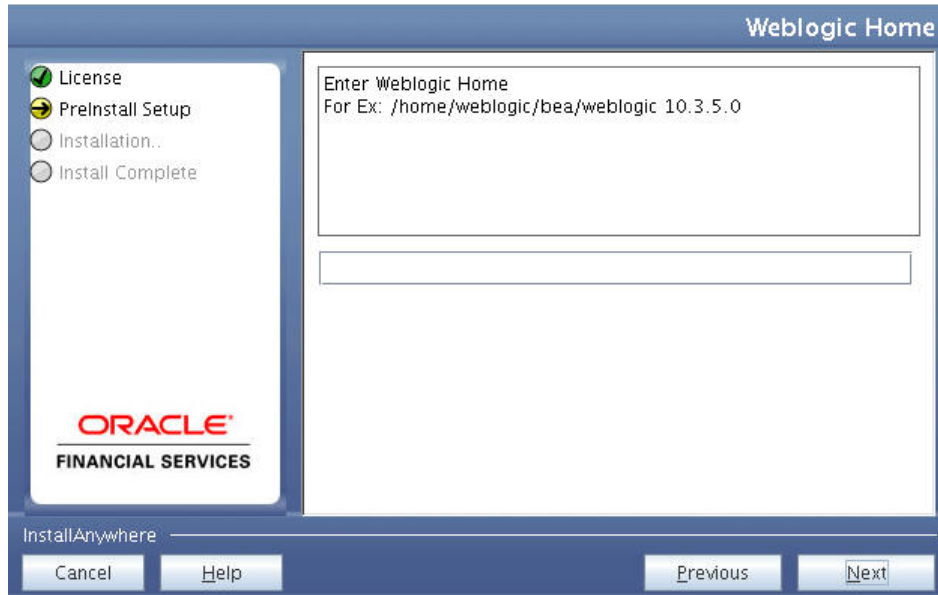
WebSphere Setup Details



- Enter the installation path (up to the host name directory) of the WebSphere. The format is WebSphere path <WebSphere profile directory>/installedApps/ <NodeCellName>.

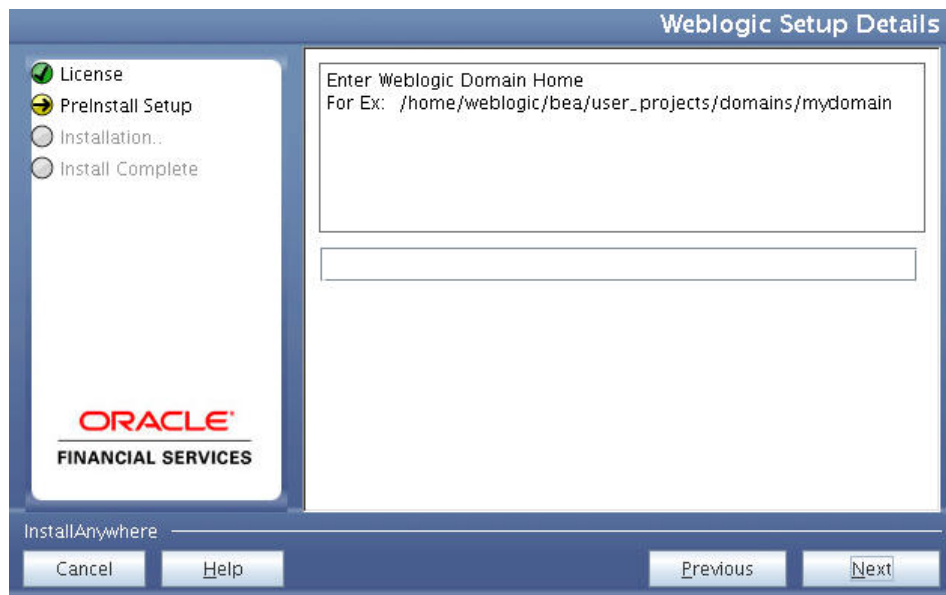
*For WebLogic: The **Weblogic Home** window is displayed*

Weblogic Home



- Enter the WebLogic home directory path.

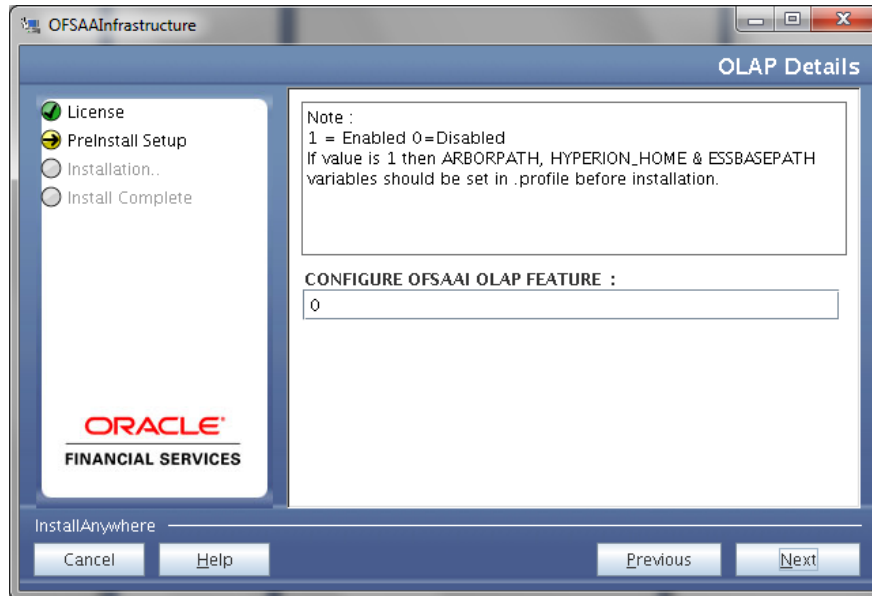
Weblogic Setup Details



- Enter the path of the Weblogic domain home directory and click Next.

The *OLAP Details* window is displayed.

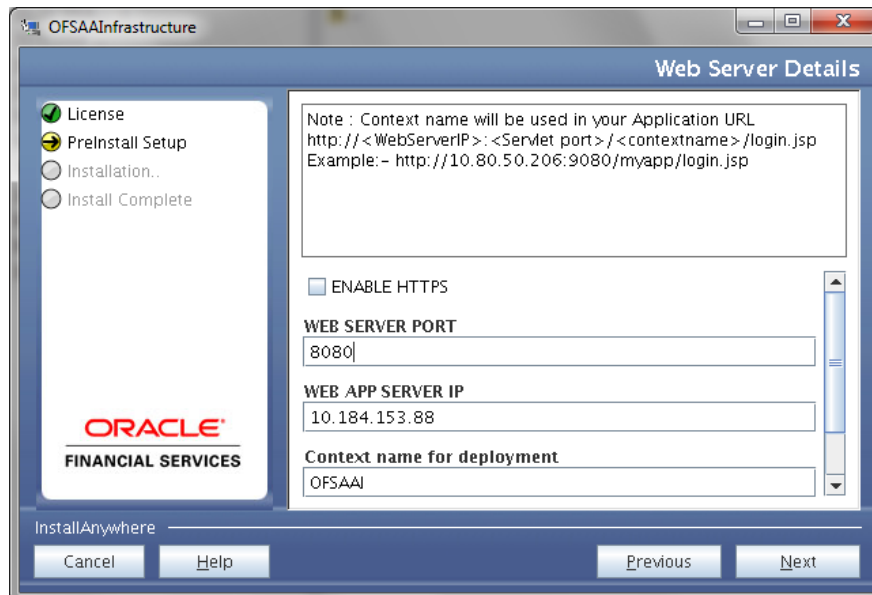
OLAP Details



26. Enter 1 if you want to configure OFSAAI OLAP feature. By default, 0 is displayed.

27. Click **Next**. The *Web Server Details* window is displayed.

Web Server Details

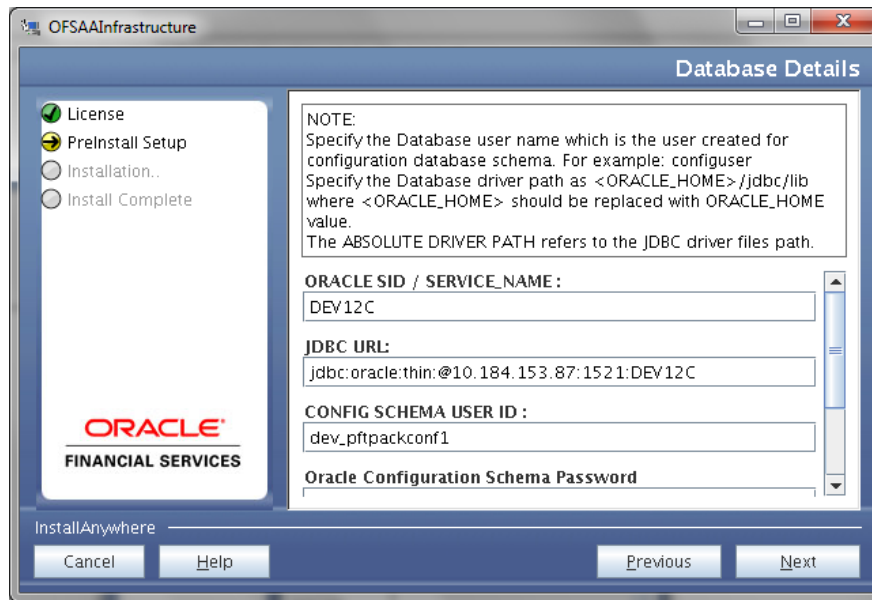


28. Select the **Enable HTTPS** checkbox to configure HTTPS.

29. Enter Web Server (HTTP Server) Port, Web App Server (HTTP Server) IP address, context name for deployment and the local path to any folder on the Web Application Server (Tomcat/ Websphere/ Weblogic).

30. Click **Next**. The *Database Details* window is displayed.

Database Details

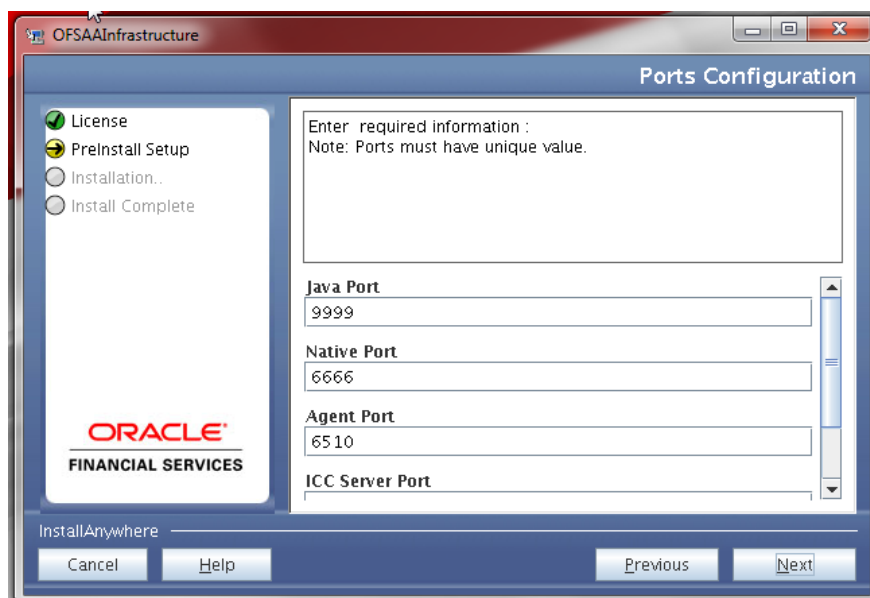


31. Enter Oracle SID/Service Name, JDBC URL, Configuration Schema User ID and Password, and Absolute Driver Path.

NOTE: Absolute Driver Path can be the path where Oracle DB client is installed or JDBC driver is installed. For example, /scratch/oracle/app/oracle/product/11.2.0/client_1/jdbc/lib

32. Click **Next**. The *Ports Configuration* window is displayed.

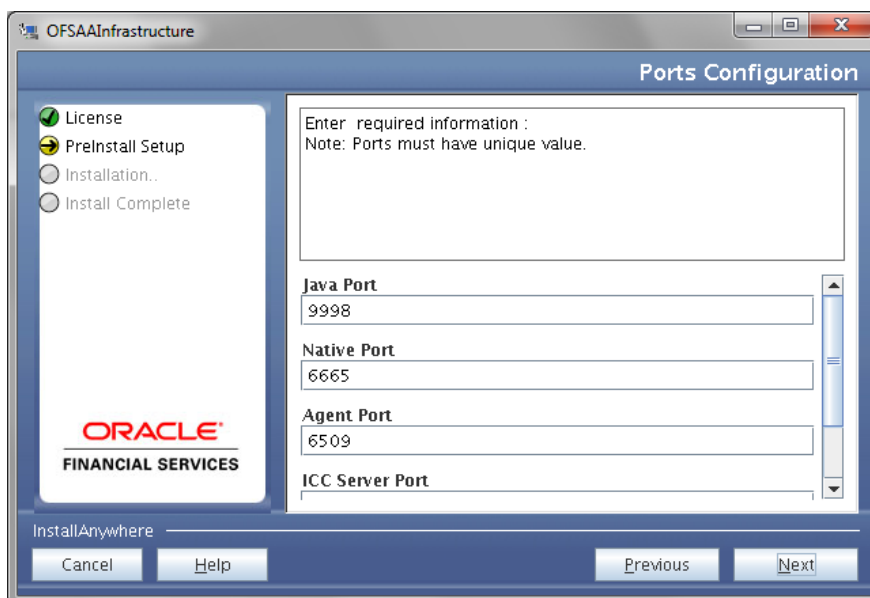
Ports Configuration



33. Enter Java Port, Native Port, Agent Port, ICC Server Port, and ICC Native Port. You can proceed with the default port values configured.

34. Click **Next**. The *Ports Configuration* window is displayed.

Ports Configuration



35. Enter OLAP Port, Message Server Port, Router Port, and AM Port.

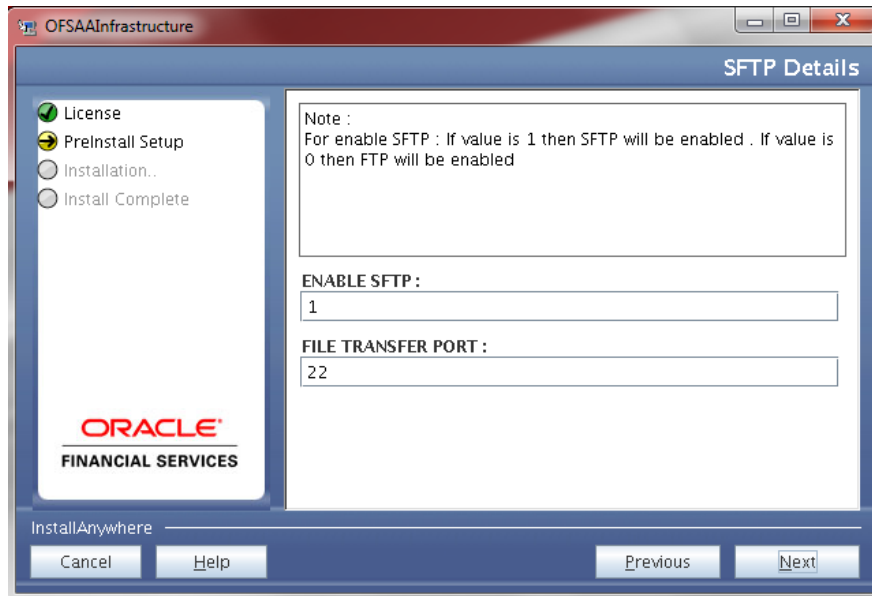
36. Click **Next**. The *Default Infrastructure Administrator and Authorizer User Password* window is displayed.

Default Infrastructure Administrator and Authorizer User Password



37. Enter the passwords for default System Administrator and System Authorizer users.
38. Click **Next**. The *SFTP Details* window is displayed.

SFTP Details



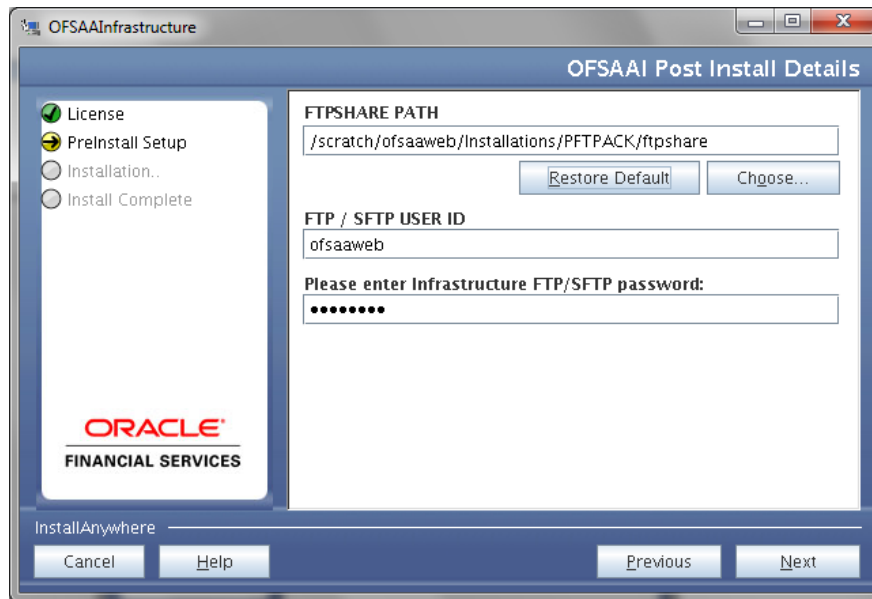
39. Enter 1 to enable SFTP or 0 to enable FTP.

NOTE: Ensure the system on which the OFSAA Infrastructure is being installed, has either FTP/ SFTP enabled.

40. Enter the port to be used for file transfer.

41. Click **Next**. The *OFSAAI Post Install Details* window is displayed.

OFSAAI Post Install Details

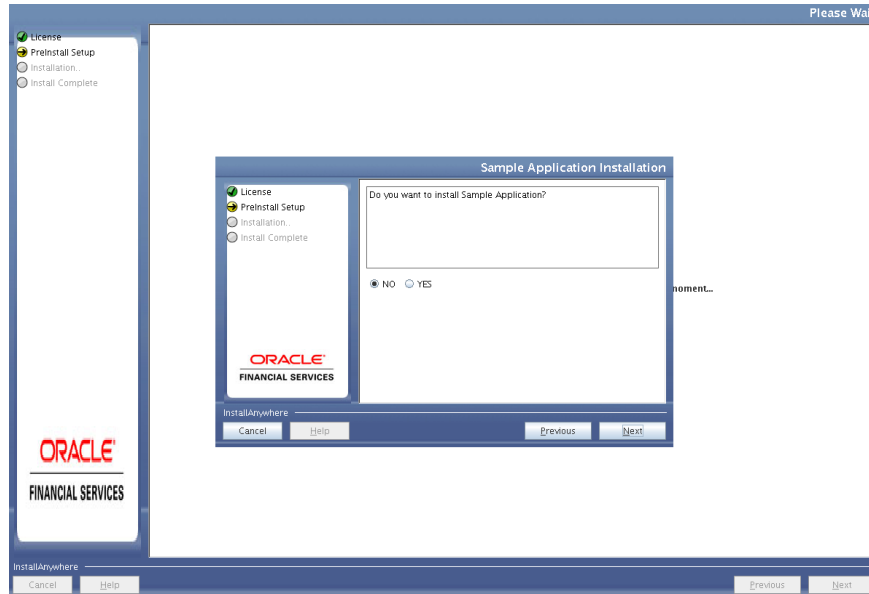


42. Enter the path of the ftpshare directory and the User Id and password for OFSAAI Server.

NOTE: The transfer of data (files) between the OFSAAI Server and the Web Application Server happens over FTP/ SFTP. Ensure the necessary host configurations are made for a successful handshake.

43. Click **Next**. The *Sample Application Installation* window is displayed.

Sample Application Installation

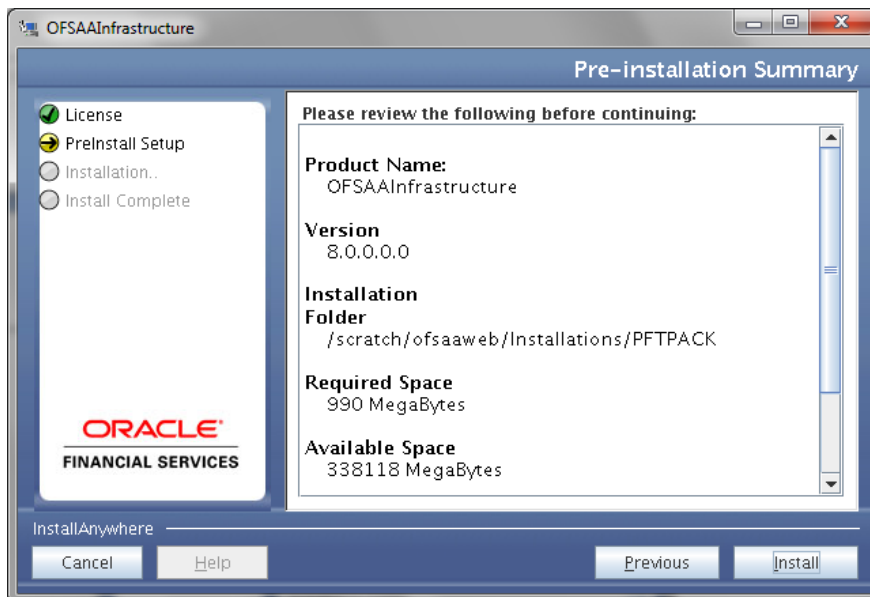


44. Select **Yes** if you want to install Sample Application.

NOTE: Ensure the appropriate DB schemas are created for holding the Sample Application data. See Database User/ SchemaDatabase User/ Schema Database User/ Schema section.

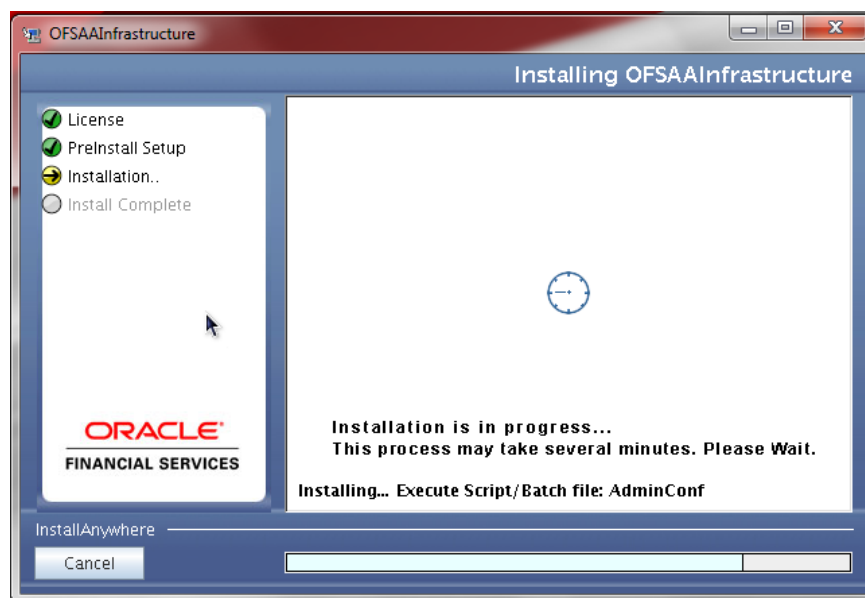
45. Click **Next**. The *Pre Installation Summary* window is displayed.

Pre Installation Summary



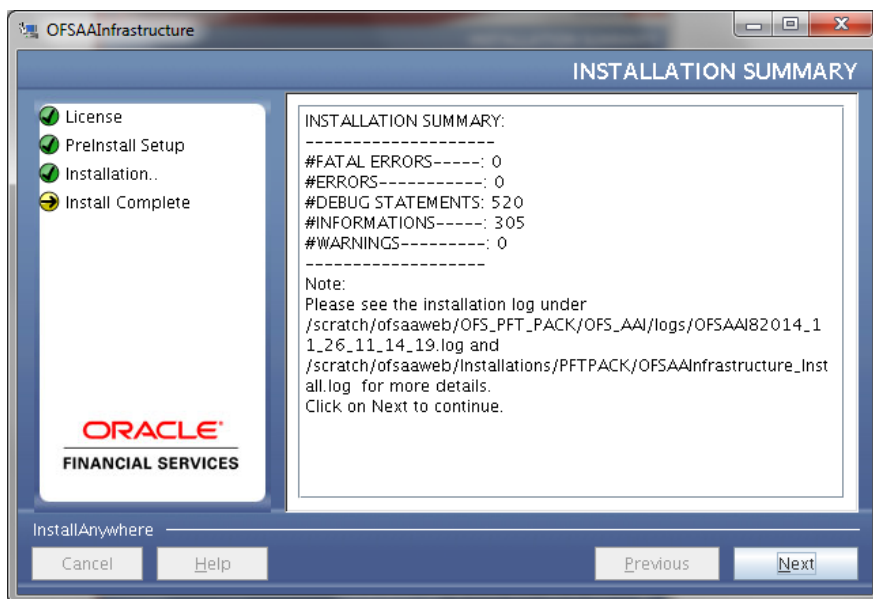
46. Click **Install**. The *Installing OFSAA Infrastructure* window is displayed.

Installing OFSAA Infrastructure



Anytime during the installation you can click **Cancel** to stop the installation. Once completed, the Installation Summary screen is displayed.

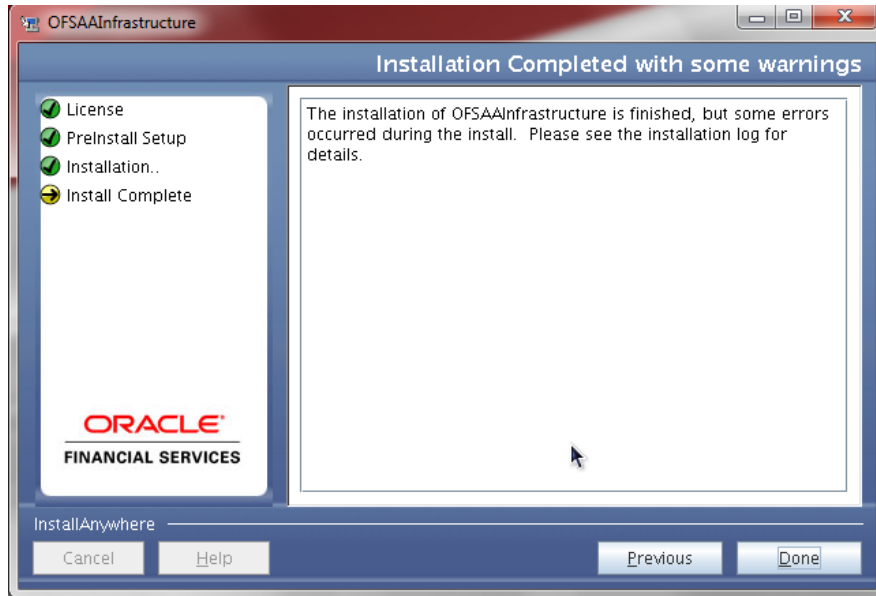
Installation Summary



The Summary screen displays the number of Fatal Errors, Errors, Debug Statements, Information, and Warnings along with the location of log files.

47. Click **Next**. The *Installation Complete* window is displayed.

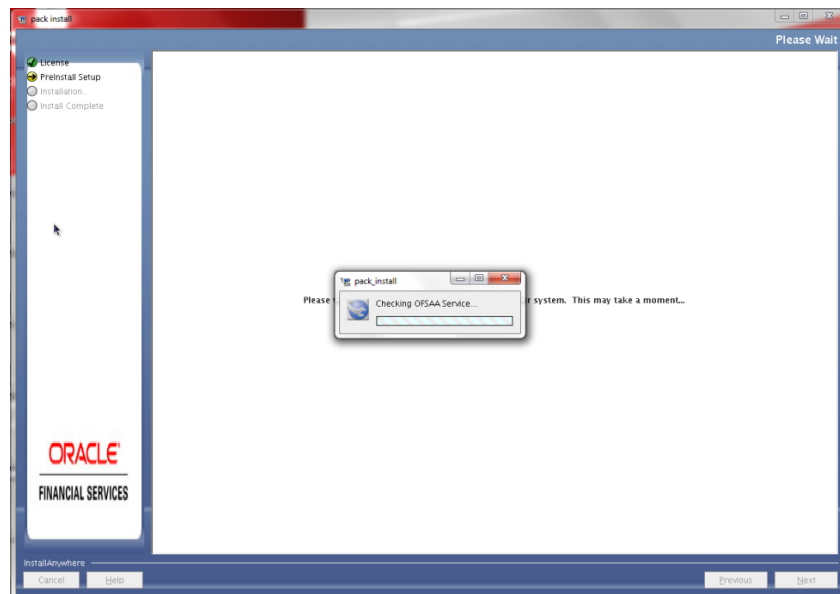
Installation Complete



Note: If the installation is successful with some warnings, you can navigate to the installation log for more details and address them.

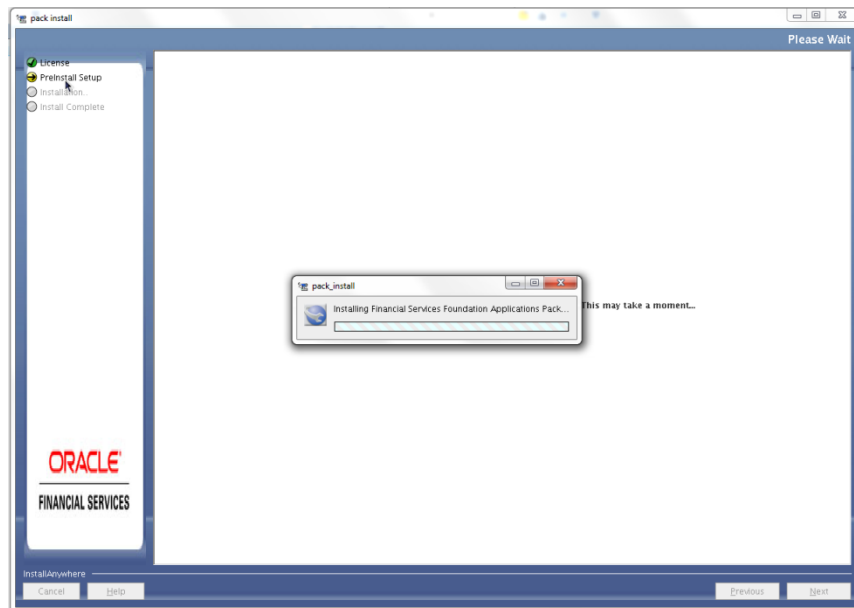
48. Click **Done**. The following message is displayed: Please wait, pack_install is being configured for your system. This may take a moment.

Checking OFSAAI Services



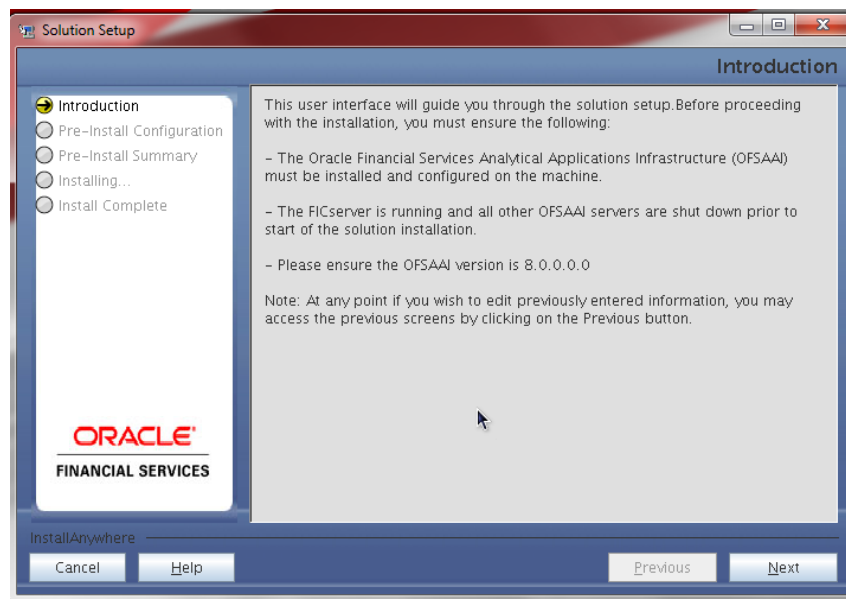
49. The Installer will prepare to install *Profitability Application Pack*

Installing Profitability Application Pack



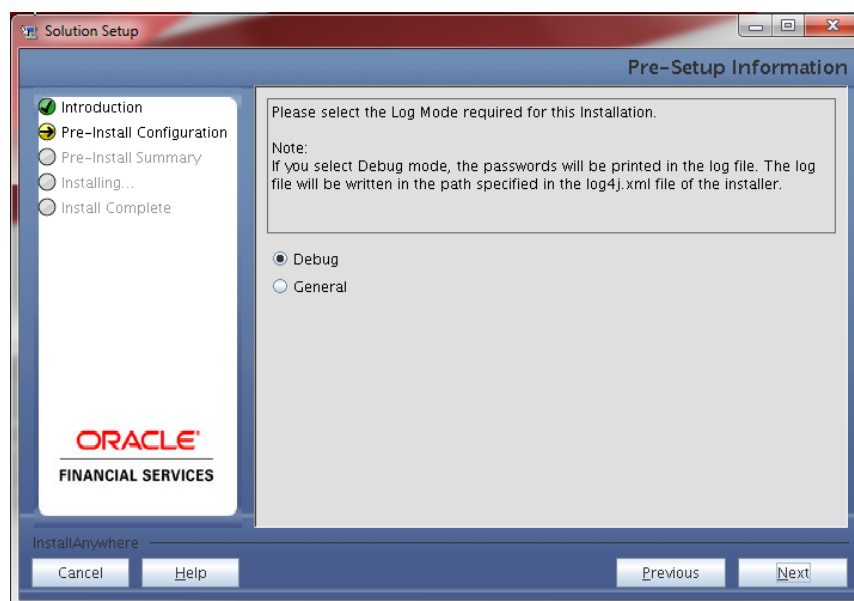
50. **Solution Setup – Introduction** window will be displayed.

Solution Setup Introduction Window



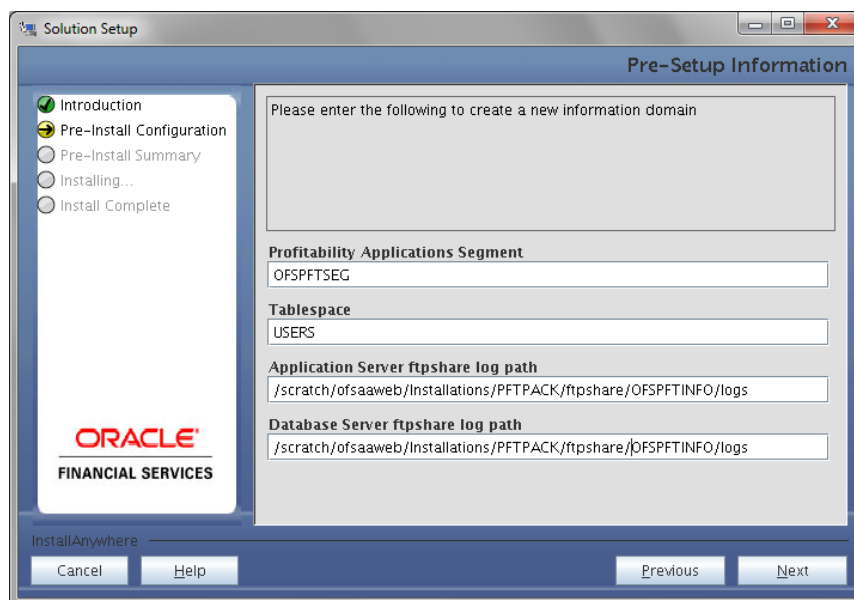
51. Click **Next**. Log mode window will be displayed. Select the **Log Mode**.

Log Mode Window



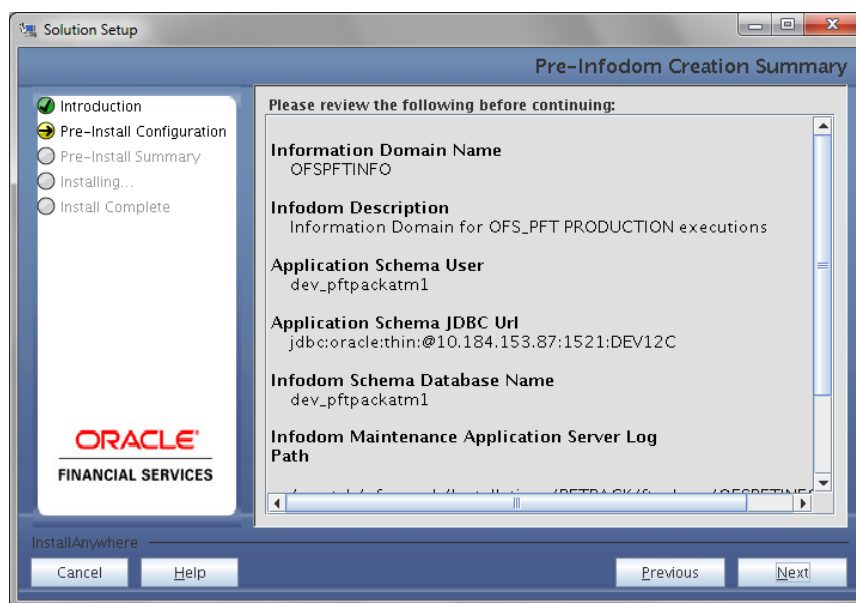
52. Click on **Next**. Segment creation window will be displayed. Enter the log paths.

Segment Creation window



53. Click on **Next**. Pre-Infodom Creation Summary window will be displayed.

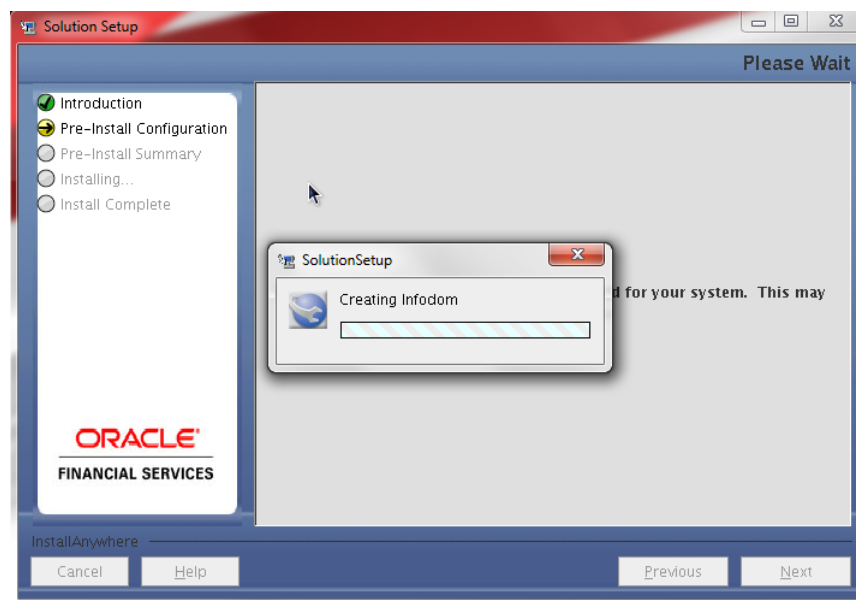
Pre-Infodom Creation Summary window



54. Click on **Next**. The Infodom creation window will be displayed.

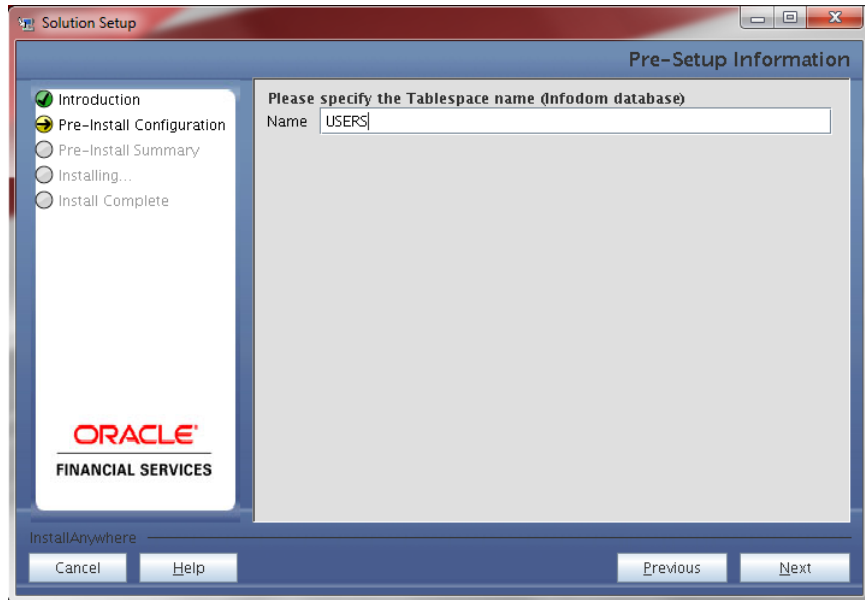
Note: Permissible length for information domain is maximum 10 characters and only alphanumeric characters allowed. No special characters allowed.

Infodom creation Window



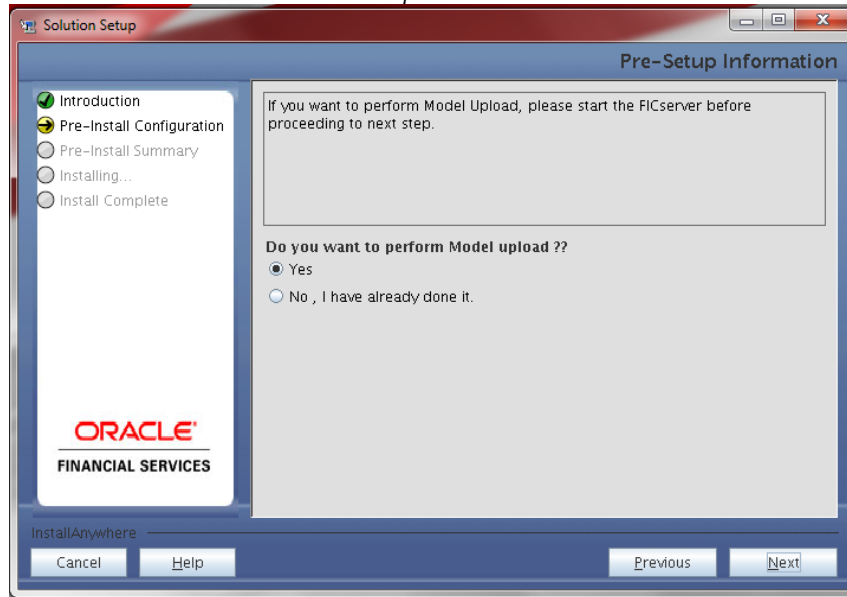
55. After creation of infodom, The Tablespace specification window will be displayed.

Tablespace specification window



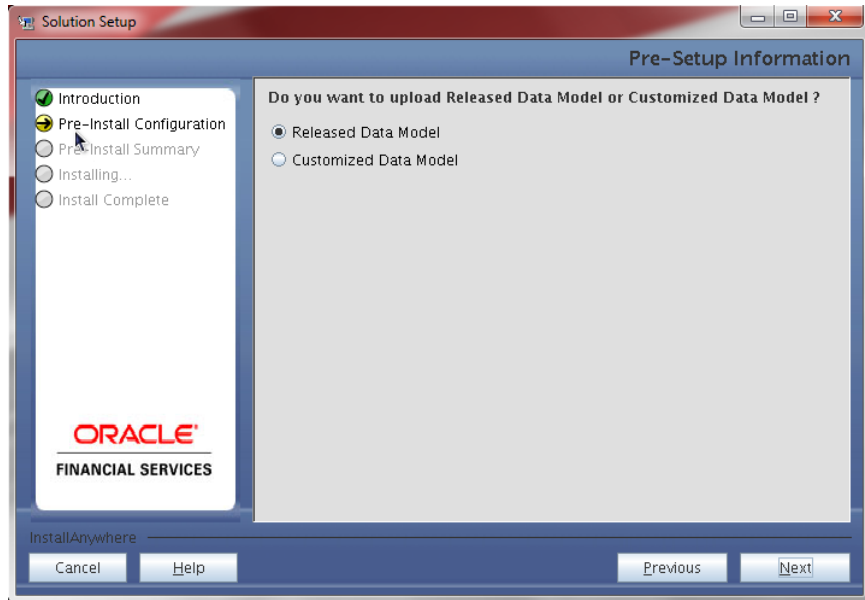
56. Click on **Next**, Model Upload Window will be displayed

Model Upload Window



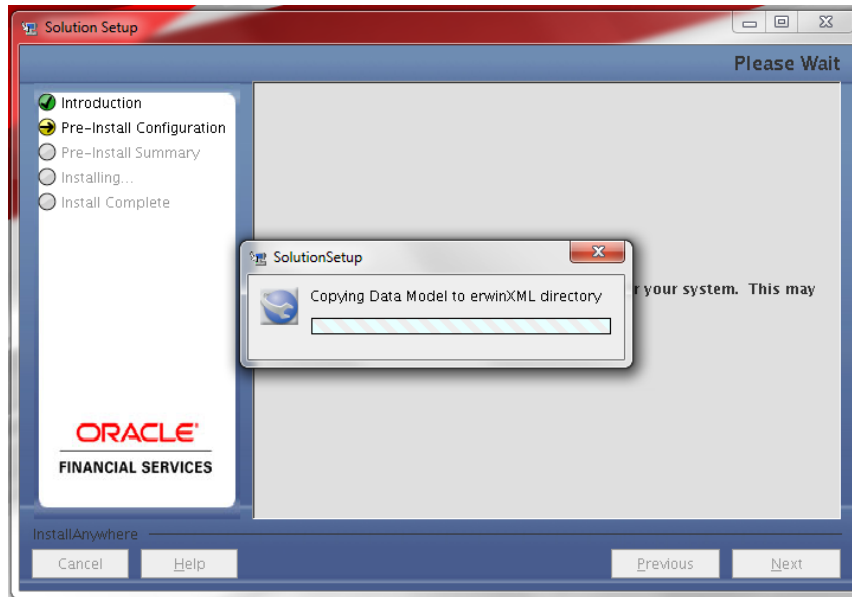
57. Select **Yes** and click on **Next**. Model Type window will be displayed.

Model Type Window



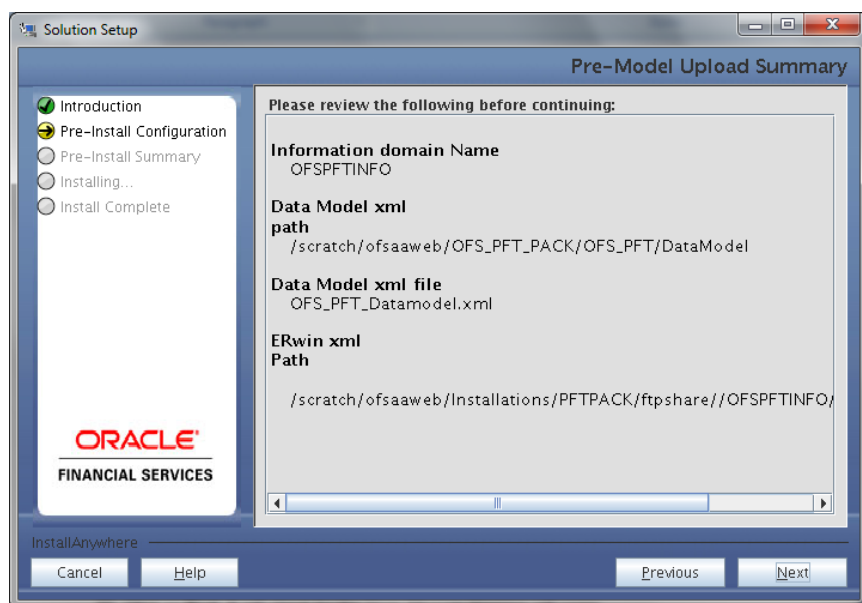
58. Select **Released Data Model** and click on **Next**. Model will get copied into ftpshare.

Model Copy Window



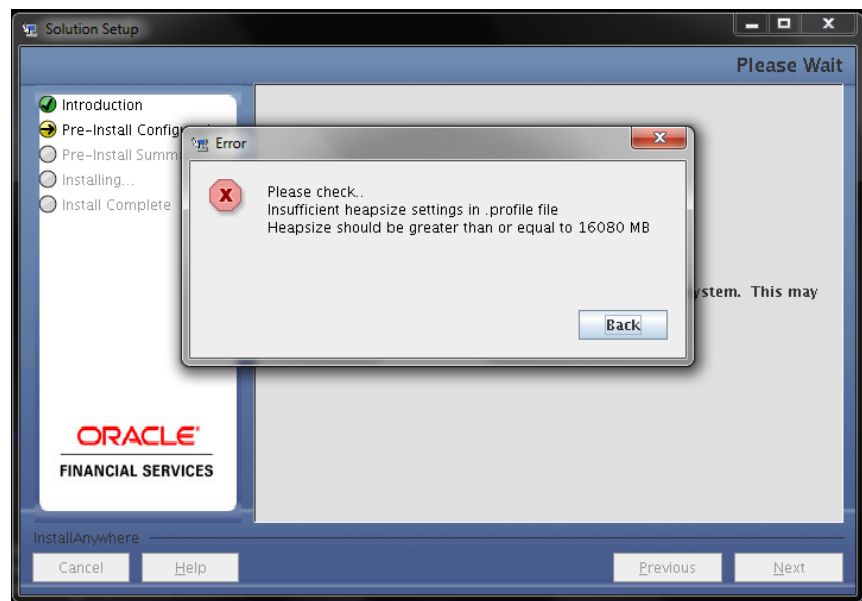
59. Model Review Window will be displayed.

Model Review Window



60. Click on **Next**, It will check for the Heap Memory Warning will come.

Model Heap Memory Warning Window



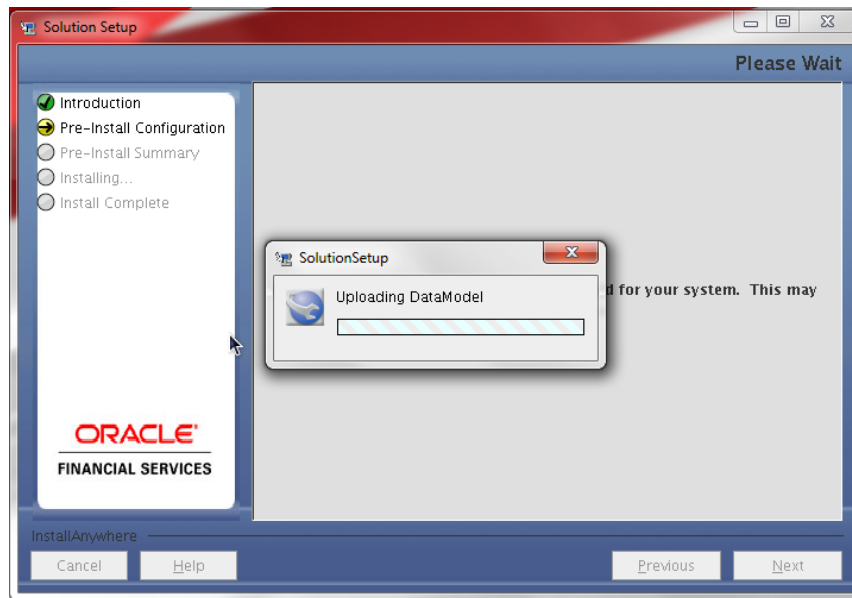
61. Click on **Back**, Update your .profile entry with required heap memory size.

- a. Open a new session in Putty
- b. Shutdown Reveleus server using `$FIC_HOME/ficapp/common/FICServer/bin/stopofsaai.sh`

-
- c. Update the X_ARGS_APP entry in .profile following eg.
Eg. X_ARGS_APP="-Xms2g -Xmx18g -XX:+UseAdaptiveSizePolicy -XX:MaxPermSize=1024M -XX:+UseParallelOldGC -XX:+DisableExplicitGC"
 - d. Run .profile
 - e. Start Reveleus using \$FIC_HOME/ficapp/common/FICServer/bin/ startofsaai.sh
 - f. Proceed for model Upload
 - g. Proceed to Model Upload by clicking on **Next**

62. Click on **Next** again. The Upload will get start. This will take 3 Hours approx.

Model Upload Window

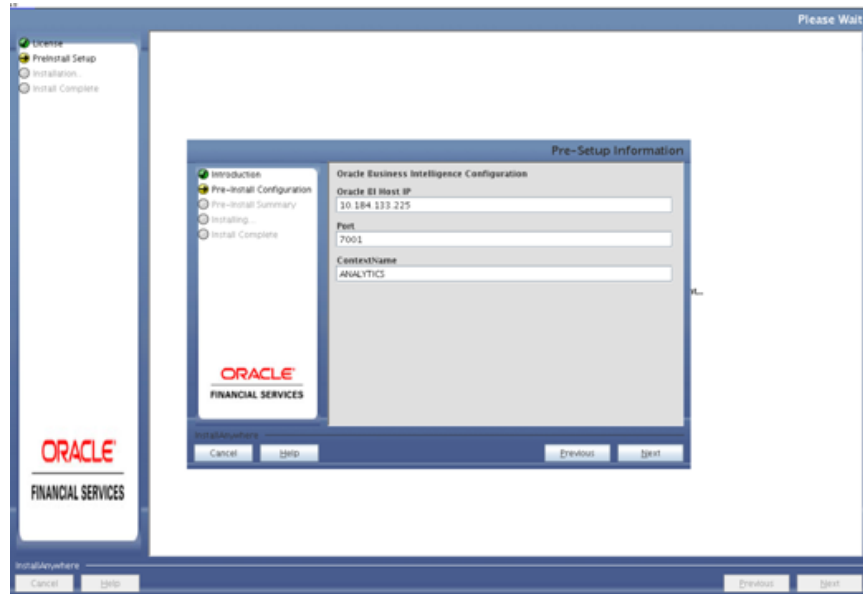


Note: Pack on pack installation for Profitability pack, execute config/insert/indexes.sql as a post data model upload step.

The data model is getting uploaded.

63. Click **Next**.

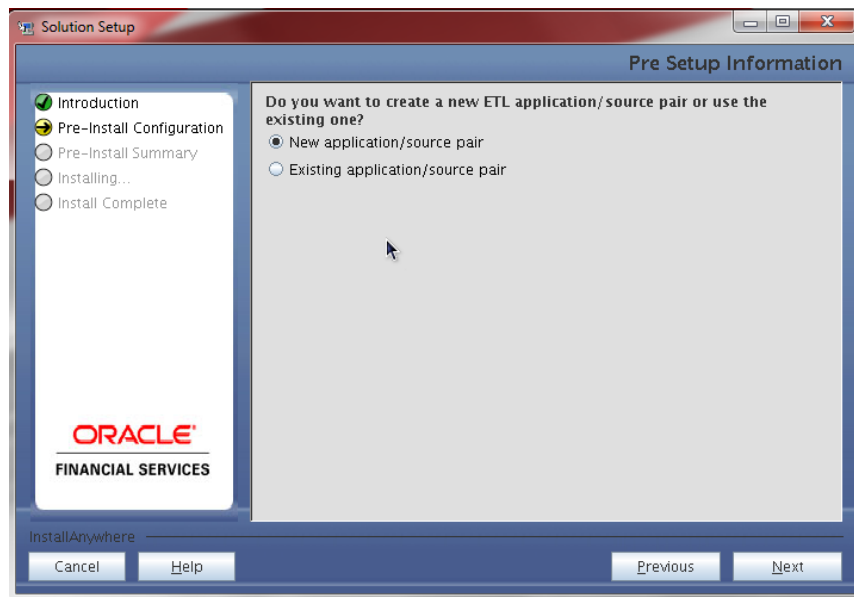
Oracle Business Intelligence Configuration



The **Pre Setup Information** screen requests for setup information. The following panel seeks input from the user on whether to create new ETL application/source pair or use an existing one. Choose a desired option.

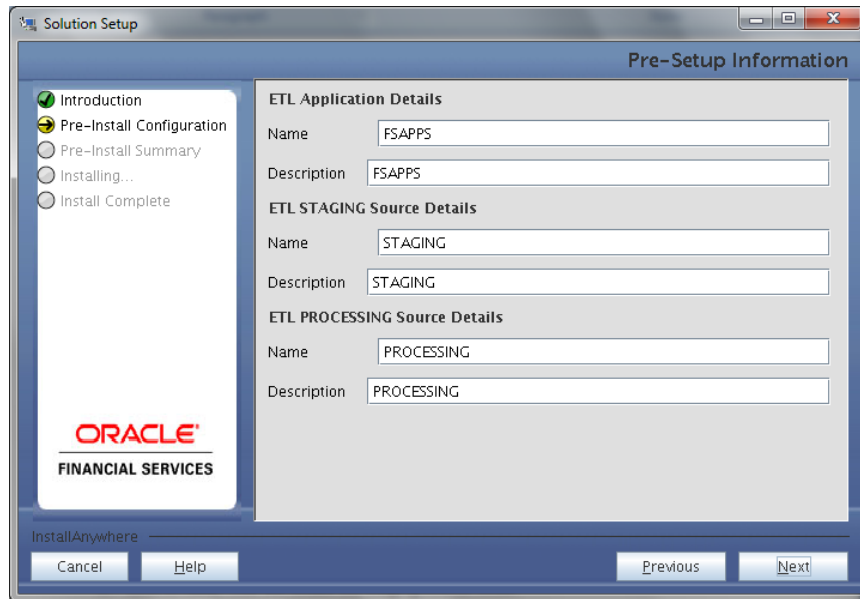
64. Click **Next** to continue.

Source Pair Window



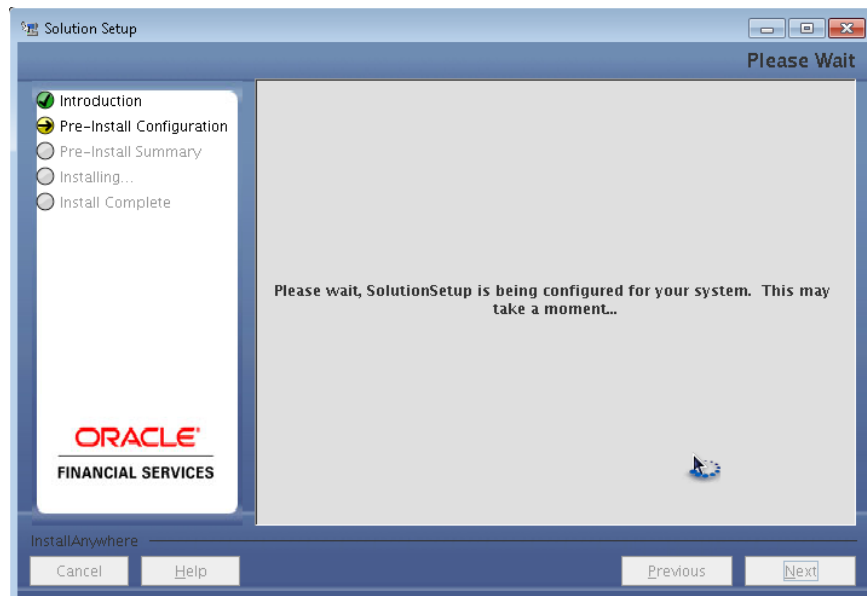
65. Select **New Application source** and click on **Next**. Staging details will be displayed

Staging Details Window



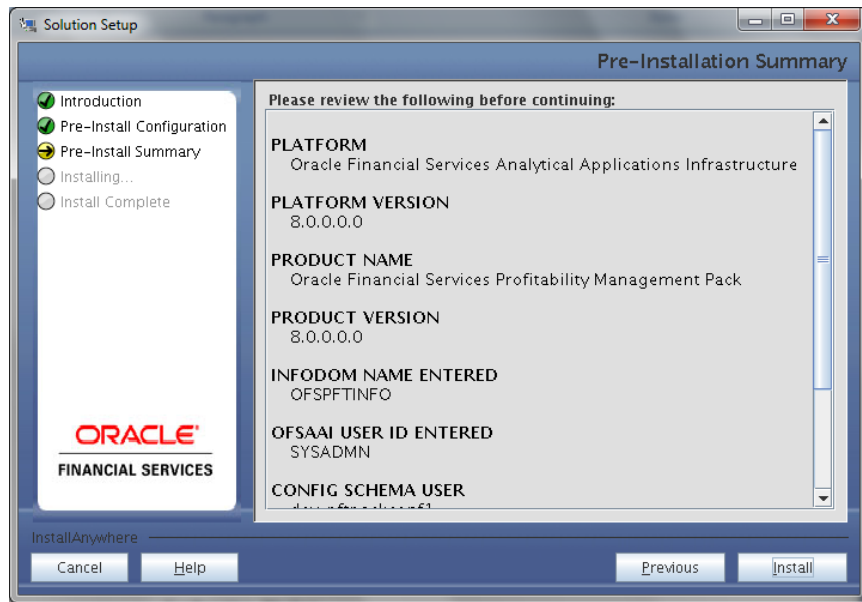
66. Click on **Next**. This will create the staging source folder.

Staging creation Window



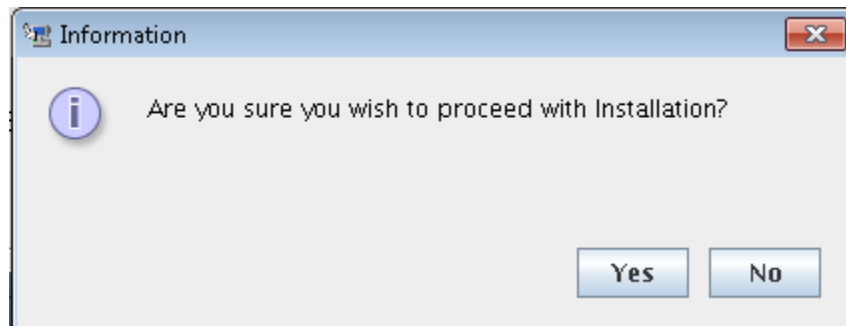
67. After Creation, Click on **Next**, Installation Details Review window.

Installation Details Review Window



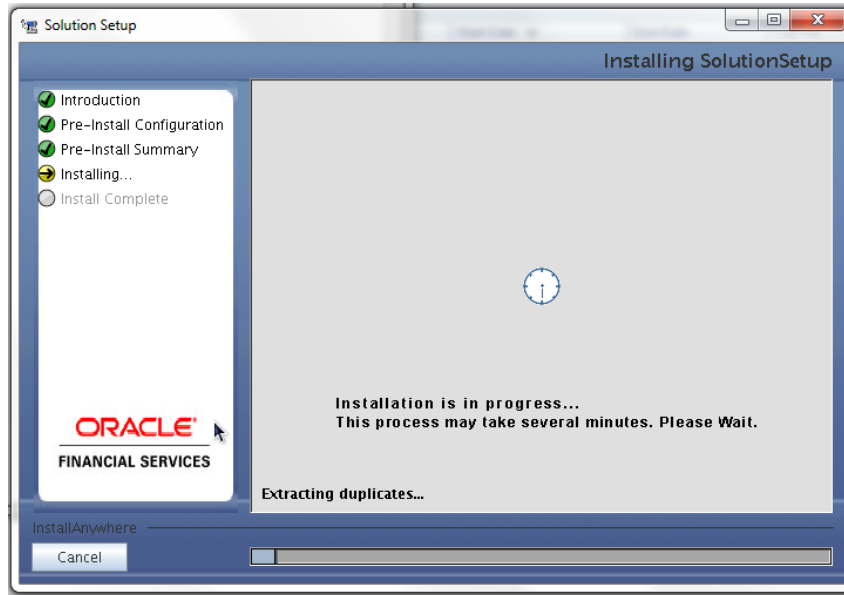
68. Click on **Install**, A Pop window will ask for the confirmation

Confirmation Window



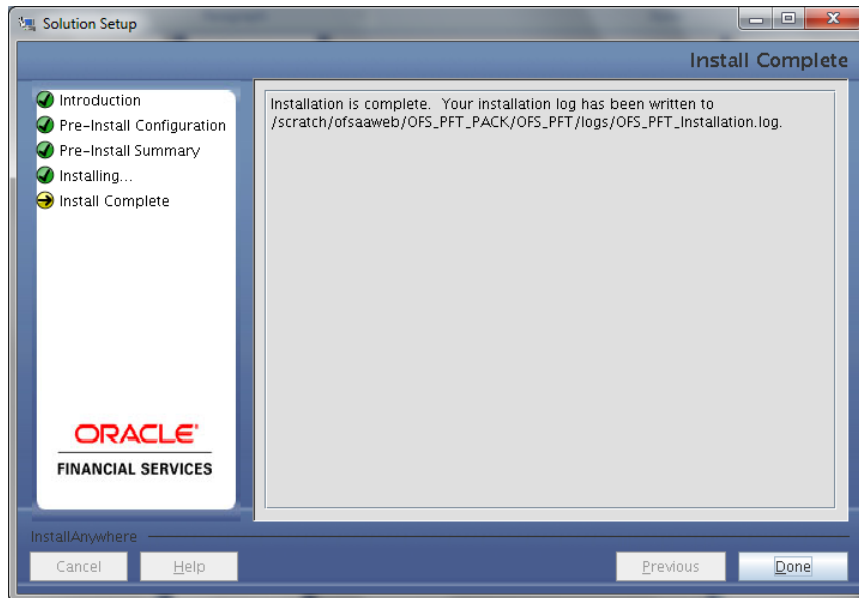
69. Click on **Yes**, Installation will begin with Installation Progress will be displayed in Installation Progress window.

Installation Progress Window



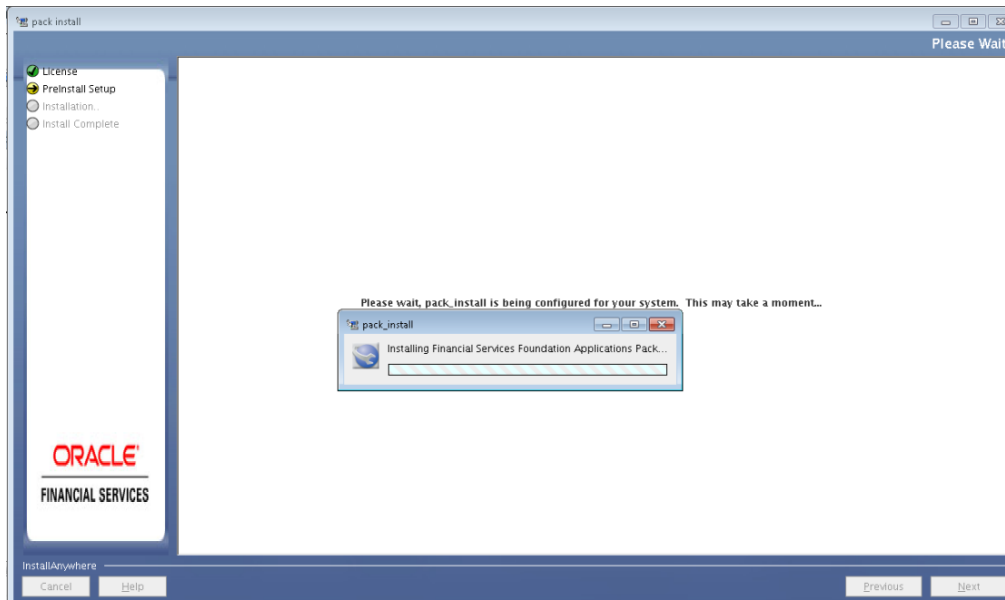
70. After Installation completion, Installation Completion window will be displayed.

Installation Completion Window



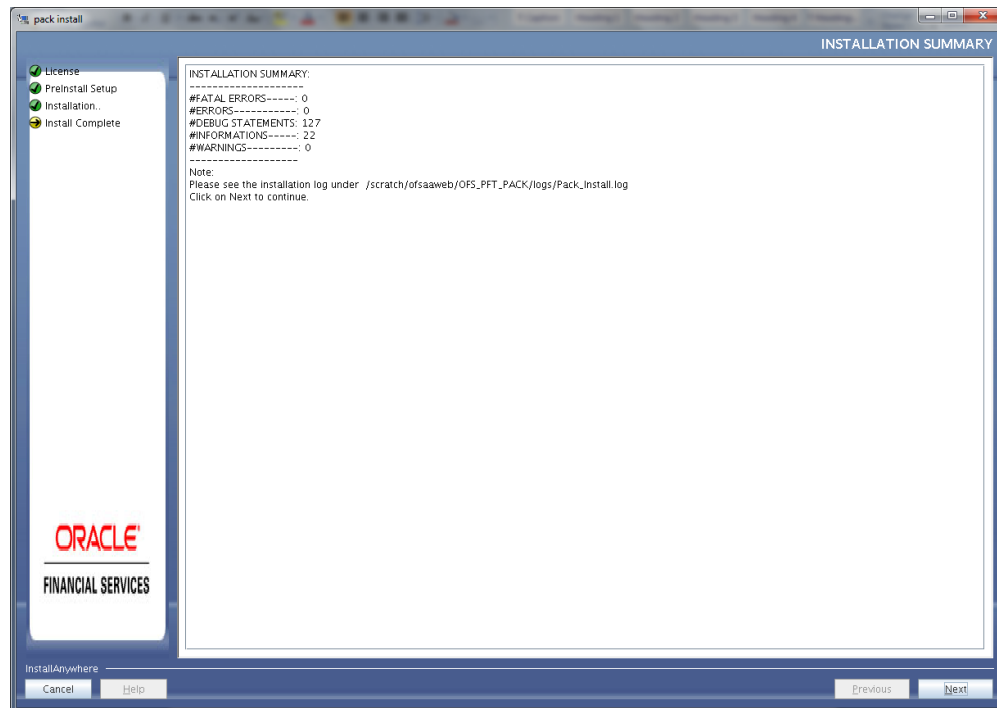
71. Click on **Done**, The Panel will go back to Main App Pack Installation Window.

App Pack Installation Window



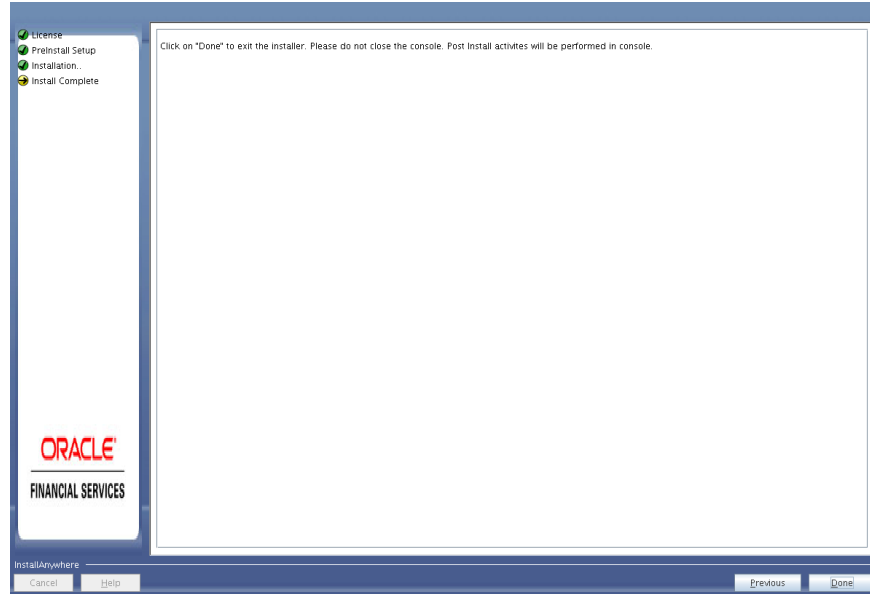
72. Installation Summary window will be displayed.

Installation Summary Window



73. Click on **Done**. Installation Complete Window will be displayed.

Installation Complete

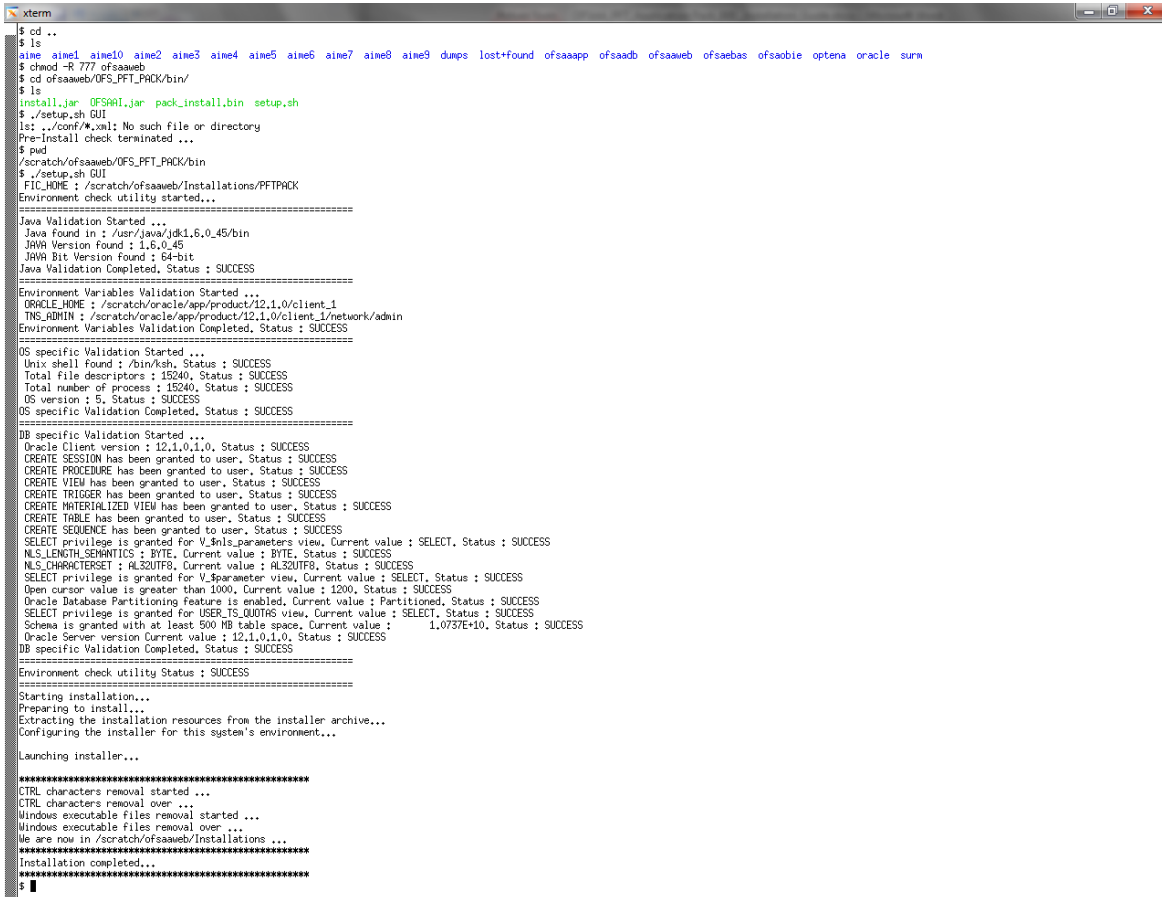


74. Click **Done**.

Note: The installation process continues on the console. Do not close the console until the installation process is complete.

Post Install Health checks are displayed:

Installation Complete



```
xterm
$ cd ..
$ ls
a1ne a1ne1 a1ne10 a1ne2 a1ne3 a1ne4 a1ne5 a1ne6 a1ne7 a1ne8 a1ne9 dumps lost+found ofsaapp ofsaadb ofsaaweb ofsaebas ofsaobie optena oracle surm
$ chand -R 777 ofsaaweb
$ cd ofsaaweb/OFS_PFT_PACK/bin/
$ ls
install.jar ofsaaweb.jar pack_install.bin setup.sh
$ ./setup.sh GUI
ls: ./conf/*.xml: No such file or directory
Pre-install check terminated ...
$ pwd
/scratch/ofsaaweb/OFS_PFT_PACK/bin
$ ./setup.sh GUI
PFT_HOME : /scratch/ofsaaweb/Installations/PFTPACK
Environment check utility started...
=====
Java Validation Started ...
Java found in : /usr/java/jdk1.6.0_45/bin
JAWR Version found : 1.6.0_45
JAWR Bit Version found : 64-bit
Java Validation Completed, Status : SUCCESS
=====
Environment Variables Validation Started ...
ORACLE_HOME : /scratch/oracle/app/product/12.1.0/client_1
TNS_ADMIN : /scratch/oracle/app/product/12.1.0/client_1/network/admin
Environment Variables Validation Completed, Status : SUCCESS
=====
OS specific Validation Started ...
Unix shell found : /bin/ksh, Status : SUCCESS
Total file descriptors : 15240, Status : SUCCESS
Total number of process : 15240, Status : SUCCESS
OS version : 5, Status : SUCCESS
OS specific Validation Completed, Status : SUCCESS
=====
DB specific Validation Started ...
Oracle Client version : 12.1.0.1.0, Status : SUCCESS
CREATE SESSION has been granted to user, Status : SUCCESS
CREATE PROCEDURE has been granted to user, Status : SUCCESS
CREATE VIEW has been granted to user, Status : SUCCESS
CREATE TRIGGER has been granted to user, Status : SUCCESS
CREATE MATERIALIZED VIEW has been granted to user, Status : SUCCESS
CREATE TABLE has been granted to user, Status : SUCCESS
CREATE SEQUENCE has been granted to user, Status : SUCCESS
SELECT privilege is granted for V_$nls_parameters view, Current value : SELECT, Status : SUCCESS
NLS_LENGTH_SEMANTICS : BYTE, Current value : BYTE, Status : SUCCESS
NLS_CHARACTERSET : AL32UTF8, Current value : AL32UTF8, Status : SUCCESS
SELECT privilege is granted for V_$parameter view, Current value : SELECT, Status : SUCCESS
Open cursor value is greater than 1000, Current value : 1200, Status : SUCCESS
Oracle Database Partitioning feature is enabled, Current value : Partitioned, Status : SUCCESS
SELECT privilege is granted for USER_TS_QUOTAS view, Current value : SELECT, Status : SUCCESS
Schema is granted with at least 500 MB table space, Current value : 1.0737E+10, Status : SUCCESS
Oracle Server version Current value : 12.1.0.1.0, Status : SUCCESS
DB specific Validation Completed, Status : SUCCESS
=====
Environment check utility Status : SUCCESS
=====
Starting installation...
Preparing to install...
Extracting the installation resources from the installer archive...
Configuring the installer for this system's environment...
Launching installer...
=====
CTRL characters removal started ...
CTRL characters removal over ...
Windows executable files removal started ...
Windows executable files removal over ...
We are now in /scratch/ofsaaweb/Installations ...
=====
Installation completed...
=====
$
```

75. Install the consolidated one-off patch **25777667**. Refer to the Readme available with the patch for further instructions on installing the patch.

76. Perform steps mentioned in the [Post Installation Configuration](#) section.

Note: Download and install patch for Bug 21160684 if installing this release of the OFS PFT Application Pack version 8.0.0.0.0 on Java 8.

4.3.2 SILENT Mode Installation

In the SILENT Mode Installation you must configure the product xml files and follow the instructions in command prompt.

Follow these steps for installing the OFS Profitability Pack in SILENT mode.

1. Log in to the system as non-root user.

-
2. Identify a directory for installation and set the same in the user `.profile` file as below:

```
FIC_HOME=< OFSAA Installation Directory >
export FIC_HOME
```
 3. Execute the user `.profile`.
 4. Navigate to `OFS_PFT_PACK` folder.
 5. Edit the `OFS_PFT_PACK/conf/OFS_PFT_PACK.xml` to enable the product licenses. Update the attribute `ENABLE=YES/NO` in `OFS_PFT_pack.xml` for licensing the App in the pack.

NOTE: Update `OFS_PFT_PACK.XML`, set the attribute “ENABLE=YES” of `<APP_ID>` tag for applications to be enabled during installation. If any application has mentioned `OFS_PFT` as `PREREQ` in the `<APP_ID>` tag, set the attribute “ENABLE=YES” for `OFS_PFT`.

6. Edit the `OFS_PFT_PACK/schema_creator/conf/OFS_PFT_SCHEMA_IN.xml` file to set the appropriate attribute values. Include `INFODOM = “<Infodom Name>”` in `OFS_PFT_SCHEMA_IN.xml` file.

NOTE: Refer [Configuring OFS_PFT_SCHEMA_IN.XML](#) for details on configuring this XML file.

7. Edit the `OFS_PFT_PACK/OFS_AAI/conf/OFSAAI_InstallConfig.xml` file to set the appropriate infrastructure installation attribute values.

NOTE: This step can be ignored if an installation of OFSAA 8.0 already exists.
Refer [Configuring OFSAAI_InstallConfig.xml](#) for details on configuring this XML file.

8. Execute the schema creator utility.

NOTE: This step is mandatory and should be executed before every additional OFSAA Application Pack installation. Ensure the execute with `-s` option in Online/Offline mode.
Refer [Executing the Schema Creator Utility](#) for more details.

9. The installer folder contains a template file “`Silent.template`”
10. Create a copy of this file and rename the copy as “`Silent.props`”
11. Edit the file “`Silent.props`” and specify the parameters as per the requirements
12. On successful execution of the schema creator utility, navigate to `OFS_PFT_PACK/bin/` and execute the application pack installer with **SILENT** option.

13. Execute `./setup.sh SILENT` in the console.

```

mfs221030@oracle.com: PuTTY
$ ls -lrc
total 24484
-rwxr-xr-x 1 ofsaaspp dba      961 Jan 22 12:00 OFSAAT.jar
-rwxr-xr-x 1 ofsaaspp dba     5604 Jan 22 12:00 install.jar
-rwxr-xr-x 1 ofsaaspp dba     24288 Jan 22 12:00 setup.sh
-rwxr-xr-x 1 ofsaaspp dba    12419072 Jan 22 12:00 pack_installerlib.bin
-rwxr-xr-x 1 ofsaaspp dba    12502912 Jan 22 12:00 pack_installer.bin
$ ./setup.sh SILENT

```

14. Enter the Infrastructure FTP/SFTP password value, when prompted at the command prompt.

```

mfs221030@oracle.com: PuTTY
-rwxr-xr-x 1 ofsaaspp dba    12502912 Jan 22 12:00 pack_installer.bin
$ ./setup.sh SILENT
FTP_HOME = /scratch/ofsaaspp/Installations/FP1?
Environment check utility started...
-----
Java Validation Started ...
Java found in : /usr/java/jdk1.6.0_25/bin
JAVA Version found : 1.6.0_25
JAVA Bin Version found : 64-bit
Java Validation Completed. Status : SUCCESS
-----
Environment Variables Validation Started ...
ORACLE_HOME = /scratch/oracle/app/product/120/client_1
THE_ADMIN = /scratch/oracle/app/product/120/client_1/network/admin
Environment Variables Validation Completed. Status : SUCCESS
-----
OS specific Validation Started ...
Unix shell found : /bin/ksh. Status : SUCCESS
Total file descriptors : 10000. Status : SUCCESS
Total number of process : 93664. Status : SUCCESS
OS version : 5. Status : SUCCESS
OS specific Validation Completed. Status : SUCCESS
-----
DB specific Validation Started ...
Oracle Client version : 12.1.0.1.0. Status : SUCCESS
CREATE SESSION has been granted to user. Status : SUCCESS
CREATE PROCEDURE has been granted to user. Status : SUCCESS
CREATE VIEW has been granted to user. Status : SUCCESS
CREATE TRIGGER has been granted to user. Status : SUCCESS
CREATE MATERIALIZED VIEW has been granted to user. Status : SUCCESS
CREATE TABLE has been granted to user. Status : SUCCESS
CREATE SEQUENCE has been granted to user. Status : SUCCESS
SELECT privilege is granted for V_sqls_parameters view. Current value : SELECT. Status : SUCCESS
MLS LENGTH SEMANTICS : BYTE. Current value : BYTE. Status : SUCCESS
MLS CHARACTERSET : AL32UTF8. Current value : AL32UTF8. Status : SUCCESS
SELECT privilege is granted for V_parameter view. Current value : SELECT. Status : SUCCESS
Open cursor value is greater than 1000. Current value : 1200. Status : SUCCESS
SELECT privilege is granted for USER_TS_QUOTAS view. Current value : SELECT. Status : SUCCESS
Someone is granted with at least 100 MB table space. Current value : 100 MB. Status : SUCCESS
Oracle Server version Current value : 12.1.0.1.0. Status : SUCCESS
DB specific Validation Completed. Status : SUCCESS
-----
Environment check utility Status : SUCCESS
-----
* Welcome to Oracle Financial Services Advanced Analytical Applications Infrastructure (OFS AAAI) Applications Pack Installation *
-----
Checking Infrastructure installation status ...
Infrastructure installation does not exist. Proceeding with Infrastructure installation ...
Triggering Infrastructure installation ...
Please enter Infrastructure Application/Database component FTP/SFTP password :

```

Console Prompts	User Inputs
Please enter Infrastructure FTP/SFTP password	In case the prompt reads as below, enter the username/ password for accessing the product Staging/ Metadata Repository FTPSHARE Kerberos username [user] Kerberos password for user:

15. Enter **Always**, when prompted to add host key fingerprint.

16. The OFSAAI License Agreement is displayed.

```

Environment check utility Status : SUCCESS
*****
* Welcome to Oracle Financial Services Advanced Analytical Applications Infrastructure (OFS AAI) Applications Pack Installation *
*****
Checking Infrastructure installation status ...
Infrastructure installation does not exist. Proceeding with Infrastructure installation ...
Triggering Infrastructure installation ...

Please enter Infrastructure FTP/SFTP password :
The host 10.104.149.241 is currently unknown to the system
The host key fingerprint is: 2040: 13 8a d b0 44 52 55 7a 47 ae ad ea 38 e6 9d 33
Do you want to allow this host key? [Yes/No/Always]: Always
*****
OFSAA APPLICATION PACK LICENSE AGREEMENT
*****
* Warning: This Software System is protected by International copyright laws. Unauthorized reproduction or distribution of this Software System, or any portion of it, may r
sult in severe civil and criminal penalties and will be prosecuted to the maximum extent possible under the law.*
* Oracle Financial Services Analytical Applications (OFSAA) Application Pack is a group of OFSAA products packaged together in a single installer. Each Application Pack add
esses specific functional domains via its products that are grouped together. The Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) being the base
infrastructure for deployment of other OFSAA products/Application Packs, is bundled with each Application Pack. With every Application Pack installation, the OFSAA Infrastru
cture product would be checked for and installed if required.*
* Oracle Financial Services Enterprise Modeling (OFS AAI) and Oracle Financial Services Inline Processing Engine (OFS IPE) products are separately licensable products and
would not be enabled unless it has been licensed. Oracle Financial Services Enterprise Modeling (OFS AAI) and Oracle Financial Services Inline Processing Engine (OFS IPE)
products are only part of the Oracle Financial Services Advanced Analytics Infrastructure Pack and specific OFSAA Application Packs that require these advanced analytical fe
tures of the product. Oracle Financial Services Enterprise Modeling (OFS AAI) or Oracle Financial Services Inline Processing Engine (OFS IPE) product gets pre-selected aut
omatically on selecting any of the OFSAA products within a specific Application Pack that require these products to be enabled and configured.*
* Multiple products being grouped together under a Application Pack, mandate installation and configuration of these products by default. However, during the Application Pa
ck installation, based on the products that are being selected, it would get enabled and should be licensed for. It is important to note that products once selected (enabled)
cannot be disabled at a later stage. However, products can only be enabled at any later stage using the OFSAA Infrastructure 'Manage Application Pack License' feature.*
* Enabling a product within a Application Pack automatically implies you agree with this license agreement and the respective terms and conditions.*
*****
Are you accepting the terms and conditions mentioned above? [Y/N]:
Y
Please enter password for default Infrastructure administrator user SYSADMN:

```

17. To accept the License Agreement, enter Y/y.

18. Enter the passwords for default Infrastructure administrator and authorizer users.

Console Prompts	User Inputs
Please enter password for default Infrastructure administrator user SYSADMN	Enter the password for the System Administrator.
Please re-enter password for default Infrastructure administrator user SYSADMN	Enter the same password again to confirm its validity.
Please enter password for default Infrastructure authorizer user SYSAUTH	Enter the password for the System Authorizer.
Please enter password for default Infrastructure authorizer user SYSAUTH	Enter the same password again to confirm its validity.

NOTE: SYSADMN and SYSAUTH are the two defaults OFSAAI administrative users created.

```

Please enter password for default Infrastructure administrator user SYSADMIN:
Please re-enter password for default Infrastructure administrator user SYSADMIN:
Please enter password for default Infrastructure authorizer user SYSAUTH:
Please re-enter password for default Infrastructure authorizer user SYSAUTH:
Starting installation...
Preparing to install...
Extracting the installation resources from the installer archive...
Configuring the installer for this system's environment...
Launching installer...
Preparing SILENT Mode Installation...
=====
OFSAAInfrastructure                               (created with InstallAnywhere)
=====
Installing...
[=====]
[-----]
Installation Complete.
YOU ARE EXECUTING profile...
80 PFT Media Pack mediapack Setup
YOU ARE EXECUTING profile...
80 PFT Media Pack mediapack Setup
*****
Welcome to OFS PFT PACK Installation
*****
Starting OFSAA Service...
nohup: appending output to 'nohup.out'
OFSAA Service - OK
Preparing to install...
Extracting the installation resources from the installer archive...
Configuring the installer for this system's environment...
Launching installer...

```

NOTE: The installation process continues on the console. Do not close the console until the installation process is complete.

19. The following message is displayed in the console *Installation completed...*

```

nohup: appending output to 'nohup.out'
OFSAA Service - OK
Starting icc service...
nohup: appending output to 'nohup.out'
ICC service - OK
Shutting down icc service...
nohup: appending output to 'nohup.out'
Shutting down OFSAA service...
nohup: appending output to 'nohup.out'
OFSAAI App Layer Services check Status: SUCCESSFUL.
OFSAAI DB Layer Services check started...
checking Router service...
Router Service - OK
checking AM service...
AM Service - OK
Checking MessageServer service...
DEBUG: main started.
DEBUG: TraceFileName = /scratch/mediapack/PFTPACK/ficdb/log/msg_trace_file.log
DEBUG: OpenFiles done.
MessageServer Service - OK
OFSAAI DB Layer File Services check Status: SUCCESSFUL.
*****
Installation completed...
*****

```

20. On completion of installation, refer the installation log files. For more information, refer [Verifying the Log Files](#).

21. Install the consolidated one-off patch **25777667**. Refer to the Readme available with the patch for further instructions on installing the patch.

22. Perform steps mentioned in the [Post Installation Configuration](#) section.

Note: Download and install patch for Bug 21160684 if installing this release of the OFS PFT Application Pack version 8.0.0.0.0 on Java 8. For more information, refer [Configurations for Java 8](#). This patch is not required if an OFSAA instance already exists and is configured for Java 8.

Silent.Props

SILENT installation is achieved via a properties file [Silent.props] that must be updated with proper values, before attempting to install using the silent mode.

NOTE: Do not install the new applications in the same segment if the pre-installed applications use run management.

The following table lists all the properties that need to be specified:

Property Name	Description of Property	Permissible values	Comments
LOG_MODE	Mode for logging	0 = Debug 1= General	Optional; Default : 0
SEGMENT_1_CODE	Segment Code	Not Applicable	MANDATORY Note: The Segment Code should be in upper case.
APPFTP_LOG_PATH=	Infodom Maintenance log path(to be created) for the new Infodom for applayer	Not Applicable	# Mandatory if this an App Layer Installation and if you want to create a new infodom # i.e you have specified INSTALL_APP=1 and INFODOM_TYPE=0
DBFTP_LOG_PATH	Infodom Maintenance log path(to be created) for the new Infodom for DBLayer	Not Applicable	# Mandatory if this an App Layer Installation and if you want to create a new infodom # i.e you have specified INSTALL_APP=1 and INFODOM_TYPE=0
OBI_HOST	Host Name of the OBIEE Server. This is parameter is required for BI applications.	Not Applicable	Applicable if INSTALL_ADMIN_BI=1

OBI_PORT	Port Number of the OBIEE Server	Not Applicable	Applicable if INSTALL_ADMIN_BI=1
OBI_CONTEXT	Context Name of the OBIEE Server	Not Applicable	Applicable if INSTALL_ADMIN_BI=1
UPLOAD_MODEL	whether you want to perform Model Upload	0 = No 1 = yes	Mandatory if INSTALL_APP=1
MODEL_TYPE	Released datamodel or Customized datamodel	0 = released 1 = customized	Mandatory if INSTALL_APP=1
DATAMODEL	the path for the customized datamodel	Not Applicable	# Mandatory only if you want to upload the customized datamodel # i.e you have specified MODEL_TYPE=1
DM_DIRECTORY	the file name for the customized datamodel	Not Applicable	# Mandatory only if you want to upload the customized datamodel # i.e you have specified MODEL_TYPE=1
ETL_APPSRC_TYPE	Create new ETL App/Src pair or use an existing one	0 = New 1 = Existing	# Mandatory if this an App Layer installation # i.e you have specified INSTALL_APP=1 # 0 = If you want to create a new ETL app/src pair # 1 = If you want to use an existing pair
ETL_APP_1_DESC	Please give description for the ETL App	Not Applicable	# Mandatory if you want to create new ETL app/src pair #i.e you have specified ETL_APPSRC_TYPE=0
ETL_SRC_1_1_DESC	Please give description for the ETL Staging source description	Not Applicable	# Mandatory if you want to create new ETL app/src pair

			#i.e you have specified ETL_APPSRC_TYPE=0
ETL_SRC_1_2_DESC	Please give description for the ETL Processing source description	Not Applicable	# Mandatory if you want to create new ETL app/src pair #i.e you have specified ETL_APPSRC_TYPE=0
ETL_APP_1_NAME	The ETL application name	Not Applicable	This is for App Layer installation
ETL_SRC_1_1_NAME	ETL Staging source name	Not Applicable	This Source must be mapped to the above ETL Application
ETL_SRC_1_2_NAME	ETL Processing source name	Not Applicable	This Source must be mapped to the above ETL Application

4.3.3 Verifying the Log File

Refer the following logs files for more information:

- Refer the Pack_Install.log located at OFS_PFT_PACK/logs/ folder for OFS Profitability Application Pack installation log file.
- Refer the log file(s) located at OFS_PFT_PACK/OFS_AAI/logs/ folder for Infrastructure installation log.
- Refer the OFSAAInfrastructure_Install.log located at \$FIC_HOME folder for Infrastructure installation log.

5 Post Installation Steps

On successful installation of the Oracle Financial Services Advanced Analytical Applications Infrastructure Application Pack, follow these post installation steps.

This chapter includes the following sections:

- [Configuring Resource Reference](#)
- [Start OFSAA Infrastructure Services](#)
- [Add TNS entries in TNSNAMES.ORA file](#)
- [Configuration for Oracle R distribution and Oracle R Enterprise \(ORE\)](#)
- [Configuration for Java 8](#)
- [Create and Deploy the Application Pack Web Archive](#)
- [Access the OFSAA Application](#)
- [Perform Post Deployment Configurations](#)

NOTE: Ensure to clear the application cache prior to the deployment of Application Pack Web Archive. This is applicable to all Web Servers (WebSphere, WebLogic, Tomcat). For more information, refer [Clearing Application Cache](#) section.

5.1 Configure Resource Reference

Configure the resource reference in the Web Application Server configured for OFSAA Applications. Refer [Appendix B](#) for details on configuring the resource reference in WebSphere, WebLogic, and Tomcat Application Servers.

5.2 Start OFSAA Infrastructure Services

Start the OFSAA Infrastructure Services prior to deployment or accessing the OFSAA Applications.

Refer to the [Appendix D](#) for details on Start/ Stop OFSAA Services.

5.3 Add TNS entries in TNSNAMES.ORA file

Add TNS entries in the `tnsnames.ora` file, for every schema created for the Application Pack

To find the tnsname for the entries, follow these steps:

1. Login to the application using System Administrator privileges.
2. Navigate to System Configuration & Identity Management tab.

-
3. Click Administration and Configuration >> System Configuration >> Database Details.
 4. Expand the dropdown list for **Name** to get the list of TNS entry names.

Alternatively, you can connect to the CONFIG schema and execute the following query:

```
select dbname from db_master where dbname != 'CONFIG'
```

5.4 Configuration for Oracle R distribution and Oracle R Enterprise (ORE)

This is an optional step. Skip and proceed with the next steps if OFS Enterprise Modeling Application with R scripting is not enabled during installation.

1. Install OFSAIRunner Package. For more information, refer [Installing OFS AAI Runner Package](#). If you have already installed OFSAIRunner package (as part of a previous installation), uninstall it (For more information, refer [Uninstalling OFS AAI Runner Package](#) section), and reinstall the latest available OFSAIRunner package.
2. Log in to the database with dba privileges and provide the following privilege to Configuration Schema:

- RQADMIN by executing the command:

```
GRANT RQADMIN TO <config_schema>;
```

3. Log in to the database with dba privileges and provide the following privileges to Atomic Schema:

- CREATE UNLIMITED TABLESPACE privilege by executing the command:

```
GRANT CREATE UNLIMITED TABLESPACE TO <atomic_schema>;
```

- CREATE MINING MODEL privilege (to execute the Data Mining models) by executing the command:

```
GRANT CREATE MINING MODEL TO <atomic_schema>;
```

5.4.1 Installing OFS AAI Runner Package

OFSAIRunner is an R package built by the OFS Enterprise Modeling Application. It is a prerequisite for executing models developed using R scripts. This package helps in:

- Initializing inputs
- Mapping framework variables to R objects
- Configuring possible outputs of the script
- Storing results back to the Database

OFSAIRunner package (OFSAIRunner_1.0.0.tar.gz) is available under `$FIC_DB_HOME/lib`.

5.4.1.1 Prerequisite

- Oracle R & ORE should be installed on the Oracle Database server before installing OFSAIRunner package.

Refer to the following instructions to install OFSAIRunner package:

1. Log in to the OFSAA Server. Navigate to the folder `$FIC_DB_HOME/lib`.
2. Copy the file `OFSAIRunner_1.0.0.tar.gz` in **Binary** mode to the Oracle Database Server.
3. Log in to the Oracle Database Server with the user using which Oracle Database Server installation is done.
4. Navigate to the directory where the file `OFSAIRunner_1.0.0.tar.gz` is copied.
5. Install the package by executing the command:

```
ORE CMD INSTALL OFSAIRunner_1.0.0.tar.gz
```

Successful installation is indicated in the installation log as:

```
* DONE (OFSAIRunner)
Making packages.html ... done
```

NOTE: The OFSAIRunner package is installed in `/usr/lib64/R/library`.

6. Navigate to the directory `$ORACLE_HOME/R/library` and check whether OFSAIRunner package is listed there by executing the command:

```
ls -l
```

5.4.2 Uninstalling OFSAIRunner Package

Refer to the following instructions to uninstall the OFSAIRunner package:

1. Log in to the Oracle Database Server with the same username, using which Oracle Database Server installation is done.
2. Enter ORE in command prompt and execute the command:

```
#ORE
```

3. To save workspace image, enter the command:

```
>remove.packages("OFSAIRunner")
```

4. Enter y when prompted to save the workspace image.

```
q()
```

-
5. Navigate to the directory `$ORACLE_HOME/R/library` and verify the package is not listed there by executing the command:
 6. Save workspace image? [y/n/c]: y

```
ls -l
```

5.5 Configuration for Java 8

Refer to the following instructions to extract and apply the patch.

1. Copy the downloaded patch file (21160684) to your OFSAA server in Binary mode.
For more information on downloading the patch files, refer to Prerequisite Information section>> Category – Others>>Sub-Category-OFSAA.
2. Follow the instructions given in the Readme to apply the patch.
3. If the Oracle Database version is 12c, copy `ojdbc7.jar` from `$ORACLE_HOME/jdbc/lib` to the following locations:
 - `$FIC_HOME/utility/OFSAAGenerateRepository/lib/`
 - `$FIC_HOME/realtime_processing/WebContent/WEB-INF/lib/`
 - `$FIC_HOME/ficdb/lib/`
 - `$FIC_HOME/ficapp/icc/lib/`
 - `$FIC_HOME/ficapp/common/FICServer/lib/`
 - `$FIC_HOME/FMStandalone/FormsManager/WEB-INF/lib/`
 - `$FIC_HOME/ficweb/webroot/WEB-INF/lib/`
 - `$FIC_HOME/ficdb/etl/classes/`

Note: If you have Oracle 12c R1 and Java 8, then copy the `ojdbc7.jar` and remove `ojdbc6.jar`.

4. If the Oracle Database version is 11g, copy `ojdbc6.jar` from `$ORACLE_HOME/jdbc/lib` to the following locations:
 - `$FIC_HOME/utility/OFSAAGenerateRepository/lib/`
 - `$FIC_HOME/realtime_processing/WebContent/WEB-INF/lib/`
 - `$FIC_HOME/ficdb/lib/`
 - `$FIC_HOME/ficapp/icc/lib/`
 - `$FIC_HOME/ficapp/common/FICServer/lib/`
 - `$FIC_HOME/FMStandalone/FormsManager/WEB-INF/lib/`
 - `$FIC_HOME/ficweb/webroot/WEB-INF/lib/`
 - `$FIC_HOME/ficdb/etl/classes/`

5.6 Create and Deploy the Application Pack Web Archive

On successful installation of the OFSAA Application Pack, the web archive file is automatically generated. However, you need to deploy the generated web archive file on the Web Application Server.

For identifying the location of the generated web archive file and for generating and deploying the web archive file at any time later, refer [Appendix C](#).

NOTE: Refer the Oracle Financial Services Forms Manager User Guide for instructions on Creating and Deploying the Forms Manager Web Archive.

5.7 Access the OFSAA Application

Prior to accessing the OFSAA application ensure the [Internet Explorer Settings](#) are configured.

Refer to [Appendix E](#) for details on accessing the OFSAA Application on successful deployment of the application web archive.

5.8 Perform Post Deployment Configurations

Prior to using the OFSAA Application perform the Post Deployment Configuration steps detailed in [Appendix F](#).

6 Appendix A – Configuring Web Server

This appendix includes the following sections:

- [Configuring Web Server](#)
- [Configuring Web Application Server](#)

6.1 Configuring Web Server

This step assumes an installation of a Web Server exists as per the prerequisites.

Refer the product specific Installation Guide/ Configuration Guide to install/ configure the Web Server. If an installation already exists, skip and proceed to the next step.

NOTE: Make a note of the IP Address/ Hostname and Port of the web server. This information is required during the installation process.

Refer *Oracle Financial Services Analytical Applications Infrastructure Security Guide* mentioned in the Related Documents section for additional information on securely configuring your Web Server.

6.2 Configuring Web Application Server

This step assumes an installation of a web application server exists as per the prerequisites. To configure the Web Application Server for OFSAA Deployment refer the following sections.

This section includes the following topics:

- [Configuring WebSphere Application Server for Application Deployment](#)
- [Configuring WebLogic for Application Deployment](#)
- [Configuring Apache Tomcat Server for Application Deployment](#)

NOTE: Make a note of the IP Address/ Hostname and Port of the web application server. This information is required during the installation process (required if Web Server is not configured). Refer OFSAA Secure Configuration Guide/ Security Guide mentioned in the Related Documents section for additional information on securely configuring your Web Server. Ensure to enable sticky session/ affinity session configuration on the web server. Refer the respective product specific Configuration Guide for more details. Additionally, you also need to enable the sticky session/ affinity session configuration at Load Balancer level if you have configured a Load Balancer in front of the web server(s).

6.2.1 Configuring WebSphere Application Server for Application Deployment

You can deploy multiple OFSAA applications on different profiles of a WebSphere application server. To create multiple WebSphere "Profiles" in a stand-alone server, use the following command line option. A profile is the set of files that define the runtime environment. At least one profile must exist to run WebSphere Application Server.

This section includes the following topics:

- [Creation of New Profile in WebSphere](#)
- [Manage Applications in WebSphere](#)
- [Delete WebSphere Profiles](#)
- [WebSphere HTTPS Configuration](#)
- [WebSphere Memory Settings](#)

6.2.1.1 Creation of New Profile in WebSphere

The Profile is created in WebSphere through command line using the **manageprofiles.sh** which resides in *<WebSphere Install directory>/AppServer/bin*.

The command to create a profile **without admin** security through command line is as follows:

```
"manageprofiles.sh -create -profileName <profile> -profilePath
<profile_path> -templatePath <template_path> -nodeName
<node_name> -cellName <cell_name> -hostName <host_name>"
```

Example:

```
$usr/home>./manageprofiles.sh -create -profileName mockaix -
profilePath/websphere/webs64/Appserver/profiles/mockaix -
templatePath/websphere/webs64/Appserver/profileTemplates/default
-nodeName ipa020dorNode04 - cellName ipa020dorNode04Cell -
hostName ipa020dor
```

The command to create a profile **with admin** security through command line is as follows:

```
"manageprofiles.sh -create -profileName <profile> -profilePath
<profile_path> -templatePath <template_path> -nodeName <node_name> -
cellName <cell_name> -hostName <host_name> -enableAdminSecurity true -
adminUserName <Admin User Name> -adminPassword < Admin User Password> -
samplespassword <sample User Password>"
```

Example:

```
$usr/home>./manageprofiles.sh -create -profileName mockaix -
profilePath/websphere/webs64/Appserver/profiles/mockaix -
templatePath/websphere/webs64/Appserver/profileTemplates/default -
nodeName ipa020dorNode04 -cellName ipa020dorNode04Cell -hostName
```

```
ipa020dor -enableAdminSecurity true -adminUserName ofsaai -  
adminPassword ofsaai -samplespassword ofsaai"
```

NOTE: While using the `manageprofiles.sh` command to create a New Profile in WebSphere, you can also use `"-validatePorts"` to validate if the specified ports are not reserved or in use. Additionally, you can specify new ports with `"-startingPort <base port>"` which specifies the starting port number to generate and assign all ports for the profile. For more information on using these ports, refer WebSphere `manageprofiles` command.

6.2.1.2 Manage Applications in WebSphere

To manage the installed applications in WebSphere, do the following:

1. Open the administrator console using the following URL:

```
http://<ipaddress>:<Administrative Console Port>/ibm/console
```

Example: `http://10.111.222.333:9003/ibm/console` (https if SSL is enabled)

NOTE: Administrative Console Port value is available in `serverindex.xml` file within `<WebSphere Profile Directory>/config/cells/<Node Cell>/nodes/<Node Name>` directory.

The Integrated Solutions Console Login window is displayed.

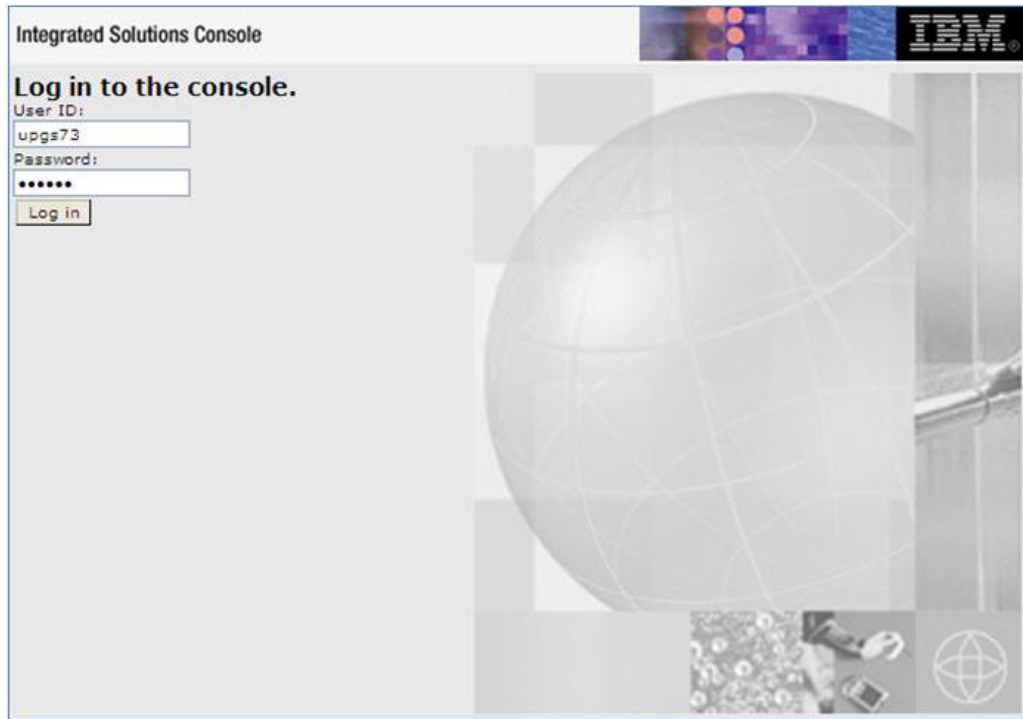


Figure 2: Integrated Solutions Console Login

2. Log on with the **User ID** provided with the admin rights.
3. From the LHS menu, expand the **Applications > Application Type> WebSphere Enterprise Applications**.
4. The *Enterprise Applications* screen is displayed.

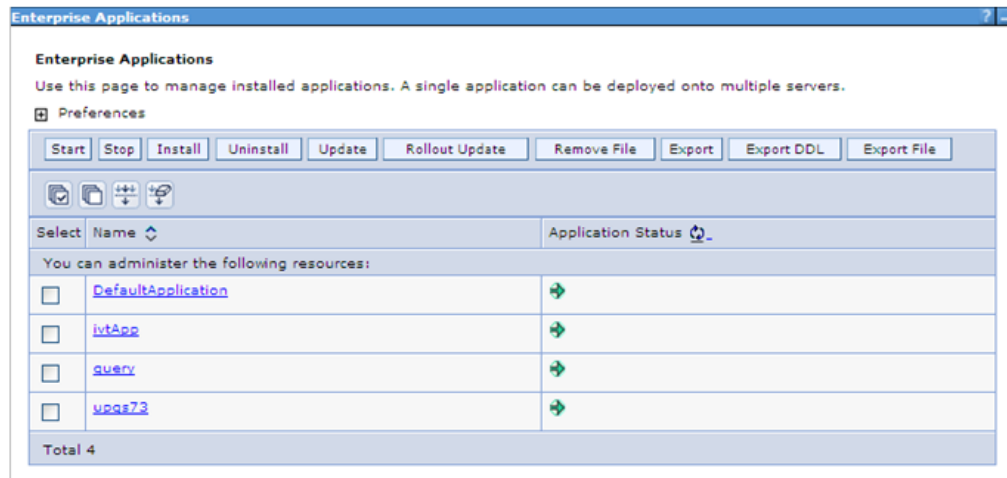


Figure 3: Enterprise Applications

5. This Enterprise Applications screen helps you to:
 - Install new application

-
- Uninstall existing applications
 - Start or Stop the installed applications

6.2.1.3 Delete WebSphere Profiles

To delete a WebSphere profile, do the following:

1. Select the checkbox adjacent to the required application and click **Stop**.
2. **Stop** the WebSphere profile to be deleted.
3. Navigate to WebSphere directory:

```
<WebSphere_Installation_Directory>/AppServer/bin/
```

4. Execute the command:

```
manageprofiles.sh -delete -profileName <profile_name>
```

5. Delete profile folder.

6. Example:

```
<WebSphere_Installation_Directory>/AppServer/profiles/<profile_name>
```

7. Execute the command:

```
manageprofiles.sh -validateAndUpdateRegistry
```

6.2.1.4 WebSphere HTTPS Configuration

Following are the steps for configuring an HTTPS Transport on WebSphere:

1. Create a profile using the *Profile Creation Wizard* in WebSphere.
2. Note down the https port specified during this process and use the same as servlet port or web server port during OFSAAI installation.

To enable https configuration on Infrastructure, assign value 1 to "HTTPS_ENABLE" in OFSAAI_InstallConfig.xml for SILENT mode OFSAAI installation.

6.2.1.5 WebSphere Memory Settings

To configure the WebSphere Memory Settings:

1. Navigate to Websphere applications server > Application servers > server1 > Process definition > Java Virtual Machine.
2. Change the memory setting for Java Heap:

```
Initial heap size = 512
```

```
Maximum heap size = 3072
```

6.2.2 Configuring WebLogic for Application Deployment

Applicable only if the web container is WebLogic.

You can deploy multiple Infrastructure applications on different domains of a stand-alone weblogic application server. To create multiple WebLogic "Domains" in a stand-alone server you can use the Domain Creation wizard. A domain is the set of files that define the runtime environment. At least one domain must exist to run WebLogic Application Server.

Note: For deployment on Oracle WebLogic Server 12.1.3+ (64 bit) with Java 8, download and install patch 18729264.

This section includes the following topics:

- [Creating Domain in WebLogic Server](#)
- [Delete Domain in WebLogic](#)
- [WebLogic HTTPS Configuring](#)
- [WebLogic Memory Settings](#)

6.2.2.1 Creating Domain in WebLogic Server

To create a new domain using Configuration Wizard in WebLogic, do the following:

1. Navigate to the directory `<WLS_HOME>/wlserver/common/bin` and execute the command:

```
./config.sh
```

The *Welcome* window of the *Configuration Wizard* is displayed.

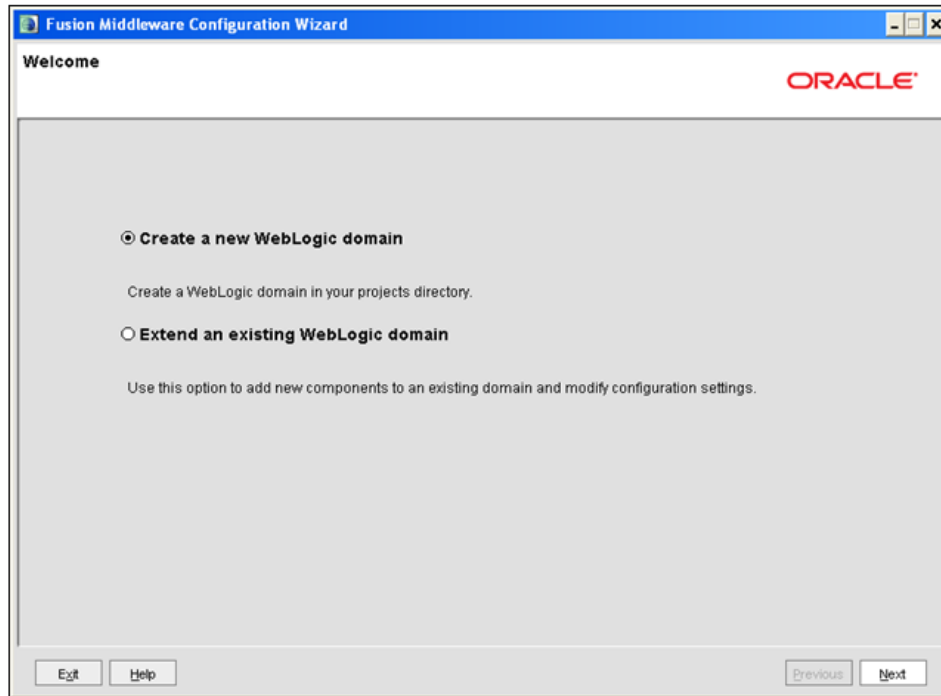


Figure 4: Welcome

2. Select Create a new WebLogic domain option and click Next.

The *Select Domain Source* window is displayed.

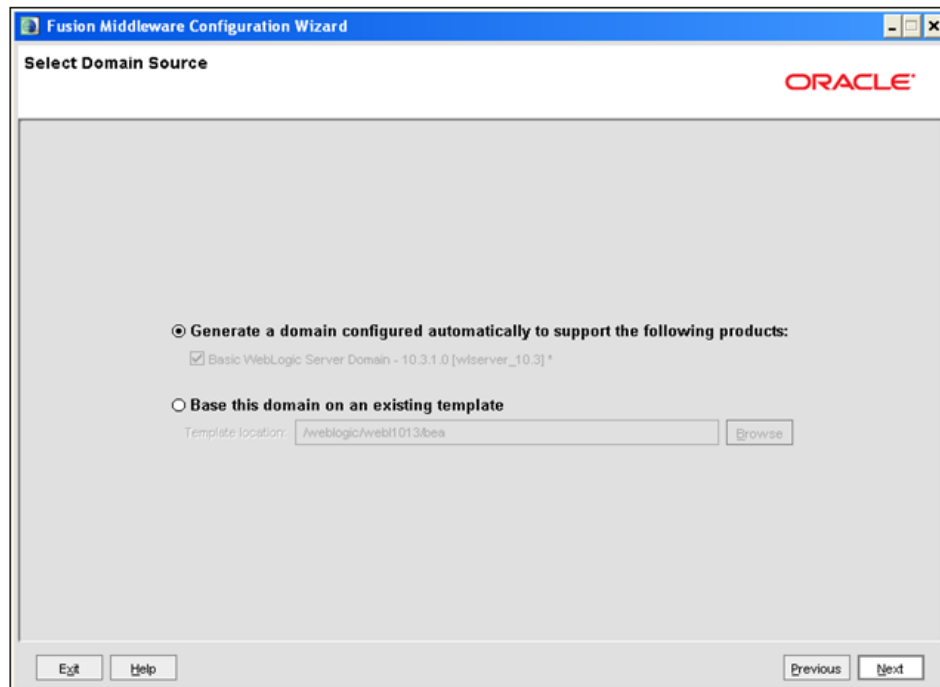


Figure 5: Select Domain Source

3. Select the Generate a domain configured automatically to support the following products option and click Next.
4. The *Specify Domain Name and Location* window is displayed.

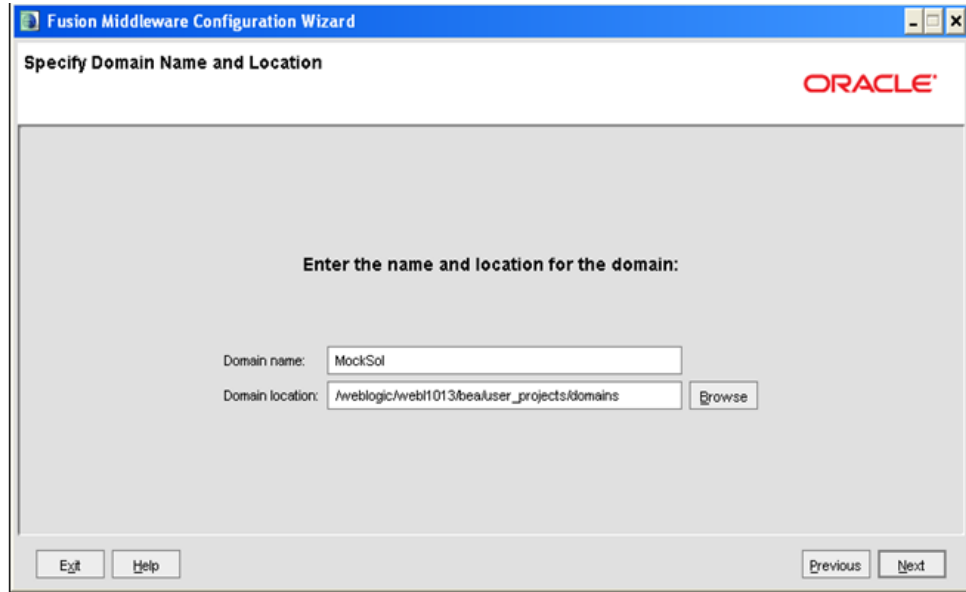


Figure 6: Specify Domain Name and Location

5. Enter the **Domain Name** and **Location**. Click **Browse** to navigate and specify the location. Click **Next**.

The *Configure Administrator Username and Password* window is displayed.



Figure 7: Configure Administrator Username and Password

6. Enter the **User name** and **User password** to be assigned to the Administrator. Ensure that the password is of minimum 8 characters in length.

-
7. Re-enter the password for confirmation and add a brief **Description**. Click **Next**.
The *Configure Server Start Mode and JDK* window is displayed.

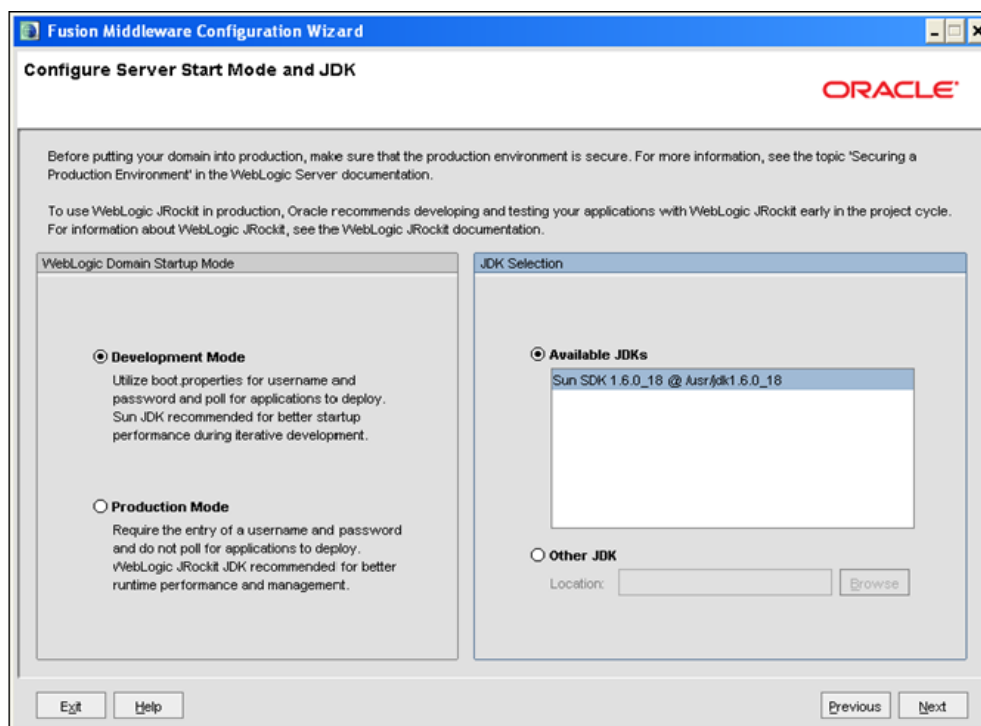


Figure 8: Configure Server Start Mode and JDK

8. Select the following options:

In the *WebLogic Domain Startup Mode* section, select the required mode (Development Mode or Production Mode).

In the *JDK Selection* section, select **Other JDK**. Click **Browse** and navigate to the JDK location. Click **Next**.

The *Select Optional Configuration* window is displayed.

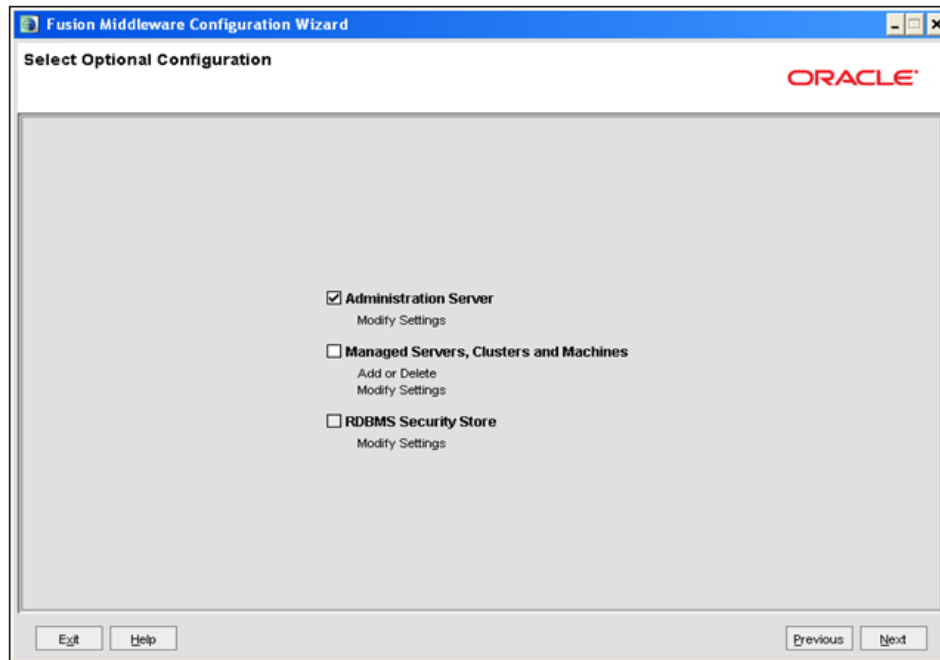


Figure 9: Select Optional Configuration

9. Select **Administration Server**. A WebLogic Server domain must have an Administration Server. You can also select Manages Servers, Clusters and Machines and RDBMS Security Store if required. Click **Next**.

The *Configure the Administration Server* window is displayed.

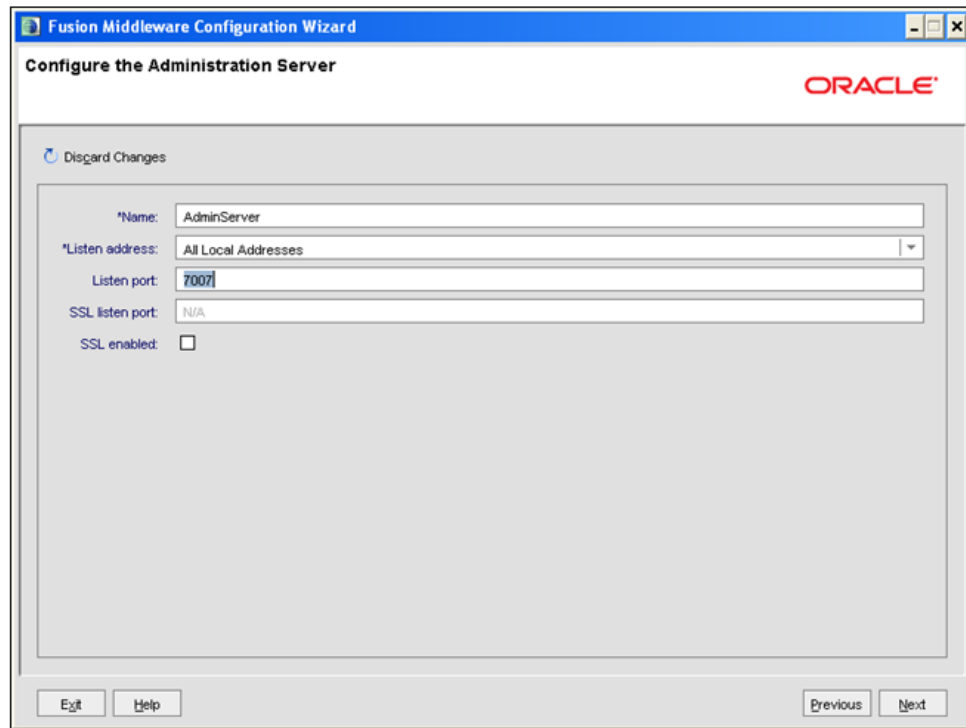


Figure 10Configure the Administration Server

10. Enter Administration Server details such as the Name, Listen address, Listen Port, SSL listen port, and SSL enabled (for secure login using https) check box. Click **Next**.

The *Configuration Summary* window is displayed.

NOTE: Make a note of the Listen Port or SSL Listen Port value (ex: 7007), since the same has to be re-entered in the Servlet port field during Infrastructure installation.

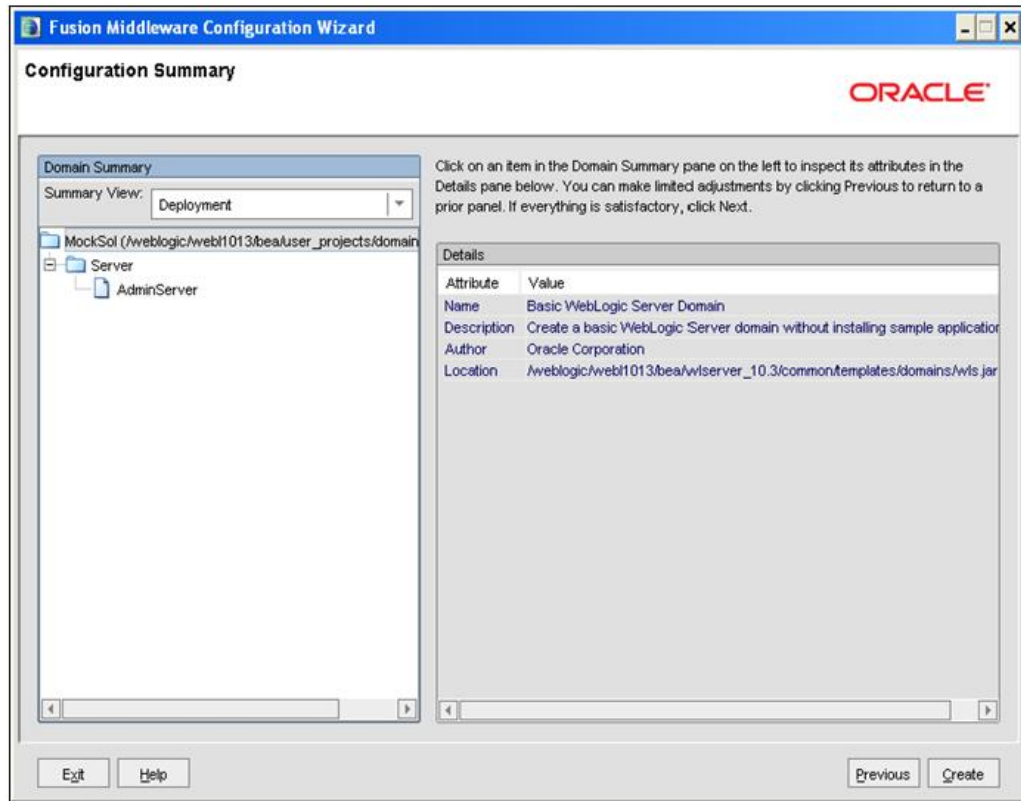


Figure 11: Configure Server Start Mode and JDK

11. Verify the configuration details of the WebLogic domain and click **Create**.
12. The *Creating Domain* window is displayed with the status indication of the domain creation process.

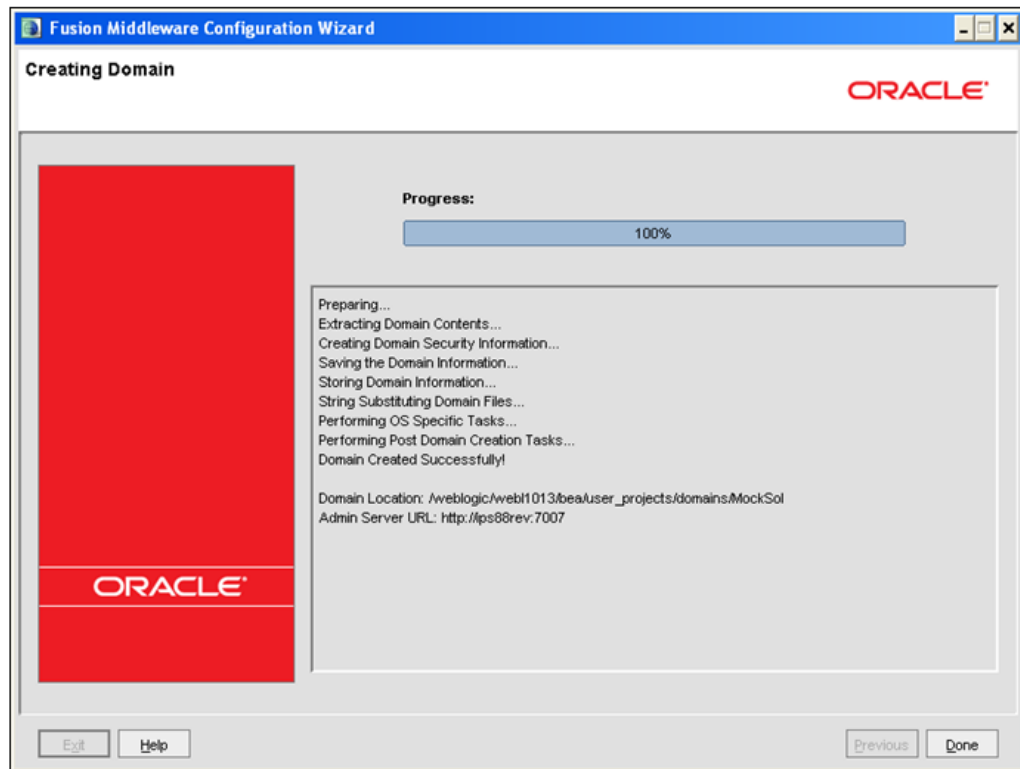


Figure 12: Configure Server Start Mode and JDK

13. Click **Done** when complete. The domain server is created enabling the deployment of multiple Infrastructure applications on a single WebLogic.

Note: Note down the HTTPS port specified during this process and use the same as servlet port or web server port during OFSAAI Installation.

To enable https configuration on Infrastructure, assign value 1 to "HTTPS_ENABLE" in OFSAAI_InstallConfig.xml for silent mode OFSAAI installation

14. Add a java option entry `-DUseSunHttpHandler=true` in `WLS_HOME/bin/"setDomainEnv.sh"` file (Required only if self signed certificate is used).

6.2.2.2 Delete Domain in WebLogic

1. Navigate to the following directory:
2. `<WebLogic Installation directory>/user_projects/domains/<domain name>/bin`
3. Execute **stopWebLogic.sh** to stop the Weblogic domain.
4. Delete the Weblogic domain.

6.2.2.3 WebLogic Memory Settings

To configure the WebLogic Memory Settings:

1. Change the memory setting for Java Heap to `-Xms512m -Xmx3072m` in `setDomainEnv.sh` file, which resides in the folder `<DOMAIN_HOME>/bin` and in `CommEnv.sh` file which resides in the folder `common/bin`.
2. Edit this file for customizing memory settings and garbage collector settings depending on the available hardware configuration.
3. Example 1:

```
if [ "${JAVA_VENDOR}" = "Sun" ] ; then
WLS_MEM_ARGS_64BIT="-Xms512m -Xmx1024m"
export WLS_MEM_ARGS_64BIT
WLS_MEM_ARGS_32BIT="-Xms512m -Xmx1024m"
export WLS_MEM_ARGS_32BIT
else
WLS_MEM_ARGS_64BIT="-Xms512m -Xmx1024m"
export WLS_MEM_ARGS_64BIT
WLS_MEM_ARGS_32BIT="-Xms512m -Xmx1024m"
export WLS_MEM_ARGS_32BIT
```

Example 2:

```
JAVA_VM=
MEM_ARGS="-Xms256m -Xmx1024m"
```

6.2.3 Configuring Apache Tomcat Server for Application Deployment

This section is applicable only when the Web Application Server type is Tomcat.

This section includes the following topics:

- [Tomcat User Administration](#)
- [Configure Tomcat to use JAVA 64 bit Executables](#)
- [Configure Servlet Port](#)
- [SSL Port Configuration](#)
- [Apache Tomcat Memory Settings](#)
- [Uninstalling WAR Files in Tomcat](#)

-
- [Configuration for Axis API](#)

6.2.3.1 Tomcat User Administration

The Tomcat administration and manager application does not provide a default login. You are required to edit "\$CATALINA_HOME/conf/tomcat-users.xml".

This file contains an XML tag <user> for each individual user, which will display the username and password used by admin to log on to Tomcat, and the role names to which the admin user is associated with. For example, <user name="admin" password="admin" roles="standard-manager" />

1. Add the manager role to any one of the existing username/password combination as shown in the example above.
2. Use the same username/password to which the manager role has been assigned to access the Tomcat Application Manager.
3. If the Tomcat server is already running, it requires a re-start after the above configuration is done.

6.2.3.2 Configure Tomcat to use JAVA 64 bit Executables

1. Navigate to the "\$CATALINA_HOME/bin" folder.
2. Edit the setclasspath.sh:
3. Replace the following block of text

```
# Set standard commands for invoking Java.  
_RUNJAVA="$JRE_HOME"/bin/java  
if [ "$os400" != "true" ]; then  
_RUNJDB="$JAVA_HOME"/bin/jdb
```

With:

```
# Set standard commands for invoking Java.  
_RUNJAVA="$JAVA_BIN"/java  
if [ "$os400" != "true" ]; then  
_RUNJDB="$JAVA_BIN"/jdb
```

4. If the Tomcat server is already running, it requires a re-start after the above configuration is done.

Note: In case tomcat is installed under different Unix profile, set JAVA_BIN environment variable in .profile to include the Java Runtime Environment absolute path.

For example:

```
export JAVA_BIN /usr/java6_64/jre/bin
export JAVA_BIN = /usr/java6_64/jre/bin//sparcv9 for Solaris Sparc
```

6.2.3.3 Configure Servlet Port

The default servlet port configured for the Tomcat installation is 8080. Ignore this section if you need to use the default port.

If you need to use a different port number, you must first configure the port in the "server.xml" in the "conf" directory of Tomcat Installation directory. The following steps guide you through the configuration process:

1. Navigate to \$CATALINA_HOME/conf. Open server.xml and locate the tag:
"Define a non-SSL HTTP/1.1 Connector on port 8080 "
2. Against this tag, a parameter is specified 'Connector port = "8080" '. Edit this value to the new port number that will be used during the installation process.
3. Save your changes in "server.xml".

NOTE: Make a note of the servlet port configured. This information is required during the installation of OFSAA Application Pack.

6.2.3.4 SSL Port Configuration

If you need to configure and access your OFSAA setup for HTTPS access, ensure that the following connect tag under "Define a SSL HTTP/1/1 Connector on port 8443" in "<Tomcat_installation_folder>/conf/server.xml" file is uncommented for SSL Configuration. (By default, it is commented).

```
<Connector port="8443" protocol="HTTP/1.1" SSLEnabled="true"
maxThreads="150" scheme="https" secure="true"
clientAuth="false" sslProtocol="TLS"
```

NOTE: Make a note of the servlet port configured. This information would be required during the installation of OFSAA Application Pack. To enable https configuration on Infrastructure, assign value 1 to "HTTPS_ENABLE" in OFSAAI_InstallConfig.xml for SILENT mode OFSAAI installation.

For more information related to SSL Configuration on Tomcat, refer to <http://tomcat.apache.org/>.

6.2.3.5 Apache Tomcat Memory Settings

To configure the Apache Tomcat Memory Settings:

1. Locate the file `catalina.sh` which resides in the folder `<CATALINA_HOME>/bin`.
2. Edit this file for customizing the memory settings and garbage collector settings depending on the available hardware configuration.
3. Add the memory setting for Java Heap to `-Xms512m -Xmx1024m`.
4. Example:

```
if [ -z "$LOGGING_MANAGER" ]; then
    JAVA_OPTS="$JAVA_OPTS -Xms512m -Xmx1024m
    -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager"
else
    JAVA_OPTS="$JAVA_OPTS -Xms512m -Xmx1024m $LOGGING_MANAGER"
fi
```

6.2.3.6 Uninstalling WAR Files in Tomcat

To uninstall WAR files in tomcat, refer [Uninstalling WAR Files in Tomcat](#).

6.2.3.7 Configuration for Axis API

This step is optional and required only if the web application server used in Apache Tomcat. If you use any other web application server, skip and proceed to next step.

Copy the `jaxrpc.jar` from the `<OFSAA Installation Directory>/axis-1_4/webapps/axis/WEB-INF/lib` and place it in under `<Tomcat Installation Directory>/lib` and restart the Tomcat Server

7 Appendix B - Configuring Resource Reference Web Application Servers

This appendix includes the following topics:

- [Configure Resource Reference in WebSphere Application Server](#)
- [Configure Resource Reference in WebLogic Application Server](#)
- [Configure Resource Reference in Tomcat Application Server](#)

7.1 Configure Resource Reference in WebSphere Application Server

This section is applicable only when the Web Application Server is WebSphere.

This section includes the following topics:

- [Create JDBC Provider](#)
- [Create Data Source](#)
- [J2C Authentication Details](#)
- [JDBC Connection Pooling](#)

7.1.1 Create JDBC Provider

1. Open the WebSphere admin console in the browser window:
`http://<ipaddress>:<administrative console port>/ibm/console`. (https if SSL is enabled). The *Login* window is displayed.
2. Login with the user ID that has admin rights.
3. Expand the **Resources** option in the LHS menu and click **JDBC > JDBC Providers**. The *JDBC Providers* window is displayed.

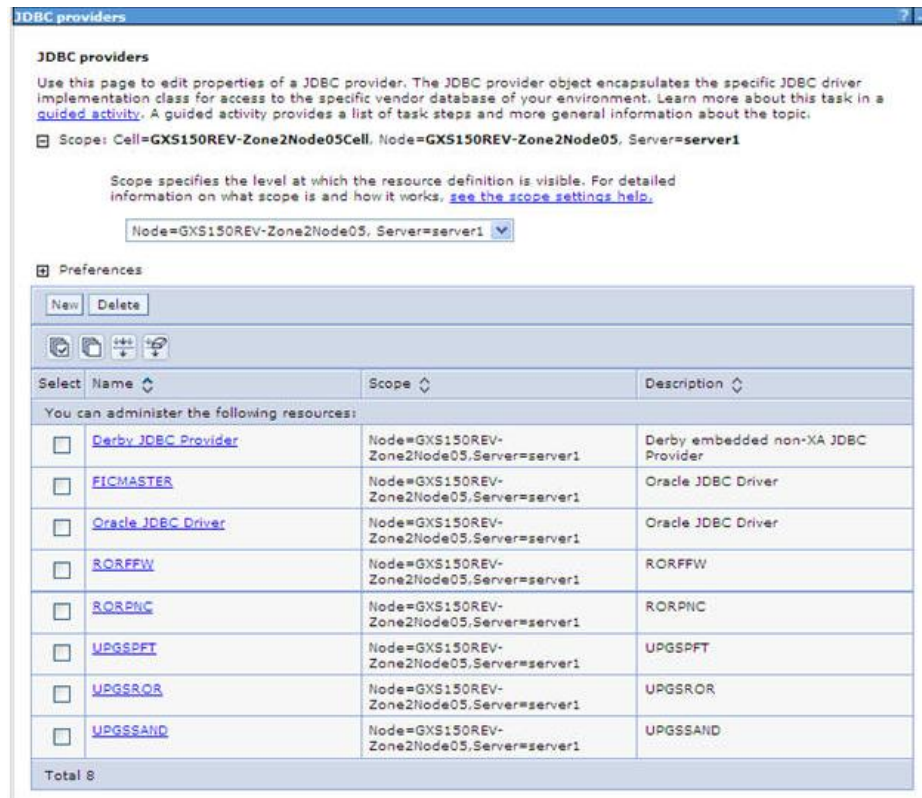


Figure 13: JDBC Providers

4. Select the **Scope** from the drop-down list. Scope specifies the level at which the resource definition is visible.
5. Click **New** to add new JDBC Provider under the *Preferences* section. The Create *new JDBC provider* window is displayed.

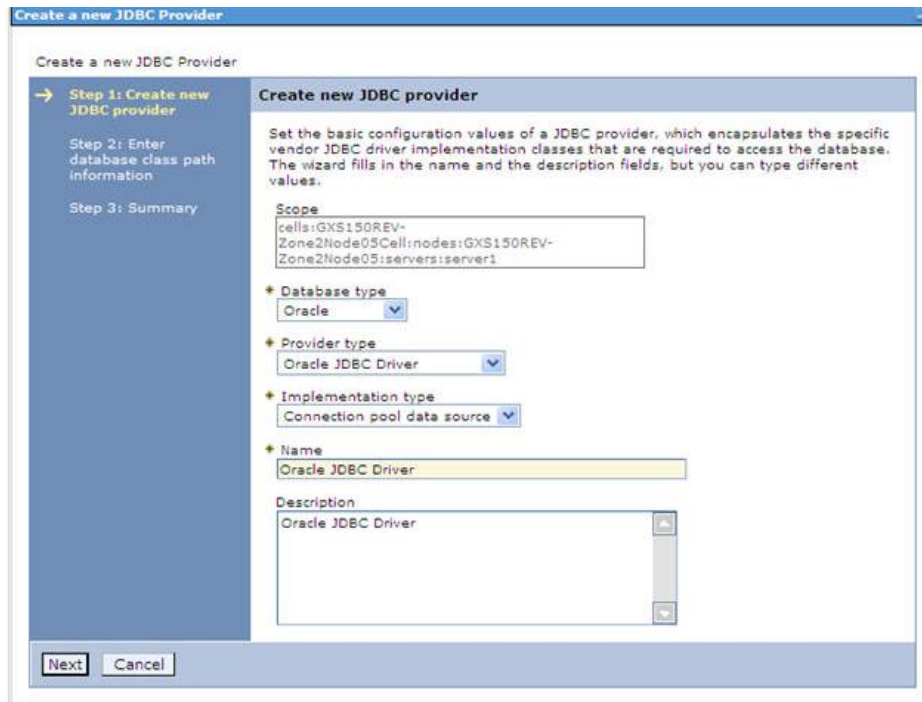


Figure 14: Create a new JDBC Provider

6. Enter the following details:
 - Database Type - Oracle
 - Provider Type- Oracle JDBC Driver
 - Implementation Type- Connection pool data source
 - Name- The required display name for the resource
 - Description - The optional description for the resource
7. Click **Next**.

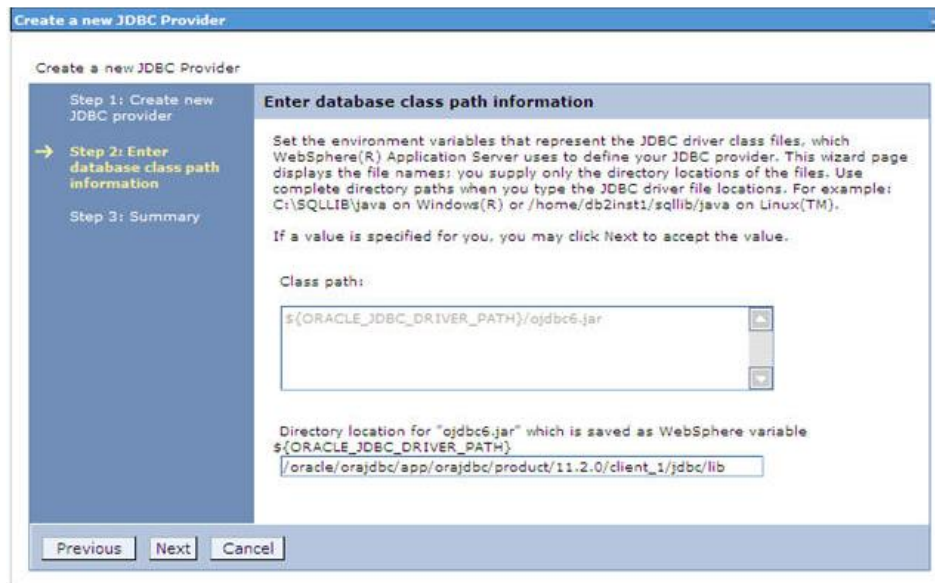


Figure 15: Enter database class path information

- Specify the directory location for "ojdbc<version>.jar" file. Ensure that you do not use the trailing slash file separators.

The Oracle JDBC driver can be downloaded from the following Oracle Download site:

- [Oracle Database 11g Release 2 \(11.2.0.4\) JDBC Drivers](#)
- [Oracle Database 12c Release 1 \(12.1.0.1\) JDBC Drivers](#)

Once downloaded, you need to copy the file in the required folder on the server.

NOTE: Refer [Appendix S](#) for identifying the correct ojdbc<version>.jar version to be copied.

Once downloaded, you need to place the file in the required folder in your system. While creating the JDBC Provider, ensure that the path to the jar file in the folder is specified in the **Classpath** field in the *previous* window.

- Click **Next**. The *Summary* window is displayed.

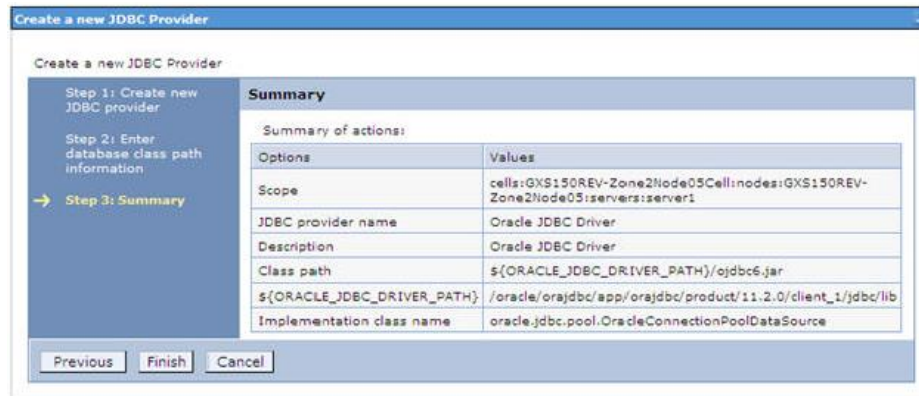


Figure 16: Summary

10. Verify the details and click **Finish** to create the JDBC Provider.
11. The options to **Save** and **Review** are displayed. Click **Save**.

7.1.2 Create Data Source

These steps are applicable for both CONFIG and ATOMIC data source creation.

1. Open this URL in the browser window: <http://<ipaddress>:<administrative console port>/ibm/console>. (https if SSL is enabled). The Login window is displayed.
2. Login with the user id that has admin rights.
3. Expand the **Resources** option in the LHS menu and click **JDBC > Data sources** option. The *Data sources* page is displayed.

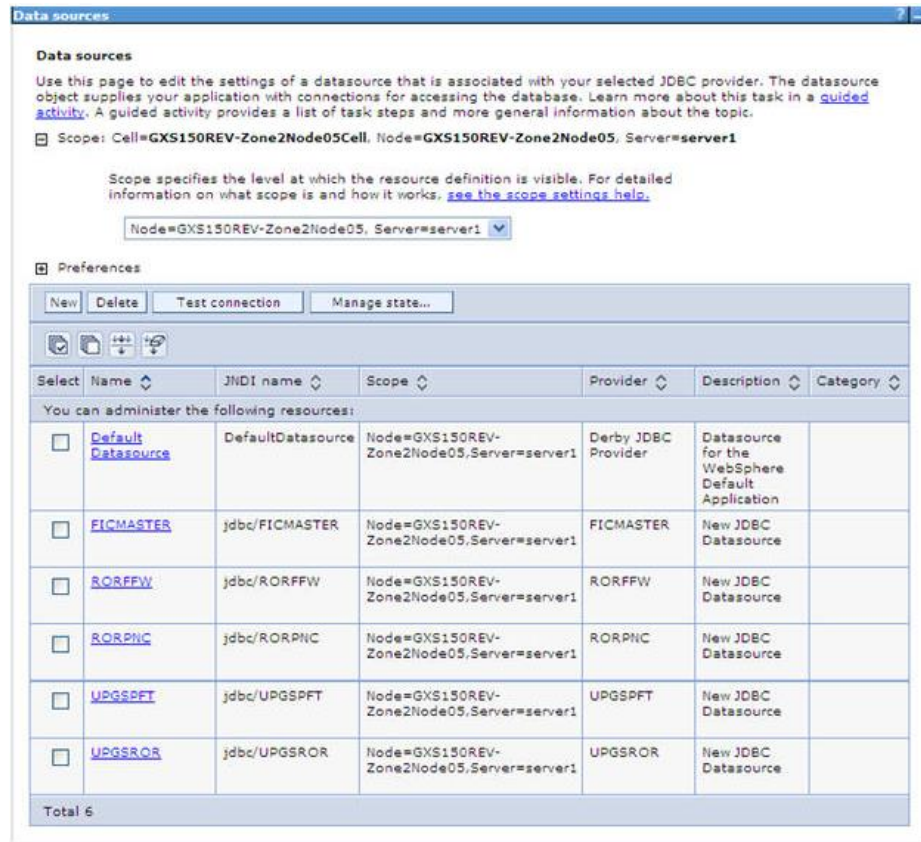


Figure 17: Data Sources

- Select the **Scope** from the drop down list. Scope specifies the level at which the resource definition is visible.
- Click **New**. The *Create a Data Source* window is displayed.

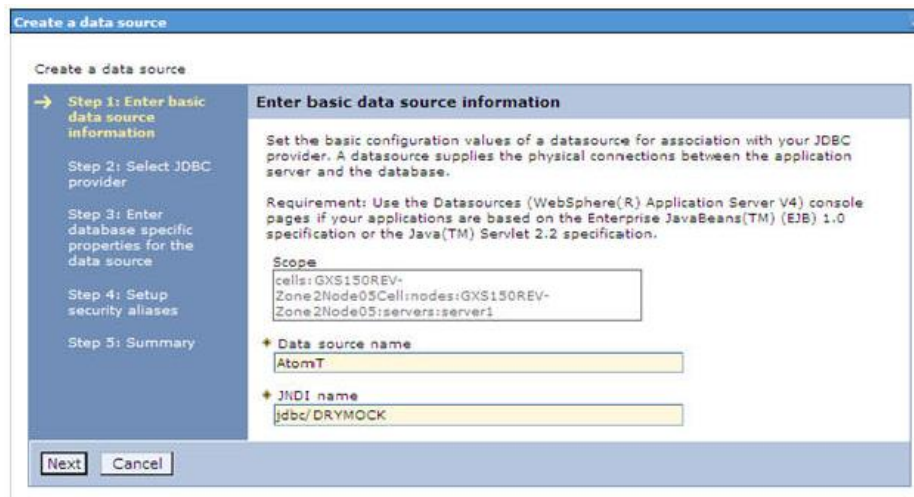


Figure 18: Create a data source

- Specify the **Data Source name** and **JNDI name** for the new "Data Source".

The **JNDI** and **Data Source name** are case sensitive. Ensure that JNDI name is same as the "Information Domain" name.

- Click **Next**. The Select *JDBC provider* window is displayed.

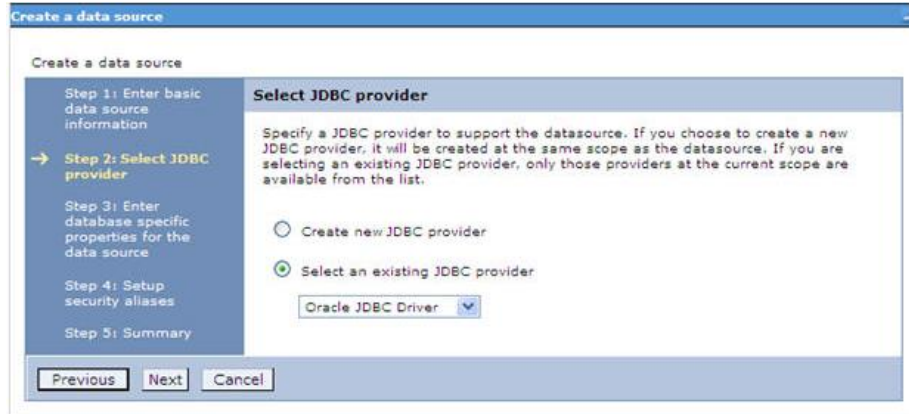


Figure 19: Select JDBC provider

- Select the option **Select an Existing JDBC Provider** and select the required JDBC provider from the drop-down list. Click **Next**.

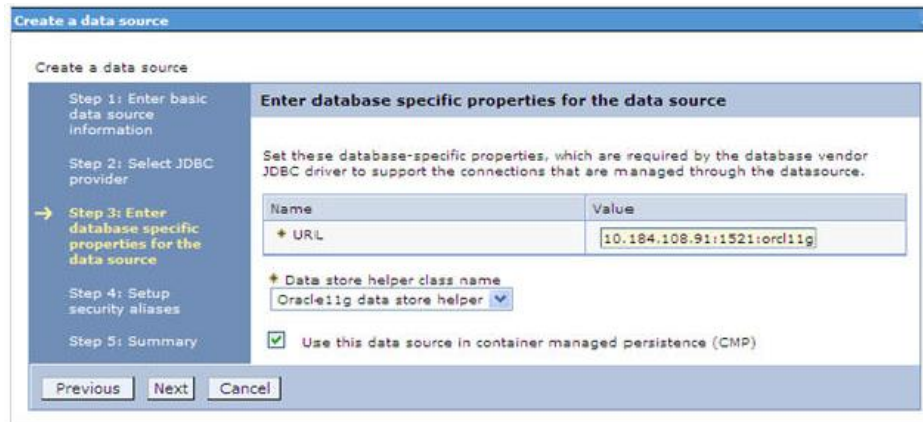


Figure 20: Enter database specific properties

- Specify the database connection URL.

For Example: jdbc:oracle:thin:@<DB_SERVER_IP>:<DB_SERVER_PORT>:<SID>

- Select **Data Store Helper Class Name** from the drop-down list and ensure that the checkbox **Use this data source in container managed persistence (CMP)** is selected.

NOTE: For RAC configuration, provide the RAC URL specified during installation

For Example:

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=10.11.12.13)(port=1521))(ADDRESS=(PROTOCOL=TCP)(HOST=10.11.12.14)(PORT=1521))(LOAD_BALANCE=no)(FAILOVER=yes))(CONNECT_DATA=(SERVICE_NAME=pqadb)))
```

11. Click **Next**.

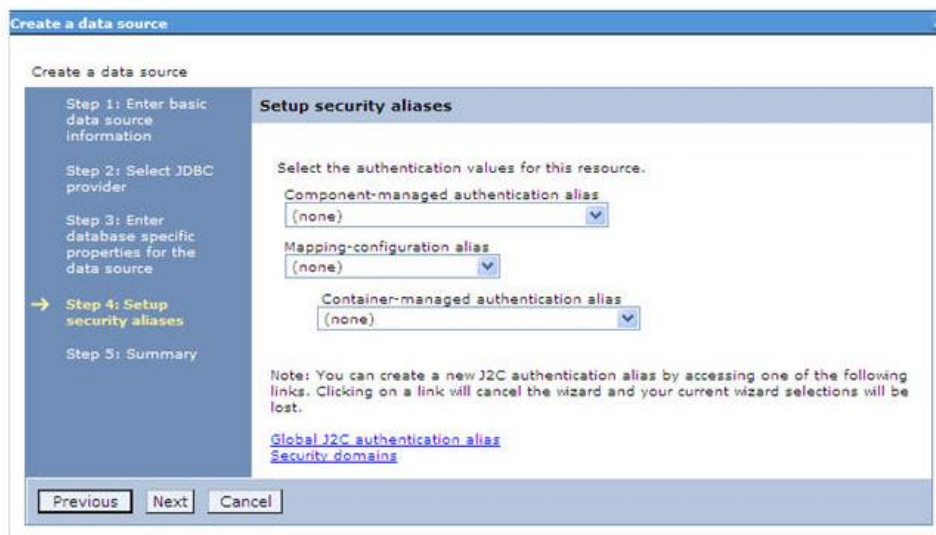


Figure 21: Setup security aliases

12. Map the J2C authentication alias, if already created. If not, you can create a new J2C authentication alias by accessing the link given (**Global J2C authentication alias**) or you can continue with the data source creation by clicking **Next** and then **Finish**.

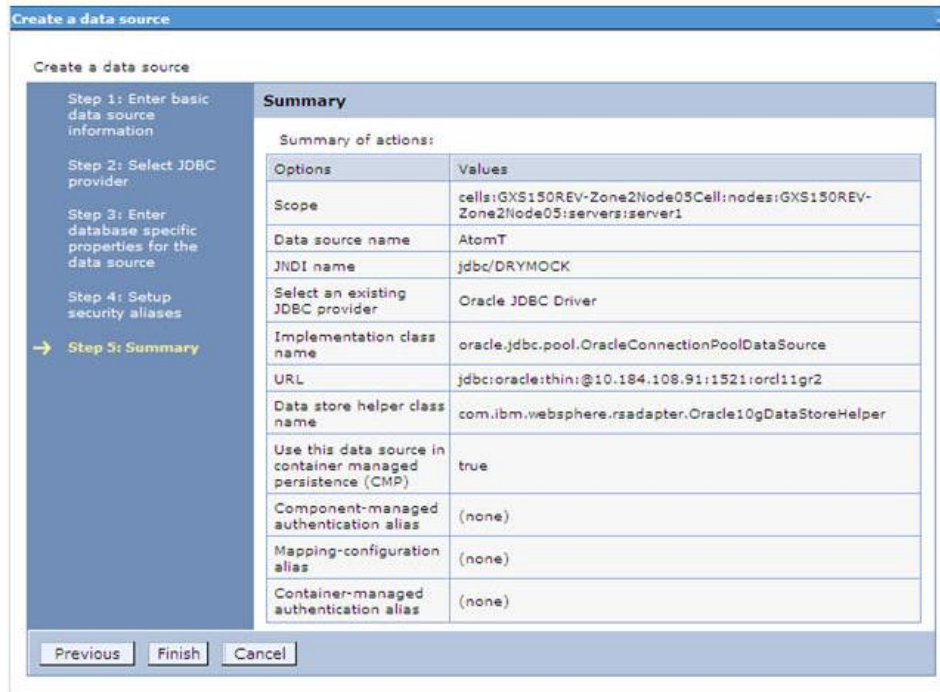


Figure 22: Summary

You can also create and map J2C authentication alias after creating the data source.

13. You must create another Data source by following the above procedure with jdbc/FICMASTER as JNDI name pointing to the "configuration schema" of Infrastructure.

7.1.3 J2C Authentication Details

These steps are applicable for creating both config and atomic J2C Authentication.

To create J2C Authentication details:

1. Select the newly created Data Source and click **JAAS - J2C authentication data** link under **Related Items**.

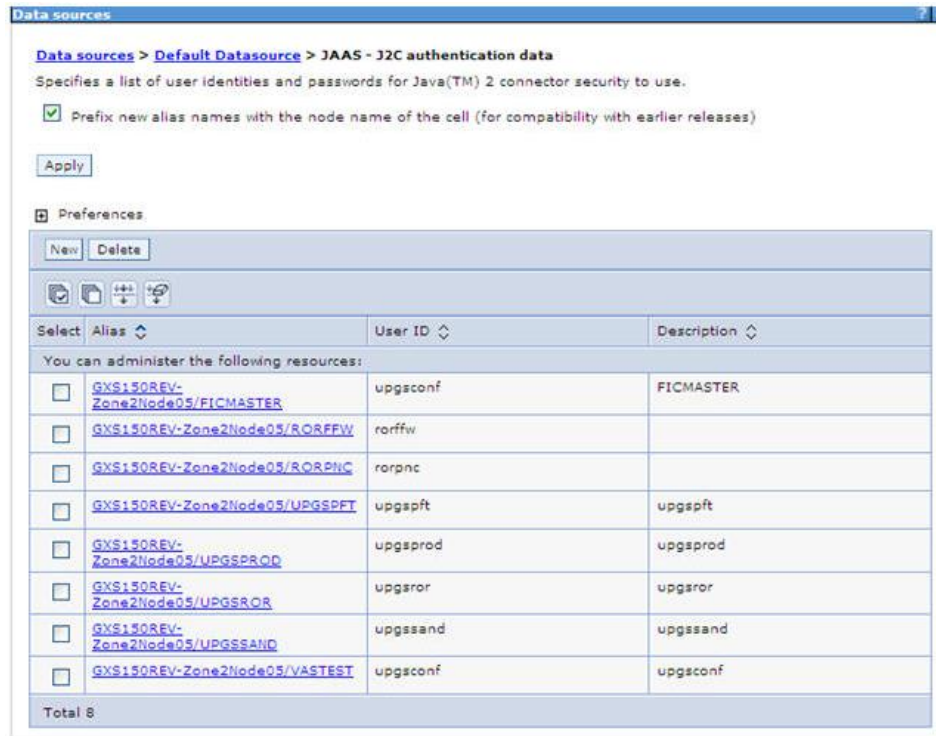


Figure 23: JAAS- J2C authentication data

2. Click **New** under the *Preferences* section.



Figure 24: JAAS- J2C authentication data- New

3. Enter the **Alias**, **User ID**, **Password**, and **Description**. Ensure the following:
 - User ID is the Oracle user ID created for the respective CONFIG and ATOMIC Schema for the “Information Domain”.
 - Specify the CONFIG database user ID and password information for the jdbc/FICMASTER data source, and specify the ATOMIC database user ID and password information for the ATOMIC schema data source that you created earlier.

4. Click **Apply** and save the details.

7.1.4 JDBC Connection Pooling

To define the JDBC connection pooling ensure that you have created JDBC Provider and Data source to access the data from the database.

1. Expand the **Resources** option in the LHS menu and click **JDBC > Data sources** option. The *Data sources* page is displayed.
2. Click the newly created Data Source `$DATA_SOURCE$` and navigate to the path `Data sources>$DATA_SOURCE$>Connection pools`.

The screenshot shows a web-based configuration interface for a JDBC connection pool. The breadcrumb path is "Data sources > GAFUSION DATA SOURCE > Connection pools". Below the breadcrumb, there is a descriptive paragraph: "Use this page to set properties that impact the timing of connection management tasks, which can affect the performance of your application. Consider the default values carefully; your application requirements might warrant changing these values." The main configuration area is titled "Configuration" and is divided into two sections: "General Properties" and "Additional Properties".

General Properties:

- Scope: cells:ipa26dorNode01Cell:nodes:ipa26dorNode01:servers:server1
- Connection timeout: 0 seconds
- Maximum connections: 100 connections
- Minimum connections: 10 connections
- Reap time: 180 seconds
- Unused timeout: 1800 seconds
- Aged timeout: 0 seconds
- Purge policy: EntirePool (dropdown menu)

Additional Properties:

- Advanced connection pool properties (expandable)
- Connection pool custom properties (expandable)

At the bottom of the configuration area, there are four buttons: "Apply", "OK", "Reset", and "Cancel".

Figure 25: Connection Pools

3. Set the values for **Connection timeout** to 0 seconds, **Maximum connections** to 100 connections, and **Minimum connections** to 10 connections as shown in the above figure. You can also define **Reap Time**, **Unused Timeout**, and **Aged Timeout** as required.

7.2 Configure Resource Reference in WebLogic Application Server

This section is applicable only when the Web Application Server is WebLogic.

This section includes the following topics:

- [Create Data Source](#)
- [Create GridLink Data Source](#)
- [Configure Multi Data Sources](#)
- [Advanced Settings for Data Source](#)
- [JDBC Connection Pooling](#)

In WebLogic, you can create "Data Source" in the following ways:

- For a Non RAC Database instance, Generic Data Source has to be created. See Create Data Source.
- For a RAC Database instance, Gridlink Data Source has to be created. See Create GridLink Data Source.
- When Load Balancing/Fail over is required, Multi Data Source has to be created. See Configure Multi Data Sources.

7.2.1 Create Data Source

These steps are applicable for both config and atomic data source creation.

1. Open WebLogic Admin Console in the browser window:
`http://<ipaddress>:<administrative console port>/console`. (https if SSL is enabled). The *Welcome* window is displayed.
2. Login with the Administrator **Username** and **Password**.



Figure 26: Welcome

- From the LHS menu (Domain Structure), click **Services > Data Sources**. The *Summary of JDBC Data Sources* window is displayed.

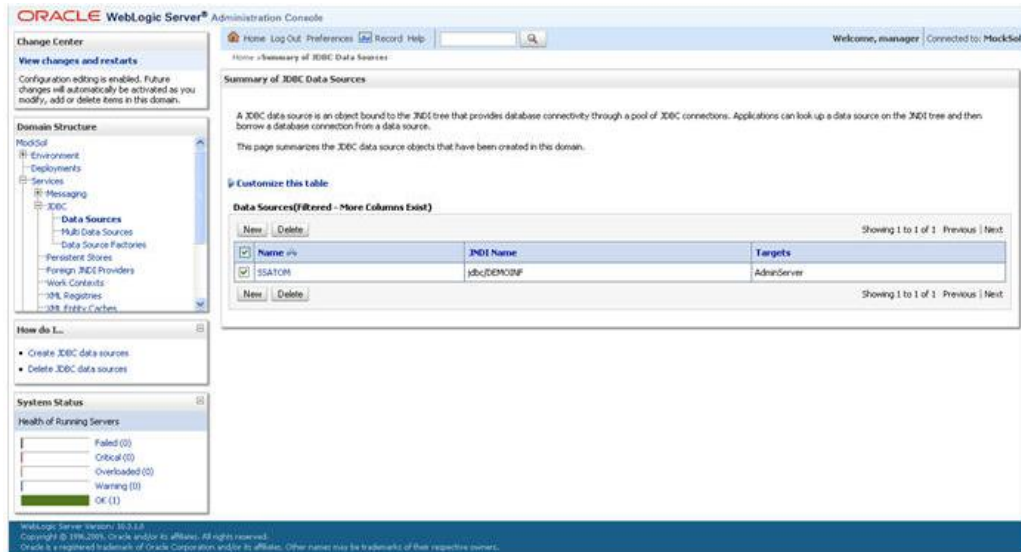


Figure 27: Summary of JDBC Data Sources

- Click **New** and select **Generic Data Source** option. The *Create a New JDBC Data Source* window is displayed.

You can also select **GridLink Data Source** or **Multi Data Source** while creating a Data Source. For more information, see [Error! Reference source not found.](#) or [Error! Reference source not found.](#)

Figure 28: Create a New JDBC Data Source

5. Enter JDBC data source **Name**, **JNDI Name**, and select the **Database Type** from the drop-down list. Click **Next**.

Ensure the following:

- The JNDI Name field should be in the format "jdbc/informationdomain"
- Same steps needs to be followed to create a mandatory data source pointing to the "configuration schema" of infrastructure with `jdbc/FICMASTER` as JNDI name.
- JNDI Name is the same as mentioned in `web.xml` file of OFSAAI Application.
- Required "Database Type" and "Database Driver" should be selected.

Figure 29: JDBC Data Source Properties

6. Select the **Database Driver** from the drop-down list. You need to select the Database Driver depending on database setup, that is, with or without RAC. Click **Next**.

Create a New JDBC Data Source

Back Next Finish Cancel

Transaction Options

You have selected non-XA JDBC driver to create database connection in your new data source.

Does this data source support global transactions? If yes, please choose the transaction protocol for this data source.

Supports Global Transactions

Select this option if you want to enable non-XA JDBC connections from the data source to participate in global transactions using the *Logging Last Resource (LR)* transaction optimization. Recommended in place of Emulate Two-Phase Commit.

Logging Last Resource

Select this option if you want to enable non-XA JDBC connections from the data source to emulate participation in global transactions using JTA. Select this option only if your application can tolerate heuristic conditions.

Emulate Two-Phase Commit

Select this option if you want to enable non-XA JDBC connections from the data source to participate in global transactions using the one-phase commit transaction processing. With this option, no other resources can participate in the global transaction.

One-Phase Commit

Back Next Finish Cancel

Figure 30: Transaction Options

7. Select the Supports Global Transactions checkbox and the One-Phase Commit option.
8. Click **Next**. The *Connection Properties* window is displayed.

Create a New JDBC Data Source

Back Next Finish Cancel

Connection Properties

Define Connection Properties.

What is the name of the database you would like to connect to?

Database Name: fsgbu

What is the name or IP address of the database server?

Host Name: 10.184.74.80

What is the port on the database server used to connect to the database?

Port: 1521

What database account user name do you want to use to create database connections?

Database User Name: ssatom

What is the database account password to use to create database connections?

Password: *****

Confirm Password: *****

Back Next Finish Cancel

Figure 31: Connection Properties

9. Enter the required details such as the **Database Name**, **Host Name**, **Port**, **Oracle User Name**, and **Password**.
10. Click **Next**. The *Test Database Connection* window is displayed.

Create a New JDBC Data Source

Test Configuration | Back | Next | Finish | Cancel

Test Database Connection
Test the database availability and the connection properties you provided.

What is the full package name of JDBC driver class used to create database connections in the connection pool?
(Note that this driver class must be in the classpath of any server to which it is deployed.)

Driver Class Name: oracle.jdbc.OracleDriver

What is the URL of the database to connect to? The format of the URL varies by JDBC driver.

URL: jdbc:oracle:thin:@10.184.

What database account user name do you want to use to create database connections?

Database User Name: ssatom

What is the database account password to use to create database connections?
(Note: for secure password management, enter the password in the Password field instead of the Properties field below)

Password: [REDACTED]

Confirm Password: [REDACTED]

What are the properties to pass to the JDBC driver when creating database connections?

Properties: user=ssatom

The set of driver properties whose values are derived at runtime from the named system property.

System Properties:

What table name or SQL statement would you like to use to test database connections?

Test Table Name: SQL SELECT 1 FROM DUAL

Test Configuration | Back | Next | Finish | Cancel

Figure 32: Test Database Connection

11. Verify the details and click **Test Configuration** and test the configuration settings.
A confirmation message is displayed stating "Connection test succeeded."
12. Click **Finish**. The created "Data Source" is displayed in the list of Data Sources.

NOTE: " User ID" is the Oracle user ID that is created for the respective "Information Domain".

"User ID" to be specified for data source with "FICMASTER" as "JNDI" name should be the Oracle user ID created for the CONFIG schema.

-
13. Select the new Data Source and click the **Targets** tab.

The screenshot shows a dialog box titled "Create a New JDBC Data Source". At the top, there are navigation buttons: "Back", "Next", "Finish", and "Cancel". Below this is the "Select Targets" section. A text box explains: "You can select one or more targets to deploy your new JDBC data source. If you don't select a target, the data source will be created but not deployed. You will need to deploy the data source at a later time." Below the text is a table with a header "Servers" and one row containing "AdminServer" with a checked checkbox. At the bottom, there are navigation buttons: "Back", "Next", "Finish", and "Cancel".

Figure 33: Select Targets

14. Select the **AdminServer** option and click **Finish**.

7.2.2 Create GridLink Data Source

If you have selected the option, **New > GridLink Data Source** while creating the "Data Source", you can directly specify the JDBC URL as indicated.

The screenshot shows a dialog box titled "Create a New JDBC GridLink Data Source". At the top, there are navigation buttons: "Back", "Next", "Finish", and "Cancel". Below this is the "JDBC GridLink Data Source Properties" section. A text box explains: "The following properties will be used to identify your new JDBC GridLink data source. * Indicates required fields". Below this is a text box asking "What would you like to name your new JDBC GridLink data source?" with a "Name:" label and a text input field containing "xyz". Below that is another text box asking "What JNDI name would you like to assign to your new JDBC GridLink data source?" with a "JNDI Name:" label and a text input field containing "jdbc/xyz". Below that is a text box asking "What database type would you like to select?" with a "Database Type:" label and a dropdown menu showing "Oracle". Below that is a text box asking "Is this XA driver?" with an "XA Driver" checkbox that is not selected. At the bottom, there are navigation buttons: "Back", "Next", "Finish", and "Cancel".

Figure 34: Create a New JDBC GridLinkData Source

1. Enter Data Source **Name**, and **JNDI Name**.

Ensure that the "JNDI Name" field is specified in the format "jdbc/infodomain" and the **XA Driver** checkbox is not selected. Click **Next**.

Figure 35: JDBC GridLinkData Source- Connection Properties

2. Specify **Complete JDBC URL**, **Database User Name**, and **Password**. Click **Finish**. The created "Data Source" is displayed in the list of Data Sources.

7.2.3 Configure Multi Data Sources

A JDBC multi data source is an abstraction around a group of data sources that provides load balancing and failover between data sources. As with data sources, multi data sources are also bound to the JNDI tree. Applications can look up a multi data source on the JNDI tree and then reserve a database connection from a data source. The multi data source determines from which data source to provide the connection.

When the database used is **Oracle RAC (Real Application Clusters)** which allows Oracle Database to run across a set of clustered servers, then group of data sources can be created for instances running on a set of clustered servers and a JDBC multi data source can be created so that applications can look up a multi data source on the JNDI tree to reserve database connection. If a clustered server fails, Oracle continues running on the remaining servers.

1. Open WebLogic Admin Console in the browser window:
`http://<ipaddress>:<administrative console port>/console.` (https if SSL is enabled). The *Login* window is displayed.
2. Login with the "User ID" that has admin rights.
3. In the LHS menu (Domain Structure), select **Services > JDBC > Multi Data Sources**. The *Summary of JDBC Multi Data Sources* window is displayed.

Summary of JDBC Multi Data Sources

A JDBC multi data source is an abstraction around a group of data sources that provides load balancing and failover between data sources. As with data sources, multi data sources are also bound to the JNDI tree. Applications can look up a multi data source on the JNDI tree and then reserve a database connection from a data source. The multi data source determines from which data source to provide the connection.

Use this page to create or view multi data sources in your domain.

Customize this table

Multi Data Sources (Filtered - More Columns Exist)

New Delete Showing 1 to 2 of 2 Previous | Next

<input type="checkbox"/>	Name ↕	JNDI Name	Algorithm Type	Targets
<input type="checkbox"/>	FUSIONDS	jdbc/FUSIONRHEL	Load-Balancing	AdminServer
<input type="checkbox"/>	RORDS	jdbc/RORRHELQT	Load-Balancing	AdminServer

New Delete Showing 1 to 2 of 2 Previous | Next

Figure 36: Summary of JDBC Multi Data Sources

- Click **New**. The *New JDBC Multi Data Source* screen is displayed.

NOTE: Ensure that the Data Sources which needs to be added to new JDBC Multi Data Source has been created.

Create a New JDBC Multi Data Source

Back Next First Cancel

Configure the Multi Data Source

The following properties will be used to identify your new JDBC multi data source.

What would you like to name your new JDBC multi data source?

Name: JDBC Multi Data Source-0

What JNDI name would you like to assign to your new JDBC multi data source?

JNDI Name: jdbc/infodomaine

What algorithm type for this JDBC Multi Data Source would you like to select?

Algorithm Type: Load-Balancing

Back Next First Cancel

Figure 37: Configure the Multi Data Source

- Enter the JDBC Source **Name**, **JNDI name**, and select the **Algorithm Type** from the drop-down list. Click **Next**.

Note:

- The JNDI Name has to be specified in the format jdbc/infodomaine.
- JNDI Name of the Data Sources that will be added to new JDBC Multi data source should be different from the JNDI name specified during Multi Data Source. Same steps needs to be followed to create a mandatory data source pointing to the "configuration schema" of infrastructure with jdbc/FICMASTER as JNDI name for Data Source.

- Same steps needs to be followed to create a mandatory data source pointing to the "configuration schema" of infrastructure with jdbc/FICMASTER as JNDI name for Data Source.
- JNDI Name provided in multi data source should be the same name that will be mentioned in the web.xml file of OFSAAI Application.
- You can select the Algorithm Type as Load-Balancing.

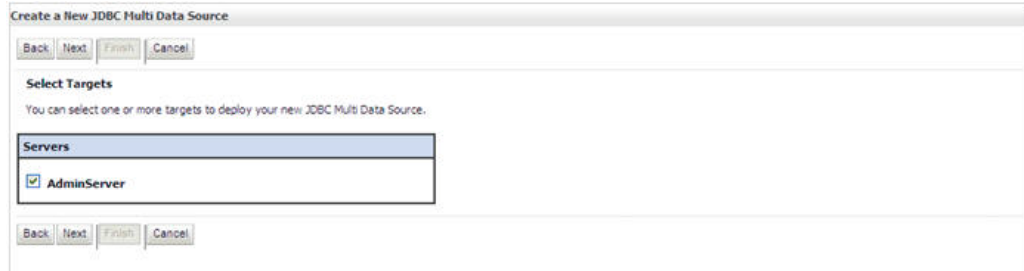


Figure 38: Select Targets

6. Select the **AdminServer** check box and click **Next**.



Figure 39: Select Data Source Type

7. Select the type of data source which will be added to new JDBC Multi Data Source. Click **Next**.

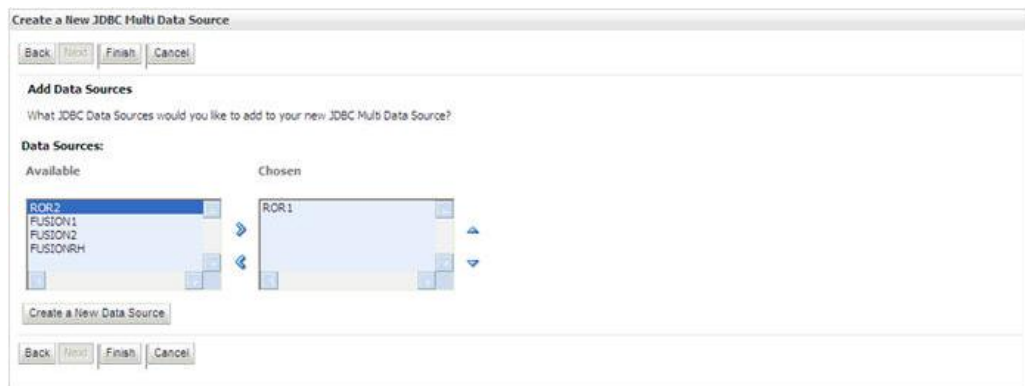


Figure 40: Add Data Sources

8. Map the required Data Source from the *Available* Data Sources. Click **Finish**.

The New JDBC Multi Data Source is created with added data sources.

7.2.4 Advanced Settings for Data Source

1. Click the new Data Source from the *Summary of JDBC Data Sources* window. The *Settings for <Data Source Name>* window is displayed.
2. Select the **Connection Pooling** tab given under Configuration.
3. Go to the **Advanced** option at the bottom of the page, and check the **Test Connection of Reserve** checkbox (Enables Weblogic Server to test a connection before giving it to a client).
4. To verify if the data source is valid, select "Data Source name". For example, FICMASTER.

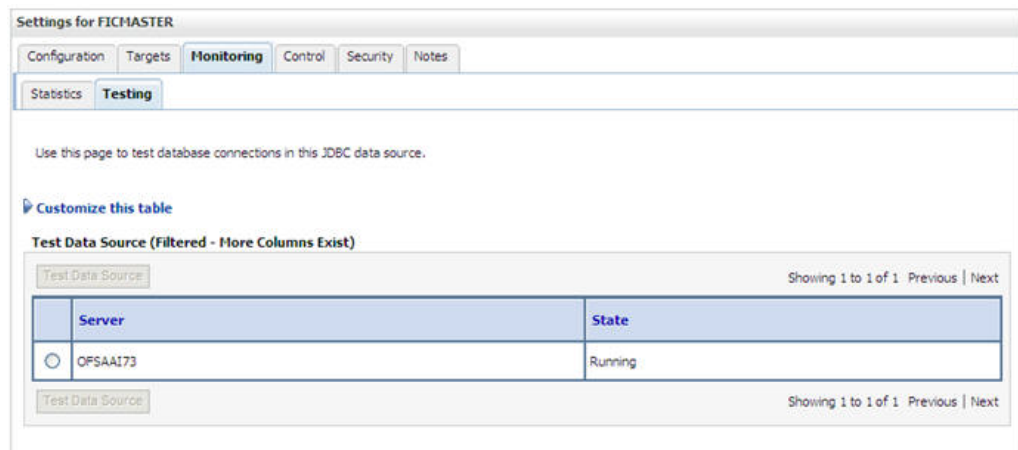


Figure 41: Settings for <Data Source Name>

5. Select the server and click **Test Data Source**.
6. A message is displayed indicating that the test was successful.
7. Once the "Data Source" is created successfully, the following messages are displayed:
 - All changes have been activated. No restart is necessary.
 - Settings updated successfully.

If not, follow the steps given above to recreate the data source.

7.2.5 JDBC Connection Pooling

To define the JDBC connection pooling, ensure that you have created JDBC Provider and Data source to access the data from the database.

-
1. Click the newly created Data Source \$DATA_SOURCE\$ and navigate to the path Home >Summary of Services: JDBC >Summary of JDBC Data Sources >JDBC Data Source-<INFODDOM_NAME>
 2. Set the values for Initial Capacity to 10, Maximum Capacity to 100, Capacity Increment by 1, Statement Cache Type to LRU, and Statement Cache Size to 10.
 3. Click **Save**.

7.3 Configure Resource Reference in Tomcat Application Server

This section is applicable only when the Web Application Server is Tomcat.

This section includes the following topics:

- [Create Data Source](#)
- [JDBC Connection Pooling](#)
- [Class loader configuration for Apache Tomcat](#)

Copy the Oracle JDBC driver file, `ojdbc<version>.jar` from `<Oracle Home>/jdbc/lib` and place it in `<Tomcat Home>/lib`.

NOTE: Refer [Appendix S](#) for identifying the correct `ojdbc<version>.jar` version to be copied.

7.3.1 Create Data Source

To create "data source" for OFSAA application, navigate to `<Tomcat Home>/conf` and edit the following block of text by replacing the actual values in `server.xml`.

NOTE: The User-IDs for configuration/ atomic schemas have the prefix of `setupinfo` depending on the value set for `PREFIX_SCHEMA_NAME` in `<<APP Pack>>_SCHEMA_IN.XML` file of Schema Creator Utility. For example: if the value set for `PREFIX_SCHEMA_NAME` is `DEV` and the schema name was mentioned as `ofsaacnf`, then the actual schema created in the database would be `DEV_ofsaacnf`.

```
<Context path ="/<context name>" docBase="<Tomcat Installation
Directory>/webapps/<context name>" debug="0" reloadable="true"
crossContext="true">
<Resource auth="Container"
    name="jdbc/FICMASTER"
    type="javax.sql.DataSource"
```

```

        driverClassName="oracle.jdbc.driver.OracleDriver"
        username="<user id for the configuration schema>"
        password="<password for the above user id>"
        url="jdbc:oracle:thin:@<DB engine IP address>:<DB Port>:<SID>"
        maxActive="100"
        maxIdle="30"
        maxWait="10000"/>
    <Resource auth="Container"
        name="jdbc/< INFORMATION DOMAIN NAME >"
    type="javax.sql.DataSource"
        driverClassName="oracle.jdbc.driver.OracleDriver"
        username="<user id for the atomic schema>"
        password="<password for the above user id>"
        url="jdbc:oracle:thin:@<DB engine IP address>:<DB Port>:<SID>"
        maxActive="100"
        maxIdle="30"
        maxWait="10000"/>
</Context>

```

NOTE: The <Resource> tag must be repeated for each Information Domain created. After the above configuration, the "WAR" file has to be created and deployed in Tomcat.

7.3.2 JDBC Connection Pooling

To define the JDBC connection pooling, do the following:

1. Copy \$ORACLE_HOME/jdbc/lib/ojdbc<version>.jar to the path \$TOMCAT_DIRECTORY/lib/.

Note: Refer [Appendix S](#) for identifying the correct "ojdbc<version>.jar" version to be copied.

2. Edit the server.xml present under the path \$TOMCAT_DIRECTORY/conf/ with the following changes, which is required for connection pooling.

```

<Context path="/" $CONTEXTNAME$ " docBase=" $APP_DEPLOYED_PATH$ "
debug="0" reloadable="true" crossContext="true">
    <Resource auth="Container"
        name="jdbc/ $INFODOM_NAME$"
        type="javax.sql.DataSource"

```

```

        driverClassName="oracle.jdbc.driver.OracleDriver"
        username=" $ATOMICSCHEMA_USERNAME$"
        password="$ATOMICSCHEMA_PASSWORD$"
        url="$JDBC_CONNECTION_URL"
        maxActive="100"
        maxIdle="30"
        maxWait="10000"
        removeAbandoned="true" removeAbandonedTimeout="60"
        logAbandoned="true"/>
    </Context>

```

Note the following:

- \$TOMCAT_DIRECTORY\$ should be replaced by Tomcat application installed path.
- \$CONTEXTNAME\$ should be replaced by OFSAAI context name.
- \$APP_DEPLOYED_PATH\$ should be replaced by OFSAAI application deployed path.
- \$INFODOM_NAME\$ should be replaced by Infodom Name.
- \$ATOMICSCHEMA_USERNAME\$ should be replaced by Atomic schema database user name.
- \$ATOMICSCHEMA_PASSWORD\$ should be replaced by Atomic schema database password.
- \$JDBC_CONNECTION_URL should be replaced by JDBC connection string jdbc:Oracle:thin:<IP>:<PORT>:<SID>. For example, jdbc:oracle:thin 10.80.50.53:1521:soluint
- The User-IDs for configuration/ atomic schemas have the prefix of setupinfo depending on the value set for PREFIX_SCHEMA_NAME in <<APP Pack>>_SCHEMA_IN.XML file of Schema Creator Utility.
- For example: if the value set for PREFIX_SCHEMA_NAME is DEV and the schema name was mentioned as ofsaacnf, then the actual schema created in the database would be DEV_ofsaacnf.

7.3.3 Class loader configuration for Apache Tomcat

Edit the `server.xml` available in `$TOMCAT_HOME/conf/` folder .

Add tag `<Loader delegate="true" />` within the `<Context>` tag, above the `<Resource>` tag. This is applicable only when the web application server is Apache Tomcat 8.

NOTE:
is 8.

This configuration is required if Apache Tomcat version

8 Appendix C - Creating and Deploying EAR/WAR File

This appendix includes the following topics:

- [Creating EAR/WAR File](#)
- [Deploying EAR/WAR File](#)

8.1 Creating EAR/WAR File

To create EAR/WAR File, follow these steps:

1. Navigate to the `$FIC_WEB_HOME` directory on the OFSAA Installed server.
2. Execute `./ant.sh` to trigger the creation of EAR/ WAR file.
3. On completion of the EAR files creation, the "BUILD SUCCESSFUL" and "Time taken" message is displayed and you will be returned to the prompt.

```
/scratch/ofsaaweb>cd /scratch/ofsaaweb/OFSAA80/ficweb
/scratch/ofsaaweb/OFSAA80/ficweb>
/scratch/ofsaaweb/OFSAA80/ficweb>ls
ant.sh                               ficwebChecksum.sh
apache-ant-1.7.1                     ficweb_InstalledChecksum.txt
application.xml                       lib
build.xml                             MANIFEST.MF
conf                                  mycertificates
ficweb_Build_CheckSum.txt             OFSALMINFO_FusionMenu.xml
ficwebCheckSum.log                   unix
ficwebChecksum.properties             webroot
/scratch/ofsaaweb/OFSAA80/ficweb>./ant.sh
executing "ant"
Buildfile: build.xml

createwar:
  [war] Building war: /scratch/ofsaaweb/OFSAA80/ficweb/AAI80.war

createear:
  [ear] Building ear: /scratch/ofsaaweb/OFSAA80/ficweb/AAI80.ear

BUILD SUCCESSFUL
Total time: 2 minutes 8 seconds
/scratch/ofsaaweb/OFSAA80/ficweb>
```

4. The EAR/ WAR file - `<contextname>.ear/ .war` - is created.

NOTE: The `<contextname>` is the name given during installation.
This process overwrites any existing version of EAR file that exists in the path.

In case of OFSAA configured on Tomcat installation, `<contextname>.war` will be created.

8.2 Deploying EAR/WAR File

This section includes the following topics:

- [Deploying WebSphere EAR/WAR Files](#)
- [Deploying WebLogic EAR/WAR Files](#)
- [Deploying Tomcat WAR Files](#)

NOTE: Ensure to clear the application cache prior to the deployment of Application Pack Web Archive. This is applicable to all Web Servers (WebSphere, WebLogic, and Tomcat). For more information, refer [Clearing Application Cache](#) section.

8.2.1 Deploying EAR/WAR Files for WebSphere

To deploy WebSphere EAR/WAR File, follow these steps:

1. Start WebSphere Profile by navigating to the path "`<Websphere_Installation_Directory>/IBM/WebSphere/AppServer/profiles/<Profile_Name>/bin/`" and execute the command:

```
./startServer.sh server1
```
2. Open the following URL in the browser: `http://<ipaddress>:<Administrative Console Port>/ibm/console`. (https if SSL is enabled). The login screen is displayed.



Figure 42: Login Window

3. Enter the user credentials with admin privileges and click **Log In**.
4. From the LHS menu, select **Applications** and click **New Application**. The *New Application* window is displayed.

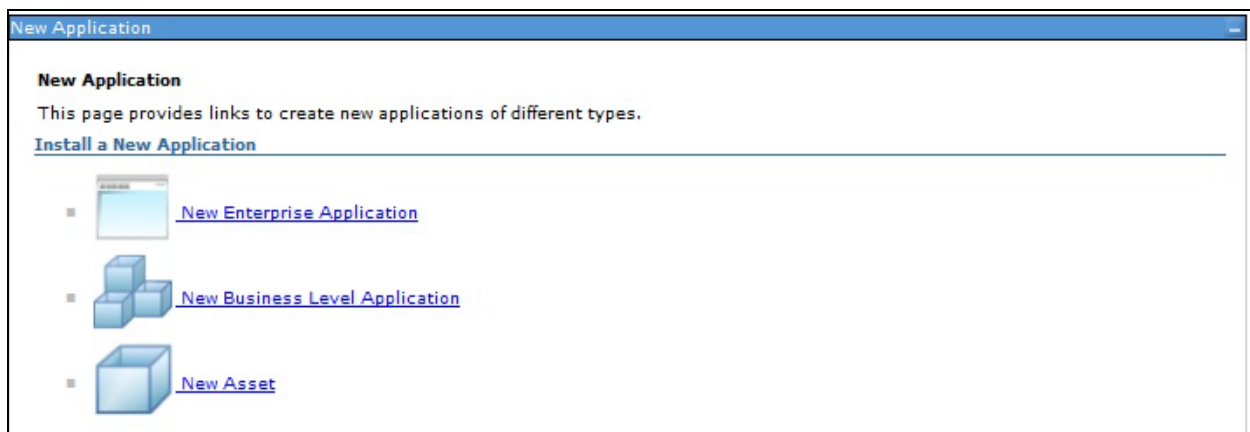


Figure 43: New Application

5. Click **New Enterprise Application**. The *Preparing for the application installation* window is displayed.

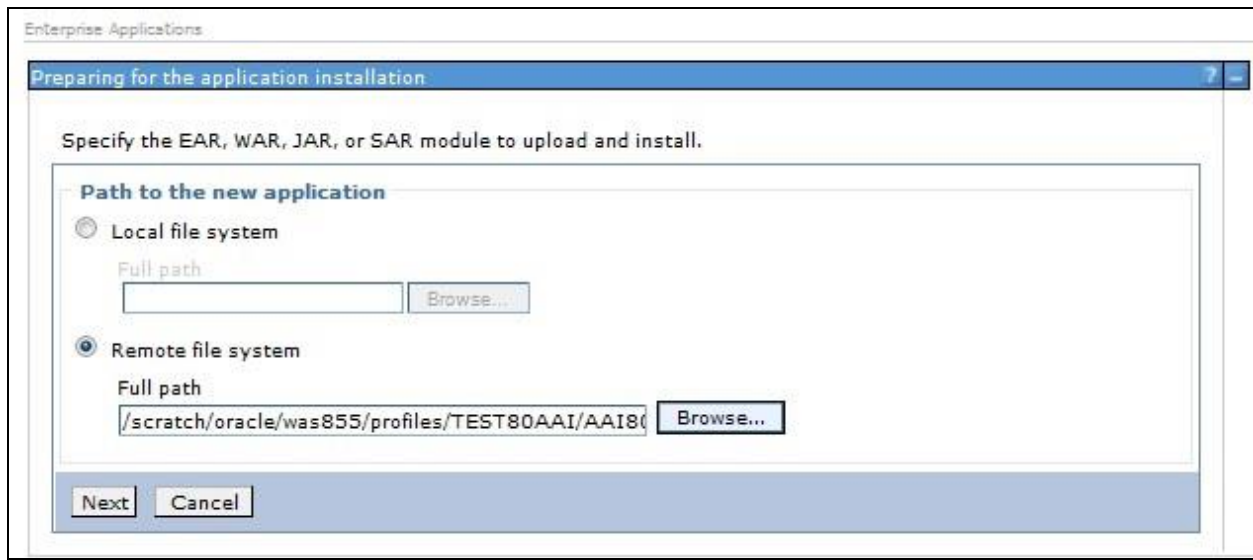


Figure 44: Preparing for the application installation

6. Select **Remote File System** and click **Browse**. Select the EAR file generated for OFSAA to upload and install. Click **Next**.



Figure 45: Installation Options

7. Select the **Fast Path** option and click **Next**. The *Install New Application* window is displayed.



Figure 46: Install New Application

8. Enter the required information and click **Next**. The *Map Modules to Servers* window is displayed.

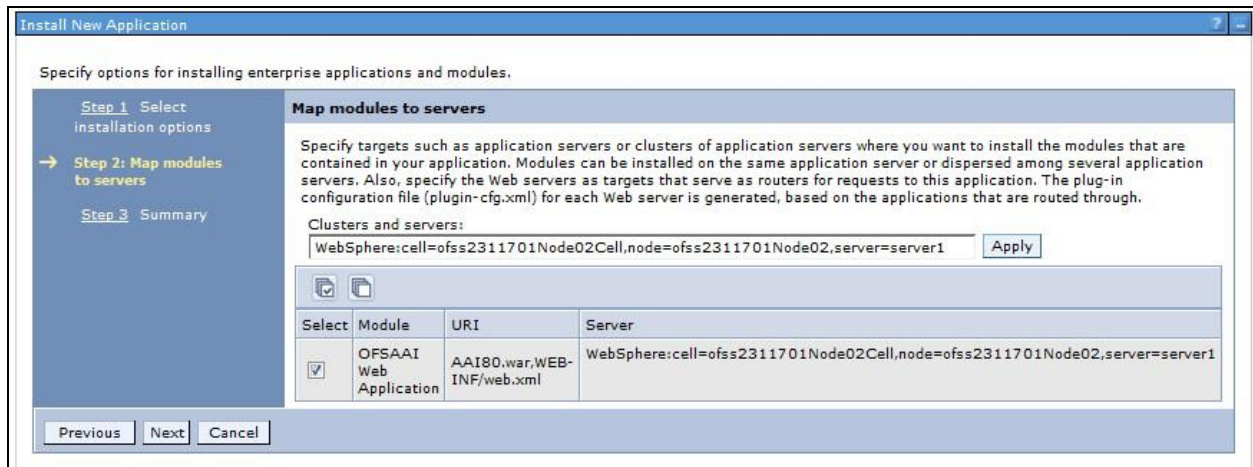


Figure 47: Map Modules to Servers

9. Select the **Web Application** and click **Next**. The *Map Resource References to Resources* window is displayed.

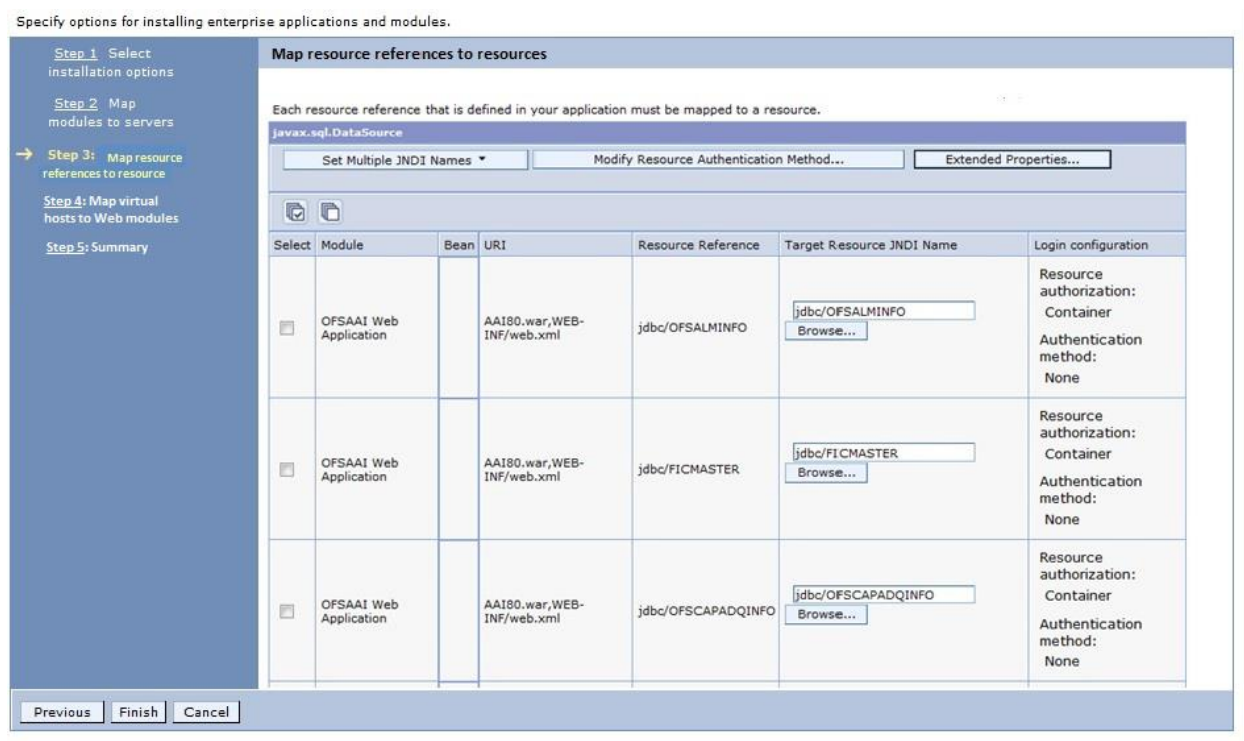


Figure 48: Map Resource References to Resources

10. Map each resource defined in the application to a resource JNDI name defined earlier.
11. Click **Modify Resource Authentication Method** and specify the authentication method created earlier.

You can specify "config" for FICMASTER resource or "atomic" for atomic resource as the authentication method.

12. Select the **OFSAAI Web Application** check box and click **Next**. The *Map Virtual hosts for Web Modules* window is displayed.

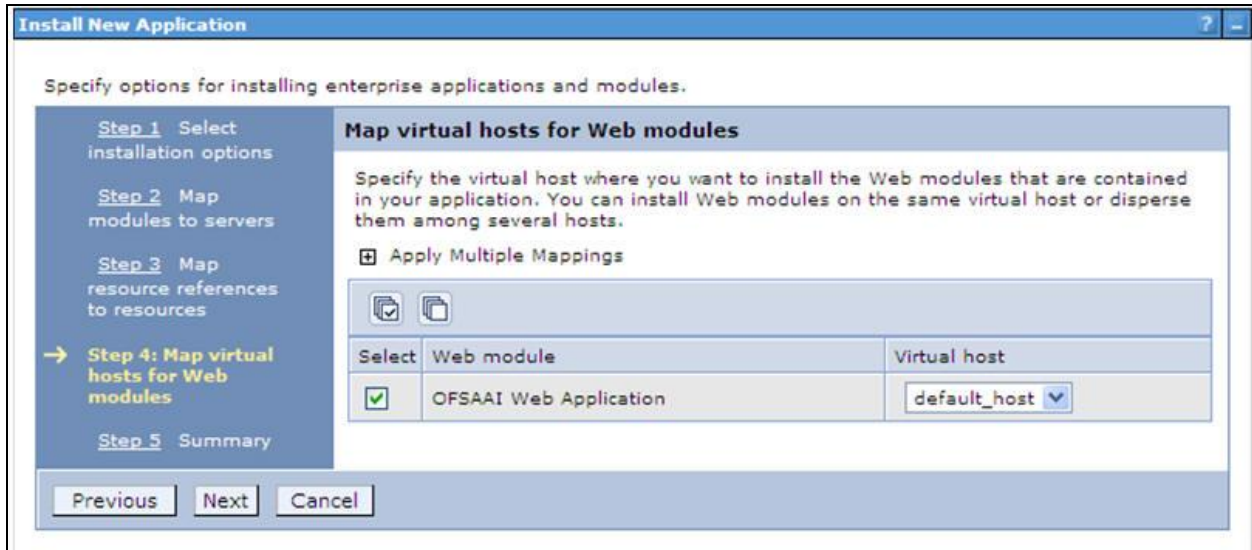


Figure 49: Map Virtual host for Web Modules

13. Select the **Web Application** check box and click **Next**. The *Summary* page is displayed.

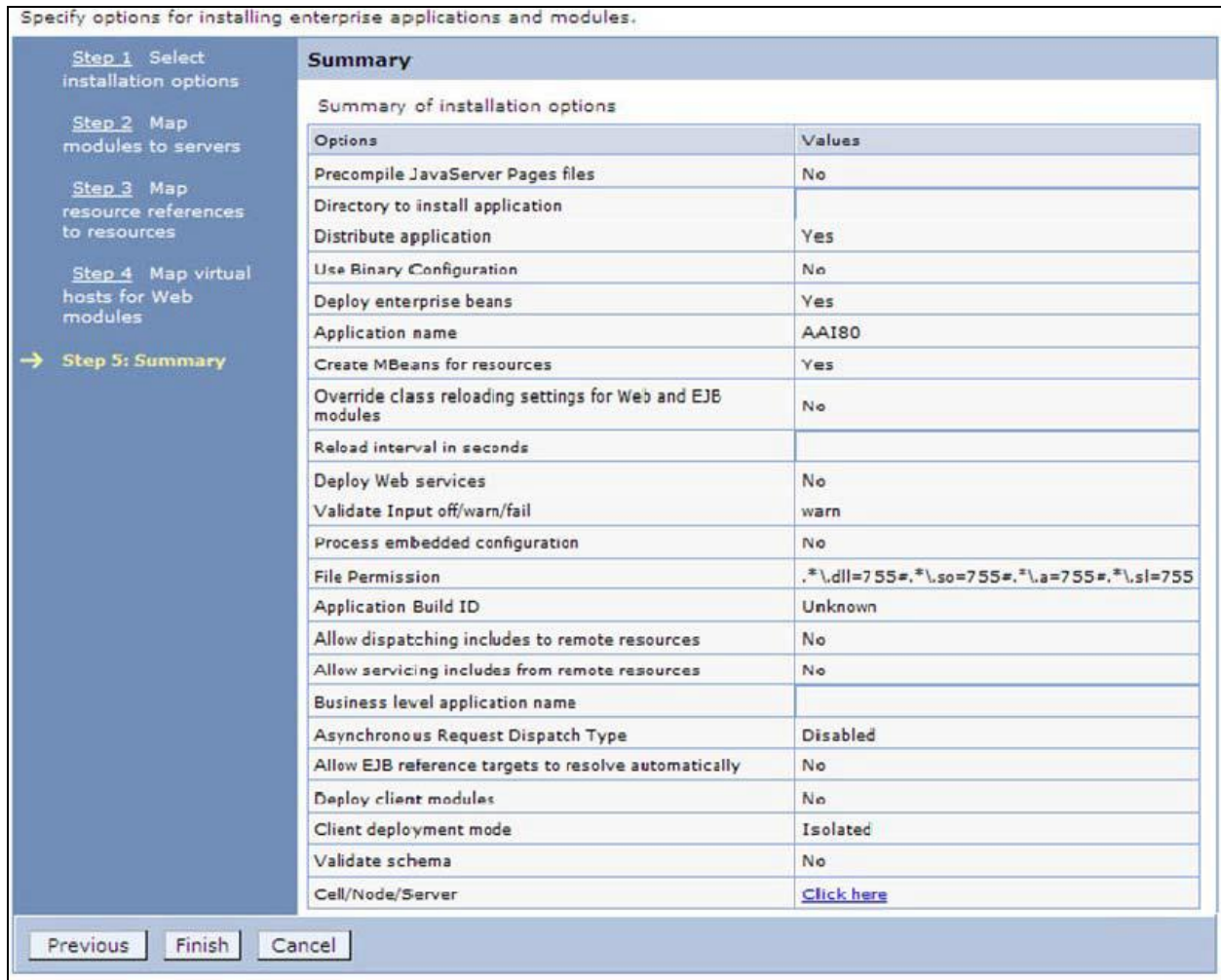


Figure 50: Summary

14. Click **Finish** and deploy the Infrastructure Application on WebSphere.
15. On successful installation, a message is displayed. Click **Save** and save the master file configuration. The details are displayed in the *Master File Configuration* window.

To start the application

1. Expand **Applications > Application Type > WebSphere enterprise applications**. The *Enterprise Applications* window is displayed.

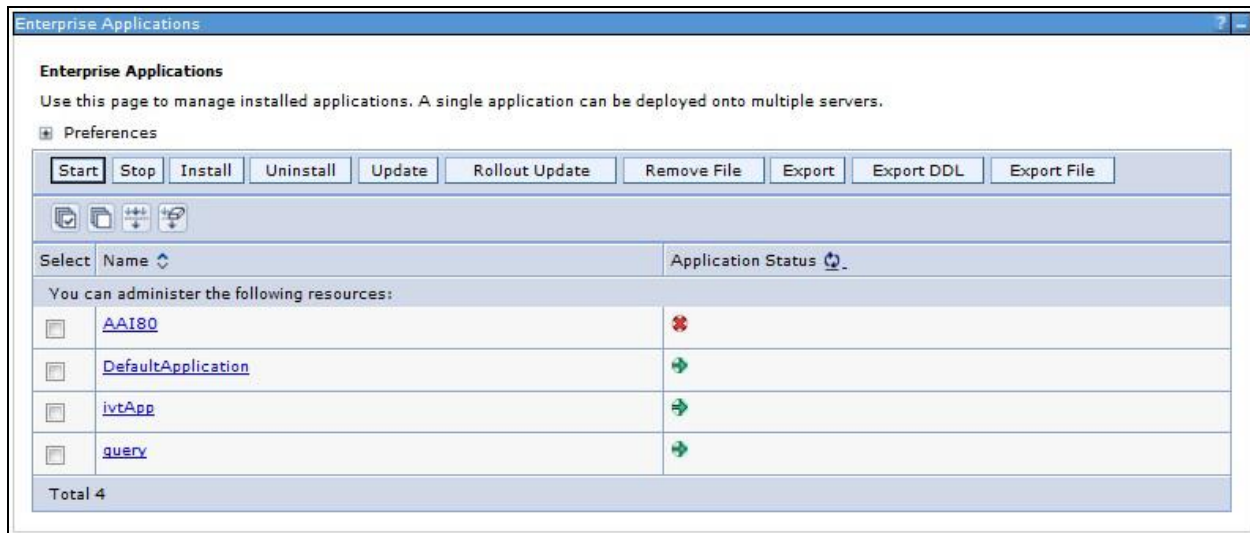


Figure 51: Enterprise Applications

2. Select the installed application and click **Start**.

NOTE: <profile name> is the profile name given while creating the <cell name > WebSphere profile. <contextname> is the context name given during installation.

8.2.2 Deploying EAR / WAR File for WebLogic

Following are the steps for deploying Infrastructure application that would be created during installation:

1. Navigate to the path <WebLogic Installation directory>/user_projects/domains/<domain name>/bin in the machine in which WebLogic is installed.
2. Start WebLogic by executing the command:

```
./startWebLogic.sh -d64 file
```
3. Open the URL in the browser window: `http://<ipaddress>:<admin server port>/console`. (https if SSL is enabled). The Sign in window of the WebLogic Server Administration Console is displayed.

NOTE: Ensure that you have started Infrastructure Server by executing “./startofsaai.sh” as mentioned in Start Infrastructure section

4. Log on to the WebLogic Server by entering the user credentials having privileges to deploy the EAR file.

- From the **Domain Structure** LHS menu, click **Deployments**. The *Summary of Deployments* window is displayed.

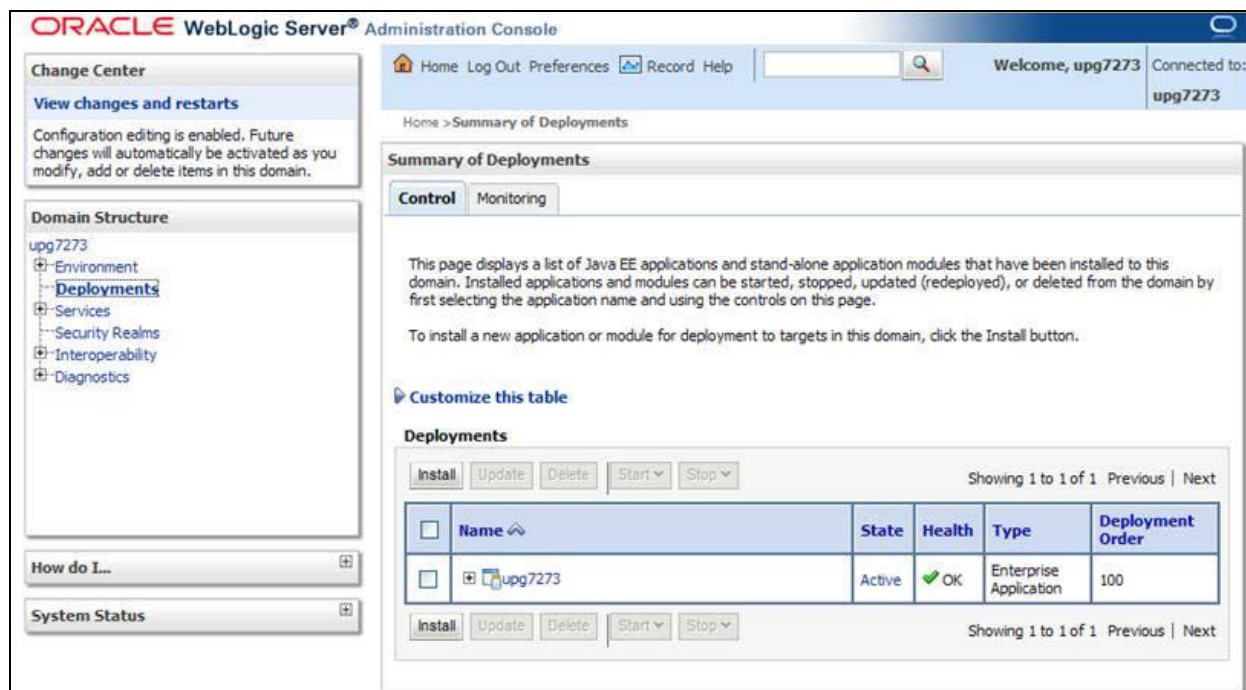


Figure 52: Summary of Deployments

- Click **Install**. The Install Application Assistant window is displayed.
- Select the Exploded EAR directory after browsing to the directory where it is saved and click **Next**.

Explode EAR File

To explode EAR, follow these steps:

- Create the "applications" folder under domain name. For example, `/Bea/user_projects/domains/<Domain_name>/applications`.
- Create `<context_name>.ear` folder under "applications" folder.
- Copy the `<$FIC_WEB_HOME/<context_name>.ear` file to `<WEBLOGIC_INSTALL_DIR>/Bea/user_projects/domains/<DOMAIN_NAME>/applications/<context_name>.ear`.
- Explode the `<context_name>.ear` file by executing the command:


```
jar -xvf <context_name>.ear
```


5. Delete the `<context>.ear` and `<context>.war` files (recently created)
`<WEBLOGIC_INSTALL_DIR>/Bea/user_projects/domains/<DOMAIN_NAME>/applications/<context_name>.ear.`
6. Create a directory `<context_name>.war` under
`<WEBLOGIC_INSTALL_DIR>/Bea/user_projects/domains/<DOMAIN_NAME>/applications/<context_name>.ear.`
7. Copy `<$FIC_WEB_HOME/<context_name>.war` file to
`<WEBLOGIC_INSTALL_DIR>/Bea/user_projects/domains/<DOMAIN_NAME>/applications/<context_name>.ear/<context_name>.war.`
8. Explode the `<context_name>.war` file by executing the following command to get the directory structure:

```
jar -xvf <context_name>.war
```

Install Application

To install Application:

1. Open the Install Application Assistant.

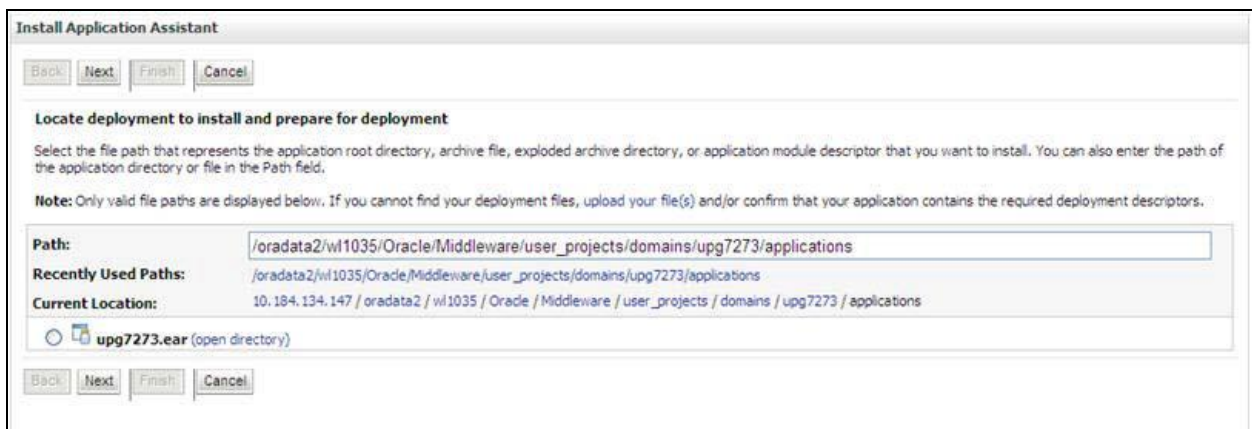


Figure 53: Install Application Assistant

2. Click **Next**.

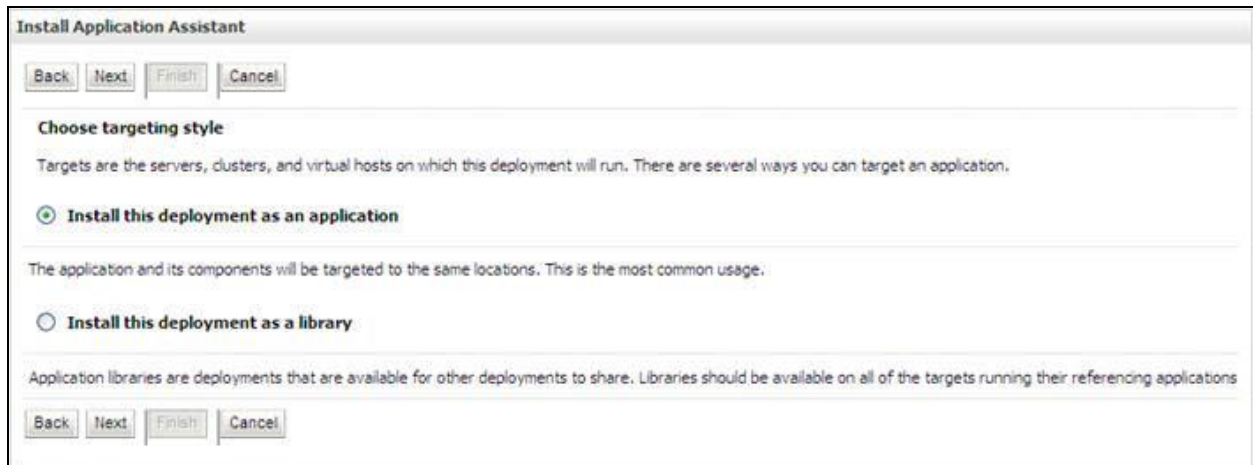


Figure 54: Install Application Assistant

3. From the *Choose targeting style* section, select the **Install this deployment as an application** option and click **Next**. The *Optional Settings* window is displayed.

Install Application Assistant

Back Next Finish Cancel

Optional Settings
You can modify these settings or accept the defaults:

General

What do you want to name this deployment?

Name:

Security

What security model do you want to use with this application?

DD Only: Use only roles and policies that are defined in the deployment descriptors.

Custom Roles: Use roles that are defined in the Administration Console; use policies that are defined in the deployment descriptor.

Custom Roles and Policies: Use only roles and policies that are defined in the Administration Console.

Advanced: Use a custom model that you have configured on the realm's configuration page.

Source accessibility

How should the source files be made accessible?

Use the defaults defined by the deployment's targets

Recommended selection:

Copy this application onto every target for me

During deployment, the files will be copied automatically to the managed servers to which the application is targeted.

I will make the deployment accessible from the following location

Location:

Provide the location from where all targets will access this application's files. This is often a shared directory. You must ensure the application files exist in this location and that each target can reach the location.

Back Next Finish Cancel

Figure 55: Optional Settings

4. Enter a **Name** for the deployment if required.
5. Under the Security section, select the **DD only** option to specify that only roles and policies that are defined in the deployment descriptors should be used.
6. Select the **I will make the deployment available from the following location** option under the Source accessibility section.
7. Click **Next** to continue. The Deployment Summary window is displayed.

Install Application Assistant

Back Next Finish Cancel

Review your choices and click Finish

Click Finish to complete the deployment. This may take a few moments to complete.

Additional configuration

In order to work successfully, this application may require additional configuration. Do you want to review this application's configuration after completing this assistant?

Yes, take me to the deployment's configuration screen.

No, I will review the configuration later.

Summary

Deployment: /oradata2/wl1035/Oracle/Middleware/user_projects/domains/upg7273/applications/upg7273.ear

Name: upg72733

Staging mode: Use the defaults defined by the chosen targets

Security Model: DDOnly: Use only roles and policies that are defined in the deployment descriptors.

Target Summary

Components	Targets
upg7273.ear	AdminServer

Back Next Finish Cancel

Figure 56: Deployment Summary

8. Select the **Yes, take me to the deployment's configuration screen** option and click **Finish**. The *Settings for <Deployment Name>* window is displayed.

Settings for upg7273

Overview | Deployment Plan | Configuration | Security | Targets | Control | Testing | Monitoring | Notes

Save

Use this page to view the general configuration of an Enterprise application, such as its name, the physical path to the application files, the associated deployment plan, and so on. The table at the end of the page lists the modules (such as Web applications and EJBs) that are contained in the Enterprise application. Click on the name of the module to view and update its configuration.

Name: upg7273 The name of this Enterprise Application. [More Info...](#)

Path: / oradata2/ \w1035/ Oracle/ Middleware/ user_projects/ domains/ upg7273/ applications/ upg7273. ear The path to the source of the deployable unit on the Administration Server. [More Info...](#)

Deployment Plan: (no plan specified) The path to the deployment plan document on Administration Server. [More Info...](#)

Staging Mode: (not specified) The mode that specifies whether a deployment's files are copied from a source on the Administration Server to the Managed Server's staging area during application preparation. [More Info...](#)

Security Model: DOOnly The security model that is used to secure a deployed module. [More Info...](#)

Deployment Order: An integer value that indicates when this unit is deployed, relative to other deployable units on a server, during startup. [More Info...](#)

Deployment Principal Name: A string value that indicates what principal should be used when deploying the file or archive during startup and shutdown. This principal will be used to set the current subject when calling out into application code for interfaces such as ApplicationLifecycleListener. If no principal name is specified, then the anonymous principal will be used. [More Info...](#)

Save

Modules and Components

Showing 1 to 1 of 1 Previous | Next

Name	Type
[-] upg7273	Enterprise Application
[-] EJBs	
[-] StatelessCacheBeanBean	EJB
[-] Modules	
[-] /upg7273	Web Application
[-] beancache.jar	EJB Module
[-] Web Services	
None to display	

Showing 1 to 1 of 1 Previous | Next

Figure 57: Settings for <Deployment Name>

9. Review the general configuration details of the deployment. You can also update the configuration of the deployment in this window. In the *Overview* tab you can view the complete deployment configuration.
10. Click **Save** to update the changes, if any.
11. From the LHS menu, click **Deployments**. The *Summary of Deployments* window is displayed.

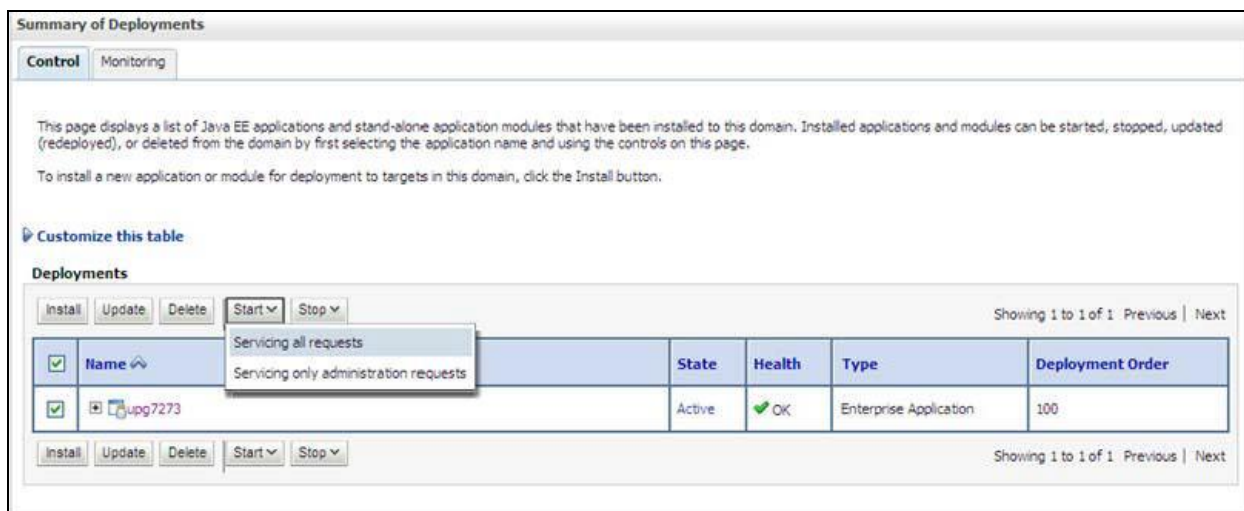


Figure 58: Summary of Deployments

12. Select the newly deployed Infrastructure application and click **Start > Servicing all requests**. Ensure that the Infrastructure server is up and running.

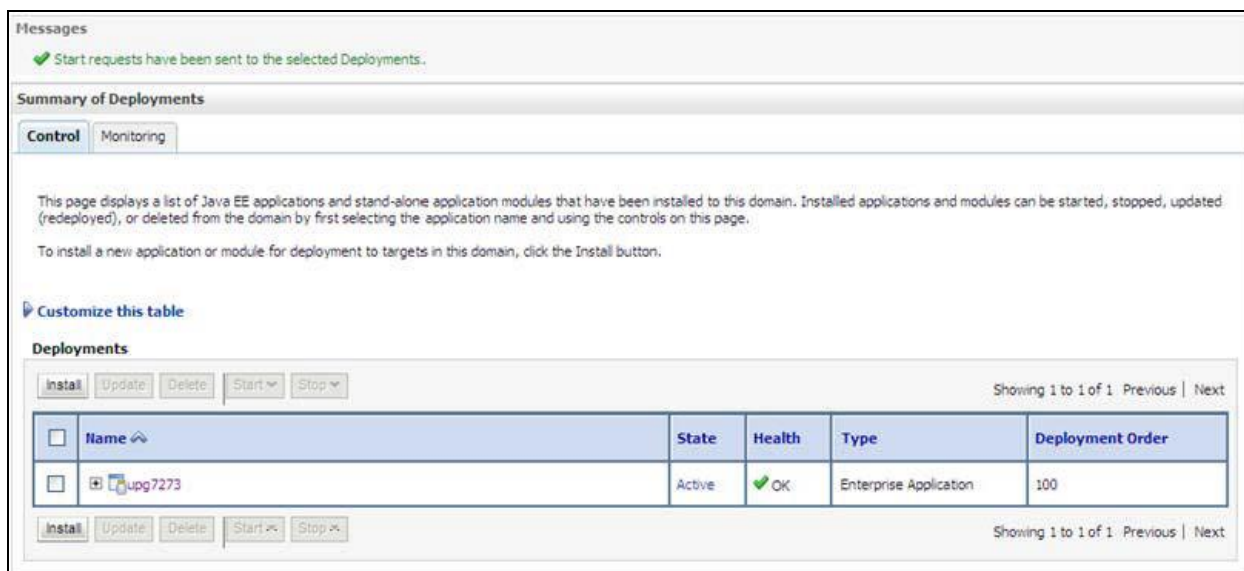


Figure 59: Summary of Deployments

13. The **State** of the deployed application is displayed as **Active** if started successfully.

8.2.3 Deploying WAR Files on Tomcat

Before deploying the WAR files, ensure that the previously deployed applications of Infrastructure are uninstalled. See *Uninstalling Previously Deployed WAR Files in Tomcat* for the procedure to uninstall the previously deployed Infrastructure war files.

On the machine that hosts Tomcat, follow these steps outlined to deploy Infrastructure application:


1. Copy the <context-name>.war from \$FIC_WEB_HOME/<context-name.war> to <Tomcat Installation Directory>/webapps/ directory.

Home Documentation Configuration Examples Wiki Mailing Lists Find Help

Apache Tomcat/7.0.57

The Apache Software Foundation
<http://www.apache.org/>

If you're seeing this, you've successfully installed Tomcat. Congratulations!

 Recommended Reading:

- [Security Considerations HOW-TO](#)
- [Manager Application HOW-TO](#)
- [Clustering/Session Replication HOW-TO](#)

Server Status
Manager App
Host Manager

Developer Quick Start

[Tomcat Setup](#) [Realms & AAA](#) [Examples](#) [Servlet Specifications](#)
[First Web Application](#) [JDBC Data Sources](#) [Tomcat Versions](#)

Managing Tomcat

For security, access to the [manager webapp](#) is restricted. Users are defined in:

```
$CATALINA_HOME/conf/tomcat-users.xml
```

In Tomcat 7.0 access to the manager application is split between different users.
[Read more...](#)

[Release Notes](#)
[Changelog](#)
[Migration Guide](#)
[Security Notices](#)

Documentation

[Tomcat 7.0 Documentation](#)
[Tomcat 7.0 Configuration](#)
[Tomcat Wiki](#)

Find additional important configuration information in:

```
$CATALINA_HOME/RUNNING.txt
```

Developers may be interested in:

- [Tomcat 7.0 Bug Database](#)
- [Tomcat 7.0 JavaDocs](#)
- [Tomcat 7.0 SVN Repository](#)

Getting Help

[FAQ and Mailing Lists](#)

The following mailing lists are available:

- [tomcat-announce](#)
Important announcements, releases, security vulnerability notifications. (Low volume).
- [tomcat-users](#)
User support and discussion
- [taolibs-user](#)
User support and discussion for [Apache Taolibs](#)
- [tomcat-dev](#)
Development mailing list, including commit messages

Other Downloads: [Tomcat Connectors](#), [Tomcat Native](#), [Taolibs](#), [Deployer](#)

Other Documentation: [Tomcat Connectors](#), [mod_jk Documentation](#), [Tomcat Native](#), [Deployer](#)

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Apache Software Foundation: [Who We Are](#), [Heritage](#), [Apache Home](#), [Resources](#)

2. Click **Manager App**. The Connect to dialog box is displayed.
3. Enter the User Id and Password that has admin rights and click OK. (For user creation in tomcat, see Tomcat User Administration. The Tomcat Web Application Manager window is displayed with the list of all the applications deployed.

<code>/docs</code>	None specified	Tomcat Documentation	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
<code>/examples</code>	None specified	Servlet and JSP Examples	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
<code>/host-manager</code>	None specified	Tomcat Host Manager Application	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
<code>/manager</code>	None specified	Tomcat Manager Application	true	1	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes

Deploy

Deploy directory or WAR file located on server

Context Path (required):

XML Configuration file URL:

WAR or Directory URL:

WAR file to deploy

Select WAR file to upload

Diagnostics

Check to see if a web application has caused a memory leak on stop, reload or undeploy

This diagnostic check will trigger a full garbage collection. Use it with extreme caution on production systems.

Server Information

Tomcat Version	JVM Version	JVM Vendor	OS Name	OS Version	OS Architecture	Hostname	IP Address
Apache Tomcat/7.0.57	1.6.0_45-b06	Sun Microsystems Inc.	Linux	2.6.39-400.211.1.el6uek.x86_64	amd64	ofss220354.in.oracle.com	10.184.135.215

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4. In the Deploy section, enter the Context Path provided during the installation as `"/<context-name>"`.
5. Enter the path where the `<context-name>.war` file resides (by default `"$FIC_WEB_HOME/<context-name.war>"`) in the WAR or Directory URL field and click Deploy.
6. On successful application deployment, a confirmation message is displayed. Start the Tomcat server. Refer *Starting Infrastructure Services* for more details.

9 Appendix D - Start/Stop OFSAA Infrastructure Services

This chapter details on how to start and stop OFSAA Infrastructure services. This chapter includes the following sections:

- [Starting Infrastructure services](#)
- [Stopping Infrastructure Services](#)

9.1 Starting Infrastructure Services

Once the installation of Infrastructure has been completed successfully and the post-installation steps are completed, the servers must be started. Log on to each machine and run the `.profile` file. All servers mentioned must be started from the same shell encoding. Following servers are dependent on each other. It is mandatory to maintain the order in which the servers are started. Allow each of the servers to initialize completely before starting the next server.

1. On the machine in which Infrastructure Application components have been installed, navigate to `$FIC_APP_HOME/common/FICServer/bin` and execute the following command to start the Infrastructure Server.

```
./startofsaai.sh
```

NOTE: You can also start the Infrastructure Server by executing the command `"nohup ./ startofsaai.sh &"`. Starting the process using `"nohup"` and `"&"` will return the command prompt without having to wait till the process completes. However, this command cannot be used when you are starting the server for the first time or starting after changing user password in the configuration database schema. You can also start the Infrastructure Server by executing the command `"nohup ./ startofsaai.sh &"`. Starting the process using `"nohup"` and `"&"` will return the command prompt without having to wait till the process completes. However, this command cannot be used when you are starting the server after changing user password in the Configuration database schema.

2. Start ICC server:
 - On the machine in which Infrastructure default Application components have been installed, navigate to `$FIC_HOME/ficapp/icc/bin`
 - Execute the command:

```
./iccserver.sh
```

Note: Only Infrastructure Default Application Server would hold ICC component.

3. Stopping Infrastructure Services

- On the machine on which Infrastructure Database components have been installed, navigate to \$FIC_DB_HOME/bin and execute the command to start "Agent server":

```
./agentstartup.sh
```

Or

- Start Back-end services using the command:

```
nohup ./agentstartup.sh &
```

Note: This agent internally starts the Router, Message Server, OLAP data server and AM services.

9.2 Starting Web Application Servers

Start the Web Application Server depending on the type from the following table.

Start up Option	Description
Starting WebSphere profile	On the machine in which Web sphere is installed, navigate to [Webshpere_Install_Directory] /AppServer/<profiles>/<profile name>/bin and execute the command: ./startServer.sh server1.
Starting WebLogic Domain	On the machine in which WebLogic is installed navigate to <WebLogic Installation directory>/user_projects/domains/<domain name>/bin and execute the command: startWebLogic.sh -d64. Note: If WebLogic is already running, access the WebLogic Admin Console. Stop and start the application <context name>.ear.
Starting Tomcat Application	On the machine in which Tomcat is installed, navigate to <Tomcat_Install_Directory>/bin and execute the command: ./catalina.sh run

9.2.1 Starting Web Application Servers

Start the Web Application Server depending on the type from the following table.

Start up Option	Description
Starting WebSphere profile	On the machine in which Web sphere is installed, navigate to [Webshpere_Install_Directory] /AppServer/<profiles>/<profile name>/bin and execute the command: ./startServer.sh server1.

Start up Option	Description
Starting WebLogic Domain	<p>On the machine in which WebLogic is installed navigate to <WebLogic Installation directory>/user_projects/domains/<domain name>/bin and execute the command: <code>startWebLogic.sh -d64</code>.</p> <p>Note: If WebLogic is already running, access the WebLogic Admin Console. Stop and start the application <context name>.ear.</p>
Starting Tomcat Application	<p>On the machine in which Tomcat is installed, navigate to <Tomcat_Install_Directory>/bin and execute the command: <code>./catalina.sh run</code></p>

9.2.2 Stopping Infrastructure Services

To stop Infrastructure services:

1. On the machine in which Infrastructure Application components have been installed, navigate to `$FIC_APP_HOME/common/FICServer/bin` and execute the command:

```
./stopofsaai.sh
```

2. To stop ICC server, on the machine in which Infrastructure default Application components have been installed, navigate to `$FIC_HOME/ficapp/icc/bin` and execute the command:

```
./iccserversshutdown.sh
```

NOTE: Only Infrastructure Default Application Server would hold ICC component.

3. To stop Back-end server, on the machine in which Infrastructure database components have been installed, navigate to `$FIC_DB_HOME/bin` and execute the command:

```
./agentshutdown.sh
```

10 Appendix E - Access the OFSAA Application

This appendix gives details about the steps to be performed to access OFSAA Application.

10.1 Access the OFSAA Application

1. From a your desktop, open the browser and enter the URL in following format:

<scheme>://<IP address/ hostname>:<port>/<context-name>/login.jsp

For example, <https://111.222.333.444:5555/ofsa/login.jsp>

Following OFSAA login window is displayed:

OFSAA Login Window



Language

User ID

Password

Version 8.0.0.0.0
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ORACLE

2. With installation of every OFSAA Application Pack, there are two seeded user profiles configured in the system:
 - SYSADMN – System Administrator
 - SYSAUTH – System Authorizer

Login to the application using the "SYSADMN" User ID. (Note that, there is no "I" in the SYSADMN login USER ID). Enter the password that was provided during installation. On the first login, you will be prompted to change the password.

11 Appendix F – Post Deployment Configuration

This chapter covers the following topics:

- [Deploying the Application](#)
- [Logging as System Administrator](#)
- [Creating Application Users](#)
- [Mapping Application User\(s\) to User Group](#)

11.1 Deploying the Application

11.1.1 To deploy the FTP application, follow the steps:

The Oracle Financial Services Analytical Applications Infrastructure Application Server is started using `startofsaai.sh`. This file can be edited for setting customized memory settings, garbage collector settings depending on the available hardware configuration. Please raise an SR in **support.Oracle.com** if you have any queries related to EPM applications.

Once the installation of Oracle Financial Services Funds Transfer Pricing Management Product is completed, you must perform the following steps.

1. Check the Log file.
2. Add the following mentioned entries in `excludeURLList.cfg` file located in the path `$FIC_WEB_HOME/webroot/conf/`. These entries are required for Asset and Liability Management, Funds Transfer pricing, Profitability Management and Hedge Management / IFRS:
[SQLIA]../fsapps/common/batchCreate.action
[SQLIA]../fsapps/common/batchEdit.action

Note: Copy the above information into notepad, and then copy it from notepad into `cfg` file. Take extra care to avoid copying formatting characters into the `cfg` file.

3. For Administrative Reports (Admin BI) configuration follow the steps mentioned in *Oracle Financial Services Administrative Reports on OBIEE 11g v8.0.0.0.0 - Configuration Note.docx* under `$FIC_HOME/adminbi`

Note: You can also find the *Oracle Financial Services Administrative Reports on OBIEE 11g v8.0.0.0.0 - Configuration Note* on [OTN](#).

4. The `web.xml` under the path `$FIC_WB_HOME\webroot\WEB-INF\` should have Resource tag, if not present add the tag and replace ORDEMO with the INFODOM name.

```
<resource-ref>
```

```
<description>DB ConnectionORDEMO</description>
```

```
<res-ref-name>jdbc/ORDEMO</res-ref-name>
<res-type>javax.sql.DataSource</res-type>
<res-auth>Container</res-auth>
</resource-ref>
```

Note: Copy the above information into notepad, and then copy it from notepad into cfg file. Take extra care to avoid copying formatting characters into the cfg file.

5. Execute following script as a post installation step:

```
$FIC_HOME/scripts/atomic/create/indexes.sql
```

Note: This may display some ORA errors, those can be ignored.

6. If there are ICC batch processes created having **roll_portfolio** and **rebalance_portfolio** DTs as the tasks, the parameter list of the DTs are to be updated as:

- If the parameters for roll portfolio are '70001', 'TP', 'TP USER1', change the parameters as : ', ', ', ', ', ', '70001', 'TP', 'TP USER1'.
- If the parameters for re-balance portfolio are '70001', '2', 'TP USER1', 'TP' change the parameters as: ', ', ', ', ', ', '70001', '2', 'TP USER1', 'TP'.

The screenshot shows the 'Task Definition' configuration page. The 'Task ID' is 'Task1' and the 'Components' are set to 'TRANSFORM DATA'. The 'Dynamic Parameters List' table is as follows:

Property	Value
Datastore Type	EDW
Datastore Name	EPMG2DEV
IP Address	10.184.134.17
Rule Name	Roll Portfolio
Parameter List	', ', ', ', ', ', '70001', 'TP', 'TP USER1'

- Following is an example as of Merge Portfolio:
 - Run ID: when running via ICC batch and Simplified batch process, this parameter can be passed as ''.
 - Process ID: when running via ICC batch and Simplified batch process, this parameter can be passed as ''
 - Execution ID: when running via ICC batch and Simplified batch process, this parameter can be passed as ''
 - Run Surrogate Key: when running via ICC batch and Simplified batch process, this parameter can be passed as ''
 - Pattern Code, for example, '70001'
 - FTP User, for example, 'TP USER 1'
 - Application ID, for example, 'TP' (this is a static value)
 - When to merge (roll versus rebalance): when running via ICC batch and Simplified batch process, this parameter should always be 'N'. Maturity date identifying maturing strips to be merged on roll : when running via ICC batch and Simplified batch process, this parameter should always be ''

These parameters would appear as follows in the simplified batch parameter input block:

', ', ', ', ', '70001', 'TP USER 1', 'TP', 'N', ''

-
- The parameter pattern to be used when RP batches are scheduling from the Run Rule Framework. When executing from the Run Rule Framework, the user does not have to pass the Run ID, Process ID, Execution ID, and Run Surrogate Key, as the framework itself passes these values along with the Batch ID and MISDATE. The parameters would appear as follows:

"70001", "TP USER 1", "TP", "N", ""

7. Transfer the ownership of batches to the required User.

1. Login to config user.
2. Execute the Following anonymous pl/sql block to execute procedure "AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP".

```
begin
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP('fromUser','toUser','infodom');
end;
OR
begin
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP('fromuser','touser');
end;
```

Parameter details:

- **fromUser:** indicates the user who currently owns the batch
- **to User:** indicated the user to which the ownership has to be transferred.
- **infodom:** optional parameter , if specified the ownership of batches pertaining to that Infodom will be changed.

8. If the web application server is hosted on a machine other than where pack is installed, then perform the following step.
 - Generate RSA key for the machine where Web application server is hosted.
 - Add the generated RSA key to the authorized keys list of the machine where Pack s installed

11.1.2 To deploy the PFT application, follow the steps:

The Oracle Financial Services Analytical Applications Infrastructure Application Server is started using startofsaai.sh. This file can be edited for setting customized memory settings, garbage collector settings depending on the available hardware configuration. Please raise an SR in [support.Oracle.com](https://support.oracle.com) if you have any queries related to EPM applications.

Once the installation of Oracle Financial Services Profitability Management Product is completed, you must perform the following steps.

1. Check the Log file.

-
2. Add the following entries in excludeURLList.cfg file located in the path \$FIC_WEB_HOME/webroot/conf/. These entries are required for Asset and Liability Management, Funds Transfer pricing, Profitability Management and Hedge Management / IFRS:
[SQLIA]/fsapps/common/batchCreate.action
[SQLIA]/fsapps/common/batchEdit.action
 3. For Administrative Reports (Admin BI) configuration follow the steps mentioned in *Oracle Financial Services Administrative Reports on OBIEE 11g - Configuration Note.docx* under \$FIC_HOME/adminbi
 4. The web.xml under the path \$FIC_WB_HOME \webroot\WEB-INF\ should have Resource tag, if not present add the tag and replace ORDEMO with the INFODOM name.

```
<resource-ref>  
  <description>DB ConnectionORDEMO</description>  
  <res-ref-name>jdbc/ORDEMO</res-ref-name>  
  <res-type>javax.sql.DataSource</res-type>  
  <res-auth>Container</res-auth>  
</resource-ref>
```

Note: Copy the above information into notepad, and then copy it from notepad into cfg file. Take extra care to avoid copying formatting characters into the cfg file.

5. Transfer the ownership of batches to the required User.
 1. Login to config user.
 2. Execute the Following anonymous pl/sql block to execute procedure "AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP".

```
begin  
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP('fromUser','toUser','infodom');  
end;  
OR  
begin  
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP('fromuser','touser');  
end;
```

Parameter details:

- **fromUser:** indicates the user who currently owns the batch
- **to User:** indicated the user to which the ownership has to be transferred.
- **infodom:** optional parameter , if specified the ownership of batches pertaining to that Infodom will be changed.

-
6. If the web application server is hosted on a machine other than where pack is installed, then perform the following step.
 - Generate RSA key for the machine where Web application server is hosted.
 - Add the generated RSA key to the authorized keys list of the machine where Pack s installed

11.1.3 To deploy the EFPA/ IPA/RPA application, follow the OBIEE configuration steps:

Make sure Oracle Business Intelligence version 11.1.1.7.1 is available.

NOTE: After Installation, patch 16556157 is recommended for all the customers who are using Oracle Business Intelligence Enterprise Edition 11.1.1.7.0. This patch can be downloaded from Oracle support site.

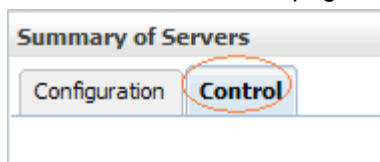
1. Set the <Oracle BI Instance Home> directory> =>.
For example: /u01/OBIEE11G/instances/instance1
2. Start Weblogic AdminServer.
 - a. Set the < BI Domain Home> directory> => e.g.
/u01/OBIEE11G/user_projects/domains/bifoundation_domain.
 - b. Navigate to < BI Domain Home >/bin and run 'nohup ./startWebLogic.sh &'
 - c. Bringing up this service may take a few minutes depending on your environment. Check the logs using the command 'tail -f nohup.out'
3. Start Node Manager.
 - a. Set the < WebLogic Server Home > directory> => e.g.
/u01/OBIEE11G/wlserver_10.3.
 - b. Navigate to <WebLogic Server Home>/server/bin and run 'nohup ./startNodeManager.sh &'
2. Start Weblogic Managed Server(bi_server1).
 - a. Login onto <http://localhost:7001/console> using your Administrator credentials created during platform install (Replace the hostname based on your setup).
 - b. Under Environment block (mid of page, towards left side), click on Servers link.



c. The bi_server1 line should show as shutdown state at this point.

<input type="checkbox"/>	Server	Machine	State	Status of Last Action
<input type="checkbox"/>	AdminServer(admin)	laliv-lap	RUNNING	None
<input type="checkbox"/>	bi_server1	laliv-lap	SHUTDOWN	TASK COMPLETED

d. Click on control page tab.



e. Select the bi_server1 line by clicking on the left tick box,

f. Click start button at the top of the list and confirm starting this service

Servers (Filtered - More Columns Exist)

Start Resume Suspend ▾ Shutdown ▾ Restart SSL

<input type="checkbox"/>	Server ↕	Machine	State
<input type="checkbox"/>	AdminServer(admin)	laliv-lap	RUNNING
<input checked="" type="checkbox"/>	bi_server1	laliv-lap	SHUTDOWN

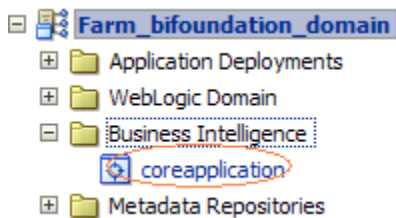
Start Resume Suspend ▾ Shutdown ▾ Restart SSL

g. State will update to "RUNNING" mode after a few minutes.

3. Start BIEE services and login

a. Starting services From EM screen

- i. Login to the EM administration screen using the url <http://localhost:7001/em> (Replace the hostname and port number based on your setup). Use the login you created in BIEE installation to log in.
- ii. Expand 'Business Intelligence' node on the left and choose Coreapplication.



iii. Click on the Overview Tab,

Change Center: | Lock and Edit Configuration

Overview | Capacity Management | Diagnostics | Security | Deployment

System Shutdown & Startup

System Components

System Status | **Manage System**

All components are available

- iv. Click on blue button 'Restart' (or green button 'Start') under the Manage System category, middle of screen,
- v. Click yes on dialog box to confirm the move. Wait for message that confirms successful restart.

b. If starting using EM is not successful and complaining about OPMNCTL not up, Follow starting process with OPMNCTL.

- i. Open a command prompt, navigate to <Oracle BI Instance Home>/bin.
- ii. run “./opmnctl status, this will show you status of all the OBIEE core services.
- iii. run “./opmnctl startall” or “./opmnctl stopall” depending on your need.

4. Deploy RPD and webcat file(s).

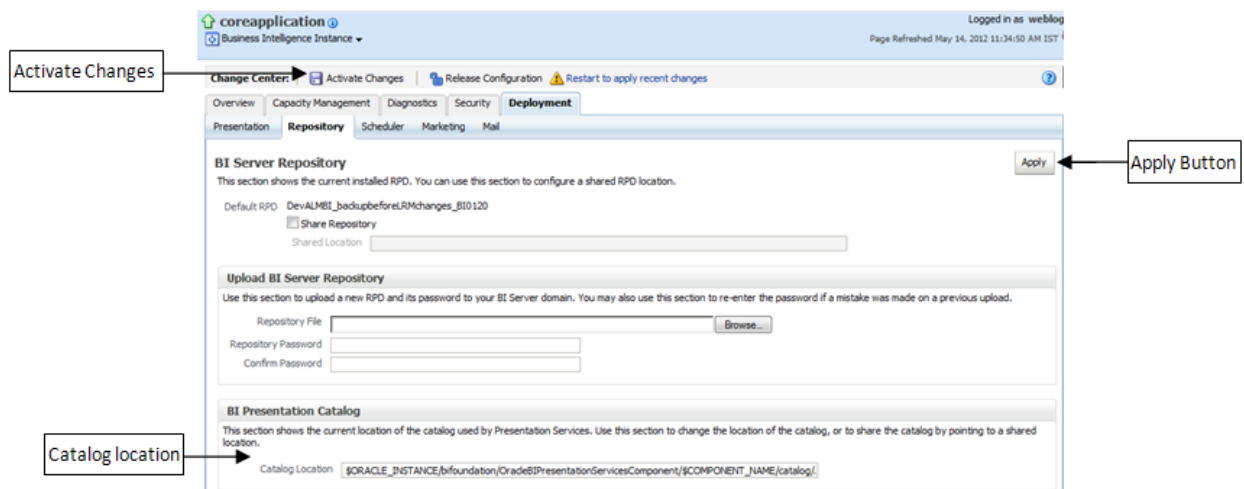
a. Navigate to folder \$FIC_HOME/EFPA/repository, where OFS_PFT_PACK.rpd file is present. Copy this file into a local folder.

b. Also navigate to \$FIC_HOME/EFPA/catalog folder, where EFPA.zip file is present. This zip file contains the catalog files OFS_PFT_PACK.catalog.

Copy both these catalog files to the local folder, where OFS_PFT_PACK.rpd has been copied.

c. Login to OBIEE – Enterprise Manager URL (http://<ip address>:<port>/em).

- i. Click on hyperlink ‘coreapplication’ from ‘Business Intelligence’ tab on left hand side.
- ii. Under ‘coreapplication’, select the tab ‘Deployment’ and in that select sub-tab ‘Repository’.
- iii. Click ‘Lock and Edit Configuration’ button located title ‘coreapplication’. Following screen is displayed.

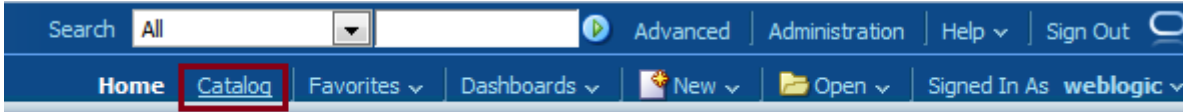


iv. RPD Deployment:

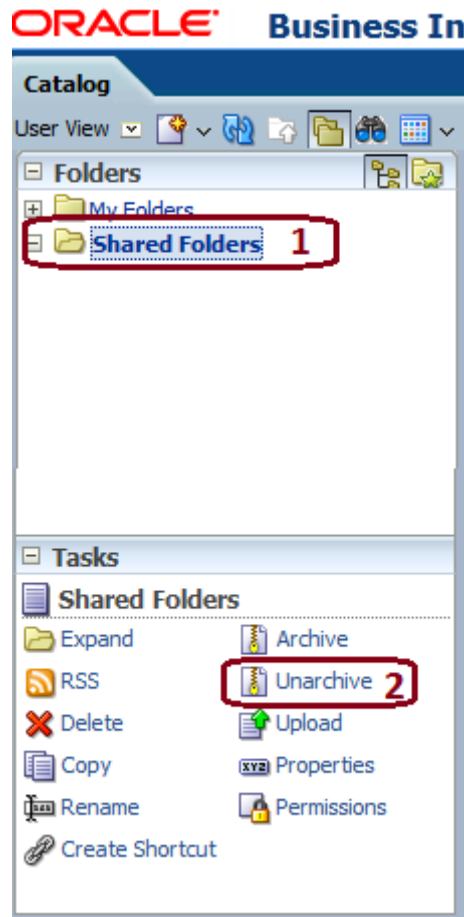
Select ‘Browse’ button available under ‘Upload BI Server Repository’ section and select OFS_PFT_PACK.rpd file from the local folder. Enter Repository password Admin123.

v. Web catalog Deployment:

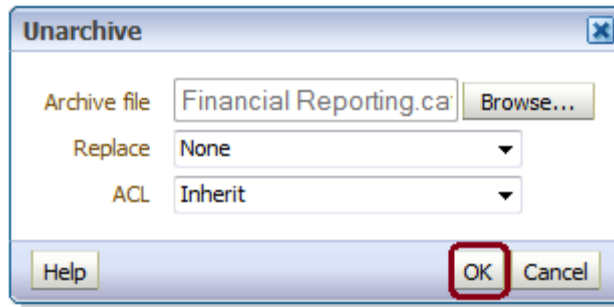
- Open the analytics OBIEE URL-(*http://<ipaddress>:<port>/analytics*) and login with the credentials.
- Click “Catalog” link available on the top right corner.



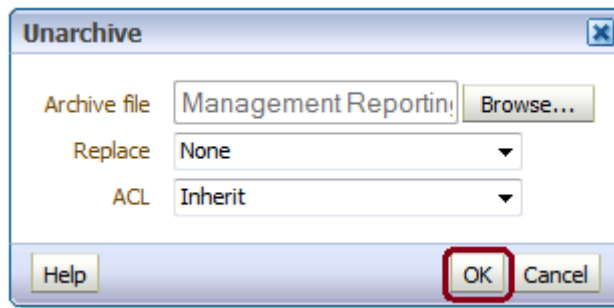
- Click “Shared Folders” and then “Un-Archive”.



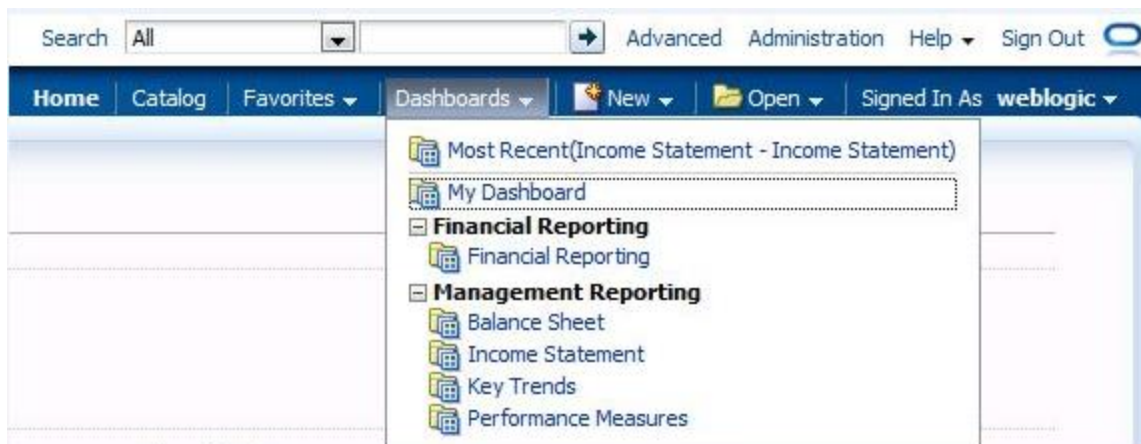
- Browse the path where “OFS_PFT_PACK.catalog” is copied in the local folder. Select the file and click “Open”. Then click “OK”.



- o Click on “Shared Folders” and then on Un-Archive. Browse the path where “OFS_PFT_PACK.catalog” is copied in the local folder. Select the file and click “Open”. Click “OK” as shown in below diagram.



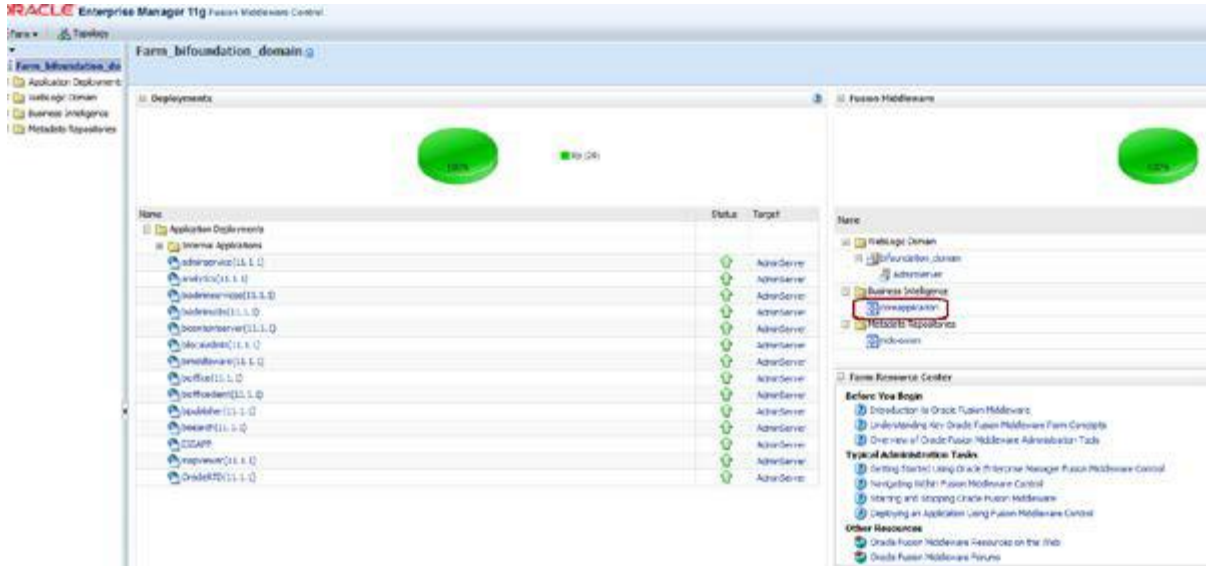
- o Two new catalogs are available on the left hand side.
- o Click “Dashboard” and click on any of the reports to ensure that all the reports are available.



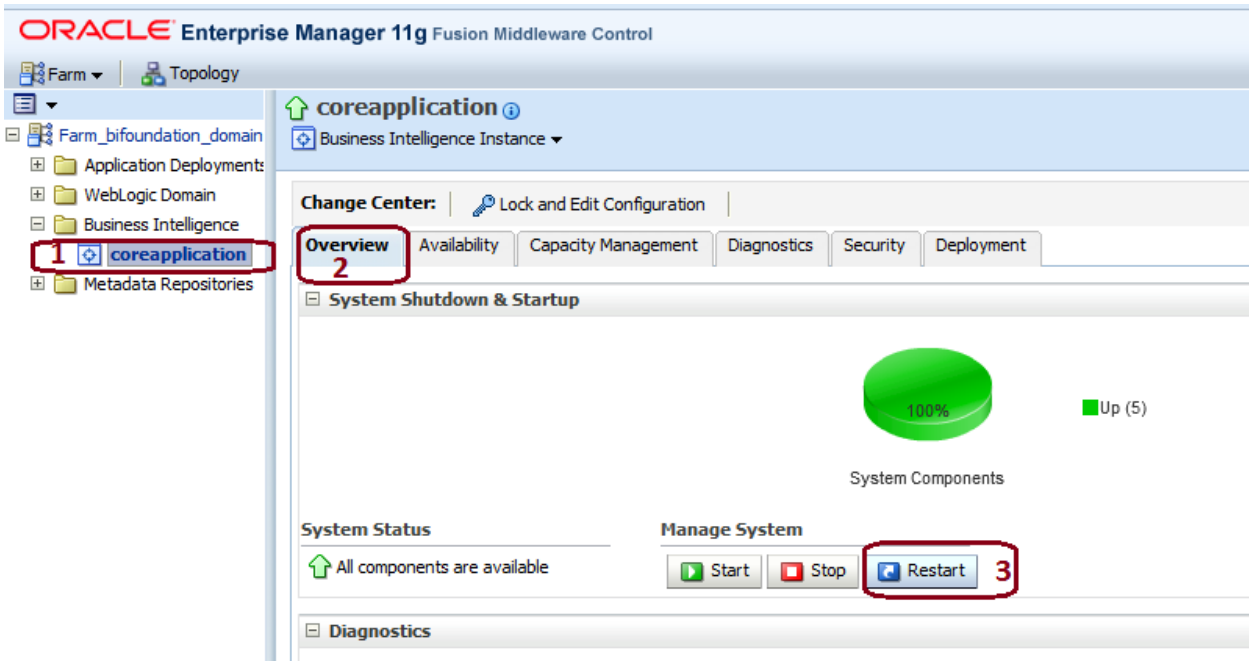
- vi. Steps to restart all services in OBIEE “Enterprise Manager”.

Open the EM OBIEE URL- (<http://<ipaddress>:<port>/em>) and login with the credentials.

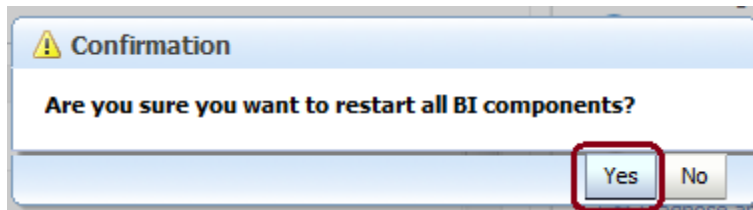
- o Click “coreapplication” link.



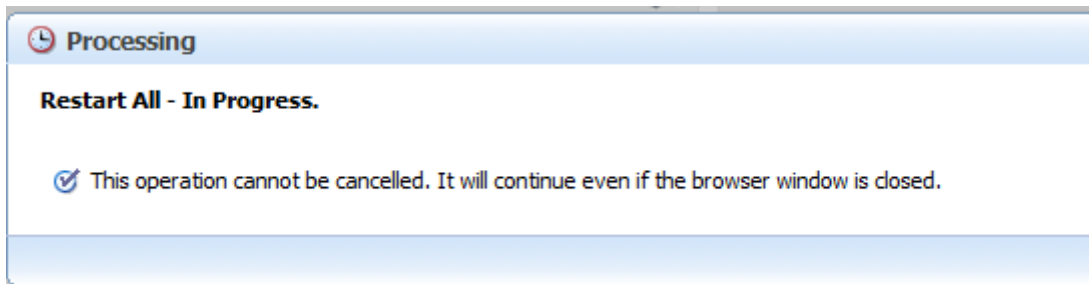
- o Click the “Restart” button.



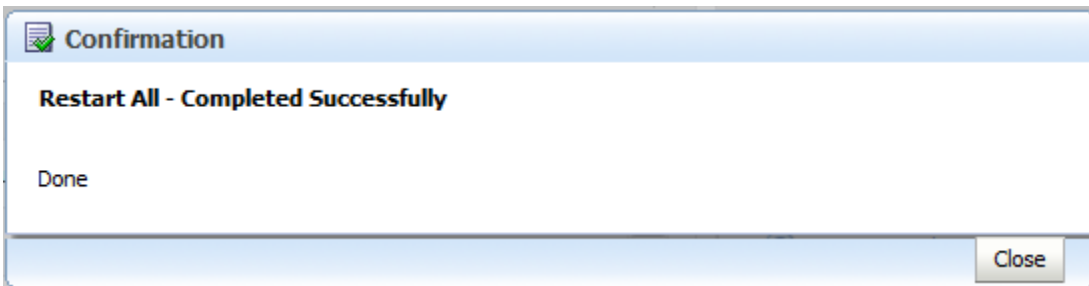
- o Click “Yes” to restart all BI components.



A message is displayed as follows:



- Once restart is done, a confirmation message is displayed as follows:



-
5. Configure tnsnames.ora.
 - a. Open "tnsnames.ora" file under the folder - <Oracle Home>/network/admin.
 - b. Make sure an entry is made in the tnsnames.ora to connect to atomic schema of OFSAA application.
 - c. Save the tnsnames.ora.

 6. Configure ODBC data source to connect to Oracle BI Server.
 - a. Go To Control Panel>Administrative Tools>Data Sources (ODBC).
 - b. Select the 'System DSN' tab and click 'Add' Button.
 - c. Select a driver specific to (Oracle BI Server 11g) and click 'Finish' Button.
 - d. Enter 'Name' and 'Server' details (Specify the Host Name or IP Address of the BI Server and click 'Next').
 - e. Enter Oracle BI Server login id and password (Enter User Name and Password created at the time of OBIEE installation). Click 'Next'.
 - f. Click 'Finish'.

 7. Modify RDBMS connection pool and set the properties.
 - a. a. Open the OBI Administration tool.
 - b. Select Start > Programs > Oracle Business Intelligence > BI Administration.
 - c. Select File > Open > Online and select 'OFS_PFT_PACK.rpd' file from the Open dialog box.
 - d. Enter Repository password as 'Admin123'.
 - e. In the "Physical" layer, double-click the "OFSEFPA Connection Pool" to open its properties.
 - f. In the 'General' tab, edit / check the following entries:
 - g. Call Interface: (OCI 10g/11g).
 - h. Data source name: <tnsnames.ora entry created in the step 7.b connecting to OFSAA atomic schema>.
 - i. User name: <enter atomic db user name>.
 - j. Password: <enter atomic db user password>.
 - k. Confirm password and Click 'OK' to close the window and click 'Save' to save the RPD file.
 - l. Click 'No' for the Global Consistency Message.
 - m. Repeat the steps from 9.f to 9.l to set the connection properties for "OFSEFPA Init Block".
 - n. Close the RPD file (File / Exit).

 8. In case RPD deployment is done on Essbase then modify ESSBASE connection pool and set the properties.

Note: This is applicable only for EFPA.

 - a. Open the OBI Administration tool.
 - b. Select Start > Programs > Oracle Business Intelligence > BI Administration.
-

-
- c. Select File > Open > Online and select the cube rpd file created as mentioned in the 3rd step (RPD Deployment On Essbase Cubes) of section Post-Deployment Activities of OFSEFPA 8.0.0.0.0, from the Open dialog box.
 - d. Enter Repository password as 'Admin123'.
 - e. In the "Physical" layer, double-click the "Connection Pool" under Essbase, to open its properties.
 - f. In the 'General' tab, edit / check the following entries:
 - o Call Interface: (Essbase).
 - o Essbase Server: IP Address of Essbase server.
 - o User name: <enter Essbase console user name>.
 - o Password: <enter Essbase console user password>.
 - g. Confirm password and Click 'OK' to close the window and click 'Save' to save the RPD file.
 - g. Click 'No' for the Global Consistency Message.
 - h. Close the RPD file (File > Exit).
9. Login into OFSEFPA Application using the URL: <http://localhost:9704/analytics>. (Replace the port number based on your setup).
 10. Once the OBIEE Environment is up and running, the OBIEE url needs to be updated in the table 'AAI_MENU_B' for an end user to access the respective Business Intelligence Analytics Application.

Following update statement needs to be executed in the config schema:

```
UPDATE AAI_MENU_B
SET V_MENU_URL = '<URL>'
WHERE V_MENU_ID IN ('<List of enabled BI Analytical Links for a particular Media Pack >')
/
COMMIT
/
```

For PFT Media Pack as an example:

```
UPDATE AAI_MENU_B
SET V_MENU_URL = 'http://ofss222798:7001/analytics/'
WHERE V_MENU_ID IN ('OFS_EFPABI_LINK')
/
UPDATE AAI_MENU_B
SET V_MENU_URL = 'http://ofss222799:7001/analytics/'
WHERE V_MENU_ID IN ('OFS_RPABI_LINK','OFS_IPABI_LINK')
/
COMMIT
```

/

(Replace the IP address and port number based on your setup.)

11. Execute the following in atomic schema to view the T2T mappings in Metadata browser(object view):

```
declare
result number;
begin
result:=fn_mdb_t2t_view;
dbms_output.put_line(result);
exception
when others then
dbms_output.put_line(SQLERRM);
end;
```

11.1.4 Post-deployment Activities of OFSEFPA v8.0.0.0

The following activities have to be done after installing and deploying OFSEFPA v8.0.0.0

OBIEE Configuration

1. Evaluate Support Level

Evaluate function is used in filters of many reports. To support the evaluate function in reports, the value of EVALUATE_SUPPORT_LEVEL in NQConfig.INI file of the OBIEE server needs to be set as 2.

Path:

OBIEEHOME\instances\instance1\config\OracleBIServerComponent\coreapplication_obis1

File: NQConfig.INI

Changes: Set EVALUATE_SUPPORT_LEVEL = 2 from EVALUATE_SUPPORT_LEVEL = 0;

2. Session variable setting

'ENTITY' by default picks the lowest of Legal Entities in the alphabetical order.

```
select min(v_entity_name) from dim_org_structure
```

This query fetches the default legal entity that will be displayed in the obiee reports (Legal Entity drop-down) at on load of the report.

Users can also set the default value for Entity, by following these steps:

- a. Open the RPD online.
- b. Under **Manage** Menu go to **Variables** and select session variable 'ENTITY'.

-
- c. Set the default value in default initialize section with any one of the available entity name from DIM_ORG_STRUCTURE table in single quotes. For example: '<Entity Name>'
 - d. Save and check the global consistency of the RPD.

3. Repository Variable Setting

- a. Open the RPD online.
- b. Under Manage Menu go to Variables. Set Static Repository variables 'RV_Reporting_Currency' and 'RV_Base_Currency'
- c. Save and check the global consistency of the RPD.

4. RPD Deployment On Essbase Cubes (Optional)

- During deployment use “Admin123” as OFS_PFT_PACK.rpd repository password.
- Deployment of RPD on ESSBASE cubes will be done through an xml patch (EFPA_Cube_Patch.xml). The xml has been provided as a part of installation and will be present at \$FIC_HOME/ EFPA/repository folder.
- Provide connection details of RDBMS in ‘OFSEFPA Connection Pool’ and ‘OFSEFPA Init Block’. This is required to show LCY Label in the reports, for the legal entity selected in the prompt.
- See the **Steps to Create Cube related RPD** in [Appendix W](#) for the steps to be followed for creating cube related RPD.

5. OFSAAI Startup

OFSAAI servers need to be restarted, in order to see the transformations in the Post Load Transformation screen.

6. Security Roles

Security roles are created in OBIEE to allow or disallow certain users to see selective dashboards and data. To accomplish these user roles can be created in OBIEE. This step is optional. See the **Steps to Configure User Roles** in [Appendix X](#) for the procedure to create user roles.

Metadata Browser Batches:

UMM metadata (Hierarchies, Datasets, Measures, Dimensions) can be seen in Metadata Browser by executing the Metadata Browser Batches (MDB batches) from the Batch Execution screen of OFSAAI. Following are the batch names:

- a) <INFODOM>_MDB
- b) <INFODOM>_MDB_OBJECT_APPLN_MAP

Additional Configuration:

1. After deploying the latest Web catalog and RPD from the server, the default reporting periods have to be set based on users requirements. The default value has to be set at the Reporting Period prompts by editing the dashboard and choosing a specific value for the reporting period prompt. Following are the dashboard pages where the default time period is to be selected:
 - a. Financial Reporting>Income Statement>Time_Hierarchy Prompt
 - b. Management Reporting>Balance Sheet> Time Hierarchy Prompt
 - c. Management Reporting>FTP Reports> Time Hierarchy FTP Prompt
 - d. Management Reporting>Income Statement> Time Hierarchy Prompt
 - e. Management Reporting>Key Trends>Time Hierarchy Prompt
 - f. Management Reporting>KeyTrends>Balance Trends> Time_Hierarchy_Month Prompt
 - g. Management Reporting > Performance Measures> Time Hierarchy Prompt

-
2. Create an entry in Setup_Master table to configure the identity codes that are required for Financial Reporting dashboard reports.

V_COMPONENT_DESC as "IDENTITY_CODE_PFTBI_FR_UNALLOCATED_DATA" having Identity Code value in V_COMPONENT_CODE and V_COMPONENT_VALUE columns.

3. If OFSEFPA 6.1.1.0.0 is deployed on Oracle ESSBASE Cubes, then the hierarchies would need to be resaved in the Business Hierarchy link of OFSAAI. Subsequently, rebuild the Oracle ESSBASE Cubes.

11.2 Logging as System Administrator

Post installation, the first login into Infrastructure is possible only for a System Administrator through user id "**sysadm**n". This ID is created at the time of installation with the password provided during installation. Enter login id "**sysadm**n" and password that was provided during installation. Click **Login**.

11.2.1 System Administrator

System Administration refers to a process of managing, configuring, and maintaining confidential data in a multi-user computing environment. System Administration in Security Management involves creating functions, roles, and mapping functions to specific roles. System Administration also involves maintaining segment information, holiday list, and restricted passwords to ensure security within the Infrastructure system.

You can access System Administrator in LHS menu of Security Management. The options available under System Administrator are:

- Function Maintenance
- Role Maintenance
- Function - Role Map
- Segment Maintenance
- Holiday Maintenance
- Restricted Passwords

11.2.1.1 Function Maintenance

A function in the Infrastructure system defines the privileges to access modules or components and to define or modify metadata information associated. Function Maintenance allows you to create functions for users to ensure only those functions are executed which are specific to the user's role.

You can access Function Maintenance by expanding System Administrator section within the tree structure of LHS menu. The Function Maintenance window displays the function details such as

Function Code, Function Name, Description, and the number of Roles Mapped to the function. The Function Maintenance window also facilitates you to view, create, modify, and delete functions within the system.

You can also make use of Search and Pagination options to search for a specific function or view the list of existing functions within the system.

11.2.1.2 Role Maintenance

A role in the Infrastructure system is a collection of functions defined for a set of users to execute a specific task. You can create roles based on the group of functions to which users are mapped. You can access Role Maintenance by expanding **System Administrator** section within the tree structure of LHS menu. The *Role Maintenance* window displays the role details such as Role Code, Role Name, Role Description, and the number of Users Mapped to the role. The *Role Maintenance* window also facilitates you to view, create, modify, and delete roles within the system.

You can also make use of Search and Pagination options to search for a specific role or view the list of existing roles within the system.

11.2.1.3 Segment Maintenance

Segment is used to control access rights on a defined list of objects. It is mapped to an information domain.

Segment Maintenance in the Infrastructure system facilitates you to create segments and assign access rights. You can have different segments for different Information Domains or same segments for different Information Domains.

User scope is controlled by segment/ folder types with which the object is associated.

- Objects contained in a public folder will be displayed irrespective of any user.
- Objects contained in a shared folder will be displayed if user belongs to a user group which is mapped to an access type role with the corresponding folder.
- Objects contained in a private folder will be displayed only to the associated owner.

You can access Segment Maintenance by expanding System Administrator section within the tree structure of LHS menu. The *Segment Maintenance* window displays a list of available segments with details such Domain, Segment Code, Segment Name, Segment Description,

Segment/Folder Type, Owner Code, and the number of Users Mapped to the segment. You can view, create, modify, and delete segments within the *Segment Maintenance* window.

You can also make use of Search and Pagination options to search for a specific role or view the list of existing roles within the system.

11.2.1.4 Holiday Maintenance

Note: As part of OFSAAI 7.3.3.0.0 release, this feature will not be available if Authentication is configured to SSO Authentication and SMS Authorization.

Holiday Maintenance facilitates you to create and maintain a schedule of holidays or non-working days within the Infrastructure system. On a holiday, you can provide access to the required users and restrict all others from accessing the system from the *User Maintenance* window..

You can access Holiday Maintenance by expanding **System Administrator** section within the tree structure of LHS menu. The *Holiday Maintenance* window displays a list of holidays in ascending order. In the *Holiday Maintenance* window you can create and delete holidays.

11.2.1.5 Restricted Passwords

NOTE: As part of OFSAAI 7.3.3.0.0 release, this feature will not be available if Authentication Type is selected as SSO Authentication and SMS Authorization from System Configuration> Configuration.

Restricted Passwords facilitates you to add and store a list of passwords using which users are not permitted to access the Infrastructure system.

You can access Restricted Passwords by expanding **System Administrator** section within the tree structure of LHS menu. The *Restricted Passwords* window displays a list of restricted passwords and allows you to add and delete passwords from the list.

You can also make use of Search and Pagination options to search for a specific password or view the list of existing passwords within the system. For more information, refer Pagination and Search & Filter.

NOTE: While searching for any pre defined restricted password, you have to key in the entire password

11.3 Creating Application Users

Create the application users in the OFSAA setup prior to use.

NOTE: This step may not be required if you have already setup users in the OFSAA setup. For more information refer user creation section from the *Oracle Financial Services Analytical Applications Infrastructure User Guide*.

11.4 Mapping Application User(s) to User Group

Starting the OFSAA 8.0 release, with installation of Profitability Application Pack, pre-configured application user groups are seeded. These user groups are unique to every OFSAA Application Pack and have application roles pre-configured.

For more information on seeded User Groups, refer to [Appendix M](#).

11.5 Change ICC Batch Ownership

All the seeded Batches in OFSDF Applications Pack will be automatically assigned to SYSADMN user during Installation. If one user who wants to see the Batches in *Batch Maintenance* Menu, He needs to execute the following Queries in Config Schema of the Database.

Syntax:

```
begin
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP ('fromUser','toUser','infodom');
end;
```

OR

```
begin
```

```
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP ('fromuser','touser');
end;
```

Where from User indicates the user who currently owns the batch, to User indicated the user to which the ownership has to be transferred. Infodom is optional parameter, if specified the ownership of batches pertaining to that Infodom will be changed.

Eg.

```
begin
```

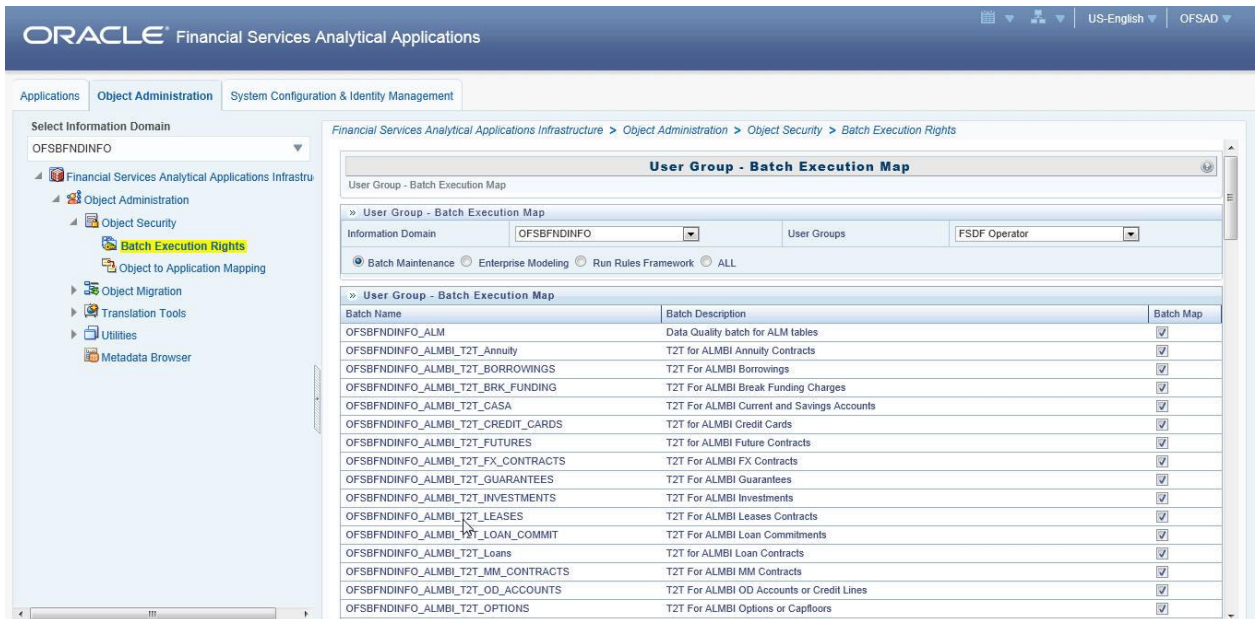
```
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP
('SYSADMN','FSDFOP','OFSEBNDINFO');
```

```
end;
```

11.6 Mapping ICC Batch Execution Rights to User

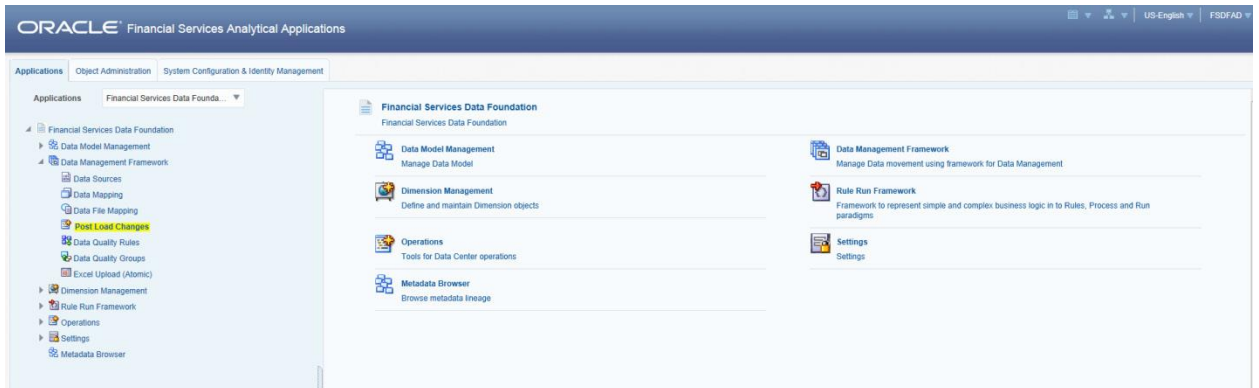
By default all users who are mapped to FSDF Admin and FSDF Operator will have the permission to execute the seeded Batches in FSDF Application Pack. However if any other user-defined batches or any other application pack batches created during the respective installation application packs, the user need to map the Batch execution rights for each user/batch in the Batch Execution Rights menu under Object Administration >> Object Security.

Note: Only SYSADMN user or any user who is mapped under FSDF Admin User Group will have the access to map the Batch execution rights menu access.



11.7 Saving Post- Load Change Transformations

After creating users, Login to Infrastructure as any user who is mapped to FSD Admin or FSD Analyst group. Navigate to **Data Management Framework >> Post Load Changes**.



A New window will be displayed. Click on Each Transformation from Transformations List & Click on Stored Procedure in the Right Panel, Click on Edit in the Top Right Menu and Click on Finish Button in Bottom.

The screenshot displays the Oracle Data Management Tools interface. On the left, a tree view shows 'Transformations' with sub-items: 'fn_dmDates', 'fn_DMDataLoader', 'fn_popDownAccount', 'MapPushDown_DT', and 'Pop_Load_Run_Map'. The main workspace is titled 'Transformation Process Flow' and contains a diagram with a 'Transformation' box connected to a menu with options: 'Insert Transformation', 'Update Transformation', 'Stored Procedure', and 'External Library'. This menu is connected to 'Input Parameters' and 'Expression Generator' boxes.

Below the diagram is the 'Parameter Definition' section, which contains a table:

Parameter Name	Data Type	Default Value
P_ST_DT	Varchar2	null
P_ED_DT	Varchar2	null

The 'Stored Procedure Editor' section shows a 'File Path' field with a 'Browse...' button. Below it is a text area containing the following SQL code:

```

create or replace function FN_DM_DATES(p_batch_run_id varchar2,p_as_of_date varchar2,p_ST_DT varchar2,p_ED_DT varchar2) return number is
V_ST_DT date;
V_ED_DT date;
begin
V_ST_DT := to_date(p_batch_run_id,'YYYYMMDD');
V_ED_DT := to_date(p_as_of_date,'YYYYMMDD');
PROC_DM_DATES_POPULATION(v_st_dt,v_ed_dt);
return(1);
exception
when others then
dbms_output.put_line('Error Occured While Executing Procedure PROC_DM_DATES_POPULATION: '||sqlerrm);
return(0);
end FN_DM_DATES;

```

The 'Business Process Flow' section has an 'Upload Status' field set to 'No' and a 'File Path' field with a 'Browse...' button. At the bottom right, there are 'Finish' and 'Reset' buttons.

Note: All the Transformation Stored Procedures are required to be edited and saved (Finish Button) once for getting it is available.

12 Appendix G – Cloning OFSAA Instance

There is a consistent need for a faster and effective approach of replicating an existing OFSAA instance for further project developments, that is, setting up OFSAA instances that are exact copies of the current OFSAA instance. For more information on cloning, refer to [OFSAA Cloning Reference Guide](#).

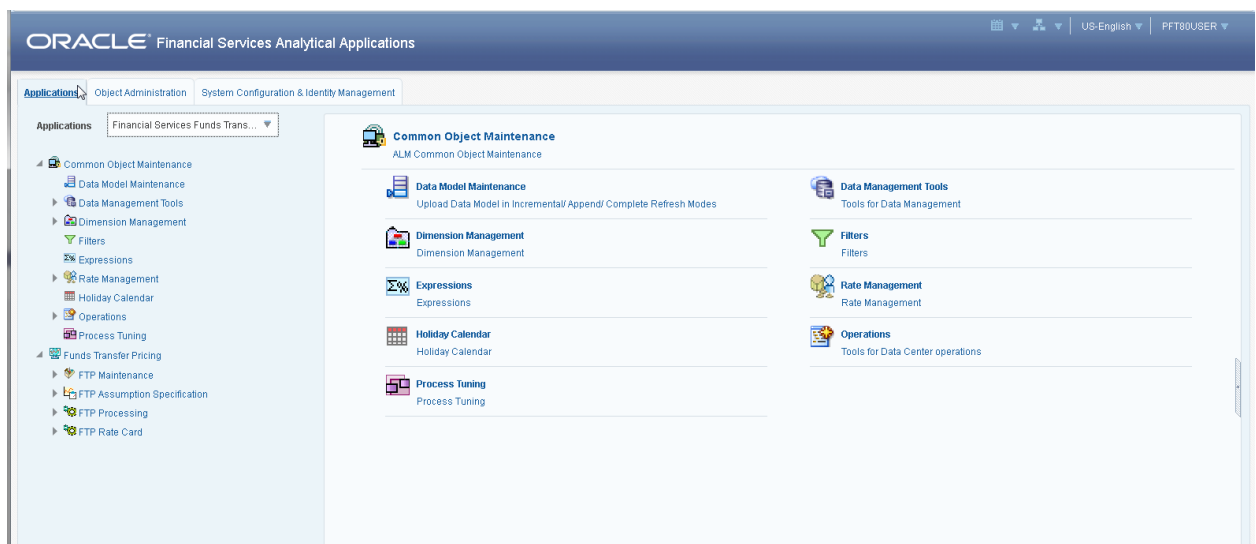
13 Appendix H - OFSAA Landing Page

This appendix includes the following topics:

- [OFSAA Landing Page](#)
- [Enabling a Product within an Application](#)

13.1 OFSAA Landing Page for Profitability Administrator

On successful authentication, the OFSAA Landing Page is displayed. This is a common landing page for all users until a preferred application landing page is set by the user in his preferences.



The landing page includes multiple tabs and each tab has specific links to OFSAA Infrastructure and/or Application modules. The tabs and links are displayed based on the OFSAA Application accessed and the access roles mapped to the logged in user.

Each tab contains LHS Menu and RHS Menu. The LHS Menu holds link(s) to modules in a tree structure. The RHS Menu holds link(s) to modules in a navigational panel format.

The following tabs are available in the Landing Page:

- Applications tab
- Object Administration tab
- System Configuration and Identity Management tab

13.1.1 Applications tab

This tab lists the various OFSAA Applications that are installed in the OFSAA setup. The Select Application drop-down list displays the OFSAA Applications, based on the logged in user and

mapped OFSAA Application User Group(s). Links to related modules within Applications and Infrastructure are grouped appropriately to maintain a unified experience.

13.1.2 Object Administration tab

This tab lists the various OFSAA Information Domains created in the OFSAA setup. The Select Information Domain drop-down list displays the OFSAA Information Domains based on the logged in user and mapped OFSAA Application User Group(s). Links to modules that enable object traceability and migration of objects are grouped in this tab.

13.1.3 System Configuration & Identity Management tab

This tab lists the OFSAA Infrastructure System Configuration and Identity Management modules. These modules work across Applications/ Information Domains and hence there are no Application and Information Domain drop-down lists in this tab. Links to modules that allow the maintenance of setup installation and identity management tasks are grouped together in this tab.

NOTE: The navigation path differs from Application to Application. That is, based on the selected Application, the navigation varies.

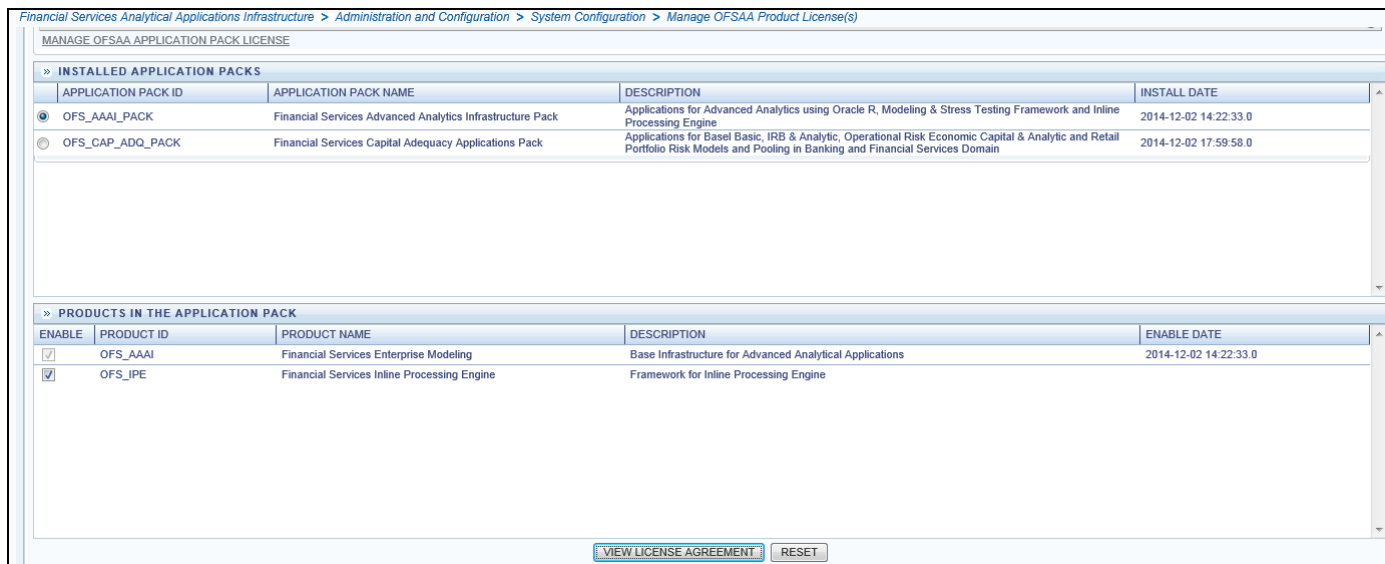
NOTE: For more details on how to operate on each tab, see OFSAAI User Guide available in [OTN](#).

13.2 Enabling a Product within an Application Pack

You can also enable a product/ application within an application pack post installation at any point of time.

To enable a product through the application UI, follow these steps:

1. Login to the application as SYSADMN user or any user with System Administrator privileges.
2. Navigate to **System Configurations & Identity Management tab** and expand *Financial Services Analytical Applications Infrastructure >> Administration and Configuration >> System Configuration*.
3. Click **Manage OFSAA Product License(s)**
4. The **Manage OFSAA Product License(s)** page is displayed as below.



This page includes the following sections:

- INSTALLED APPLICATION PACKS
- PRODUCTS IN THE APPLICATION PACK

5. The following fields are displayed in the INSTALLED APPLICATION PACKS section:

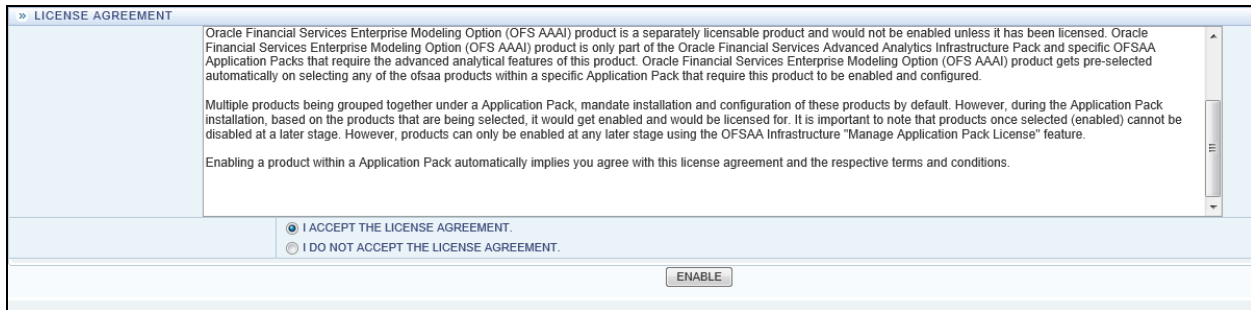
Field	Description
Application Pack ID	Displays a unique Application Pack ID related to the application pack. Select the appropriate Pack id using the radio button. The Products in the application pack will be displayed in the <i>PRODUCTS IN THE APPLICATION PACKS</i> section.
Application Pack Name	Displays the name of the Application Pack.
Description	Displays the description of the Application Pack.
Install Date	Displays the date when the Application Pack was installed.

6. The following fields are displayed in the PRODUCTS IN THE APPLICATION PACK section:

Field	Description
Enable	Select the checkbox to enable a product within an Application Pack.
Product ID	Displays a unique product id for the product.
Product Name	Displays the name of the Product
Description	Displays the description of the product.

Field	Description
Enable Date	Displays the date when the product was enabled.

7. Select an Application Pack by clicking the radio button next to the Application Pack ID field.
8. Selecting an Application Pack will display the products within the Application Pack.
9. Products which were enabled at the time of installation will have the checkbox “ENABLE” disabled. You can enable any product within the selected Application Pack by clicking the “ENABLE” checkbox against the respective Product ID.
10. Click on RESET button to cancel the operation and refresh the screen.
11. Click VIEW LICENSE AGREEMENT button.
12. The License Agreement section is displayed.



13. Select the option I ACCEPT THE LICENSE AGREEMENT.
14. Click ENABLE.
15. An appropriate pop-up message confirmation is displayed showing that the product is enabled for the pack.

NOTE: To use the newly enabled product, you need to map your application users to the appropriate product specific User_Group(s) and subsequently, authorize the actions by logging in as System Authorizer.

For more information refer to *Mapping/Unmapping Users* section in the *Oracle Financial Services Analytical Applications Infrastructure User Guide 8.0*.

To identify the newly enabled product specific UserGroups/ Application Pack specific User_Groups, refer to the respective Application Pack specific Installation and Configuration Guide/ User Manual.

14 Appendix I – Additional Configuration

The following sections provide detailed module specific post installation configurations.

This section includes the following topics:

- [FTP/SFTP Configuration for File Transfer](#)
- [Configuration for Dimension and Hierarchy Management](#)
- [Configure Infrastructure Server Memory](#)
- [Internet Explorer Settings](#)
- [Retrieving Patch Information](#)
- [OLAP Data Server Configuration](#)
- [Changing IP/ Hostname, Ports, Deployed Paths of the OFSAA Instance](#)
- [OFSAAI Setup Information Fetching Tool](#)
- [Encryption Changer](#)
- [Infrastructure LDAP Configuration](#)
- [Configure OFSAAI Web Services](#)
- [Deploy OFSAAI Web Services](#)
- [Configure Message Details in Forms Designer](#)
- [Clearing Application Cache](#)
- [Configuring Password changes](#)
- [Configuring Java Virtual Machine](#)
- [Configure Internal Service \(Document Upload/ Download\)](#)

14.1 FTP/SFTP Configuration for File Transfer

In OFSAA, certain modules require transfer of files from the web application server to the OFSAA server over SSH.

Follow these steps to ensure the OFSAA server recognizes the web application server during file transfers.

1. Login to the web application server.
2. Type `sftp <user>@<OFSAA Server>`
3. Specify Yes when prompted for permission.
Are you sure you want to continue connecting (Yes/No)?
4. This will add an entry into the "known_hosts" file.

5. A confirmation message is displayed:

Permanently added <OFSAA Server> RSA) to the list of known hosts.

14.2 Configuration for Dimension and Hierarchy Management

These configuration changes are applicable when Dimension Management features provided in OFSAAI are used. You can open `AMHMConfig.properties` file present in the `$FIC_WEB_HOME/webroot/conf` directory to set the properties for the following:

This section includes the following topics:

- [Member Deletion](#)
- [Attribute Default Date Format](#)
- [Members Reverse Population](#)
- [Hierarchy Reverse Population](#)
- [Maximum levels allowed in Hierarchies](#)
- [Node Limit for a Hierarchy Tree](#)

Configuration for Dimension and Hierarchy Management has to be done only after the application/solution installation is done. The properties specific to Information Domain are:

- `$INFODOM$=<Name of the Information Domain>`
- `$DIMENSION_ID$=<Dimension ID for which the property to be set>`

14.2.1 Configure Member Deletion

This property should be set to allow the user to delete the Members for the Dimension.

Value	Code	Example
# Member Deletion Configuration - VALUE- Y/N	MEMBER_DEL-\$INFODOM\$-\$DIMENSION_ID\$=\$VALUE\$	MEMBER_DEL-ORAFUSION-1=Y

14.2.2 Configure Attribute Default Date Format

This property should be set to display the Default Date Format for Date type Attribute in *Attributes* window.

Value	Code	Example
# Attribute Default Date Format - DB_DATE_FORMAT:DD-	ATTR_DEF_DATE_FORMAT-\$INFODOM\$=\$DB_DATE_FORMAT\$	ATTR_DEF_DATE_FORMAT-ORAFUSION=DD/MON/YYYY

MON-YYYY		
----------	--	--

14.2.3 Configure Members Reverse Population

This property should be set for reverse population of Members for the Dimensions in required Information Domains.

Value	Code	Example
# Members Reverse population - VALUE- Y/N	MEMBER_REVERSE_POP- \$INFODOM\$- \$DIMENSION_ID\$=\$VALUE\$	MEMBER_REVERSE_POP- ORAFUSION-1=Y

14.2.4 Configure Hierarchy Reverse Population

This property should be set for reverse population of Hierarchies for the Dimensions in required Information Domains.

Value	Code	Example
#Hierarchy Reverse population - VALUE- Y/N	HIERARCHY_REVERSE_PO P-\$INFODOM\$- \$DIMENSION_ID\$=\$VALUE\$	HIERARCHY_REVERSE_PO P-ORAFUSION-1=Y

14.2.5 Configure Maximum Levels allowed in Hierarchies

This property is required to set the maximum levels allowed to build the Hierarchies tree structure.

Value	Code	Example
#Hierarchy Maximum level allowed for the hierarchy in particular Information Domain - VALUE - Integer number	MAX_DEPTH- \$INFODOM\$=\$VALUE\$	MAX_DEPTH-FUSION=15

Hierarchies greater than 15 levels are not supported within OFSAA EPM applications (ALM, FTP, PFT, and HM). If the hierarchy data contains more than 15 levels,

OFSA_IDT_ROLLUP will not be populated. The number of hierarchy levels allowed for OFSAA EPM key dimensions must be less than or equal to 15.

- If the Hierarchy Reverse Population setting is set to “Y” and more than 15 levels exist in the data, then the following alert is displayed “*The number of levels exceeds the limit*”.
- If the maximum level allowed setting is set greater than 15 and Hierarchy Reverse Population is set to “Y”, then following error is displayed “*Error occurred in Reverse Populating the hierarchy*”.

14.2.6 Configure Node Limit for a Hierarchy Tree

This property is required to display the Hierarchy as a small or a large hierarchy. If the tree node limit exceeds the set limit, the Hierarchies are treated as large Hierarchy.

Table 5: Hierarchy Tree node limit

Value	Code	Example
#Tree node limit for the hierarchy - Values is Integer number	TREE_NODE_LIMIT=\$VALUE \$	TREE_NODE_LIMIT=30

14.3 Configure Infrastructure Server Memory

The memory settings for Infrastructure Application Server, Tomcat, WebSphere, and WebLogic can be edited for customizing memory settings and garbage collector settings depending on the available hardware configuration as explained below. These settings are base minimum and has to be incremented considering the deployment metrics into account. The increments are usually handled in multiples of 128mb for heap and 64mb for stack.

14.3.1 Infrastructure Application Server Memory Settings

You can configure the Infrastructure Application Memory settings as follows:

1. Locate .profile file.
2. Edit X_ARGS field in this file for customizing memory settings and garbage collector settings depends on the hardware configuration.

This has a default value X_ARGS="-Xms200m"

X_ARGS=" "\$X_ARGS" \$DELIM -Xmx2048m"

NOTE: This parameter is modified in 7.3.2 IR and you need to modify `X_ARGS_APP` variable in the `.profile` file to customize Java Memory Settings for Model Upload based on the Data Model size.
For Run and Rule executions, the following value is recommended:

```
X_ARGS_RNEXE="-Xms1g -Xmx1g  
-XX:+UseAdaptiveSizePolicy -XX:MaxPermSize=512M -  
XX:+UseParallelOldGC -XX:+DisableExplicitGC"
```

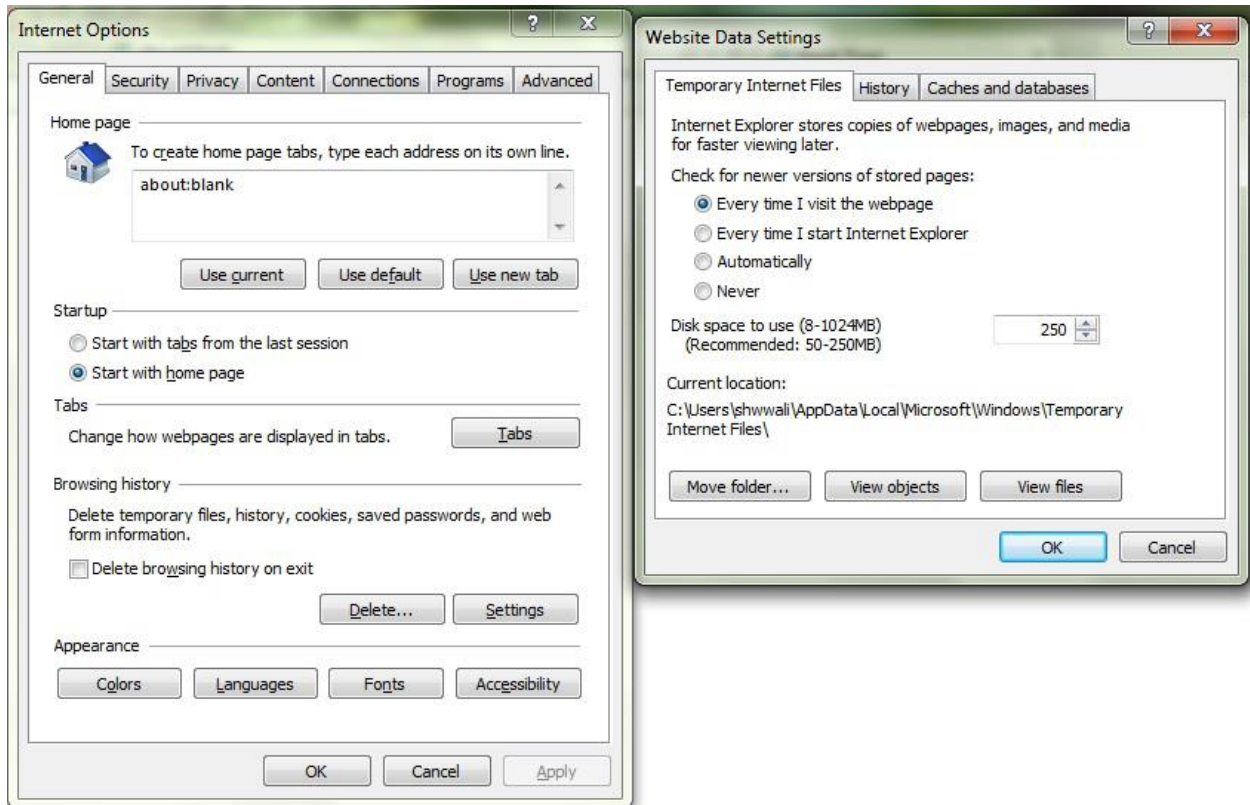
```
X_ARGS_RLEXE="-Xms1g -Xmx1g  
-XX:+UseAdaptiveSizePolicy -XX:MaxPermSize=512M -  
XX:+UseParallelOldGC -XX:+DisableExplicitGC"
```

14.4 Internet Explorer Settings

NOTE: OFSAAI supports only default zoom setting in Internet Explorer, that is, 100%.
Cookies should be enabled.

The following browser settings have to be specified at every client machine prior to accessing the Infrastructure application.

1. Open Internet Explorer. Select Tools > Internet Options. The Internet Options window is displayed.
2. Click the Settings button. The Settings window is displayed.
3. Select the option Everytime I Visit the webpage and click OK.



4. In the *Internet Options* window, select the **Security** tab and select the **Internet** option under **Select a zone to view or change the security settings**.
5. Click **Default Level** under **Security level for this zone**.

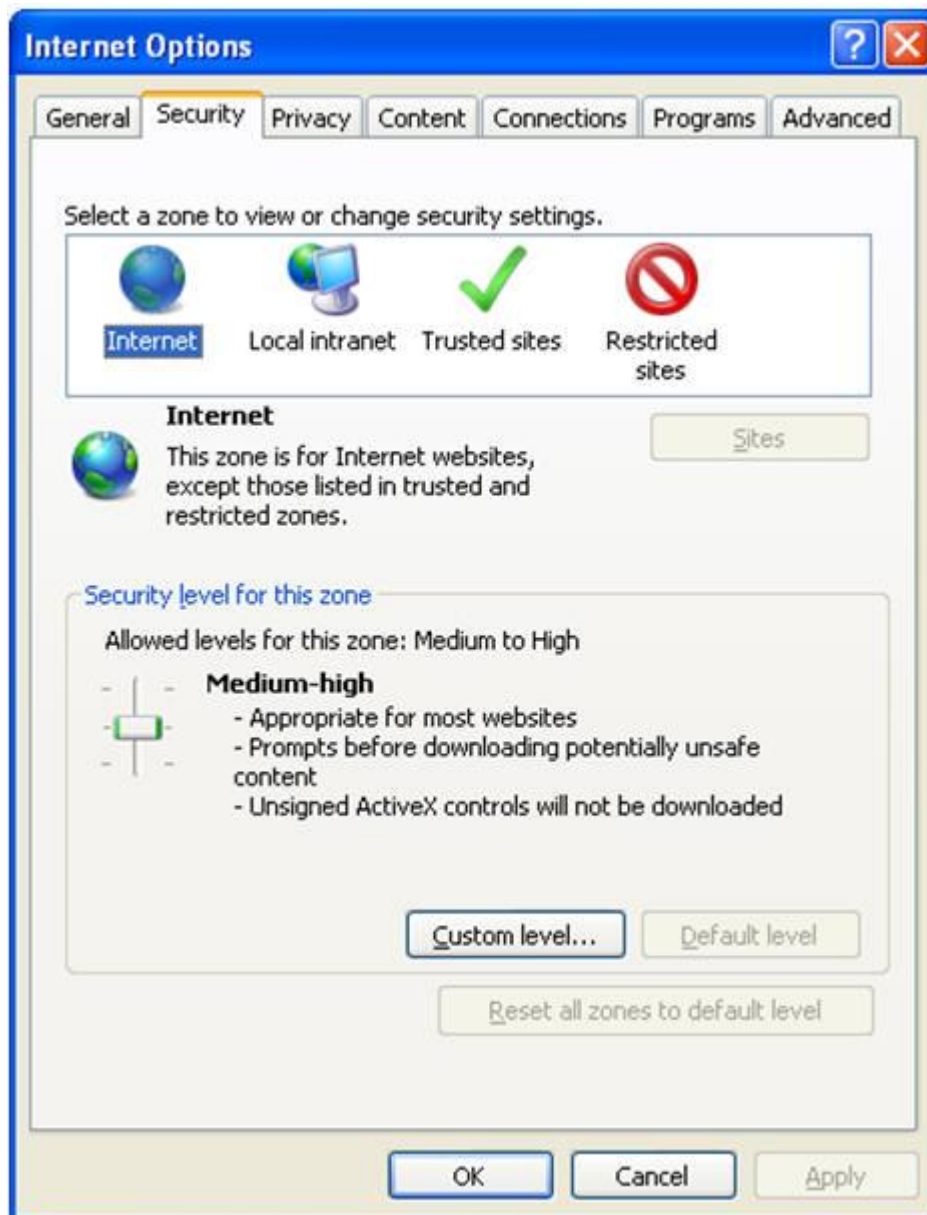
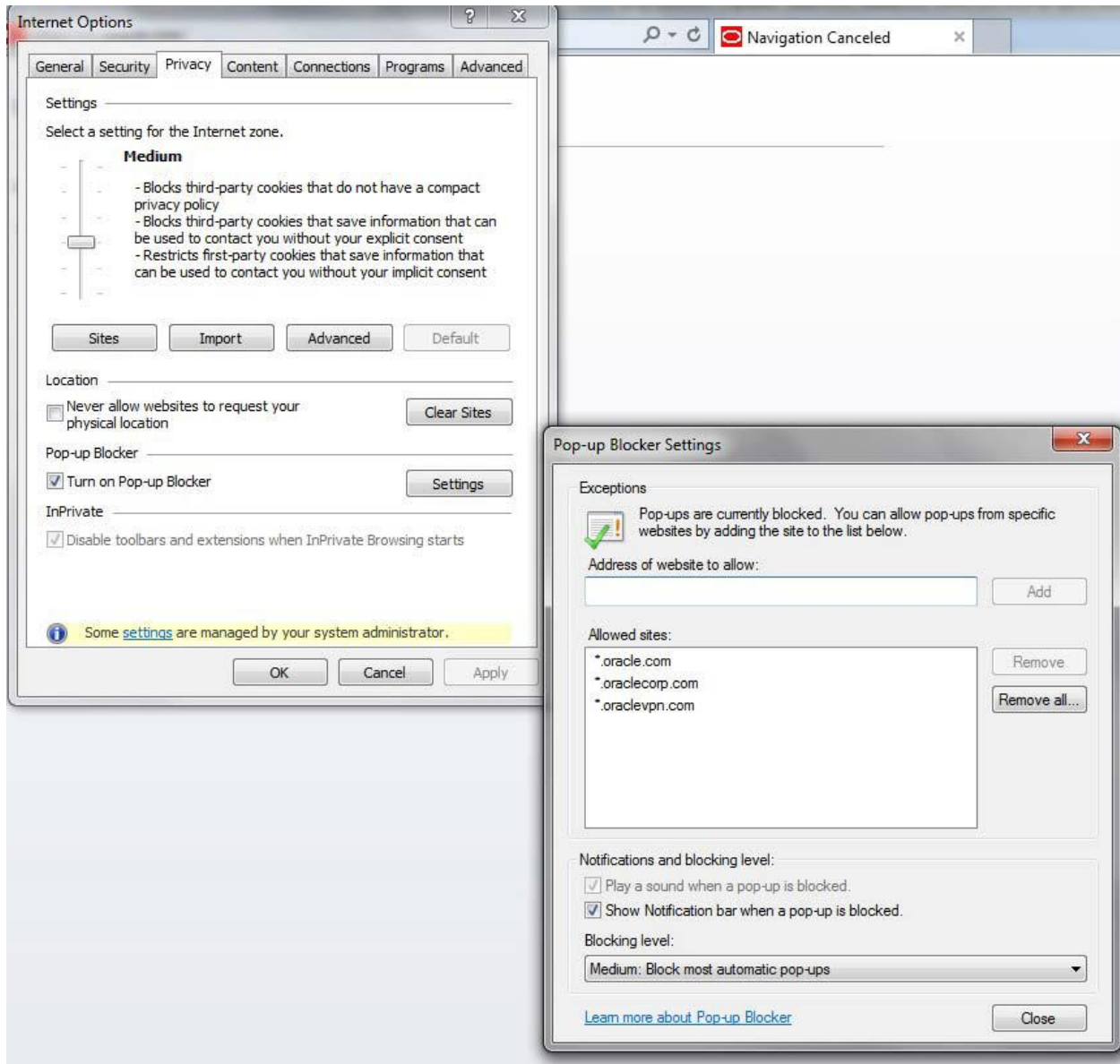


Figure 60; Internet Options

6. Click OK to save.
7. Click Internet Explorer >> Tools >> Compatibility View Settings.
8. Enter the OFSAA setup URL in the Add this website field.
9. Click Add.
10. Ensure the URL is listed under Websites you've added to Compatibility View.
11. In the Internet Options window, select the Privacy tab and select the Turn on Pop-up Blocker option under Pop-up Blocker settings.



Internet Options- Popup Blocker Settings

12. Click Settings. The Pop-up Blocker Settings window is displayed.
13. Enter the URL of the OFSAA Application in the Address of Website to Allow: field.
14. Click Add. The OFSAA URL is displayed in the Allowed Sites section.
15. Click Close.
16. Click OK in the Internet Options window.

14.5 Retrieving Patch Information

To identify the list of patches installed on your OFSAA setup, follow these steps:

-
1. Login to the OFSAA application as a user with Object AdminAdvanced Role.
 2. Navigate to **Object Administration** tab, expand **Utilities** and click **Patch Information**.
 3. The window displays the list of patches installed on the OFSAA setup across Applications/ Platform.

14.6 OLAP Data Server Configuration

This section is applicable if you are using the OLAP feature of OFSAAI.

The following parameters must be set to ensure that the system limitations are not exceeded at any stage. The values for these OS parameters should be specified based on the expected load at each implementation site.

Example:

Process Memory Limit

Max Thread Stack Size

Max Number of Threads per Process

- **Sort Buffer settings:** This must be set at the Essbase application level appropriate to the anticipated load.
- **Shutdown and Restart:** During shutdown of OFSAAI Server that has an instance of Data Services that is communicating with an OLAP Data Server, it is imperative to ensure that the cleanup of the old instance is completed on the OLAP Data Server before restarting the OFSAAI Server. Pause for a period of time based on the load the system was subjected to, before restarting the Data Services subsystem.

14.7 Changing IP/ Hostname, Ports, Deployed Paths of the OFSAA Instance

For information on this section, refer OFS Analytical Applications Infrastructure Administration User Guide in [OTN](#).

14.8 OFSAAI Setup Information Fetching Tool

Executing the `SetupInfo.jar` file available in the `FIC_HOME` path will help you retrieve the related information about the OFSAAI Set up such as Operating System Name and version, Database Type and Version, OFSAAI architecture, Log file locations and so on.

To execute `SetupInfo.jar` in console:

1. Navigate to the path `$FIC_HOME`.
2. Enter the command:

```
java -jar SetupInfo.jar
```

After execution, the output file location is displayed in the console.

14.9 Encryption Changer

This utility helps you to regenerate the new `AESCryptKey.ext` file and encrypt all the encrypted values of the OFSAAI setup according to the new key.

To execute `EncryptC.jar` in console:

1. Navigate to the path `$FIC_HOME`.
2. Enter the command:

```
java -jar EncryptC.jar
```

A confirmation message is displayed after execution.

Once executed, you need to create and deploy the EAR / WAR file depending on the configured Web Application Server. For more information, see [Create and Deploy EAR/ WAR files](#).

14.10 Infrastructure LDAP Configuration

For more information on LDAP configuration, see [OFSAAI Administration Guide](#).

14.11 Configure OFSAAI Web Services

Web Services in OFSAAI is meant for exposing a web service to "asynchronously" or "synchronously" execute requested tasks offered by OFSAAI. Following configuration steps are to be done only if you are using the Web Services feature of OFSAAI.

14.11.1 Configure DynamicWSConfig.xml File

For each third party web service that needs to be accessed using the OFSAAI Web services framework and the operations to be invoked, corresponding entries are to be made in the `DynamicWSConfig.xml` template file.

The variable `<WebServer>` denotes any one of the application server, i.e. WebSphere, WebLogic, or Tomcat.

The `DynamicWSConfig.xml` file will be available in the `<OFSAAI Installation Directory>/EXEWebService/ <WebServer>/ROOT/conf` directory. This file can be placed in any directory that is accessible by the application and this location must be specified in the `web.xml` file, as `WSCONFIGFILE` parameter.

The `DynamicWSConfig.xml` template file will be in `<WebServer Deployment Path>/EXEWebService.ear/EXEWebService.war/conf` directory.

Following is the template:

```
<XML>
```

```
<WEBSERVICES>
```

```

<WEBSERVICE CODE="$CODE"
ENDPOINT="$ENDPOINT" TARGETNAMESPACE="$TARGETNAMESPACE"
XMLNS_XSD="$XMLNS_XSD" ENCODINGSTYLE="$ENCODINGSTYLE"
SERVICENAME="$SERVICENAME" PORTTYPENAME="$PORTTYPENAME"
SESSION_MAINTAIN_PROPERTY="$SESSION_MAINTAIN_PROPERTY"
USERNAME="$USERNAME"
PASSWORD="$PASSWORD" STYLE="$WEBSERVICESTYLE"
STUBIMPLEMENTATION="$STUBIMPLEMENTATION">
<OPERATION CODE="$CODE"
NAME="$NAME"
SOAPACTION="$SOAPACTION"
STYLE="$STYLE"
PACKAGENAME="$PACKAGENAME">
<INPUT ORDER="$ORDER"
PARAMNAME="$PARAMNAME"
ARGTYPE="$ARGTYPE"
CLASSNAME="$CLASSNAME"/>
<OUTPUT PARAMNAME="$PARAMNAME"
RETURNNTYPE="$RETURNNTYPE"
CLASSNAME="$CLASSNAME"/>
</OPERATION>
</WEBSERVICE>
</WEBSERVICES>
</XML>

```

The DynamicWSConfig.xml has the placeholders as tabulated below. These have to be updated depending on the web service chosen and the mode of accessing it. For each Web service to be accessed, the entire webservice tag in the DynamicWSConfig.xml file must be repeated. The placeholders tabulated below should be set in accordance to the parameters published in the third party wsdl files (webservises) to be accessed. The stub class specified must implement the "com.iflex.Oracle Reveleus.execution.webservice.EXEWebIF" interface.

14.11.2 Attributes for WEBSERVICE tag

Table 6: WEBSERVICE tag

Placeholder	Description
\$CODE	Unique number within the xml file and cannot be 999 or 0.
\$ENDPOINT	soap: address location in the wsdl: service name tag of the wsdl file.
\$TARGETNAMESPACE	The attribute value for the targetNamespace of the wsdl: definitions tag.
\$XMLNS_XSD	The attribute value for the xmlns:s of the wsdl:definitions tag
\$ENCODINGSTYLE	The attribute value for the xmlns:soapenc of the wsdl:definitions tag.
\$SERVICENAME	Name of the service found under the wsdl:service name tag of the wsdl file.
\$PORTTYPE	wsdl port type name as mentioned in the wsdl file.
\$SESSION_MAINTAIN_PROPER TY	This could be given as "" also.
\$USERNAME	User name to access the web services. Enter "" if no user name is required.
\$PASSWORD	Password to access the web services. Enter "" if no password is required.
\$WEBSERVICESTYLE	This can take either "rpc" in case of DII mode of invoking web services or "stub" in case of static mode. This is a mandatory parameter.
\$STUBIMPLEMENTATION	Fully qualified class name (package name.classname).

14.11.3 Attributes for OPERATION tag

Ensure that the "operation tag attributes" are repeated for each of the operation tags.

Table 7: OPERSTION tag

Placeholder	Description
\$CODE	Should be unique within the Webservice tag.
\$NAME	The name of the Function that is to be called by the wsdl file.
\$SOAPACTION	The URL for the Operation to access. This is associated with the Operation tag of the wsdl file.
\$STYLE	This can take "rpc" if the web services invoking is in DII mode or "stub" if it is in static mode. This is a mandatory parameter.
\$PACKAGENAME	Represents the JAXB package of input object.

14.11.4 Attributes for INPUT tag

Table 8: INPUT tag

Placeholder	Description
\$ORDER	The sequential number of the INPUT tag. Should start from 0. This is in line with the input order of the arguments that the API accepts which is called by this operation.
\$PARAMNAME	Input parameter name to be called by the wsdl file.
\$ARGTYPE	Input Parameter Data Type. If the input argument type is complex object, specify \$ARGTYPE as "xmlstring".
\$CLASSNAME	Represents class name of input object parameter.

14.11.5 Attributes for OUTPUT tag

Table 9: OUTPUT tag

Placeholder	Description
\$PARAMNAME	Output parameter name to be returned by the web service.
\$RETURNTYPE	Output parameter Data Type. If the web service response is a complex object, then specify \$RETURNTYPE as

	"object".
\$CLASSNAME	Represents class name of output object parameter.

14.11.6 web.xml Entries

1. This step is optional and required only if the web application server used is Tomcat. In case of any other application server, skip and proceed with next step.

Navigate to \$FIC_HOME/webroot/WEB-INF/ and edit the web.xml file. Set parameter value DOCSERVICEAPP to EXEWebServiceAXIS.

2. Navigate to <OFSAAI Installation Directory>/EXEWebService/<WebServer>/ROOT/WEB-INF/ and edit the web.xml file.

NOTE: In case of Java 7 when WebLogic is used as web application server replace following line of <OFSAAI Installation Directory>/EXEWebService/Weblogic/ROOT/WEB-INF/web.xml file that is

```
<?xml version='1.0' encoding='UTF-8'?>
<web-app id="WebApp_ID" version="3.0"
xmlns="http://java.sun.com/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd" metadata-
complete="true">
```

with

```
<?xml version='1.0' encoding='UTF-8'?>
<web-app xmlns="http://java.sun.com/xml/ns/j2ee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

14.11.7 Entry for WsConfig File

The WSCONFIG file (DynamicWsConfig.xml) is available in the <WebServer Deployment Path>/ EXEWebService.ear/EXEWebService.war/conf directory. This file can be placed in any directory that is accessible by the application.

The path where the WSCONFIG file is placed must be specified in place of \$WSCONFIGFILELOCATION\$ in the below block of text in web.xml.

```
<context-param>
<description>WebServices Configuration File</description>
<param-name>WSCONFIGFILE</param-name>
<param-value>$WSCONFIGFILELOCATION$</param-value>
<!--Specify the Location of DynamicWSConFig.xml-->
</context-param>
```

14.11.8 Proxy Settings

Replace the following `<param-value>` given in bold in the following block of text in `web.xml` file, with appropriate values.

If no values are required, leave the `<param-value>` blank.

```
<context-param>
<description>http Proxy Host</description>
<param-name>http.proxyHost</param-name>
<param-value>$PROXYHOST$</param-value>
<!-- Specify the IP address or hostname of the http proxy server-->
</context-param>
<context-param>
<description>http Proxy Port</description>
<param-name>http.proxyPort</param-name>
<param-value>$PROXYPORT$</param-value>
<!--Port Number for the Proxy Server-->
</context-param>
<context-param>
<description>http proxy UserName</description>
<param-name>http.proxyUserName</param-name>
<param-value>$PROXYUSERNAME$</param-value>
<!-- User ID To get authenticated by proxy server-->
</context-param>
<context-param>
```

```

<description>http proxy Password</description>
<param-name>http.proxyPassword</param-name>
<param-value>$PROXYPASSWORD$</param-value>
<!-- User Password To get authenticated by proxy server-->
</context-param>
<context-param>
<description>http non-ProxyHosts</description>
<param-name>http.nonProxyHosts</param-name>
<param-value>$NONPROXYHOST$</param-value>
<!--Hosts for which the proxy settings should get by-passed (Note:
Separate them by "|" symbol) -->
</context-param>

```

14.11.9 OFSAAI Home Entry

This entry should point to the Application layer / Web layer of the OFSAAI installation and should be accessible.

Replace \$FIC_HOME\$ in the following block of text in web.xml with <WebServer Deployment Path>/EXEWebService.ear/EXEWebService.war.

```

<context-param>
<description>OFSAAI Web Home</description>
<param-name>FIC_HOME</param-name>
<param-value>$FIC_HOME$</param-value>
<!--OFSAAI Installation Folder-->
</context-param>
<context-param>
<description>OFSAAI Web Home</description>
<param-name>FIC_PHYSICAL_HOME</param-name>
<param-value>$FIC_HOME$</param-value>
<!--OFSAAI Installation Folder-->
</context-param>

```

14.11.10 DynamicWSConfig.xml

For each third party web service that needs to be accessed using the OFSAAI Web services framework, and the operation to be invoked, make corresponding entries into this file. This file is to be placed in the location that is specified in the `web.xml`, as `WSCONFIGFILE` parameter.

14.12 Deploy OFSAAI Web Services

You can deploy OFSAAI Web Services separately if you had not configured OFSAAI Web Services as part of the installation.

1. Complete the manual configuration of OFSAAI Web Services.
2. Navigate to `<OFSAAI Installation Directory>/EXEWebService/<WebServer>` and execute the command:

```
./ant.sh
```
3. This will trigger the EAR/WAR file creation, which is required for the deployment.
4. Deploy the generated `EXEWebService.EAR/EXEWebService.WAR` file into the WebServer.

If you have already configured OFSAAI Web Services as part of the installation, deploy the generated `EXEWebService.EAR/ EXEWebService.WAR` file into the OFSAAI Deployment area in WebServer profile.

14.13 Configuration to Enable Parallel Execution of DML statements

A configuration file, `OracleDB.conf` has been introduced to accommodate any configurable parameter related to operations on oracle database. If you do not want to set a parameter to a specific value, then the respective parameter entry can be removed/commented off from the `OracleDB.conf` file which resides in the path `$FIC_DB_HOME/conf`.

As of now, the `OracleDB.conf` file has only one parameter namely `CNF_DEGREE_OF_PARALLELISM`. This parameter indicates the degree of parallelism to be used for a DML operation if parallel DML is explicitly enabled in the session with the `ENABLE PARALLEL DML` clause of the `ALTER SESSION` statement. The default mode of a session is `DISABLE PARALLEL DML`. If `CNF_DEGREE_OF_PARALLELISM` is not set, then the default degree, as decided by Oracle will be used.

14.14 Configure Message Details in Forms Designer

You can configure the Message Details in Forms Designer under Data Entry Forms and Queries module by updating the details of mail server in the "NotificationConfig.cfg" file which resides in the path `$FIC_APP_HOME/common/FICServer/conf`.

Ensure that the "authorized User details" for whom you need to configure the Message details are included in Administration > Security Management > User Administrator > User Maintenance window.

Update the following parameters in the "NotificationConfig.cfg" file:

Table 10: NotificationConfig.cfg File

Parameter	Description
SMTP_SERVER_IP	Specify the hostname or IP address of SMTP Server.
SMTP_DEBUG_MODE	To run SMTP service in Debug mode, set value to 'true', otherwise set value to 'false'.
SMTP_AUTHORIZATION	Set to 'true' if SMTP server requires the client to be authenticated, otherwise set to 'false'.
SMTP_USERNAME	Username required for logging into SMTP server, if authentication is not required use a dummy value.
SMTP_PASSWORD	Password required for logging into SMTP server, if authentication is not required use a dummy value.
SMTP_MAILID	If the Messages has to go from a Particular ID that ID need to be added. Exchange server forces you set a valid ID that is there in the exchange server. (Based on Security settings)

Ensure that the authorized User details are included in Administration > Security Management > User Administrator > User Maintenance window.

14.15 Clearing Application Cache

This is applicable to all Web Servers (i.e. WebSphere, WebLogic, and Tomcat).

Prior to the deployment of Infrastructure or Application Service Packs / One-off patches, navigate to the following path depending on the WebServer configured and clear the cache:

- **Tomcat:** <Tomcat installation folder>/work/Catalina/localhost/<Application name>/org/apache/jsp

-
- **WebLogic:** <Weblogic installation location>/domains/<Domain name>/servers/<Server name>/tmp/_WL_user/<Application name>/qaelce/jsp_servlet
 - **WebSphere:** <Websphere installation directory>/AppServer/profiles/<Profile name>/temp/<Node name>/server1/<Application name>/<.war file name>

14.16 Configuring Password changes

This section explains about how to modify the OFSAA Infrastructure Config Schema and Atomic Schema passwords.

14.16.1 OFSAA Infrastructure Config Schema password modification

To change the Config Schema password, perform the following steps:

1. Change the Config schema User Password in the database.
2. Delete the \$FIC_HOME/conf/Reveleus.SEC file.
3. Shutdown the OFSAAI App service:

```
cd $FIC_APP_HOME/common/FICServer/bin
./stopofsaa.sh
```

4. Start the Infrastructure Server in foreground directly on the server or through X-Windows software using the command:

```
./startofsaa.sh
```

At the prompt, enter System Password. Enter the "new Config schema" password. The service will start and initialize itself if it is able to successfully connect to the DB.

5. Post successful startup of the service, if required, the Infrastructure server may be shut down and restarted in the background using nohup mode.

14.16.2 OFSAA Infrastructure Atomic Schema password modification

To change the Atomic Schema password, perform the following steps:

1. Change the Atomic schema User Password in the database.
2. Login to the application from the browser using SYSADMIN account or any user id, which has System Administrator role mapped.
3. Navigate to System Configuration > Database Details window. Select the appropriate connection and edit the password.

-
4. Navigate to Data Management Tools >Data Sources> Source Designer window. Update the password of the appropriate Source.
 5. If you are using Apache Tomcat as Web server, update the <Context> -> Resource tag details in Server.xml file from the \$CATALINA_HOME/conf folder. (In case of Tomcat only Atomic <Resource> will exist).
 6. If you are using WebSphere as Web server:
 - a. Login to the WebSphere Administration Console, from the left side menu.
 - b. Navigate to *Resources >JDBC >Data Sources*. A list of data sources will be populated on the right side.
 - c. Select the appropriate Data Source and edit the connection details. (In this case, both Config and Atomic data sources will need to be modified).

If you are using WebLogic as Web server:

- a. Login to the WebLogic Administration Console, from the left side menu
 - b. Under Domain Structure list box, expand the appropriate Domain and navigate to *Services > JDBC >Data Sources*. A list of data sources will be populated on the right side.
 - c. Select the appropriate Data Source and edit the connection details. (In this case, both Config and Atomic data sources need to be modified).
7. Restart the OFSAAI services.

14.17 Configuring Java Virtual Machine

While running several database intensive tasks in parallel, fetching the database connection from connection pool may face an error. To ensure no such error is encountered, add the line `securerandom.source=file:/dev/./urandom` in the **java.security** configuration file available in `$JAVA_HOME/jre/lib/security/` path.

This needs to be configured on all the machines or virtual machines where the OFSAAI database components (ficdb layer) are installed.

14.18 Configure Internal Service (Document Upload/ Download)

This step can be ignored if it has already been configured as part of any previous IR /ML installation.

The Document Upload /Download feature has undergone a change and can now be configured to use Internal service for document upload / download instead of the earlier ExeWebService.

To facilitate Internal service for document upload/ download, perform the following configurations:

-
1. Create the folders **download**, **upload**, **TempDocument** and **Temp** in the local path of Web application server and provide **Read/Write** permission.

- To find the exact location, execute the following query in CONFIG schema:

```
select localpath from web_server_info
```

- To create folders with Read/Write permission, execute the command:

```
mkdir -m 777 download upload TempDocument Temp
```

2. Create **DocStorage** folder in the FTPSHARE location of APP tier and provide **Read/Write** permission.

- To find the exact location, execute the query in CONFIG schema:

```
select ftpdrive from app_server_info
```

- To create folder with Read/Write permission, execute the command:

```
mkdir -m 777 DocStorage
```

By default, the parameter **DOCUMENT_SERVICE_TYPE_EXTERNAL** value is set to **FALSE** in the Configuration table in CONFIG schema and hence the application “ExeWebService” will not be used. It is recommended that the value to be set to **FALSE** and use the Internal service for document upload/ downloads. If you intend to continue using the External ExeWebService, set the value to **TRUE**.

Navigate to `$FIC_HOME/EXEWebService/<WEBSERVER_TYPE>` directory of WEB tier and type **./ant.sh**. This triggers the creation of EAR/WAR file EXEWebService.ear/.war. The EAR/WAR file EXEWebService.ear/.war will be created in

`$FIC_HOME/EXEWebService/<WEBSERVER_TYPE>` directory of WEB tier. Redeploy the generated EAR/WAR file onto your configured web application server.

15 Appendix J - Patching Your OFS PROFITABILITY Pack Installation

15.1 Patching Your OFS PROFITABILITY Pack Installation

Oracle strongly recommends installing the latest available patchset so as to be up to date with the various releases of the OFSAA Infrastructure product.

Refer <http://support.oracle.com> for more information on latest releases.

16 Appendix K - Grants for Atomic/ Config Schema

This Appendix includes the following sections:

- [Grants for Atomic Schema](#)
- [Grants for Config Schema](#)
- [Grants for Config Schema Entities for Atomic Users](#)

16.1 Grants for Atomic Schema

Atomic Schema creation requires certain grants for object creation. This can be located in `$FIC_HOME/privileges_atomic_user.sql` file

```
grant create SESSION to &database_username
/
grant create PROCEDURE to &database_username
/
grant create SEQUENCE to &database_username
/
grant create TABLE to &database_username
/
grant create TRIGGER to &database_username
/
grant create VIEW to &database_username
/
grant create MATERIALIZED VIEW to &database_username
/
grant olap_user to &database_username
/
grant select on SYS.V_$PARAMETER to &database_username
/
grant create SYNONYM to &database_username
/
```

NOTE: If you intend to use Oracle OLAP feature, execute the following grant on all ATOMIC schema(s):

```
grant olap_user to &database_username
```

16.2 Grants for Config Schema

Config Schema creation requires certain grants for object creation. This can be located in `$FIC_HOME/privileges_config_user.sql` file

The following are the Grants for Config Schema:

```
grant create SESSION to &database_username
```

```

/
grant create PROCEDURE to &database_username
/
grant create SEQUENCE to &database_username
/
grant create TABLE to &database_username
/
grant create TRIGGER to &database_username
/
grant create VIEW to &database_username
/
grant create MATERIALIZED VIEW to &database_username
/
grant olap_user to &database_username
/
grant select on SYS.V_$PARAMETER to &database_username
/
grant create SYNONYM to &database_username
/

```

16.3 Grants on Config Schema Entities for Atomic Users

Atomic Schema creation requires certain grants for config schema object access. This can be located in `$FIC_HOME/config_table_privileges_for_atomic_user.sql` file.

The following are the Grants for Config Schema entities for Atomic Users:

```

grant select on CSSMS_USR_PROFILE to &database_username
/
grant select on CSSMS_ROLE_MAST to &database_username
/
grant select on CSSMS_GROUP_MAST to &database_username
/
grant select on CSSMS_FUNCTION_MAST to &database_username
/
grant select on CSSMS_USR_GROUP_MAP to &database_username
/
grant select on CSSMS_USR_GROUP_DSN_SEG_MAP to &database_username
/
grant select on CSSMS_ROLE_FUNCTION_MAP to &database_username
/
grant select on CSSMS_GROUP_ROLE_MAP to &database_username
/
grant select on CSSMS_SEGMENT_MAST to &database_username
/
grant select on BATCH_TASK to &database_username
/
grant select on CSSMS_USR_DSN_SEG_MAP to &database_username
/
grant select on CSSMS_USR_ROLE_MAP to &database_username
/
grant select on CSSMS_METADATA_SEGMENT_MAP to &database_username

```

```

/
grant select on BATCH_RUN to &database_username
/
grant select on PR2_FILTERS to &database_username
/
grant select on PR2_TASK_FILTER to &database_username
/
grant select on PR2_TASK_FILTER_DETAIL to &database_username
/
grant select on ST_STRESS_MASTER to &database_username
/
grant select on ST_SCENARIO_MASTER to &database_username
/
grant select on ST_SHOCK_MASTER to &database_username
/
grant select on BATCH_MASTER to &database_username
/
grant select on ICC_MESSAGELOG to &database_username
/
grant select on PR2_MASTER to &database_username
/
grant select on PR2_RUN_REQUEST to &database_username
/
grant select on MF_MODEL_SCRIPT_MASTER to &database_username
/
grant select on MF_INPUT_VALUES to &database_username
/
grant select on MF_MODEL_OUTPUT_VALUES to &database_username
/
grant select on DB_MASTER to &database_username
/
grant select on DSNMASTER to &database_username
/
grant select on pr2_rule_map to &database_username
/
grant delete on pr2_rule_map_pr to &database_username
/
grant insert on pr2_rule_map_pr to &database_username
/
grant update on pr2_rule_map_pr to &database_username
/
grant select on pr2_rule_map_pr to &database_username
/
grant delete on pr2_rule_map_pr_tmp to &database_username
/
grant insert on pr2_rule_map_pr_tmp to &database_username
/
grant update on pr2_rule_map_pr_tmp to &database_username
/
grant select on pr2_rule_map_pr_tmp to &database_username
/
grant select on pr2_rule_map_exclude to &database_username
/

```

```

grant delete on pr2_rule_map_exclude_pr to &database_username
/
grant insert on pr2_rule_map_exclude_pr to &database_username
/
grant update on pr2_rule_map_exclude_pr to &database_username
/
grant select on pr2_rule_map_exclude_pr to &database_username
/
grant delete on pr2_rule_map_exclude_pr_tmp to &database_username
/
grant insert on pr2_rule_map_exclude_pr_tmp to &database_username
/
grant update on pr2_rule_map_exclude_pr_tmp to &database_username
/
grant select on pr2_rule_map_exclude_pr_tmp to &database_username
/
grant select on pr2_run_object to &database_username
/
grant select on pr2_run_object_member to &database_username
/
grant select on pr2_run_map to &database_username
/
grant select on pr2_run_execution_b to &database_username
/
grant select on pr2_run_execution_filter to &database_username
/
grant select on pr2_firerun_filter to &database_username
/
grant select on pr2_filters to &database_username
/
grant select on configuration to &database_username
/
grant select on batch_parameter to &database_username
/
grant select on component_master to &database_username
/
grant select on MDB_OBJECT_TYPE_ATT_LAYOUT to &database_username
/
grant select on REV_OBJECT_ATTRIBUTE_DTL to &database_username
/
grant select on FORMS_LOCALE_MASTER to &database_username
/
grant select on mdb_object_dependencies to &database_username
/
grant select on mdb_execution_details to &database_username
/
grant select on REV_STAT_DATA to &database_username
/
grant select on REV_OBJECT_REPOSITORY_B to &database_username
/
grant select on REV_OBJECT_REPOSITORY_TL to &database_username
/
grant select on REV_OBJECT_ATTRIBUTE_DTL_MLS to &database_username

```

```
/
grant select on REV_OBJECT_APPLICATION_MAP to &database_username
/
grant select on MDB_OBJ_EXPR_DETAILS to &database_username
/
grant select on MDB_EXECUTION_DETAILS to &database_username
/
grant select on REV_OBJECT_TYPES_CD to &database_username
/
grant select on REV_OBJECT_TYPES_MLS to &database_username
/
grant select on REV_APPLICATIONS_CD to &database_username
/
grant select on REV_APPLICATIONS_MLS to &database_username
/
grant select on METADATA_BROWSER_LOCALE to &database_username
/
grant select on MDB_STAT_DATA to &database_username
/
grant select on MDB_OBJECT_TYPE_LAYOUT to &database_username
/
grant select on ofsa_md_id_ref to &database_username
/
grant select on MDB_ETL_MAPPING to &database_username
/
grant select on setupinfo to &database_username
/
grant select on LOCALEREPOSITORY to &database_username
/
grant select on MF_MODEL_MASTER to &database_username
/
grant select on MF_SANDBOX_MASTER to &database_username
/
grant select on MF_VARIABLE_MASTER to &database_username
/
grant select on MF_TECHNIQUE_MASTER to &database_username
/
grant select on MDB_RULE_SOURCE_HEADER to &database_username
/
grant select on MDB_RULE_TARGET_HEADER to &database_username
/
grant select on MDB_RULE_TARGET_MEMBER_HEADER to &database_username
/
grant select on MDB_RULE_GRID_DATA to &database_username
/
grant select on MDB_MODEL_MAPPING to &database_username
/
grant delete on AAI_MAP_MAPPER to &database_username
/
grant insert on AAI_MAP_MAPPER to &database_username
/
grant update on AAI_MAP_MAPPER to &database_username
/
```

```
grant select on AAI_MAP_MAPPER to &database_username
/  
grant select on RTI_UI_EXCLUDE_PDM_LIST to &database_username
/  
grant select on RTI_VIR_PHY_TBL_NAME to &database_username
/  
grant select on infodom_patches to &database_username
/
```

17 Appendix L - Configuring Application Pack XML Files

17.1 OFS_PFT_PACK.xml

The OFS_PFT_PACK.xml file holds details on the various products that are packaged together in Profitability Application Pack.

This section details the various tags/ parameters available in the file and the values that need to be updated. Prior to installing the Profitability Application Pack in SILENT mode, it is mandatory to update this file.

Note: If you are installing in the GUI mode, then this file need not be updated.

```
<APP_PACK_CONFIG>
  <APP_PACK_ID>OFS_PFT_PACK</APP_PACK_ID>
  <APP_PACK_NAME>Financial Services Profitability Applications Pack</APP_PACK_NAME>
  <APP_PACK_DESCRIPTION>Applications for Profitability in the Banking and Financial Services Domain</APP_PACK_DESCRIPTION>
  <VERSION>8.0.0.0</VERSION>
  <APP>
    <APP_ID PREREQ="" DEF_SEL_FLG="YES" ENABLE="YES">OFS_AAI</APP_ID>
    <APP_NAME>Financial Services Analytical Applications Infrastructure</APP_NAME>
    <APP_DESCRIPTION>Base Infrastructure for Analytical Applications</APP_DESCRIPTION>
    <VERSION>8.0.0.0</VERSION>
  </APP>
  <APP>
    <APP_ID PREREQ="OFS_AAI" ENABLE="YES">OFS_PFT</APP_ID>
    <APP_NAME>Financial Services Profitability Management</APP_NAME>
    <APP_DESCRIPTION>Application for Profitability Management</APP_DESCRIPTION>
    <VERSION>8.0.0.0</VERSION>
  </APP>
  <APP>
    <APP_ID PREREQ="OFS_AAI" ENABLE="YES">OFS_FTP</APP_ID>
    <APP_NAME>Financial Services Funds Transfer Pricing</APP_NAME>
    <APP_DESCRIPTION>Application for Funds Transfer Pricing</APP_DESCRIPTION>
    <VERSION>8.0.0.0</VERSION>
  </APP>
  <APP>
    <APP_ID PREREQ="OFS_AAI" ENABLE="YES">OFS_IPA</APP_ID>
    <APP_NAME>Financial Services Institutional Performance Analytics</APP_NAME>
    <APP_DESCRIPTION>Application for Institutional Performance Analytics</APP_DESCRIPTION>
    <VERSION>8.0.0.0</VERSION>
  </APP>
  <APP>
    <APP_ID PREREQ="OFS_AAI" ENABLE="YES">OFS_RPA</APP_ID>
    <APP_NAME>Financial Services Retail Performance Analytics</APP_NAME>
    <APP_DESCRIPTION>Application for Retail Performance Analytics</APP_DESCRIPTION>
    <VERSION>8.0.0.0</VERSION>
  </APP>
  <APP>
    <APP_ID PREREQ="OFS_AAI" ENABLE="YES">OFS_EFPA</APP_ID>
    <APP_NAME>Financial Services Enterprise Financial Performance Analytics</APP_NAME>
    <APP_DESCRIPTION>Application for Enterprise Financial Performance Analytics</APP_DESCRIPTION>
    <VERSION>8.0.0.0</VERSION>
  </APP>
</APP_PACK_CONFIG>
```

Tag Name/ Attribute Name	Description	Mandatory (Y/ N)	Default Value/ Permissible Value	Comments
APP_PACK_ID	Unique Application Pack Identifier	Y	Unique Seeded Value	DO NOT modify this value.
APP_PACK_NAME	Unique Application Pack Name	Y	Unique Seeded Value	DO NOT modify this value.

Tag Name/ Attribute Name	Description	Mandatory (Y/ N)	Default Value/ Permissible Value	Comments
APP_PACK_DESCRIPTION	Unique Application Pack Description	Y	Unique Seeded Value	DO NOT modify this value.
VERSION	Unique release version	Y	Unique Seeded Value	DO NOT modify this value.
APP	Unique Application Entries	Y	Unique Seeded Value	DO NOT remove these tags.
APP_ID	Unique Application Identifier	Y	Unique Seeded Value	DO NOT modify this value.
APP_ID/ PREREQ	Prerequisite Application/ Product	Y	Unique Seeded Value	For most applications Infrastructure would be the prerequisite set. For certain other applications, an appropriate Application ID would be set. DO NOT modify this value.
APP_ID/ DEF_SEL_FLAG	Default Selected Flag	Y	Default - YES	In all Application Packs, Infrastructure would have this value set to "YES". DO NOT modify this value.
APP_ID/ ENABLE	Enable Application/ Product	YES if installing in SILENT mode.	Default – YES for Infrastructure NO for Others Permissible - YES or NO	Set this attribute-value to YES against every APP_ID which is licensed and should be enabled for use. Note: Application/ Product once enabled cannot be disabled. However, Application/ Product not enabled

Tag Name/ Attribute Name	Description	Mandatory (Y/ N)	Default Value/ Permissible Value	Comments
				during installation can be enabled later through the Administration UI.
APP_NAME	Unique Application/ Product Name	Y	Unique Seeded Value	DO NOT modify this value.
APP_DESCRIPTION	Unique Application/ Product Name	Y	Unique Seeded Value	DO NOT modify this value.
VERSION	Unique release version	Y	Unique Seeded Value	DO NOT modify this value.

17.2 Configuring OFS_PFT_SCHEMA_IN.xml

Creating database schemas, objects within schemas and assigning appropriate grants are the primary steps in the installation process of OFSAA Applications. The OFS_ALM_SCHEMA_IN.xml file contains details on the various application schemas that should be created prior to the Application Pack installation.

```

<APPACKSCHEMA>
  <APP_PACK_ID>OFS_PFT_PACK</APP_PACK_ID>
  <JDBC_URL>jdbc:oracle:thin:@ofss222763:1521:FTPDEV</JDBC_URL>
  <JDBC_DRIVER>oracle.jdbc.driver.OracleDriver</JDBC_DRIVER>
  <HOST>10.184.149.241</HOST>
  <SETUPINFO NAME="DEV" />
  <PASSWORD APPLYNAMEFORALL="Y" DEFAULT="" />
  <SCHEMAS>
    <SCHEMA TYPE="CONFIG" NAME="pftconf" PASSWORD="" APP_ID="OFS_AAI" DEFAULTTABLESPACE="USERS" TEMPTABLESPACE="TEMP" QUOTA="" />
    <SCHEMA TYPE="ATOMIC" NAME="pftatn" PASSWORD="" APP_ID="OFS_PFT" APP_GRP="1" INFODOM="" DEFAULTTABLESPACE="USERS" TEMPTABLESPACE="TEMP" QUOTA="" />
    <SCHEMA TYPE="ATOMIC" NAME="pftatn" PASSWORD="" APP_ID="OFS_FTP" APP_GRP="1" INFODOM="" DEFAULTTABLESPACE="USERS" TEMPTABLESPACE="TEMP" QUOTA="" />
    <SCHEMA TYPE="ATOMIC" NAME="pftatn" PASSWORD="" APP_ID="OFS_IPA" APP_GRP="1" INFODOM="" DEFAULTTABLESPACE="USERS" TEMPTABLESPACE="TEMP" QUOTA="" />
    <SCHEMA TYPE="ATOMIC" NAME="pftatn" PASSWORD="" APP_ID="OFS_RPA" APP_GRP="1" INFODOM="" DEFAULTTABLESPACE="USERS" TEMPTABLESPACE="TEMP" QUOTA="" />
    <SCHEMA TYPE="ATOMIC" NAME="pftatn" PASSWORD="" APP_ID="OFS_EPPA" APP_GRP="1" INFODOM="" DEFAULTTABLESPACE="USERS" TEMPTABLESPACE="TEMP" QUOTA="" />
  </SCHEMAS>
</APPACKSCHEMA>

```

The following table gives details about the various tags/ parameters available in the file and the values that need to be updated. Prior to executing the schema creator utility, it is mandatory to update this file.

Tag Name/ Attribute Name	Description	Mandatory/ Optional	Default Value/ Permissible Value	Comments
<APP_PACK_ID>	Seeded unique ID for the OFSAA	Y	Seeded	DO NOT modify this value.

Tag Attribute Name	Name/ Description	Mandatory/ Optional	Default Value/ Permissible Value	Comments
	Application Pack			
<JDBC_URL>	<p>Enter the JDBC URL.</p> <p>Note: You can enter RAC and NON-RAC enabled database connectivity URL.</p>	Mandatory	<p>Example,</p> <p>jdbc:oracle:thin:@<HOST/IP>:<PORT>:<SID></p> <p>or</p> <p>jdbc:oracle:thin:@//[HOST][:PORT]/SERVICE</p> <p>or</p> <p>jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=[HOST])(port=[PORT]))(ADDRESS=(PROTOCOL=TCP)(HOST=[HOST])(PORT=[PORT]))(LOAD_BALANCE=yes)(FAILOVER=yes))(CONNECT_DATA=(SERVICE_NAME=[SERVICE])))</p> <p>For example,</p> <p>jdbc:oracle:thin:@//dbhost.server.com:1521/service1</p> <p>or</p> <p>jdbc:oracle:thin:@//dbshost.server.com:1521/scan-1</p> <p>or</p> <p>jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=dbhost1.server.com)(port=1521))(ADDRESS=(PROTOCOL=TCP)(HOST=dbhost2.server.com)(PORT=1521))(LOAD_BALANCE=yes)(FAILOVER=yes))(CONNECT_DATA=(SERVICE_NAME=service1)))</p>	<p>Ensure to add an entry (with SID/SERVICE NAME) in the tnsnames.ora file on the OFSAA server. The entry should match with the SID/SERVICE NAME used in the JDBC URL.</p>

Tag Attribute Name	Name/ Description	Mandatory/ Optional	Default Permissible Value	Value/ Comments
<JDBC_DRIVER>	By default this driver name is seeded. Note: Do not edit this attribute value.	Mandatory	Example, oracle.jdbc.driver.OracleDriver	Only JDBC Thin Driver is supported. DO NOT modify this value.
<HOST>	Enter the Hostname/ IP Address of the system on which you are installing the OFSAA components.	Mandatory	Host Name/ IP Address	
<SETUPINFO>/ PREFIX_SCHEMA_NAME	Identifies if the value specified in <SETUPINFO >/ NAME attribute should be prefixed to the schema name.	N	YES or NO	Default value is YES
<SETUPINFO>/ NAME	Enter the acronym for the type of implementation. This information will be displayed in the OFSAA Home Page. Note: On executing the schema creator utility, this value will be prefixed with each schema	Mandatory	Accepts strings with a minimum length of two and maximum of four. Example, DEV, SIT, PROD	This name would appear in the OFSAA Landing Page as "Connected To: xxxx" The schemas being created would get this prefix. For E.g. dev_ofsaaconf, uat_ofsaaconf etc.

Tag Attribute Name	Name/ Description	Mandatory/ Optional	Default Permissible Value	Value/ Comments
	name. For example: dev_ofsaaconf, uat_ofsaaatm.			
<PASSWORD>/ DEFAULT*	Enter the password if you want to set a default password for all schemas. Note: You also need to set APPLYSAMEFOR ALL attribute as Y to apply the default password for all the schemas.	Optional	The maximum length allowed is 30 characters. Special characters are not allowed.	
<PASSWORD>/ APPLYSAMEFORALL	Enter as Y if you want to apply the password specified in DEFAULT attribute for all the schemas. If you enter as N, you need to provide individual passwords for all schemas. Note: In case you have entered Y in APPLYSAMEFOR ALL attribute and also have	Mandatory	Default – N Permissible – Y or N	Note: Setting this attribute value is mandatory, If DEFAULT attribute is set.

Tag Attribute Name	Name/ Description	Mandatory/ Optional	Default Value/ Permissible Value	Comments
	specified individual passwords for all the schemas, then the specified individual passwords will take precedence.			
<SCHEMA>/ TYPE	<p>The different types of schemas that are supported in this release are ATOMIC, CONFIG, SANDBOX, and ADDON.</p> <p>By default, the schemas types are seeded based on the Application Pack.</p> <p>Note: Do not edit this attribute value.</p>	Mandatory	<p>ATOMIC/CONFIG/SANDBOX/ADDON</p> <p>Note: SANDBOX AND ADDON schemas are not applicable for OFS AAI Application Pack.</p>	<p>Only One CONFIG schema can exist in the file.</p> <p>This schema identifies as the CONFIGURATION schema that holds the OFSAAI setup details and other metadata information.</p> <p>Multiple ATOMIC/ SANDBOX/ ADDON schemas can exist in the file.</p> <p>ATOMIC schema refers to the Information Domain schema. SANDBOX schema refers to the SANDBOX schema. ADDON schema refers to other miscellaneous schema (not applicable for this Application Pack).</p> <p>Note: The Profitability Pack supports only</p>

Tag Attribute Name	Name/ Description	Mandatory/ Optional	Default Permissible Value	Value/ Comments
				one Atomic Schema.
<SCHEMA.>/ NAME	<p>By default, the schemas names are seeded based on the Application Pack.</p> <p>You can edit the schema names if required.</p> <p>Note:</p> <p>The Schema Name will have a prefix of the SETUPINFO/ NAME attribute.</p> <p>SCHEMA NAME must be same for all the ATOMIC Schemas of applications within an Application Pack.</p>	Mandatory	The permissible length is 15 characters and only alphanumeric characters allowed. No special characters allowed except underscore ' _ '.	<p>SETUPINFO/ NAME attribute value would be prefixed to the schema name being created.</p> <p>For E.g. if name is set as 'ofsaaatm' and setupinfo as 'uat' then schema being created would be 'uat_ofsaaatm'.</p> <p>NAME should be same where APP_GRP=1 for all SCHEMA tags (Not applicable for this Application Pack).</p>
<SCHEMA>/ PASSWORD*	<p>Enter the password of the schema to be created.</p> <p>Note:</p> <p>If this attribute is left blank, then the password specified in the <PASSWORD>/DEFAULT attribute is applied as the</p>	Optional	The maximum length allowed is 30 characters. Special characters are not allowed.	<p>Note: You need to mandatorily enter the password if you have set the <PASSWORD>/APPLYSAMEFORALL attribute as N.</p>

Tag Attribute Name	Name/	Description	Mandatory/ Optional	Default Permissible Value	Value/ Comments
		Schema Password.			
<SCHEMA>/ APP_ID		By default, the Application ID is seeded based on the Application Pack. Note: Do not edit this attribute value.	Mandatory	Unique Seeded Value	Identifies the Application/ Product for which the schema is being created. DO NOT modify this value.
<SCHEMA>/ DEFAULTTABLESPACE		Enter the available default tablespace for DB User. Note: If this attribute is left blank, then USERS is set as the default tablespace.	Optional	Default - USERS Permissible - Any existing valid tablespace name.	Modify this value to associate any valid tablespace with the schema.
<SCHEMA>/ TEMPTABLESPACE		Enter the available temporary tablespace for the DB User. Note: If this attribute is left blank, then TEMP is set as the default tablespace.	Optional	Default - TEMP Permissible - Any existing valid temporary tablespace name.	Modify this value to associate any valid tablespace with the schema.
<SCHEMA>/ QUOTA		Enter the quota to be set on	Optional	Example, 600M/m	Modify this value to grant the specified

Tag Attribute Name	Name/ Description	Mandatory/ Optional	Default Value/ Permissible Value	Comments
	DEFAULTTABLE SPACE attribute for the schema/ user. By default, the quota size is set to 500M. Minimum: 500M or Unlimited on default Tablespace		20G/g UNLIMITED/unlimited	quota on the mentioned tablespace to the user.
<SCHEMA>/ INFODOM	Enter the name of the Information Domain to associate this schema. The schema creator utility automatically derives an Information Domain Name based on the Application Pack if no value is specified for this attribute.	Optional	Permissible length is 16 characters and only alphanumeric characters allowed. No special characters allowed.	

18 Appendix M - Configuring OFSAAI_InstallConfig.xml File

18.1 Configuring OFSAAI_InstallConfig.xml file

1. Navigate to OFS_PFT_PACK/OFS_AAI/conf/
2. Open the file OFSAAI_InstallConfig.xml in text editor.

```

[?xml version="1.0" encoding="UTF-8"?>
<userInteractions>
  <layer name="GENERAL">
    <interactiongroup name="webServerType" >
      <interactionvariable name="WEBAPPSERVERTYPE">1</Interactionvariable>
    </interactiongroup>
    <interactiongroup name="OFSAAI Infrastructure Server Details">
      <interactionvariable name="OBSERVER_IP">10.184.149.54</Interactionvariable>
    </interactiongroup>
    <interactiongroup name="Database Details" >
      <interactionvariable name="ORACLE_SID/SERVICE_NAME">FTPD&lt;/Interactionvariable>
      <interactionvariable name="ABS_DRIVER_PATH">/scratch/oracle/app/product/11.2.0.3/client_1/jdbc/11b</Interactionvariable>
    </interactiongroup>
    <interactiongroup name="OLAP Detail">
      <interactionvariable name="OLAP_SERVER_IMPLEMENTATION">0</Interactionvariable>
    </interactiongroup>
    <interactiongroup name="SFTP Details">
      <interactionvariable name="SFTP_ENABLE">1</Interactionvariable>
      <interactionvariable name="FILE_TRANSFER_PORT">22</Interactionvariable>
    </interactiongroup>
    <interactiongroup name="Locale Detail">
      <interactionvariable name="LOCALE">en_US</Interactionvariable>
    </interactiongroup>
    <interactiongroup name="OFSAAI Infrastructure communicating ports" >
      <interactionvariable name="JAVAPORT">9999</Interactionvariable>
      <interactionvariable name="NATIVEPORT">6666</Interactionvariable>
      <interactionvariable name="AGENTPORT">6510</Interactionvariable>
      <interactionvariable name="TCPSPORT">6507</Interactionvariable>
      <interactionvariable name="ICCNATIVEPORT">6509</Interactionvariable>
      <interactionvariable name="OLAPPORT">10101</Interactionvariable>
      <interactionvariable name="MSGPORT">6501</Interactionvariable>
      <interactionvariable name="ROUTERPORT">6500</Interactionvariable>
      <interactionvariable name="WSPORT">6505</Interactionvariable>
    </interactiongroup>
    <interactiongroup name="WEB_DETAILS" >
      <interactionvariable name="HTTPS_ENABLE">0</Interactionvariable>
      <interactionvariable name="WEB_SERVER_IP">10.184.149.241</Interactionvariable>
      <interactionvariable name="WEB_SERVER_PORT">8080</Interactionvariable>
      <interactionvariable name="CONTEXT_NAME">OFSAAI</Interactionvariable>
      <interactionvariable name="WEBAPP_CONTEXT_PATH">/scratch/mediapack/apache-tomcat-7.0.19/webapps</Interactionvariable>
      <interactionvariable name="WEB_LOCAL_PATH">/scratch/mediapack/ftpshare</Interactionvariable>
    </interactiongroup>
    <interactiongroup name=" weblogic Setup Details" >
      <interactionvariable name="WEBLOGIC_DOMAIN_HOME">NA</Interactionvariable>
    </interactiongroup>
    <interactiongroup name="OFSAAI FTP Details">
      <interactionvariable name="OFSAAI_FTPSHARE_PATH">/scratch/mediapack/ftpshare</Interactionvariable>
      <interactionvariable name="OFSAAI_SFTP_USER_ID">mediapack</Interactionvariable>
    </interactiongroup>
  </layer>
</UserInteractions>

```

3. Configure the OFSAAI_InstallConfig.xml:
4. You need to manually set the InteractionVariable parameter values as mentioned in the table. If a value is not applicable, enter **NA** and ensure that the value is not entered as **NULL**.

InteractionVariable Name		
<Layer name="GENERAL">		
WEBAPPSERVERTYPE	<p>Identifies the web application server on which the OFSAAI Infrastructure web components would be deployed.</p> <p>Following numeric value should be set depending on the type:</p> <p>Apache Tomcat = 1</p> <p>IBM WebSphere Application Server = 2</p> <p>Oracle WebLogic Server = 3</p> <p>For example, <InteractionVariable name="WEBAPPSERVERTYPE">3</InteractionVariable></p>	Yes

InteractionVariable Name		
DBSERVER_IP	<p>Identifies the hostname or IP address of the system on which the Database Engine is hosted.</p> <p>Note: For RAC Database , the value should be NA.</p> <p>For example, <InteractionVariable name="DBSERVER_IP">14.15.16.17</InteractionVariable> or <InteractionVariable name="DBSERVER_IP">dbhost.server.com</InteractionVariable></p>	Yes
ORACLE_SID/SERVICE_NAME	<p>Identifies the Oracle DB Instance SID or SERVICE_NAME</p> <p>Note: The Oracle_SID value should be exactly the same as it is mentioned in JDBC_URL.</p> <p>For example, <InteractionVariable name="ORACLE_SID/SERVICE_NAME">ofsaser</InteractionVariable></p>	Yes
ABS_DRIVER_PATH	<p>Identifies the directory where the JDBC driver (ojdbc<version>.jar) exists. This would typically be the \$ORACLE_HOME/jdbc/lib</p> <p>For example, <InteractionVariable name="ABS_DRIVER_PATH">"/oradata6/revwb7/oracle</InteractionVariable></p> <p>Note: Refer Appendix O for identifying the correct "ojdbc<version>.jar" version to be copied.</p>	Yes
OLAP_SERVER_IMPLEMENTATION	<p>Identifies if the OFSAA Infrastructure OLAP component needs to be configured depending on whether you intend to use the OLAP feature.</p> <p>Following numeric value should be set depending on the choice:</p> <p>YES - 1</p> <p>NO - 0</p>	No
<p>Note: If value for OLAP_SERVER_IMPLEMENTATION is set to 1, it checks for following environment variables are set in .profile: ARBORPATH, HYPERION_HOME and ESSBASEPATH.</p>		

InteractionVariable Name		
SFTP_ENABLE	Identifies if the SFTP (Secure File Transfer Protocol) feature is to be enabled. Following numeric value should be set depending on the choice: SFTP - 1 FTP - 0	Yes
<p>Note: The default value for SFTP_ENABLE is 1, which signifies that SFTP will be used. Oracle recommends using SFTP instead of FTP because SFTP is considered more secure. However, a client may choose to ignore this recommendation and to use FTP by setting SFTP_ENABLE to 0. This selection may be changed later by using the OFSAAI administration interface.</p>		
FILE_TRANSFER_PORT	Identifies the port used for the file transfer service. The default value specified is 22 (SFTP). Specify value as 21 or any other PORT value if value for SFTP_ENABLE is 0. For example, <InteractionVariable name="FILE_TRANSFER_PORT">21</InteractionVariable>	Yes
LOCALE	Identifies the locale information to be used during the installation. This release of the OFSAA Infrastructure supports only US English. For example, <InteractionVariable name="LOCALE">en_US</InteractionVariable>	Yes
<p>Note: Following ports are used internally by the various OFSAA Infrastructure services. Following default values are set in the installation. If you intend to specify a different value, update the parameter value accordingly and ensure this port value is in the range of 1025 to 65535 and the respective port is enabled.</p>		
JAVAPORT	9999	Yes
NATIVEPORT	6666	Yes
AGENTPORT	6510	Yes
ICCPORT	6507	Yes
ICCNATIVEPORT	6509	Yes
OLAPPORT	10101	Yes
MSGPORT	6501	Yes
ROUTERPORT	6500	Yes
AMPORT	6505	Yes

InteractionVariable Name		
<p>Note: If value for HTTPS_ENABLE is set to 1, ensure you have a valid certificate available from a trusted CA and the same is configured on your web application server. For more details on configuring your setup for HTTPS.</p>		
HTTPS_ENABLE	<p>Identifies if the UI should be accessed using HTTP or HTTPS scheme. The default value set is 0. Following numeric value should be set depending on the choice:</p> <p>YES - 1 NO - 0</p> <p>For example, <code><InteractionVariable name="HTTPS_ENABLE">0</InteractionVariable></code></p>	Yes
WEB_SERVER_IP	<p>Identifies the HTTP Server IP/ Hostname or Web Application Server IP/ Hostname, to be used for accessing the UI. This IP would typically be the HTTP Server IP.</p> <p>If no separate HTTP Server is available, the value should be Web Application Server IP/Hostname.</p> <p>For example, <code><InteractionVariable name="WEB_SERVER_IP">10.11.12.13</InteractionVariable></code></p> <p>or</p> <p><code><InteractionVariable name="WEB_SERVER_IP">myweb.server.com</InteractionVariable></code></p>	No
WEB_SERVER_PORT	<p>Identifies the Web Server Port. This would typically be 80 for non SSL and 443 for SSL. If no separate HTTP Server exists, the value should be the port configured for Web Server.</p> <p>Note: The port value will not be accepted as 80 if HTTPS_ENABLE is 1 and as 443, if HTTPS_ENABLE is 0.</p> <p>For example, <code><InteractionVariable name="WEB_SERVER_PORT">80</InteractionVariable></code></p>	No

InteractionVariable Name		
CONTEXT_NAME	<p>Identifies the web application context name which will be used to built the URL to access the OFSAA applications. Following context name can be identified from a URL:</p> <pre><scheme>://<host>:<port>/<context-name>/login.jsp</pre> <p>Sample URL:</p> <pre>https://myweb:443/ofsaadev/login.jsp</pre> <p>For example, <InteractionVariable name="CONTEXT_NAME">ofsaadev</InteractionVariable></p>	Yes
WEBAPP_CONTEXT_PATH	<p>Identifies the absolute path of the exploded .ear file on the web application server.</p> <p>For Tomcat, specify the Tomcat directory path till /webapps, such as</p> <pre>/oradata6/revwb7/tomcat/webapps/</pre> <p>For WebSphere, enter the WebSphere path as</p> <pre><WebSphere profile directory>/installedApps/ <NodeCellName>. For example, /data2/test/WebSphere/AppServer/profiles/ <Profile_ Name>/installedApps/aix-imfNode01Cell. Where aix-imf is Host name.</pre> <p>For WebLogic, provide the WebLogic home directory path as /<WebLogic home directory path>/bea/wlserver_10.3</p> <p>Note: For WebLogic, value specified for this attribute is ignored and value provided against attribute WEBLOGIC_DOMAIN_HOME is considered.</p>	Yes
WEB_LOCAL_PATH	<p>Identifies the absolute path to any directory on the web application server that can hold temporary files being uploaded as part of the applications usage. User can set this in FTPSHARE location to avoid the confusion</p> <p>Note: In case of a clustered deployment, ensure this path and directory is same on all the nodes.</p>	Yes

InteractionVariable Name		
WEBLOGIC_DOMAIN_HOME	<p>Identifies the WebLogic Domain Home. Specify the value only if WEBSERVERTYPE is set as 3 (WebLogic).</p> <p>For example, <InteractionVariable name="WEBLOGIC_DOMAIN_HOME"/>/home/weblogic/bea/user_projects/domains/mydomain</InteractionVariable></p>	Yes Specify the value only if WEBSERVERTYPE is set as 3 (WebLogic)
OFSAAI_FTPSHARE_PATH	<p>Identifies the absolute path to the directory identified as file system stage area.</p> <p>Note:</p> <p>The directory should exist on the same system on which the OFSAA Infrastructure is being installed (can be on a separate mount).</p> <p>The user mentioned in APP_SFTP_USER_ID parameter below should have RWX permission on the directory.</p> <p>For example, <InteractionVariable name="APP_FTPSHARE_PATH"/>/oradata6/revwb7/ftpshare</InteractionVariable></p>	Yes
OFSAAI_SFTP_USER_ID	Identifies the user who has RWX permissions on the directory identified under parameter APP_FTPSHARE_PATH above.	Yes

19 Appendix N - User Group Mapping

Application specific User Group mappings:

- **PFT:**
 - Profitability Application Administrator
 - Profitability Application Analyst
 - Profitability Application Auditor

- **FTP:**
 - Fund Transfer Pricing Application Administrator
 - Fund Transfer Pricing Application Analyst
 - Fund Transfer Pricing Application Auditor

- **IPA:**
 - IPA Administrator
 - IPA BI Analyst
 - IPA Data Analyst

- **RPA:**
 - RPA Administrator
 - RPA BI Analyst
 - RPA Data Analyst

- **EFPA:**
 - EFPA Administrator
 - EFPA BI Analyst
 - EFPA Data Analyst

20 Appendix O – Web Services Configuration

20.1 Introduction

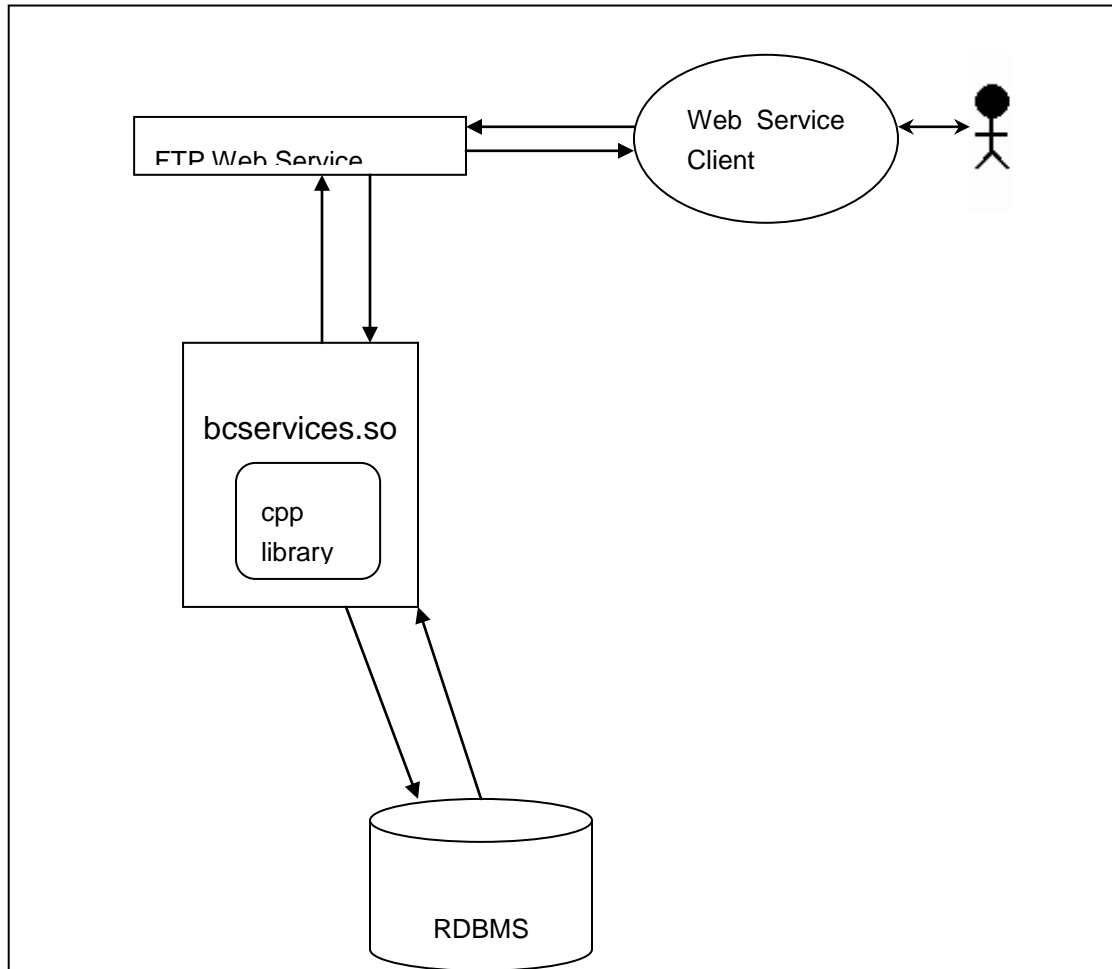
The calculation logic is derived from FTP engine component. This is an extension of Reveleus Callable Service (EXEWebService).

Note: This is applicable only for Tomat application server.

Approach

The FTP web service has to be integrated with the EXEWebService. This web service calls ftp engine library for the calculation of economic cost. This is an extension to the web service released by Reveleus Platform. However, FTP web service will be available in the same context but a separate wsdl. Both the services are based on the same framework and share the same configuration but functionally independent of each other.

Architecture



Pre-requisites

Application version installed should be 6.0.3 and above .

ExeWebService provided by platform should be up and running before proceeding to the configuration.

Please refer Exeweb service configuration in OFSAAI installation manual.

Check the table "fsi_economic_cost_hist" should present in atomic schema.

20.2 Configuration

Validate table fsi_economic_cost_hist

Check if atomic has the table fsi_economic_cost_hist. If so execute following sql statements in atomic schema

```
alter table FSI_ECONOMIC_COST_HIST add INSTRUMENT_TYPE_CODE_CUR NUMBER(5)
```

```
/
```

```
alter table FSI_ECONOMIC_COST_HIST add TP_METHOD_CODE_CUR NUMBER(5)
```

```
/
```

```
alter table FSI_ECONOMIC_COST_HIST add TP_RATE_CUR NUMBER(10,6)
```

```
/
```

```
alter table FSI_ECONOMIC_COST_HIST add INSTRUMENT_TYPE_CODE_PRIOR  
NUMBER(5)
```

```
/
```

```
alter table FSI_ECONOMIC_COST_HIST add TP_METHOD_CODE_PRIOR NUMBER(5)
```

```
/
```

```
alter table FSI_ECONOMIC_COST_HIST add TP_RATE_PRIOR NUMBER(10,6)
```

```
/
```

Integration with EXEWebService

- Go to the platform path where EXEWebService is deployed.
- Go to following path:
Example: &FIC_HOME/EXEWebService/Tomcat
- Run "ant.sh" in this folder. (No need for deploying anything. Just run ant.sh)
- EXEWebServiceAxis.war will be created in the same folder.
- Copy the above war to folder where FTP war file is present. i.e. webapps folder of apache tomcat directory.
- Restart the server.(ROOT folder will be generated) Folder structure will be created in the same directory.
- Go to EXEWebServiceAXIS/WEB-INF/web.xml and add an entry as below.(tomcat /EXEWebService) enclosed by<web-app> </web-app> tags.

```
<servlet>
```

```
  <servlet-name> OFSAAFTPService </servlet-name>
```

```
<servlet-  
class>com.sun.xml.ws.transport.http.servlet.WSServlet</servlet-  
class>  
<load-on-startup>2</load-on-startup>  
</servlet>  
<servlet-mapping>  
  <servlet-name> OFSAAFTPService </servlet-name>  
  <url-pattern> /services/OFSAAFTPService </url-pattern>  
</servlet-mapping>
```

- After configuring in web.xml, the wsdl definition is done.
- Open the file EXEWebServiceAXIS/ WEB-INF/ sun-jaxws.xml and add an entry as below.

Entry for service endpoint in sun-jaxws.xml(only for tomcat)

```
<endpoint  
      implementation="com.ofs.fsapps.ftp.ws.OFSAAFTPService"  
name="OFSAAFTPService" url-pattern="/services/OFSAAFTPService"/>  
</endpoints></endpoints>
```

enclosed by <endpoints></endpoints> tags.

Reference:

- For application version 6.0.3 and find the ftpws.jar in following path:

&FIC_HOME/EXEWebService/<webserver>/ROOT/WEB-INF/lib

copy the jar into EXEWebServiceAXIS/WEB-INF/lib

ftpws.jar has to be placed in lib directory of EXEWebServiceAXIS. this jar file contains the code of ftp web service.

Tomcat/web-INF/lib:

Create log4j.properties and ofsaaws.properties in to EXEWebServiceAXIS / WEB-INF/ classes.

Logging FTP web service - log4j.properties

Specify the log directory name inside this file. For example

Log=<path of the log folder>. A log file named as webservice.log will be generated inside the specified folder. This log file only logs the activities of FTP web service.

Log4j entries

```
log =<deployment path>/EXEWebServiceAXIS/logs
```

```
log4j.rootLogger = DEBUG, file
```

```
# Define the file appender
```

```
log4j.appender.file=org.apache.log4j.RollingFileAppender
```

```
log4j.appender.file.File=${log}/webservice.log
```

```
log4j.appender.file.Append=true
```

```
log4j.appender.file.MaxFileSize=5000kb
```

```
log4j.appender.file.MaxBackupIndex=2
```

```
log4j.appender.file.layout=org.apache.log4j.PatternLayout
```

```
log4j.appender.file.layout.ConversionPattern=%-5p %d [%t] %c: %m%n
```

Note: Restart server server after doing any modification.

Setup Environment variable - ofsaaws.properties

ofsaaws.properties file need to place under WEB-INF/classes folder. Specify the infodom name and cpp_component name. Component name is a libbcservices, placed under /ficdb/lib/libFSGBU. The folder location is added to the Reveleus classpath.

Add following entries in ofsaaws.properties file

```
infodom=FTP60INFO
```

```
cpp_component=bcservices
```

- `cpp_component=libbcservices.so(libbcservices.o) ----for AIX`
- `cpp_component=bcservices -----for Solaris`
- `cpp_component=bcservices.so -----for linux`
- Restart the server and open the wsd as per the url mapping in web.xml

Example for URL :-

<http://10.184.134.22:7075/EXEWebService/OFSAFTPService?wsdl>

WebLogic Specific configuration

EXEWebservice.ear created for weblogic server.

- In the web.xml replace the

```
<web-app xmlns="http://java.sun.com/xml/ns/j2ee"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

with the following text.

```
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://java.sun.com/xml/ns/javaee"
  xmlns:web="http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
  xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
  http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd" id="WebApp_ID"
  version="2.5">
```

1. copy the ftpws.jar to the lib directory of ExeWebservice.
2. wsdl will be available directly under the web context. for an example

<http://10.184.134.22:7075/EXEWebService/OFSAFTPService?wsdl>

FTP service

- Web service can be accessible using the service end point or wsdl url.
- Request has to be a String in a specific format given in below file.

```
<?xml version="1.0"?>
<ECONOMIC_COST TYPE="REQUEST">
<CURRENT>
<ACCOUNT_NUMBER DATATYPE="VARCHAR2 (30) "
>000048602~0</ACCOUNT_NUMBER>
<AS_OF_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20090307</AS_OF_DATE>
<CURRENT_NET_RATE DATATYPE="NUMBER (10,6) " >4.9</CURRENT_NET_RATE>
<ORIGINAL_TERM_TO_MATURITY DATATYPE="NUMBER (5) "
>33</ORIGINAL_TERM_TO_MATURITY>
<ORIGINAL_TERM_MULTIPLIER DATATYPE="CHAR (1) "
>M</ORIGINAL_TERM_MULTIPLIER>
<PAYMENT_FREQUENCY DATATYPE="NUMBER (5) " >1</PAYMENT_FREQUENCY>
```

```

<PAYMENT_FREQUENCY_MULTIPLIER DATATYPE="CHAR(1) "
>M</PAYMENT_FREQUENCY_MULTIPLIER>
<ADJUSTABLE_TYPE_CODE DATATYPE="NUMBER(5) " >0</ADJUSTABLE_TYPE_CODE>
<CURRENT_GROSS_BOOK_BALANCE DATATYPE="NUMBER(14,2) "
>60000</CURRENT_GROSS_BOOK_BALANCE>
<ACCRUAL_BASIS_CODE DATATYPE="NUMBER(5) " >4</ACCRUAL_BASIS_CODE>
<AMORTIZATION_TERM DATATYPE="NUMBER(5) " ></AMORTIZATION_TERM>
<AMORTIZATION_TERM_MULTIPLIER DATATYPE="CHAR(1) "
>Y</AMORTIZATION_TERM_MULTIPLIER>
<AMORTIZATION_TYPE_CODE DATATYPE="NUMBER(5) "
></AMORTIZATION_TYPE_CODE>
<CURRENT_GROSS_PAR_BALANCE DATATYPE="NUMBER(14,2) "
>60000</CURRENT_GROSS_PAR_BALANCE>
<CURRENT_PAYMENT_AMOUNT DATATYPE="NUMBER(14,2) "
></CURRENT_PAYMENT_AMOUNT>
<INTEREST_RATE_CODE DATATYPE="NUMBER(5) " >210</INTEREST_RATE_CODE>
<LAST_REPRICING_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20111208</LAST_REPRICING_DATE>
<MATURITY_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20111208</MATURITY_DATE>
<NEXT_PAYMENT_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
></NEXT_PAYMENT_DATE>
<NEXT_REPRICING_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20111208</NEXT_REPRICING_DATE>
<ORIGINAL_GROSS_PAR_BALANCE DATATYPE="NUMBER(14,2) "
>120000.00</ORIGINAL_GROSS_PAR_BALANCE>
<ORIGINATION_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20111208</ORIGINATION_DATE>
<ISSUE_DATE DATATYPE="DATE" FORMAT="YYYYMMDD" >20111208</ISSUE_DATE>
<REMAINING_NO_OF_PAYMENTS DATATYPE="NUMBER(5) "
></REMAINING_NO_OF_PAYMENTS>
<LAST_PAYMENT_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20090307</LAST_PAYMENT_DATE>
<INTEREST_TYPE_CODE DATATYPE="NUMBER(5) " >1</INTEREST_TYPE_CODE>
<COMPOUNDING_BASIS_CODE DATATYPE="NUMBER(5) "
>120</COMPOUNDING_BASIS_CODE>

```

```

<REPRICING_FREQUENCY DATATYPE="NUMBER(5)" >0</REPRICING_FREQUENCY>
<REPRICING_FREQUENCY_MULTIPLIER DATATYPE="CHAR(1)"
>M</REPRICING_FREQUENCY_MULTIPLIER>
</CURRENT>
<PRIOR>
<ACCOUNT_NUMBER DATATYPE="VARCHAR2(30)"
>000048602~0</ACCOUNT_NUMBER>
<AS_OF_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20090307</AS_OF_DATE>
<CURRENT_NET_RATE DATATYPE="NUMBER(10,6)" >4.9</CURRENT_NET_RATE>
<ORIGINAL_TERM_TO_MATURITY DATATYPE="NUMBER(5)"
>33</ORIGINAL_TERM_TO_MATURITY>
<ORIGINAL_TERM_MULTIPLIER DATATYPE="CHAR(1)"
>M</ORIGINAL_TERM_MULTIPLIER>
<PAYMENT_FREQUENCY DATATYPE="NUMBER(5)" >1</PAYMENT_FREQUENCY>
<PAYMENT_FREQUENCY_MULTIPLIER DATATYPE="CHAR(1)"
>M</PAYMENT_FREQUENCY_MULTIPLIER>
<ADJUSTABLE_TYPE_CODE DATATYPE="NUMBER(5)" >0</ADJUSTABLE_TYPE_CODE>
<CURRENT_GROSS_BOOK_BALANCE DATATYPE="NUMBER(14,2)"
>100000</CURRENT_GROSS_BOOK_BALANCE>
<ACCRUAL_BASIS_CODE DATATYPE="NUMBER(5)" >4</ACCRUAL_BASIS_CODE>
<AMORTIZATION_TERM DATATYPE="NUMBER(5)" ></AMORTIZATION_TERM>
<AMORTIZATION_TERM_MULTIPLIER DATATYPE="CHAR(1)"
>Y</AMORTIZATION_TERM_MULTIPLIER>
<AMORTIZATION_TYPE_CODE DATATYPE="NUMBER(5)"
></AMORTIZATION_TYPE_CODE>
<CURRENT_GROSS_PAR_BALANCE DATATYPE="NUMBER(14,2)"
>100000</CURRENT_GROSS_PAR_BALANCE>
<CURRENT_PAYMENT_AMOUNT DATATYPE="NUMBER(14,2)"
></CURRENT_PAYMENT_AMOUNT>
<INTEREST_RATE_CODE DATATYPE="NUMBER(5)" >210</INTEREST_RATE_CODE>
<LAST_REPRICING_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20111208</LAST_REPRICING_DATE>
<MATURITY_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20111208</MATURITY_DATE>

```

```

<NEXT_PAYMENT_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
></NEXT_PAYMENT_DATE>
<NEXT_REPRICING_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20111208</NEXT_REPRICING_DATE>
<ORIGINAL_GROSS_PAR_BALANCE DATATYPE="NUMBER(14,2)"
>160000.00</ORIGINAL_GROSS_PAR_BALANCE>
<ORIGINATION_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20111208</ORIGINATION_DATE>
<ISSUE_DATE DATATYPE="DATE" FORMAT="YYYYMMDD" >20111208</ISSUE_DATE>
<REMAINING_NO_OF_PAYMENTS DATATYPE="NUMBER(5)"
></REMAINING_NO_OF_PAYMENTS>
<LAST_PAYMENT_DATE DATATYPE="DATE" FORMAT="YYYYMMDD"
>20090307</LAST_PAYMENT_DATE>
<INTEREST_TYPE_CODE DATATYPE="NUMBER(5)" >1</INTEREST_TYPE_CODE>
<COMPOUNDING_BASIS_CODE DATATYPE="NUMBER(5)"
>120</COMPOUNDING_BASIS_CODE>
<REPRICING_FREQUENCY DATATYPE="NUMBER(5)" >0</REPRICING_FREQUENCY>
<REPRICING_FREQUENCY_MULTIPLIER DATATYPE="CHAR(1)"
>M</REPRICING_FREQUENCY_MULTIPLIER>
</PRIOR>
<PAYMENTSCHEDULE>
<SCHEDULE>
<AMOUNT DATATYPE="NUMBER(14,2)" ></AMOUNT>
<DATE DATATYPE="DATE" FORMAT="YYYYMMDD" ></DATE>
</SCHEDULE>
</PAYMENTSCHEDULE>
<INTERPOLATION_METHOD DATATYPE="NUMBER(5)" >1</INTERPOLATION_METHOD>
<SERVICE_TYPE DATATYPE="CHAR(1)" >A</SERVICE_TYPE>
</ECONOMIC_COST>

```

1. Response will be a text in xml style. Example given below.

```

<?xml version="1.0" encoding="UTF-8"?>
<ECONOMIC_COST TYPE="RESPONSE" STATUS="0" >
<ACCOUNT_NUMBER
DATATYPE="VARCHAR2(25)">000000000000418~000000000000418

```

```
</ACCOUNT_NUMBER>
<ECONOMIC_COST DATATYPE="NUMBER(14,2)">122.16682953958662
</ECONOMIC_COST>
<REFERENCE_ID DATATYPE="VARCHAR2(20)">1341964336155</REFERENCE_ID >
<ERROR_MSG DATATYPE="VARCHAR2(1000)">success</ERROR_MSG>
</ECONOMIC_COST>
```

2. Instrument records and the calculated economic cost will be stored to the Table named as **fsi_economic_cost_hist** incase of actual request. That is in the request SERVICE_TYPE parameter value should be A. If it is S then it just a simulation. And it doesn't log to the above table. Response contains a reference_id which will be store to the table as unique identified. This happens only for actual request type.

Note: The FTP web service will only work if you have Reveleus Callable Service installed and configure. this service will be available in the same context but as a diffrent WSDL. Deployment of FTP web service is the integration to the EXEWebserviceAIX released by Reveleus Platform.

21 Appendix P – R Dependencies

R Dependencies

R code of the application requires dependent packages to be installed before the Reporting Line Forecast batch is executed. Usage of the predictive model requires installation of packages - tseries, lattice, and R Oracle. Verify that lattice and R Oracle are compatible with each other.

Package installation instructions can be found at: <http://cran.r-project.org/doc/manuals/r-release/R-admin.html#Installing-packages>

22 Appendix Q – Visibility

22.1 Data visibility

Data visibility refers to the data control established on the results fetched by reports depending on the user logged in.

For each user, only those accounts which are directly handled or are handled by a subordinate are visible.

If the logged in user is an RM, then only those accounts which are associated to that user's organizational hierarchy will be fetched. This is achieved through FSI_M_USER_MANAGER_MAP table.

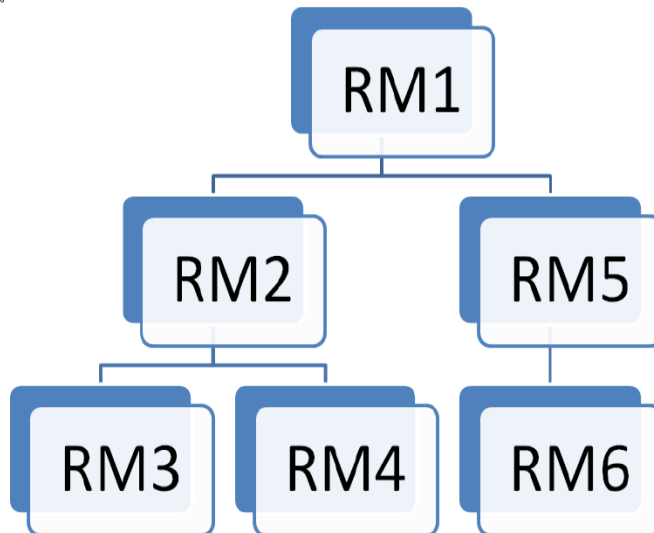
If a user is Relationship Manager (RM), then the particular log in ID and the manager code from DIM_MANAGEMENT table have to be populated into FSI_M_USER_MANAGER_MAP table. Also, the table FCT_ACCOUNT_MGR_REL should have the necessary details for the relationship manager to account mapping.

A user logging in without any associated Manager code should have access to the entire data available.

The entries to FSI_M_USER_MANAGER_MAP table have to be manually inserted. It has two columns, V_USERNAME and V_MANAGER_CODE. The V_USERNAME has to be inserted with the login username created in OBIEE and V_MANGER_CODE has to be inserted with the manager code of the corresponding user from DIM_MANAGEMENT table.

Example

The following diagram depicts a hierarchy of Relationship Managers:



The data visibility for each of the Relationship Managers, starting from the top of the hierarchy is as follows:

- RM1 user has control over the data associated to that user along with the data associated to the immediate subordinates, that is, RM2, RM5, and their subordinates till the end of the hierarchy.
- RM2 user has control over the data associated to that user along with the data associated to the immediate subordinates, that is, RM3, RM4, and their subordinates till the end of the hierarchy.
- RM5 user has control over the data associated to that user along with the data associated to the immediate subordinate, that is, RM6 and his subordinates till the end of the hierarchy.

If the logged in user is a Sales Representative (SR), the data associated with the opportunities managed by the respective Sales Representatives are visible. Each Sales Representative will have unique key values and accounts related to those keys are displayed in reports.

22.2 Report visibility

The Report's visibility are restricted as per below.

Application Role	Dashboards Available
Business Analyst	<ul style="list-style-type: none"> • Summary • Customer Summary • Cross-Sell • Top 10 Opportunities • Opportunities • Activities • Customer Performance • Product Performance • Line of Business Performance • Balance Sheet
Relationship Manager	<ul style="list-style-type: none"> • Opportunities • Activities • Relationship Manager Performance
Sales Representative	<ul style="list-style-type: none"> • Opportunities • Activities

Administrator	<ul style="list-style-type: none"> • All Reports
---------------	---

The Reports visibility for the different roles has to be handled by setting proper catalog Permissions. The steps to setup these permissions are described in *Setting Up Dashboard Visibility* under Configure Roles and Groups of this document.

22.3 Metadata Visibility

Accessibility to presentation layer objects for creating ad-hoc reports varies from user-to-user depending on the application role the user is allocated.

The following are the requirements for viewing the metadata in RPD:

Application Role	Tables for Ad-hoc Reporting
Business Analyst role	<ul style="list-style-type: none"> • Fact-Account Summary • Fact Account Profitability • Fact Opportunity • Fact Opportunity Activity • Fact Management Forecast • Fact Customers
Relationship Manager role	<ul style="list-style-type: none"> • Fact Relationship Manager Contribution • Fact Relationship Manager Profitability • Fact Opportunity • Fact Opportunity Activity
Sales Representative role	<ul style="list-style-type: none"> • Fact Opportunity • Fact Opportunity Activity • Fact Sales Representative Compensation
Administrative role (WebLogic)	<ul style="list-style-type: none"> • All tables

23 Appendix R – Migration for Excel Upload

This appendix provides detailed instructions to migrate for excel upload.

23.1.1 Prerequisites

The following are the prerequisites for migration.

- Data model in ATOMIC schemas should be same on the source and target setups.
- OFS AAI (platform) patch level version should be same on the source and target setups.
- PL/SQL Developer to connect and query the database.
- WinSCP to connect and access server file system.

23.1.2 Migration for Excel Upload

To migrate, follow these steps:

1. Open PL/SQL Developer and logon to the source setup's configuration (CONFIG) schema by entering the appropriate username and password.
2. In a new SQL window query the data of table `EXCEL_MAPPING_MASTER`.
3. Open a new session in PL/SQL developer and logon to the target setup's configuration (CONFIG) schema by entering the appropriate username and password.
4. Insert the records from Step 1 above in to this table.
5. In `V_INFODOM` column of `EXCEL_MAPPING_MASTER` table update the infodom name with the target infodom name.

NOTE: If all the mappings can work out of the single target Infodom, update same Infodom value across all rows. If only few mappings will work out of the target infodom, update the infodom value for selective records. Excel upload mappings will work only if the target infodom has same data model entities as used in the mappings defined on source setup.

6. Update `V_CREATED_BY` column with the name of any user present in the target setup that has appropriate roles to perform Excel Upload tasks.

NOTE: It is mandatory to update values for `V_INFODOM` and `V_CREATED_BY` columns.

7. Open WinSCP and login a new session by entering the host name, port number, user name and password to access the source setup.

-
8. Navigate to the folder referred as FTPSHARE.
 9. Copy the excel-entity mapping xml file(s) which are located in this folder according to their folder structure on to your desktop. For example: /ftpshare
/STAGE/ExcelUpload/\$SOURCE_INFODOM_NAME/\$EXCEL_FILE_NAME.xml

NOTE: Actual file name of Excel Sheet is mentioned in the
V_EXCEL_NAME column of EXCEL_MAPPING_MASTER table.

10. Copy the excel templates (.xls/ .xlsx) file(s) which are located in this folder according to their folder structure on to your desktop. For example:
/ftpshare/STAGE/ExcelUpload/TEMPLATE/*.xls or *.xlsx

NOTE: Ignore this step if files are not present at the location.

11. Login a new session in WinSCP by entering the host name, port number, user name and password to access the target setup.

12. Copy the xml file(s) from Step3 to the following location in the target setup. For example:
/ftpshare/STAGE/ExcelUpload/\$TARGET_INFODOM_NAME/\$EXCEL_FILE_NAME
.xml

NOTE: \$TARGET_INFODOM_NAME should be target setup
infodomain in which you have uploaded the appropriate data model and the name
should be same as the V_INFODOM column value updated in
EXCEL_MAPPING_MASTER table.

13. Copy the xls/ xlsx file(s) from Step 3 to the following location in target setup. For example: /ftpshare/STAGE/ExcelUpload/TEMPLATE/*.xls or *.xlsx

NOTE: Ignore this step if files are not present at the location.

24 Appendix S - JDBC Jar Files

The `ojdbc<version>.jar` file should be copied based on Database & Java version. Refer to the following table for details.

Oracle Database version	JDK/JRE Version supported	JDBC Jar files specific to the release
12.1 or 12cR1	JDK 8, JDK 7 and JDK 8	ojdbc7.jar for JDK 7/JDK 8
11.2 or 11gR2	JDK 7 supported in 11.2.0.3 and 11.2.0.4	ojdbc6.jar for JDK 7

25 Appendix T - Upgrading an Existing OFSAA 8.0.x Java 7 Instance to Java 8

This section explains the configurations required to upgrade an existing OFSAA 8.0.x Java 7 instance to Java 8. It consists of the following topics:

- [Prerequisites](#)
- [Steps for upgrading OFSAA 8.0.x Java 7 instance to Java 8](#)
- [Web Application Server Configurations](#)
- [OFSAA Generic Configurations](#)
- [OFSAA Configurations for New Web Application Server Installation](#)

25.1 Prerequisites

The following are the prerequisites for upgrading OFSAA 8.0.x Java 7 instance to Java 8:

- Java 8 should be installed on the OFSAA server and Web Application Server.
- Oracle WebLogic Server should be 12.1.3.0 or above. Download and install patch 18729264 from <http://support.oracle.com/>

Note: IBM WebSphere 8.5.x (Full Profile) on Java 8 is not available.

25.2 Steps for upgrading OFSAA 8.0.x Java 7 instance to Java 8

To upgrade OFSAA 8.0.x Java 7 instance to Java 8, follow these steps:

1. Configure Web Application Server to Java 8. For more information, refer [Web Application Server Configurations](#).
2. Configure the OFSAA instance to Java 8. For more information, refer [OFSAA Generic Configurations](#). For a newly installed Web Application Server, refer [OFSAA Configurations for New Web Application Server Installation](#)
3. Restart the OFSAA services. For more information, refer the *Start/Stop Infrastructure Services* section in [Appendix D](#)
4. Generate the application EAR/WAR file and redeploy the application onto your configured web application server. For more information on generating and deploying EAR / WAR file, refer [Appendix C](#).

25.3 Web Application Server Configurations

This section describes the changes to be made in the Web Application Server. Following are the two options to perform Web Application Server Configurations which are listed as follows:

- Upgrade the existing Web Application Server installation to Java 8
- Install a new instance of the Web Application Server with Java 8

This section consists of the following topics:

- [Oracle WebLogic Server Updates](#)
- [Apache Tomcat Server Updates](#)

25.3.1 Oracle WebLogic Server Updates

Perform the following configurations to upgrade the existing WebLogic server instance to Java 8:

1. Navigate to <WLS_HOME>/Middleware/Oracle_Home/wlserver.
2. Edit the product.properties file. Set JAVA_HOME, WLS_JAVA_HOME, JAVAHOME properties to the new Java path and java.vm.version to the new Java version. For example,

```
JAVA_HOME=/usr/java/jre1.8.0_45
WLS_JAVA_HOME=/usr/java/jre1.8.0_45
JAVAHOME=/usr/java/jre1.8.0_45
java.vm.version=1.8.0_45
```

3. Navigate to <WLS_HOME>/Middleware/Oracle_Home/user_projects/domains/<domain>/bin. Update SUN_JAVA_HOME, DEFAULT_JAVA_HOME, JAVA_HOME in the setDomainEnv.sh file to point to the new Java path. For example,

```
SUN_JAVA_HOME="/usr/java/jre1.8.0_45"
DEFAULT_SUN_JAVA_HOME="/usr/java/jre1.8.0_45"
JAVA_HOME="/usr/java/jre1.8.0_45"
```

4. Clear the Application cache. Navigate to the following path and delete the files:

```
<Weblogic installation location>/domains/<Domain name>/servers/<Server
name>/tmp/_WL_user/<Application name>/qaelce/jsp_servlet
```

If you wish to install a new instance of the Oracle WebLogic Server, follow these steps:

1. Install Oracle WebLogic Server 12.1.3.x on Java 8.
2. Perform the configurations for the newly installed WebLogic server. For more information refer [Configuring Resource Reference in Weblogic Application Server](#).

Note: While creating WebLogic Domain, the Listen Port should be set same as that of the existing Domain.

Note down the new Domain path to perform OFSAA Configurations.

25.3.2 Apache Tomcat Server Updates

Perform the following configurations to upgrade the existing Apache Tomcat Server from Java 7 to Java 8:

-
1. Login to the Apache Tomcat Server as a non-root user.
 2. Edit the user `.profile`. Update the value for `JAVA_HOME` from JRE 1.7 to JRE 1.8. For Example,

```
JAVA_HOME=/usr/java/jre1.8.0_45
```
 3. Clear the Application cache. Navigate to the following path and delete the files:

```
<Tomcat installation folder>/work/Catalina/localhost/<Application name>/org/apache/jsp
```

If you wish to install a new instance of the Apache Tomcat Server, follow these steps:

1. Install Apache Tomcat Server 8 with Java 8.
2. Perform the configurations for the newly installed Tomcat server. For more information refer [Configuring Resource Reference in Tomcat Application Server](#).

Note: Update the Connector Port in `/apache-tomcat-8.0.21/conf/server.xml` file to that of the existing Tomcat instance. Note down the new deployment path to perform OFSAA Configurations.

25.4 OFSAA Generic Configurations

This section consists of the following topics:

- [User .profile Settings](#)
- [Configurations for Java 8](#)

25.4.1 User .profile Settings

Perform the following configurations:

1. Login to the OFSAA Server as a non-root user.
2. Edit the user `.profile`. Update the value for `PATH` variable from JRE 1.7 to JRE 1.8. For Example,

```
PATH=/usr/java/jre1.8.0_45/jre
JAVA_BIN=/usr/java/jre1.8.0_45/jre/bin
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/java/jre1.8.0_45/jre/lib/amd64/server
```

25.4.2 Configurations for Java 8

Perform the configurations explained in the section [Configurations for Java 8](#)

25.5 OFSAA Configurations for New Web Application Server Installation

This configuration is required only if you have freshly installed Oracle WebLogic 12.1.3 or Apache Tomcat Server 8.0. Follow these steps:

-
1. Modify the following parameters in the Configuration table present in the Config Schema with the new Domain Path in case of WebLogic or with the new deployment path in case of Tomcat:
 - DeFiHome
 - REV_IMG_PATH
 - EMBEDDED_JSP_JS_PATH
 2. Login to the OFSAA Server as a non-root user.
 3. Navigate to `$FIC_HOME/ficweb/webroot/WEB_INF` and update the following parameters in the `web.xml` file with the new Domain path in case of WebLogic or with the new deployment path in case of Tomcat:
 - FIC_PHYSICAL_HOME_LOC
 - FIC_HOME
 - ICC_SERVLET_LOG_FILE
 4. Navigate to `$FIC_HOME/ficweb/webroot/conf` and update the Domain path in case of WebLogic or with the new deployment path in case of Tomcat:
 - OFSAALogger.xml
 - MDBLogger.xml
 - RevLog4jConfig.xml
 - RFDLogger.xml
 - ExportLog4jConfig.xml
 - RFDLogger.xml
 - PR2Logger.xml

26 Appendix U - Removing OFSAA

This chapter includes the following sections:

- [Uninstalling OFSAA Infrastructure](#)
- [Uninstalling EAR Files in WebSphere](#)
- [Uninstalling EAR Files in WebLogic](#)
- [Uninstalling WAR Files in Tomcat](#)

26.1 Uninstalling OFSAA Infrastructure

This section will guide you through the necessary steps to uninstall the OFSAA Infrastructure product.

Before you start the uninstallation process, ensure that no open connections exist to the OFSAA Infrastructure Config and Atomic Schemas and Infrastructure services are brought down.

To uninstall OFSAA Infrastructure:

1. Log in to the system as non-root user.
2. Navigate to the `$FIC_HOME` directory and execute the command:

```
./Uninstall.sh
```

3. Enter the password for OFSAAI Configuration Schema when prompted as shown in the following figure.

```
/scratch/ofsaadb/OFSAAI>./Uninstall.sh
Uninstallation Started [time : Tue Jun 10 14:20:27 IST 2014 ]
*****
*** Driver loaded with Driver oracle.jdbc.driver.OracleDriver

Please enter Configuration schema Password :
Connected to Config Schema
Cleaning config schema ....
config schema cleaned ...
Cleaning up Infrastructure Home Dir !
Please wait ..
Uninstallation Completed ! Thank You [time : Tue Jun 10 14:21:59 IST 2014 ]
*****
/scratch/ofsaadb/OFSAAI>
```

Figure 101: Uninstalling OFSAA Infrastructure

Note:

- Uninstallation does not remove the Infrastructure application from the Web Application Server. This has to be done manually.

- The entries in the `.profile` file will have to be removed manually.
- The files/ folders under the file system staging area (ftpsahre) have to be deleted manually.
- All the Database objects from Atomic Schemas have to be dropped manually.

26.2 Uninstalling EAR Files in WebSphere

Following are the steps to uninstall any previously deployed application:

1. Open the URL in the browser window : `http://<ipaddress>:<Administrative Console Port>/ibm/console` (https if SSL is enabled). The *Login* window is displayed.
2. Login with the user id that has admin rights.
3. Expand Applications > Application Types > WebSphere enterprise applications from the LHS. The *Enterprise Applications* window is displayed with all the deployed applications.

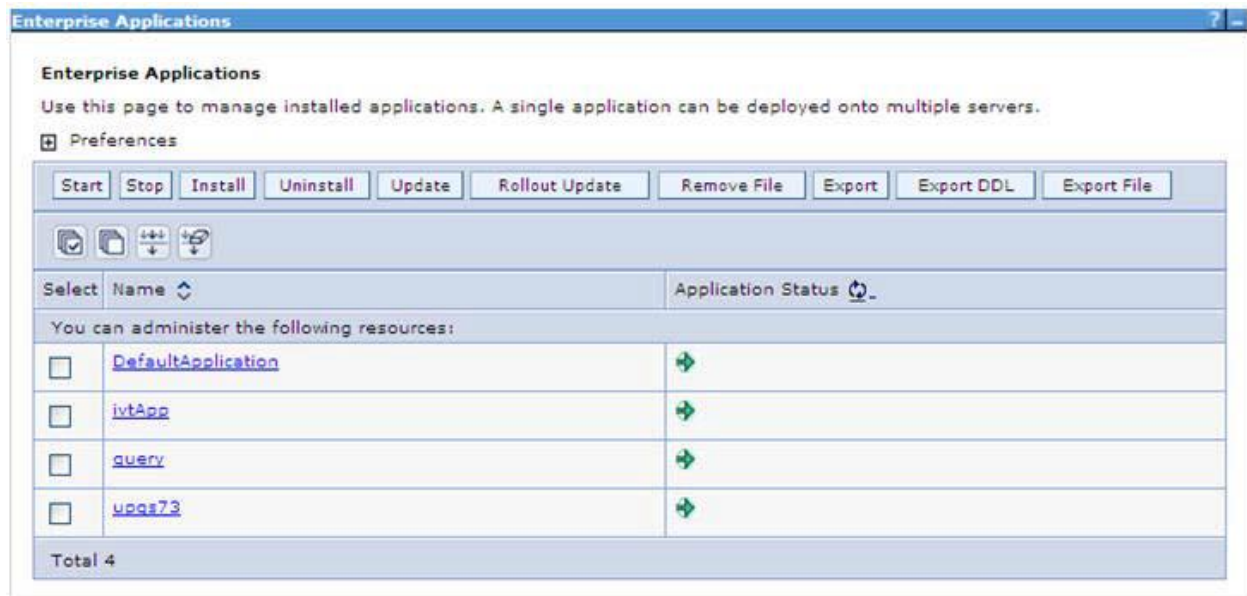


Figure 102: Enterprise Applications

4. Select the checkbox adjacent to the application to be uninstalled and click **Stop**.
5. Click **Uninstall**. The Uninstall Application window is displayed.

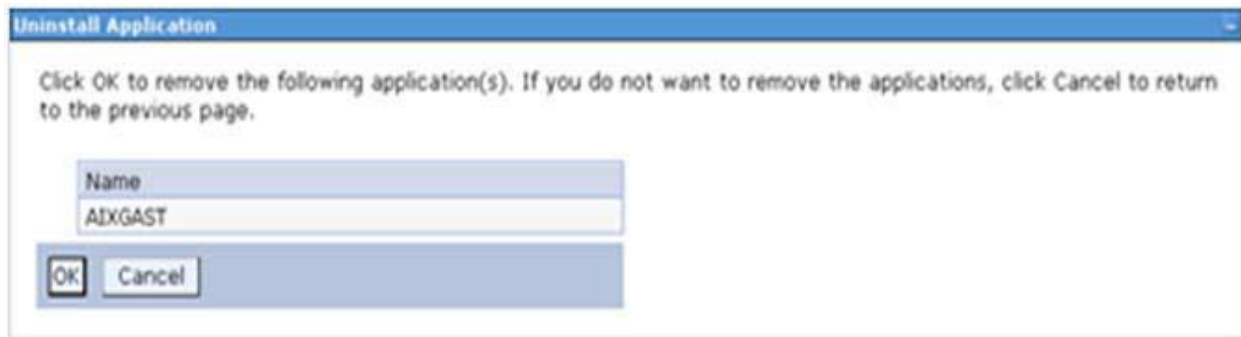


Figure 103: Uninstall Application

6. Click **OK** to confirm.
7. Click **Save** to save the master file configuration.

26.3 Uninstalling EAR Files in WebLogic

On the machine that hosts WebLogic, perform the following steps to uninstall any previously deployed application:

1. Open the URL in the browser window: `http://<ipaddress>:<admin server port>/console` (https if SSL is enabled). The Login window of the WebLogic Server Administration Console is displayed.
2. Login with the WebLogic user credentials having administrator privileges.
3. From the **Domain Structure** LHS menu, click **Deployments**. The *Summary of Deployments* screen is displayed.

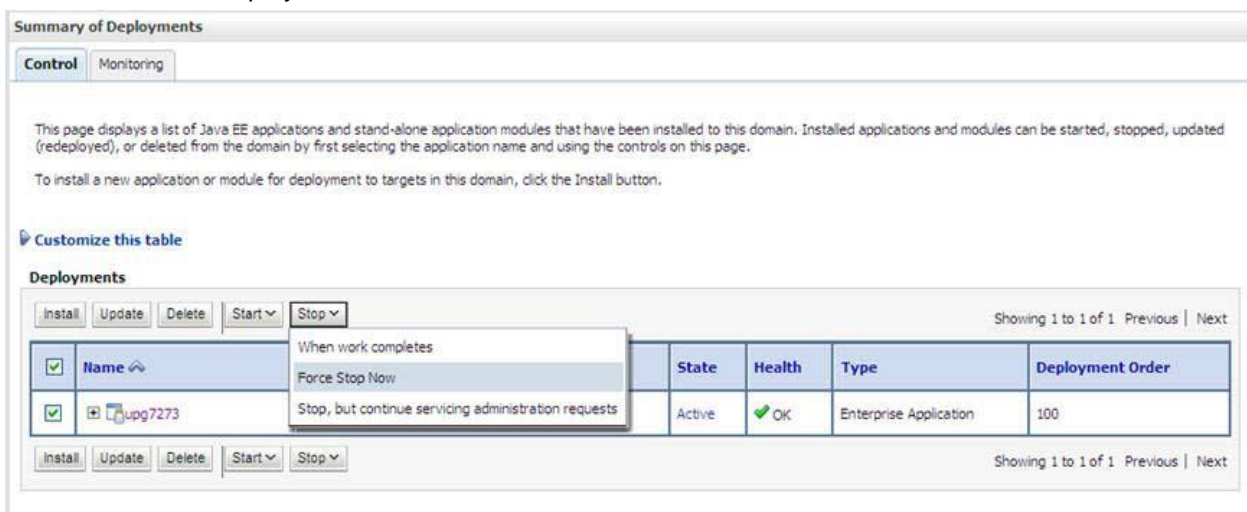


Figure 104: Summary of Deployments

4. Select the checkbox adjacent to the application to be uninstalled and click **Stop> Force Stop Now**.
5. Click **Yes** in the confirmation dialog to stop the selected deployment.

Figure 105: Summary of Deployments- Messages

6. Select the checkbox adjacent to the application and click **Delete** to delete the selected deployment.
7. Click **Yes** in the confirmation dialog to remove the selected deployment from the domain configuration.

26.4 Uninstalling WAR Files in Tomcat

On the machine that hosts Tomcat, perform the following steps to uninstall any previously deployed application:

1. Comment out Context path section from `server.xml` file in `$CATALINA_HOME/conf` directory to avoid conflict during undeploy and re-deploy of the WAR file.

Place comment `<!-- -->` in between the context path section. For example:

```
<!--
<Context path ="/pr2test" docBase="/home/perfuser/tomcat-
7.0.19/webapps/pr2test" debug="0" reloadable="true"
crossContext="true">
<Resource auth="Container"
name="jdbc/PR2ATM"
type="javax.sql.DataSource"
driverClassName="oracle.jdbc.driver.OracleDriver"
```

```

username="pr2atm"
password="pr2atm"
url="jdbc:oracle:thin:@10.184.74.99:1521:PERFTEST"
maxActive="100"
maxIdle="30"
maxWait="10000"/>
</Context>
-->

```

Restart the Tomcat service by doing the following:

- a. Login to the "Unix server" through a terminal emulator.
 - b. Navigate to \$catalina_home/bin directory.
 - c. Stop the tomcat services using the command ./shutdown.sh
 - d. Start the tomcat services using the command ./startup.sh
2. Open the URL in a browser window: http://<IP address>:<Tomcat server port>. (https if SSL is enabled). The Tomcat home window is displayed.
 3. Click the **Manager App**. The Connect to window is displayed.
 4. Login with the user credentials having admin rights. The Tomcat Web Application Manager window is displayed with the list of all applications deployed in Tomcat.

The Apache Software Foundation				
Tomcat Web Application Manager				
List Applications HTML Manager Help Manager Help Server Status				
Applications				
Path	Display Name	Running	Sessions	Commands
/	Welcome to Tomcat	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/docs	Tomcat Documentation	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/examples	Servlet and JSP Examples	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/host-manager	Tomcat Manager Application	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/manager	Tomcat Manager Application	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/ofsaajot	Reveleus web Application	true	1	Start Stop Reload Undeploy

Figure 106: Tomcat Web Application Manager

-
5. Click the **Undeploy** link against the deployed Infrastructure application. A confirmation message is displayed on the application /Infrastructure being uninstalled.

27 Appendix V- FAQs and Error Dictionary

This section of the document consists of resolution to the frequently asked questions and error codes noticed during OFSAAI installation.

- [Frequently Asked Questions](#)
- [Forms Framework FAQs](#)
- [Error Dictionary](#)

OFSAAI installer performs all the pre-requisite validation check during installation. Any errors encountered in the process is displayed with an appropriate Error Code. You can refer to the Error Dictionary to find the exact cause and resolution to rectify the error.

27.1 Frequently Asked Questions

You can refer to the Frequently Asked Questions which has been developed with the interest to help you resolve some of the OFSAAI Installation and configuration issues. This intends to share the knowledge of problem resolution to a few of the known issues. This is not an official support document and just attempts to share the knowledge of problem resolution to a few of the known issues.

This section includes the following topics:

- [OFSAAI FAQs](#)
- [Application Pack 8.0.0.0.0 FAQs](#)

27.1.1 OFSAAI FAQs

What are the different components that get installed during OFSAAI?

The different components of OFSAAI are illustrated in Figure 1–2, "Components of OFSAAI".

What are the different modes of OFSAAI installation?

OFSAAI can be installed in two modes, Silent Mode, and GUI mode.

Can the OFSAA Infrastructure components be installed on multi-tier?

No. OFSAA Infrastructure components (ficapp, ficweb, ficdb) cannot be installed on multi-tier. By default, they will be installed on single-tier. However, OFSAA Infrastructure can be deployed within the n-Tier architecture where the Database, Web Server and Web Application Server is installed on separate tiers.

Is JDK (Java Development Kit) required during installation of OFSAA? Can it be uninstalled after OFSAA installation?

JDK is not required during installation of OFSAA and only a run time is needed for details. Refer to Hardware and Software Requirements, Java Runtime Environment section.

Is JRE required during installation of OFSAA? Can it be uninstalled after OFSAAI installation?

Only JRE (Java Runtime Environment) is required during installation of OFSAA and cannot be uninstalled as the JRE is used by the OFSAA system to work.

How do I know what is the Operating system, web servers and other software versions that OFSAA supports?

Refer to OFSAA Technology Stack Matrices.

What are the different files required to install OFSAAI?

The following files are required:

- setup.sh.
- envCheck.sh
- preinstallcheck.sh
- VerInfo.txt
- OFSAAInfrastructure.bin
- validatedXMLinputs.jar
- MyResources_en_US.properties
- log4j.xml
- OFSAAI_PostInstallConfig.xml
- OFSAAI_InstallConfig.xml
- privileges_config_user.sql
- privileges_atomic_user.sql
- XML_Utility.jar

What should I do if I get the following error message during installation, "Execute Permission denied"?

Please check whether all the files provided for OFSAAI installation has execute permissions.

To give execute permissions,

Navigate to the path OFSAAI_80000 and execute the command

```
chmod 755
```

"Graphical installers are not.."

If error resembles "Graphical installers are not supported by the VM. The console mode will be used instead..." then check whether any of the X-windows software has been installed.

Example: Hummingbird Exceed is started and configured to Graphical mode installation.

Note:

Type 'xclock' from prompt and this should display clock in graphical mode.

"No Java virtual machine could be..."

If the error message reads "No Java virtual machine could be found from your PATH environment variable. You must install a VM prior to running this program", then

- Check whether "java path" is set in PATH variable. See the Table 3–1, "Prerequisite Information" section in this document.
- Check whether sufficient temporary space is available.
- Ensure that the movement of OFSAAI Installer text files to the target system is done in the Text mode so that setup.sh file does not contain control line feed characters (^M).

What should I do if I get the following error message during installation, "OracleDriver Files Not Found, Please Choose the Right Path To Continue"?

Check whether the provided path for Oracle Driver files is correct and whether the user has permissions to access the files.

What should I do if I get the following error message during installation, "User must have CREATE TABLE, CREATE VIEW, CREATE TRIGGER, CREATE INDEX, CREATE SEQUENCE, CREATE PROCEDURE" even though the oracle schema user created has the mentioned privileges?

OFSAAI installer validates the database details provided during installation, so ensure:

- Whether the oracle schema user has the required set of privileges for successful installation.
- Whether the oracle schema user has been created with quota privileges on tablespace to create database objects.

See the Table 3–1, " Prerequisite Information" section in this document.

Installation of OFSAAI was completed successfully! What next?

Post the successful completion of OFSAAI installation, one has to perform the Post Installation steps. See Chapter 5, "Post Installation Configuration".

What is to be done when OFSAAI Installation is unsuccessful?

OFSAAI installer generates log file `OFSAAIInfrastructure_Install.log` in the Infrastructure Installation Directory. There is also another log file created in the path configured in `Log4j.xml`. The logs of any of these reported, Warnings/Non Fatal Errors/Fatal Errors/Exceptions should be brought to the notice of the OFSAAI Customer Support. It is recommended not to proceed, until the reported problems are adequately addressed.

How do I completely uninstall OFSAAI?

OFSAAI can be completely uninstalled by performing the steps provided in *Uninstalling OFSAAI Installation* in the OFS AAI Installation and Configuration Guide Release 8.0.0.0.0.

Can OFSAAI config and atomic schemas be on different databases?

OFSAAI requires both config and atomic schemas to be present on the same database instance.

How to grant privileges if a new information domain is created?

If you are creating a new information domain, provide a set of privileges (database permissions) to the new Atomic schema.

- Log into the database as **sys** and connect as **sysdba** user.
- Execute the file `privileges_config_user.sql` available under `$FIC_HOME` directory
- Enter the database schema for which you want to grant privileges.

When should I run the MLS utility?

See the Multiple Language Support (MLS) Utility section in OFSAAI Administration Guide available on [OTN](#).

Does OFSAAI support Oracle Linux versions other than 5.5?

OFSAAI supports the Oracle Linux versions from 5.5 up to 5.10 and also from 6.0 and above.

What should I do if I get the following error message on the UNIX System terminal while executing `./setup.sh`, "Insert New Media. Please insert Disk1 or type its location"?

1. Login as root user on the Unix machine where OFSAAI is getting installed.
2. Navigate to the path `/etc/security/`.

-
3. Edit the file `limits.conf` to add/edit a row for the unix user installing OFSAAI:

```
<Unix User> soft nofile 9216
```

4. After saving the changes, log in as unix user with which OFSAAI is getting installed and execute the command:

```
ulimit -n
```

The command should return the value 9216.

How does one verify if the system environment is ready for OFSAAI installation?

To verify the system environment meets the minimum requirements for the installation, a Pre-Install Check utility is available within the Install Kit archive file. This utility can also be obtained separately by contacting Oracle Support.

See *Verifying System Environment* section for additional information.

How do I know if the installation is completed successfully?

The OFSAAI Infrastructure installation performs a post install health check automatically on successful installation of the product. To rerun the post install verification at a later time, perform the following steps:

1. Navigate to the path `$FIC_HOME` (Product Installation Directory).
2. Execute the command:

```
./piverify.sh
```

What should one do if the installation in GUI mode is not invoked?

There are set of configuration steps required to be performed during the installation in GUI mode. Verify whether the steps mentioned under *Configuration for GUI Mode Installation* section are done correctly.

What should one do if there are any exceptions or errors in installation and how to proceed?

1. Please backup the installation logs.
2. Share the backup logs with Oracle support.

What should I do if I get the following error message during OFSAAI installation on Solaris 11 system?:

"Error: OFSAAI-1108

ORA-00604: error occurred at recursive SQL level 1

ORA-01882: timezone region not found"

Or

"Time zone cannot be set as null or 'localtime' "

This happens if the time zone is not set, that is NULL or it is set as 'localtime'. Set the environment variable TZ to a valid time zone region in the .profile file. For example,

```
TZ=Asia/Calcutta
```

```
export TZ
```

What should I do if the installation process is abruptly terminated or aborted?

If the installation is abruptly terminated, then the installation process will be incomplete. To recover from this, follow the following steps:

1. Drop the DB objects in the config schema created by OFSAAI installation.
2. Open the `.profile` and remove the entries made by the OFSAAI installation which are made between the comment statements, `#Beginning of entries by OFSAA Infrastructure installation` and `#End of entries by OFSAA Infrastructure installation`.
3. Delete the OFSAA install directory created by the OFSAAI installer.
4. Perform the OFSAAI installation again.

Does OFSAA support any other web server types, other than the ones stated in tech matrix and installation guide?

No, all the supported softwares and versions are stated in the OFSAA Technology Stack Matrices.

What should one do if the database connection from connection pool throws an error "java.sql.SQLRecoverableException: IO Error: Connection reset"?

This happens while running several database intensive tasks in parallel. To correct this error, add the line `securerandom.source=file:/dev/./urandom` in the `java.security` configuration file available in `$JAVA_HOME/jre/lib/security/` path.

Note: This needs to be configured on all the machines or VMs where the OFSAAI components are installed.

If the issue is not resolved even with the above settings, check the MTU(Maximum Transmission Unit) settings on the linux box. For details on MTU settings and updating them, contact your system Administrator.

What should I do when I get syntax errors/file not found error messages while invoking setup.sh file from my install archive?

This could mostly happen:

When installer was not unzipped rightly or corrupted during unzip.

`setup.sh` file which resides within the install archive was not transferred in ASCII or text mode, which could have corrupted the file.

To correct this, follow the steps:

1. Copy the installer (in BINARY mode) to the system on which the OFSAA Infrastructure components will be installed.
2. Unzip the installer using the command:
`unzip <OFSAAI_Installer>.zip`
3. The corrupted `setup.sh` file would have introduced certain `^M` characters into the file. You can remove `^M` characters from `setup.sh` file by following the following steps:
 - a. Login to the server where the installer is copied.
 - b. Navigate to the directory `OFSAAI_80000`.
 - c. Open the `setup.sh` file in the `vi` editor using the command: `vi setup.sh`.
 - d. Inside `vi` editor in Esc mode, type: `%s/^M//g`

Note:

To enter ^M, hold the CTRL key then press V and M in succession.

- e. Save the setup.sh file by typing: **wq!**

Does OFSAAI support Oracle DB 11g Standard edition?

The OCI client and the jdbc driver does not change depending on whether it is a standard or enterprise edition. So, OFSAAI will work with standard edition as well.

We do not recommend standard edition because it will not scale and does not support partition pack, database security vault, or advanced analytics.

What should I do if I get the following error message while executing ./startofsaai.sh file on the UNIX System terminal “./startofsaai.sh: /java: Execute permission denied”?

- Ensure JAVA_BIN environment variable path is set on the "unix user" terminal from where the startofsaai.sh file is invoked.
- Ensure the .profile where the environment/ path settings are made has been executed successfully.

What happens when the OFSAAI Application Server does not proceed even after providing the system password?

Ensure that, the System Password provided when prompted should match with the "Oracle Configuration password" provided during installation. Also check whether the connection to the "configuration schema" can be established through sqlplus.

Although the OFSAAI installation has completed successfully, when OFSAAI servers are started, and the application URL is accessed, it gives an error message "the page cannot be found or displayed" or "Could not retrieve list of languages from Server. Please contact the system administrator". What should one do?

Ensure OFSAAI servers have been started and are running successfully. On the server start up parameters options, refer to *Starting Infrastructure Services* section.

For more details on the issue, refer on to the Revappserver log in \$FIC_APP_HOME/common/FICServer/logs directory or the Web Server log files.

Is it necessary to provide the specified grants to the Oracle schema user before installation? If yes, can it be revoked after completion of installation?

The "Oracle schema" user requires the necessary grants specified before, during, and after the installation process. Grants provided should never be revoked as the application makes use of these grants all the time.

Can we have distributed OFSAAI Application Server for load balancing?

OFSAAI Application server can be scaled out/distributed across different JVM's (machines) based on the various services and Information Domains, in other words, Load balancing could be achieved with distribution of services.

Why do we need Ftpshare? Why is it needed on all the layers? Can we have ftpshare on another machine other than the machines where OFSAAI is installed?

Ftpshare is a Metadata Repository directory. All the metadata related files used in Infrastructure are stored in the ftpshare directory. The ftpshare contains folders for each Information Domain, with each Information Domain folders holding Erwin, log, and scripts folder. The transfer of data among the Web, Application, and Database servers in Infrastructure takes place through FTP/SFTP.

You need to configure FTP/SFTP and enable communication between the servers by providing App server's FTP/SFTP credentials to the Web server and DB server users.

Yes, we can have ftpshare on another machine other than the machines where OFSAAI is installed.

Is it mandatory to provide the ftp/sftp password?

Yes, OFSAAI needs credentials of the user which has complete permissions on ftpshare directory, and should be able to independently login to the unix server.

What are the permissions required for ftpshare and when should I give them?

It is recommended to provide permissions on ftpshare in case of installations done across different machines or VMs (multitier installation).

In case of single tier installation, 770 permissions can be provided if the unix users of OFSAAI and web server belong to the same unix group.

And on any new file that is created in the 'ftpshare' folder of any installation layer should be granted specific/explicit permission.

Port Change utility could be used to have the Port number modified, which are currently being used by the Infrastructure application. For more information, refer *Configure Infrastructure Ports* section.

Are there any in-built system administration users within OFSAAI Application?

The three in-built system administration users are provided to configure and setup OFSAAI.

- SYSADMN
- SYSAUTH
- GUEST

Does OFSAAI Application support both FTP and SFTP?

OFSAAI supports both FTP and SFTP configuration.

Is it necessary to enable the FTP/SFTP services to use the OFSAAI?

Yes, enabling of FTP/SFTP services and its ports is a pre-requisite step towards using the OFSAAI.

OFSAAI Configuration: Unable to save the server details?

Ensure the input User ID, Password, and Share Name are correct.

- Ensure FTP/SFTP services are enabled.
- Have a test FTP/SFTP connection made and confirm if they are successful.

What should I do if I get the following message message while creating Information Domain, "Please create a database and then create the information domain"?

Information Domain is mapped to only one Database; and thus before the creation of Information Domain, at least one database details would need to exist.

What should I do if I get the following message during startup of backend engine message server, "ConnectToDatabase: FatalError, could not connect to the DB server"?

- Verify whether connection to the "configuration schema" can be established through sqlplus.
- Verify "configuration schema" password is modified post installation.

-
- Ensure oracle database alias name created for oracle instance and oracle service name are same.
 - On a multi tier Installation mode, ensure TNSNAME and SID are the same in both the Application and Database Layers.

What should I do if I get the following message during the startup of backend engine message server, "Fatal Error, failed to get user ID from LibSmsConnect"?

Ensure Reveleus.sec file exist under the \$FIC_HOME/conf directory where the Database components are installed.

Does OFSAAI Application support LDAP authentication?

OFSAAI supports LDAP configuration and authentication.

Does OFSAAI support multiple languages?

Yes, OFSAAI supports multiple languages.

Does OFSAAI provide any data back-up features?

OFSAAI does not have built-in back up facility. External Storage Infrastructure is recommended for back-up.

What kind of security features does the OFSAAI provides?

OFSAAI provides security at:

- Segment Level - Users can access only the segment they are mapped to.
- Application Level - Users can perform an operation only if mapped to appropriate role and functions.

Does OFSAAI have the ability to enforce periodic password change?

OFSAAI provides configurable parameters to define number of days after which the user password would expire and then the user is forced to change the password after expiration period.

What is the password policy followed in OFSAAI?

OFSAAI enforces a minimum password length with a combination of Upper and Lower case characters and alpha-numeric strings.

Which version of Erwin Data Modeller does OFSAAI support?

OFSAAI now supports ERwin version 9.2 and 9.5 generated xmls in addition to ERwin 4.1, ERwin 7.1, ERwin 7.3 and ERwin 9.0 formats.

Does OFSAAI provide the mechanism to upload Business Data model?

OFSAAI provides two mechanisms for business data model upload:

- Easy to use GUI based Model upload mechanism to upload the Business Data Model through Unified Metadata Manager --> Import Model.
- OFSAAI also provides a model upload utility "upload.sh" for uploading the business data model through the command line parameter by executing this shell script file under the path <FIC_HOME>/ficapp/common/FICServer/bin.

Refer the section *Run Model Upload Utility* of the *Oracle Financial Services Analytical Applications Infrastructure User Guide* on [OTN](#) for details.

How do I apply incremental change to the existing model when the Business Data model undergoes a change?

Modified data model can be uploaded into the system and OFSAAI has the ability to compare the changes within the data model with respect to the one already present in the system and enables propagation of incremental changes in a consistent manner.

What are the different types of uploading a business data Model?

OFSAAI supports uploading of business data model from client desktop and also by picking up the data model from the server location.

Can the OFSAAI "Configuration Schema" password be modified post installation?

The OFSAAI "configuration schema" password can be modified post installation. OFSAAI application stores the password in the database and few configuration files, thus any changes to the "configuration schema" password would necessitate updating in these. Contact OFSAAI support for more details.

Can the OFSAAI "Atomic Schema" password be modified?

The OFSAAI "Atomic Schema" password can be modified. OFSAAI application stores the atomic schema password in the database and few configuration files, thus any change to the atomic schema password would necessitate updating the password.

To change the Atomic Schema password, follow the steps:

1. Login to OFSAA.
2. Navigate to System Configuration > Database Details window. Select the appropriate connection, provide the modified password and save.
3. Navigate to Unified Metadata Manager > Technical Metadata> Data Integrator > Define Sources window. Update the appropriate Source details.

If you are using Apache Tomcat as Web server:

*Update the <Context> -> Resource tag details in server.xml file from the \$CATALINA_HOME/conf folder. (In case of Tomcat only Atomic <Resource> will exist).

*Login to the WebSphere Administration Console from the left side menu.

*Navigate to Resources >JDBC >Data Sources. A list of data sources will be populated on the right side.

Select the appropriate Data Source and edit the connection details. (In this case, both Config and Atomic data sources need to be modified).

If you are using WebLogic as Web server:

*Login to the WebLogic Administration Console from the left side menu.

*Under Domain Structure list box, expand the appropriate Domain and navigate to Services > JDBC >Data Sources. A list of data sources will be populated on the right side.

*Select the appropriate Data Source and edit the connection details. (In this case, both Config and Atomic data sources need to be modified).

Restart the OFSAAI services

Note: If the modified passwords are not updated, OFSAAI logs displays the message ORA-28000: the account is locked.

Does the upload of Business Data model depend on Java Memory?

Business data model upload through OFSAAI depends on the Java memory settings on the client and server machines. Java memory setting varies with the data model size and the available RAM. Contact OFSAAI support for more details.

Why do the Business Metadata Management screens (Business Processors screen) in User Interface, takes longer time to load than other screens?

The Log file in DynamicServices.xml which resides in \$FIC_HOME/conf is continuously being updated/refreshed to cache metadata. This can be observed when you are starting `startofsaaish` and if any of the log file (Ex: SMSService.log) in DynamicServices.xml is being continuously refreshed for longer time.

By default, the Metadata Log file cache size is set to 1000. If in case the log is being updated beyond this limit, retrospectively the preceding entries are overwritten. For example, the 1001th entry is overwritten by deleting the first entry. This results in the application screen taking a longer time to load.

Increase the cache size limit in DynamicServices.xml located at <FIC_HOME>/conf, depending on the currently logged count for the specific metadata.

1. Generate the Log report by executing the following query in config schema.

```
select count(1), t.metadata_name, m.dsn_id
from metadata_master m, metadata_type_master t
where m.metadata_type = t.metadata_type
group by t.metadata_name, m.dsn_id
```

2. The above query returns a list of codes with their respective metadata count. You can refer to "metadata_type_master" table to identify the metadata name.
3. View the log report to identify the metadata which is being updated/refreshed beyond the specified cache size limit. Accordingly increase the cache size limit in DynamicServices.xml depending on the currently logged count for the specific metadata.

For example, if the "MEASURE_CACHE_SIZE" is set to 1000 and total measure reported in log is 1022, increase the limit to 2000 (approximately).

4. Restart Reveleus/OFSAAI servers (Web and APP) and check the issue.

What should I do if I get OutOfMemoryError while deploying EAR file in WebSphere application server?

The Java memory needs to be increased in `ejbdeploy.sh` file which is present under <WebSphere Install directory>/AppServer/deploytool/itp. For example,

```
$JAVA_CMD \  
-Xbootclasspath/a:$ejbd_bootpath \  
Xms256m -Xmx1024m \  

```

What configurations should I ensure if my data model size is greater than 2GB?

In order to upload data model of size greater than 2GB in OFSAAI Unified Metadata Manager- Import Model, you need to configure the required model size in struts.xml file available in the path \$FIC_WEB_HOME/webroot/WEB-INF/classes.

Note:

The size requirements have to be always specified in bytes.

For example, if you need to configure for model size of 2.5GB, then you can approximately set the max size to 3GB (3221225472 bytes) as indicated following, in order to avoid size constraints during model upload.

```
<constant name="struts.multipart.maxSize" value="3221225472"/>
```

After configuring struts.xml file, generate the application EAR/WAR file and redeploy the application onto your configured web application server. For more information on generating and deploying EAR / WAR file, refer Appendix C.

What should I do if my Hierarchy filter is not reflecting correctly after I make changes to the underlying Hierarchy?

In some cases, the Hierarchy Filters do not save the edits correctly if the underlying Hierarchy has been changed. This can occur in hierarchy maintenance, where you have moved a member to another hierarchy branch, and that member was explicitly selected in the Filter and is now a child of a node which is already selected in the Filter.

Refer to [Support Note](#) for the workaround.

How do you turn off unused information domains (infodoms) from cache?

Follow these steps to turn off unused infodoms from cache:

Navigate to \$FIC_HOME/conf in the APP layer of your OFSAAI installation.

1. In the DynamicServices.xml file, identify the section for <Service code="20">.
2. Modify the value of parameter CACHE_ON_STARTUP to 0 (default is 1).
3. Repeat the same in the WEB layer too. Generate the application EAR/WAR file and redeploy the application onto your configured web application server. For more information on generating and deploying EAR / WAR file, see Configuring Web Application Servers.
4. Restart the OFSAAI Services (APP and WEB). For more information, see Appendix D.

Note: This setting will cache the Infodom metadata only for the infodoms that get accessed upon user login. Infodoms which do not get accessed, will not be cached.

Sample code is pasted follows:

```
<SERVICE CODE="20"
CLASS="com.iflex.fic.metadata.services.MetadataServiceProvider" NAME="BMD"
SERVERID="DEFAULT" PATH=" " LOGGERNAME="UMMLOGGER" LOGGERLEVEL="10">
<PARAMETERS>
<PARAMETER NAME="CACHE_ON_STARTUP" VALUE="0" />
<PARAMETER NAME="BACKUP_XML" VALUE="1" />
<PARAMETER NAME="MAX_BACKUP_XML" VALUE="2" />
<PARAMETER NAME="PC_NONBI_BI_SWITCH" VALUE="2048" />
<PARAMETER NAME="HIERARCHY_NODE_LIMIT" VALUE="2000" />
<PARAMETER NAME="ALIAS_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="DATASET_CACHE_SIZE" VALUE="2000" />
<PARAMETER NAME="MEASURE_CACHE_SIZE" VALUE="2000" />
<PARAMETER NAME="HIERARCHY_CACHE_SIZE" VALUE="2000" />
```

```

<PARAMETER NAME="DIMENSION_CACHE_SIZE" VALUE="2000" />
<PARAMETER NAME="HIERARCHYATTRIBUTE_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="CUBE_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="RDM_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="BUSINESSPROCESSOR_CACHE_SIZE" VALUE="2000" />
<PARAMETER NAME="DERIVEDENTITY_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="LOG_GET_METADATA" VALUE="false" />
<PARAMETER NAME="METADATA_PARALLEL_CACHING" VALUE="0" />
</PARAMETERS>
</SERVICE>

```

Can I install an Application Pack on an existing Atomic schema/ Information Domain created manually?

No, you cannot install an Application Pack on existing Atomic schema/Information Domain created manually. Application Packs can be installed only on Atomic Schemas/Information Domain created using schema creator utility and/ or the Application Pack installer.

What should I do if I get the following exception while trying to view the model outputs in Model Outputs screen, "Exception ->Local Path/STAGE/Output file name (No such file or directory)"?

Ensure you have created a folder "STAGE" under the path mentioned as "Local Path" in the web server details screen. This folder needs to be created under the local path on every node ,in case of web application server clustering.

What should I do if I get the following exception during OFSAA services startup, "Exception in thread "main" java.lang.UnsatisfiedLinkError: net (Not a directory)"?

Ensure the JRE referred in .profile is not a symbolic link. Correct the path reference to point to a physical JRE installed.

What is the optimized memory settings required for "New" model upload?

The following table lists the optimized memory settings required for "New" model upload.

Upload Options	Size of Data Model XML File	X_ARGS_APP ENV Variable in OFSAAI APP Layer
Pick from Server	106 MB	"-Xms1024m - Xmx1024m
	36 MB	"-Xms2048m - Xmx2048m
	815 MB	"-Xms4096m - Xmx4096m
	1243 MB	"-Xms6144m - Xmx6144m
Model Upload Utility	106 MB	"-Xms1024m - Xmx1024m"-

		Xms2048m - Xmx2048m
	336 MB	"-Xms4096m - Xmx4096m
	815 MB	"-Xms4096m - Xmx4096m
	1243 MB	"-Xms6144m - Xmx6144m
Save New Erwin File In Server	106 MB	"-Xms1024m - Xmx1024m
	336 MB	"-Xms2048m - Xmx2048m
		"-Xms4096m - Xmx4096m
		"-Xms6144m - Xmx6144m

What is the resolution if I get the error - ORA 01792 maximum number of columns in a table or view is 1000 during T2T execution?

You should apply the following patch set from Oracle. Applicable only for 12c.

<https://support.oracle.com/epmos/faces/DocumentDisplay?id=1937782.1>

I did not enable OFS Inline Processing Engine Application license during the installation. However, I have enabled it post installation, using the Manage OFSAA Product License(s) in the Admin UI. Are there any other additional configurations that I need to do?

Yes. Follow the instructions explained in the *OFS Inline Processing Engine Configuration Guide* available on [OTN](#).

I get an error when I try to build an Oracle OLAP cube. What should I do?

Execute the following grant on the appropriate ATOMIC schema

```
grant olap_user to &database_username
```

How do you turn off unused Information Domains (Infodoms) from caching?

Follow these steps to turn off unused infodoms from caching:

1. Navigate to \$FIC_HOME/conf in the APP layer of your OFSAAI installation.
2. In the DynamicServices.xml file, identify the section for <Service code="20">.
3. Modify the value of parameter CACHE_ON_STARTUP to 0 (default is 1).
4. Repeat the same in the WEB layer too. Generate the application EAR/WAR file and redeploy the application onto your configured web application server. For more information on generating and deploying EAR / WAR file, refer Appendix C.
5. Restart the OFSAAI Services (APP and WEB). For more information, refer to the Start OFSAA Infrastructure Services section.

Note:

This setting will cache the Infodom metadata only for the infodoms that get accessed upon user login. Infodoms which do not get accessed, will not be cached.

Sample code is pasted follows:

```
<SERVICE CODE="20"
CLASS="com.iflex.fic.metadata.services.MetadataServiceProvider" NAME="BMD"
SERVERID="DEFAULT" PATH=" " LOGGERNAME="UMMLOGGER" LOGGERLEVEL="10">
<PARAMETERS>
<PARAMETER NAME="CACHE_ON_STARTUP" VALUE="0" />
<PARAMETER NAME="BACKUP_XML" VALUE="1" />
<PARAMETER NAME="MAX_BACKUP_XML" VALUE="2" />
<PARAMETER NAME="PC_NONBI_BI_SWITCH" VALUE="2048" />
<PARAMETER NAME="HIERARCHY_NODE_LIMIT" VALUE="2000" />
<PARAMETER NAME="ALIAS_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="DATASET_CACHE_SIZE" VALUE="2000" />
<PARAMETER NAME="MEASURE_CACHE_SIZE" VALUE="2000" />
<PARAMETER NAME="HIERARCHY_CACHE_SIZE" VALUE="2000" />
<PARAMETER NAME="DIMENSION_CACHE_SIZE" VALUE="2000" />
<PARAMETER NAME="HIERARCHYATTRIBUTE_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="CUBE_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="RDM_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="BUSINESSPROCESSOR_CACHE_SIZE" VALUE="2000" />
<PARAMETER NAME="DERIVEDENTITY_CACHE_SIZE" VALUE="1000" />
<PARAMETER NAME="LOG_GET_METADATA" VALUE="false" />
<PARAMETER NAME="METADATA_PARALLEL_CACHING" VALUE="0" />
</PARAMETERS>
</SERVICE>
```

"While creating an Excel Mapping, after specifying the excel worksheet, the target table, and mapping each column in the worksheet to a target table, I click SAVE and nothing happens. But when I click CANCEL, a message pops up informing me that all changes will be discarded", what is to be done.

Check if the excel mapping creation is done using I.E 8 with JRE 1.4 plug in enabled on machine. If so, upgrade the JRE plug in to 1.7+.

Can Multiple OFSAA Infrastructure instances share the same config schema?

No, only one OFSAA environment can be installed using one config schema.

Can Atomic schema be shared?

Yes, it can be shared between two OFSAA instances.

While setting a firewall, which ports should be opened for communication between the Web Server (Apache HTTP Server/ Oracle HTTP Server/ IBM HTTP Server) and the Web Application Server (WebSphere/ WebLogic/ Tomcat) for OFSAAI to operate properly?

The OFSAA Servlet port which is same as Web server port should be open. Also the web application port should be open.

Can I modify the NLS_LENGTH_SEMANTICS to BYTE from CHAR for the Database where older versions of OFSAA is Installed?

Yes, NLS_LENGTH_SEMANTICS can be modified to BYTE from CHAR if you are not intending to use multi language support.

Can I install already installed application in a different infodoms?

No, it is not possible to install the same application in two different infodoms.

How can I configure the OFSAA application for High Availability?

OFSAA can have active-passive high availability. For more details, refer [Configuration for High Availability- Best Practices Guide](#).

I want to configure OFSAA for High Availability that is weblogic cluster on which OFSAA.ear is deployed and cluster OFSAAI processes (such as Reveleus etc) are running. Is this a supported configuration?

High Availability is available for WebLogic cluster and DB level as active-active, but is not available on the application side. OFSAA can have active-passive high availability. For more details, refer *Configuring OFSAA in Clustered Environment Guide*.

During OFSAA installation should I provide web application server's IP /Hostname and port or web server's IP/Hostname and port, if the Apache HTTP Server/ Oracle HTTP Server/ IBM HTTP Server are configured?

In case the web server is configured, you should enter the Web Server IP Address/Hostname and Port details during OFSAA installation. Here the Servlet port should be same as the Web Server port.

If Web Server is not configured, the Web Application Server's IP Address/ Hostname and Port is required during the installation process. Here the Servlet port should be same as the Web application Server port.

Is "ReveleusAdminConsoleAgent" applicable for OFSAAI 8.0.0.0.0 and higher versions?

No, ReveleusAdminConsoleAgent is not applicable starting OFSAAI 7.3.3.0.0. There is a change in the way agentservers are managed through AGENTSTARTUP.SH & AGENTSHUTDOWN.SH.

What should I do when the message server process does not open and I get the following error message, "CI18NProvider::CI18NProvider, Error, unable to connect to the config database"?

This error is displayed due to the following reasons:

- The Config Schema password is already expired.
- If the config schema password is going to expire soon and the message like "ORA-28002: the password will expire within 6 days" displays while connecting to config schema through sqlplus.
- The Config schema password is Modified.

To resolve the error, re-set the config schema password to the old password. Else, if the config schema password is modified to something else then follow these steps:

1. Delete the \$FIC_HOME/conf/Reveleus.SEC file.

-
2. Shutdown the OFSAAI App service: `cd $FIC_APP_HOME/common/FICServer/bin`
`./stopofsaai.sh`
 3. Shutdown the OFSAAI App service: `cd $FIC_APP_HOME/common/FICServer/bin`
`./stopofsaai.sh`
 4. Start the Infrastructure Server in foreground directly on the server or through XWindows software using the command: `./startofsaai.sh`
 5. Enter System Password.
 6. Enter the new Config schema password. The service starts and initializes if it is able to successfully connect to the DB and generates the Reveleus.SEC file.
 7. Post successful startup of the service, if required, the Infrastructure server may be shut down and restarted in the background using `nohup` mode.

What is the mechanism of Log File sizing and backup?

OFSAAI Log files created under `$FIC_APP_HOME/common/FICServer/logs & <OFSAAI_DEPLOYED_AREA>/<CONTEXT.war>/logs` is configurable in `RevLog4jConfig.xml`.

The default size of the log files (`MaxFileSize`) is set to max 5000kb & number of max backup log files (`MaxBackupIndex`) retained is set to 5, both of which are configurable. Increasing these parameters to a higher value should depend on the server HW configurations and may reduce the performance.

To configure the Logs file size on OFSAA Application server, follow these steps:

1. Navigate to `$FIC_HOME/conf` where OFSAA is installed.
2. Edit the following parameters in the file `RevLog4jConfig.xml`
 - `<param name="file" :` Enter the path where the Logs are to be generated.
 - `<param name="MaxFileSize" :` Provide the required file size.
 - `<param name="MaxBackupIndex" :` Provide the required number of backup files to be created.

Example:

```
<appender name="REVERSERVERAPPENDER"
class="org.apache.log4j.RollingFileAppender">
<param name="file"
value="$FIC_HOME/ficapp/common/FICServer/logs/RevAppserver.log"/>
<param name="Append" value="true" />
<param name="MaxFileSize" value="5000kb" />
<param name="MaxBackupIndex" value="5" />
<layout class="org.apache.log4j.PatternLayout">
<param name="ConversionPattern" value="[REVELEUSLOG] %m%n"/>
</layout>
</appender>
```

To configure the Deployed area logs file, follow these steps:

3. Navigate to <EAR/WAR Deploy area>/conf folder.

4. Repeat step 2 from the above section.

Can we modify the Log file path?

Yes, Log file path is configurable, it can be configured in RevLog4jConfig.xml.default log file path (file) is set by the installer . This can be configured to another path.

Can I point the environment with HTTP enabled to HTTPS after installation and vice versa?

Follow these steps:

5. Create SSL related certificates and import to respective servers.
6. Enable SSL on a desired Port (example 9443) on your existing and already deployed web application servers.
7. Replace the protocol as https and new ssl port (FIC_SERVLET_PORT) configured and in all the URLs specified on following files:

- \$FIC_HOME/ficapp/common/FICServer/conf/FICWeb.cfg and \$FIC_HOME/ficweb/webroot/conf/FICWeb.cfg
- \$FIC_HOME/ficapp/icc/conf/WSMREService.properties
- \$FIC_HOME/ficweb/webroot/conf/ModelExecution.properties
- \$FIC_HOME/ficdb/conf/MDBPublishExecution.properties
- \$FIC_HOME/ficdb/conf/ObjAppMap.properties
- \$FIC_HOME/utility/Migration/conf/WSMigration.properties
- \$FIC_HOME/utility/WSExecution/conf/WSExecution.properties
- \$FIC_HOME/EXEWebService/WebSphere/ROOT/WEB-INF/wsd/EXEWebServiceImpl.wsdl
- \$FIC_HOME/EXEWebService/Tomcat/ROOT/WEB-INF/wsd/EXEWebServiceImpl.wsdl
- \$FIC_HOME/EXEWebService/weblogic/ROOT/WEB-INF/wsd/EXEWebServiceImpl.wsdl

8. Replace XML attribute/Node values as specified on following files:

- \$FIC_HOME/ficweb/webroot/WEB-INF/web.xml
- FIC_WEBSERVER_PORT=9443
- FIC_WEBPROTOCOL=https

\$FIC_HOME/conf/LookUpServices.xml and
\$FIC_HOME/ficweb/webroot/conf/LookUpServices.xml

PORT="9443" PROTOCOL="https:"

9. Login to config schema and execute following SQL command to replace protocol and SSL port.

```
SQL> update configuration cn set cn.paramvalue='9443' where  
cn.paramname='SERVLET_ENGINE_PORT';
```

```
SQL> update configuration cn set  
cn.paramvalue=replace(cn.paramvalue,'http:','https:') where  
cn.paramname='FormsManagerCacheReload';
```

```
SQL> update web_server_info ws set  
ws.servletport='9443',ws.servletprotocol='https';
```

10. Create EAR/WAR file and Re-Deploy.

What should I do if the sliced data model upload takes a long time to complete?

If the metadata cache size is set to a lower value than the actual count of each metadata type (hierarchy, dataset, dimension etc), then it gets into performance degrade issues. We have to increase the cache size for each metadata type according to the count in the environment.

Following are the parameters in DynamicServices.xml to be configured depends on the metadata count in your environment.

```
<PARAMETER NAME="HIERARCHY_NODE_LIMIT" VALUE="2000"/>
<PARAMETER NAME="ALIAS_CACHE_SIZE" VALUE="1000"/>
<PARAMETER NAME="DATASET_CACHE_SIZE" VALUE="2000"/>
<PARAMETER NAME="MEASURE_CACHE_SIZE" VALUE="3000"/>
<PARAMETER NAME="HIERARCHY_CACHE_SIZE" VALUE="2000"/>
<PARAMETER NAME="DIMENSION_CACHE_SIZE" VALUE="2000"/>
<PARAMETER NAME="CUBE_CACHE_SIZE" VALUE="1000"/>
<PARAMETER NAME="BUSINESSPROCESSOR_CACHE_SIZE" VALUE="2000"/>
<PARAMETER NAME="DERIVEDENTITY_CACHE_SIZE" VALUE="1000"/>
```

Metadata count can be derived based on the following queries:

```
select count(1) from metadata_master where metadata_version=0 --- for all metadata
select count(1) from metadata_master where metadata_version=0 and metadata_type=1 --- for
measure
select count(1) from metadata_master where metadata_version=0 and metadata_type=2 --- for
Dimension
select count(1) from metadata_master where metadata_version=0 and metadata_type=3 --- for
HCY
select count(1) from metadata_master where metadata_version=0 and metadata_type=4 --- for
DATASET
select count(1) from metadata_master where metadata_version=0 and metadata_type=59 --- for
BP's
select count(1) from metadata_master where metadata_version=0 and metadata_type=54 --- for
Alias
select count(1) from metadata_master where metadata_version=0 and metadata_type=5 --- for
CUBES
select count(1) from metadata_master where metadata_version=0 and metadata_type=856 --- for
Derived Entity
```

For LDAP authentication , which server connects with the LDAP server, the Application server (where ofsaai is installed), or Web Application server (where EAR is deployed)?

For LDAP authentication, the Application server (ficapp) connects with the LDAP server.

The LDAP server in the setup listens on secure protocol ldaps (port 636). I have the root certificate of the LDAP server for SSL, and would like to know where to offload this certificate?

You need to import the certificate into the JDK/JVM used by Reveleus server in ficapp layer.

How to relocate FTPSHARE folder?

You can run the PortC.jar utility. For more details, refer Changing IP/ Hostname, Ports, Deployed Paths of the OFSAA Instance section in the OFSAAI Admin Guide available on [OTN](#).

How do we identify the list of ports that are used by/configured in an OFSAA environment?

1. Navigate to \$FIC_HOME folder on Target.
2. Run the PortC.jar utility using the command:

```
java -jarPortC.jar DMP
```

A file with the name DefaultPorts.properties will be created under \$FIC_HOME directory which will contain the ports. For more information, refer Changing IP/ Hostname, Ports, Deployed Paths of the OFSAA Instance section in the OFSAAI Admin Guide available on [OTN](#).

27.1.2 Application Pack 8.0.0.0 FAQs

What is an Application pack?

An Application Pack is suite of products. For more information, refer *About Oracle Financial Services Advanced Analytical Applications (OFSAA) Application Packs*.

Can I get a standalone installer for OFSAAI 8.0?

No. AAI is part of every application pack and installs automatically.

How does OFSAA 8.0 Application pack relate to OFSAA 7.x series?

8.0 is a new major release consolidating all products from OFSAA product suite.

Can existing OFSAA 7.x customers upgrade to OFSAA 8.0 Application Pack?

There is no upgrade path available. However, we will have migration kit / path for every product to 8.0 application pack. Further details will be available with Oracle Support.

Does OFSAA 8.0 Application pack UPGRADE's automatically existing environments?

No. Refer Point 5. OFSAA 8.0 application pack has to be installed in a new environment and subsequently migration path / migration kit needs to be run to migrate from 7.x to 8.0. Please note we will have migration path only from the previously released version of OFSAA products.

Where can I download OFSAA 8.0 Application Pack?

You can download the OFSAAI 8.0 Application Pack from Oracle Software Delivery Cloud (OSDC).

What are the minimum system and software requirements for OFSAA 8.0 Application Pack?

Refer installation guide section *Hardware and Software Requirements* section.

Is my environment compatible with OFSAA 8.0 Application Pack?

Environment Check utility performs the task. It is part of install and can also be run separately.

Does OFSAA 8.0 Application Pack is support all Operating systems?

LINUX, AIX, SOLARIS 10, 11. Refer to Technology Matrix for the technology matrix that OFSAA suite products are/ will be qualified on.

How can I install OFSAA 8.0 Application Pack?

Refer to Oracle Financial Services Advanced Analytical Infrastructure Installation and Configuration Guide published in [OTN](#) for the application pack installers.

Does this installation require any Third party Software's?

Oracle Financial Services Advanced Analytical Infrastructure Installation And Configuration Guide published in [OTN](#) lists the third party software that needs to be installed.

What languages are supported during OFSAA 8.0 Application Pack installation?

US English is the language supported.

What mode of installations OFSAA Application Pack supports? [i.e., Silent , GUI]

OFSAA Application Packs supports both, GUI and Silent Mode.

Does OFSAA 8.0 Application Pack support Multi tier Installations?

OFSAA 8.0 does single tier installation. For more information refer to *OFSAAI FAQs* section.

Does this Application Pack validate all Pre-requisites required for this installation i.e., Memory, Disk Space etc.?

Yes. The pre-requisite checks are done by the respective application pack installer.

What happens if it aborts during installation of any application with in Application pack?

You must restore the system and retrigger the installation

Does this Application pack 'Rolls Back' if any of application installation fails due to errors?

Rollback of installation is not supported.

Does the Application pack installs all applications bundled?

All application pack file system files are installed but there is an option to enable the licensed products.

How can I re-install any of the Application Pack?

You can retrigger in case of failure.

Does Application pack allow enabling / disabling any of the applications installed?

Yes. You cannot disable once the product is enabled in an environment.

I have installed one application in a Application pack and can I install any of new applications within the Application pack later point of time?

No, installation of additional applications is not required. If you wish to add an application later, you can enable the application at that time.

How many OFSAA Infrastructures can be installed in a single server?

There is no issue in installing separate OFSAAI installations, each with their own PFT/FTP installations and separate associated database instances and separate Web Server installations on the same server as long as adequate memory is allocated for each instance and as long as each OFSAAI installation is installed using a separate UNIX user and profile. Care should be taken if running multiple OFSAAI

installations on a single server. Adequate memory will be required for each installation as several OFSAAI processes (model upload, DEFQ services, etc) take significant amounts of memory. So it depends on your server memory.

Is it possible to Install OFSAA 8.0 Application pack on any one of the existing 'Infodom' where another OFSAA 8.0 application is installed?

Yes. However, the Behavioral Detection Application Pack and Compliance Regulatory Reporting Application Pack are the exceptions. They need to be installed in a different INFODOM.

Can I select an Infodom in Application pack during installation?

Yes. You can select or change the required infodom.

Can I install all Application Packs in a 'Single Infodom'?

Yes. But Behavioral Detection Application Pack and Compliance Regulatory Reporting Application Pack are the exceptions. They need to be installed in a different INFODOM.

Is it possible to install applications on different Infodom within the Application pack? (That is if you want to install LRM & MR in two infodoms)

Applications within application pack have to be installed in the same information domain in the same environment.

How many Infodoms can be created over a single OFSAA Infrastructure of 8.0.1.0.0?

You can install only one infodom during installation. But after installation, you can create multiple infodoms.

Does 'Data Model' bundled is Application pack Specific or Specific to individual application?

A merged data model for all applications within the application pack is bundled and uploaded.

Is it possible to install OFS Enterprise Modeling in later point of time?

OFS Enterprise Modeling is a separate product and can be enabled as an option later from any application pack that bundles Enterprise Modeling.

Does Application pack create sandbox automatically for the required applications?

Yes, Sandbox creation is part of application install process.

Are upgrade Kits available for individual applications or the complete Application Pack?

Maintenance Level (ML) Release / Minor Release upgrades are available across all applications.

Can I upgrade AAI only?

Yes, you can upgrade AAI alone.

Can I upgrade one application within the Application Pack? (For example, I want to upgrade LRM in the Treasury Application pack, but not MR.)

No. Not possible Upgrade is applied across packs.

Is it possible to uninstall any Application from the Application pack?

No, it is not possible to uninstall any Application from the Application Pack.

Can I uninstall entire Application Pack?

No, you cannot uninstall the Application Pack.

Is it possible to uninstall only application and retain AAI in the installed environment?

No, you cannot uninstall only the application and retain AAI in the installed environment.

Can I uninstall entire Application Pack?

No, you cannot uninstall the Application Pack.

Is it possible to uninstall only application and retain AAI in the installed environment?

No, you cannot uninstall only the application and retain AAI in the installed environment.

Does Application Pack contain all Language Packs supported?

Language Packs need to be installed on 8.0 application packs.

Can I install an Application Pack over another Application Pack (that is same infodomain or different infodomain)?

Yes, you can install an Application Pack over another Application Pack in the same information domain or different information domain. But Behavioral Detection Application Pack and Compliance Regulatory Reporting Application Pack, Asset Liability Management Application Pack and Profitability Application Pack are the exceptions. They need to be installed in a different INFODOM.

Can I use an existing manually created schema as information domain for application pack installation?

No. Schemas required by OFSAA applications have to be created using Schema Creator Utility.

Does OFSAA 8.0 support on WebLogic 10.3.6 with Oracle 12c?

Yes, OFSAA 8.0 will support on WebLogic 10.3.6 with Oracle 12c. WebLogic 10.3.6 supports oracle 12c with some additional configurations. Refer the link http://docs.oracle.com/cd/E28280_01/web.11111/e13737/ds_12cdriver.htm#JDBCA655 for additional configurations.

What should I do if I get the following error message while running the schema creator utility, "HostName in input xml is not matching with the local hostname"?

One possible reason could be the machine is configured for zonal partitioning. Ensure all the known IP Addresses of the machine are present in the /etc/hosts file.

What are the Java versions supported in OFS PFT Application Pack version 8.0.0.0.0?

OFS ALM Application Pack supports 1.7.x and 1.8.x.

Is this release of the OFS PFT Application Pack version 8.0.0.0.0 supported on Java 8?

Yes. To install this release of the OFS ALM Application Pack version 8.0.0.0.0 on Java 8. For more information, refer to specific notes mentioned in the sections Installer and Installation Prerequisites Configurations supported for Java 8. Configuring the Schema Creator Utility, GUI Mode Installation, SILENT Mode Installation.

What should I do if I get following error during schema creation in PFT 8.0.0.0.0 installation on OEL7?

UPPER(TABLE_NAME) = 'DBA_USERS' and UPPER(PRIVILEGE) = 'SELECT'

[SCHEMAUTILITY] [INFO] - Connection URL successfully validated...

[SCHEMAUTILITY] [DEBUG] - Executing ...SELECT VALUE FROM v\$option WHERE parameter =

'Partitioning'

[SCHEMAUTILITY] [ERROR] - Error while validating host name 10.184.157.139

[SCHEMAUTILITY] [ERROR] -

java.net.UnknownHostException: online: Name or service not known

Modify the following line from `osc.sh`:

```
machineIP=`/sbin/ifconfig | grep "inet addr"|head -1|tr -s '\t' ' '|cut -d ' ' -f3|cut -d ':' -f2`  
to
```

```
machineIP=`/sbin/ifconfig | grep "inet"|head -1|tr -s '\t' ' '|cut -d ' ' -f3|cut -d ':' -f2`
```

27.2 Forms Framework FAQs

What should I do when I have large volume of data to be exported?

It is recommended to use BIP reports or OBIEE reports if you have to export large volume of data.

How do I export the columns added to the grid by Field Chooser option?

Perform Grid Export operation to export the columns added to the grid by Field Chooser option.

'Expand All/ Collapse All' button is not visible in the Hierarchy Browser window. What should I do?

Expand All/ Collapse All button is enabled only if the number of hierarchy nodes is less than 50. If it is more than that, it is considered as large hierarchy and the data will be fetched dynamically when you expand each node.

27.3 Error Dictionary

This contents of this section has been created with the interest to help you resolve the installation issues if any. There is a compilation of all the possible errors that might arise during the installation process with the possible cause and the resolution to quickly fix the issue and proceed further with the installation.

This section includes the following topics:

- [Accessing Error Dictionary](#)
- [Error Code Dictionary](#)

27.3.1 Accessing Error Dictionary

Instead of scrolling through the document to find the error code, you can use the pdf search functionality. In the "Find" dialog available in any of the Adobe Acrobat version that you are using to view the pdf document, follow these instructions to quickly find the error resolution.

1. With the Installation pdf open, press **Ctrl+F** or select **Edit > Find**.
2. The *Find* dialog is displayed as indicated.
3. Enter the error code that is displayed on screen during Infrastructure installation.

4. Press **Enter**. The search results are displayed and highlighted as indicated below.

Error code - OFSAAI-1003

Cause	<code>JAVA_HOME/bin</code> not found in PATH variable.
Resolution	Import <code><JAVA_HOME>/bin</code> into PATH variable. Example: <code>PATH = \$JAVA_HOME/bin:\$PATH export PATH.</code>

View the details of the issues, its cause, and resolution specific to the error code. Repeat the step to find an answer to any other errors that you notice during installation. If you are not able to resolve the issue even after following the steps provided in resolution, you can contact support.oracle.com along with log files and appropriate screen shots.

27.3.2 Error Code Dictionary

Error code - OFSAAI-1001

Cause	Unix shell is not "korn" shell.
Resolution	Change the shell type to "korn". Use <code>chsh</code> unix command to change SHELL type. Shell type can also be changed by specifying shell path for the Unix user in <code>/etc/passwd</code> file. Note: <code>chsh</code> command is not available in Solaris OS.

Error code - OFSAAI-1002

Cause	No proper arguments are available.
Resolution	Provide proper arguments. Invoke <code>Setup.sh</code> using either SILENT or GUI mode. Example: <code>./Setup.sh SILENT</code> or <code>./Setup.sh GUI</code>

Error code - OFSAAI-1004

Cause	File <code>.profile</code> is not present in \$HOME.
Resolution	Create <code>.profile</code> in \$HOME, i.e. in the home directory of user.

Error code - OFSAAI-1005

Cause	File <code>OFSAAIInfrastructure.bin</code> is not present in current folder.
Resolution	Copy <code>OFSAAIInfrastructure.bin</code> into installation kit directory.

Error code - OFSAAI-1006

Cause	File CustReg.DAT is not present in current folder.
Resolution	Copy CustReg.DAT into installation kit directory

Error code - OFSAAI-1007

Cause	File OFSAAI_InstallConfig.xml is not present in current folder.
Resolution	Copy OFSAAI_InstallConfig.xml into installation kit directory.

5 Error code - OFSAAI-1008

Cause	File validateXMLInputs.jar is not present in current folder.
Resolution	Copy validateXMLInputs.jar into installation kit directory.

Error code - OFSAAI-1009

Cause	File log4j.xml is not present in current folder.
Resolution	Copy log4j.xml into installation kit directory.

Error code - OFSAAI-1010

Cause	Unknown error occurred.
Resolution	Make sure to provide proper argument (SILENT or GUI) to the Setup.sh file.

Error code - OFSAAI-1011

Cause	XML validation failed.
Resolution	Check InfrastructurePreValidations.Log for more details.

Error code - OFSAAI-1012

Cause	Property file with locale name does not exist.
Resolution	Copy MyResources_en_US.properties to the setup kit directory and keep en_US in LOCALE tag of OFSAAI_InstallConfig.xml.

Error code - OFSAAI-1013

Cause	File OFSAAI_InstallConfig.xml/OFSAAI_PostInstallConfig.xml not found.
Resolution	Copy OFSAAI_InstallConfig.xml/OFSAAI_PostInstallConfig.xml to the setup kit directory.

Error code - OFSAAI-1014

Cause	XML node value is blank.
Resolution	Make sure all node values except SMTPSERVER, PROXYHOST, PROXYPORT, PROXYUSERNAME, PROXYPASSWORD, NONPROXYHOST, or RAC_URL are not blank.

Error code - OFSAAI-1015

Cause	XML is not well formed.
Resolution	Execute the command dos2unix OFSAAI_InstallConfig.xml to convert plain text file from DOS/MAC format to UNIX format. OR Make sure that OFSAAI_InstallConfig.xml is valid. Try to open the file through Internet Explorer for a quick way to check validity. If it is not getting opened, create new OFSAAI_InstallConfig.xml using the XML_Utility.jar.

Error code - OFSAAI-1016

Cause	User installation directory contain blank spaces.
Resolution	Provide an installation path that does not contain spaces. Check the tag USER_INSTALL_DIR in OFSAAI_InstallConfig.xml file. This path should not contain any spaces.

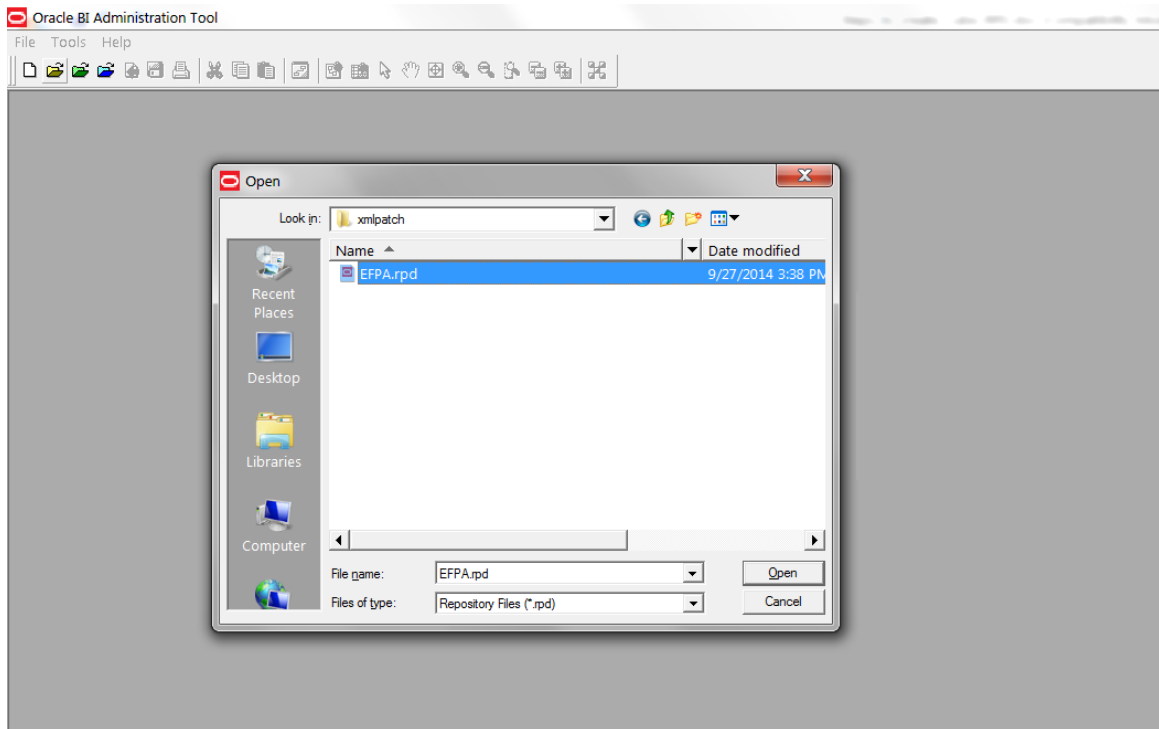
Error code - OFSAAI-1017

Cause	User installation directory is invalid.
Resolution	Provide a valid installation path. Check if you are able to create the directory mentioned in USER_INSTALL_DIR tag value of OFSAAI_InstallConfig.xml file.

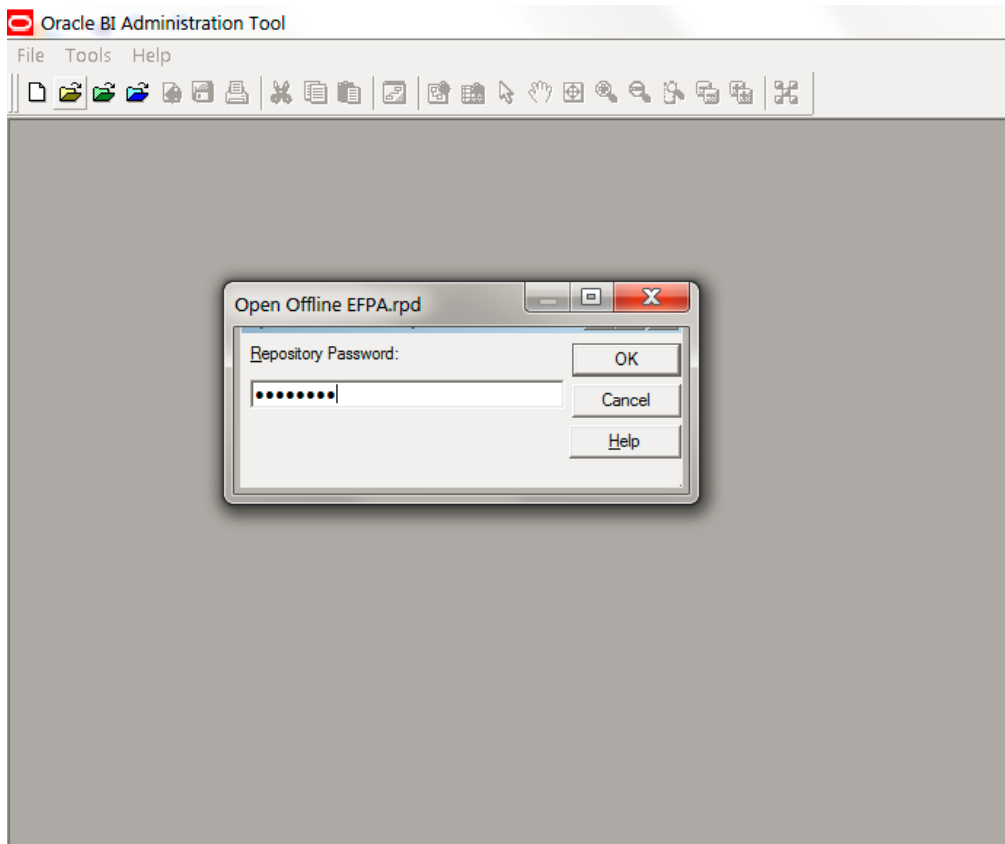
28 Appendix W – Steps to Configure Cube Related RPD

The steps to be followed for creating cube related RPD is mentioned in the following procedure:

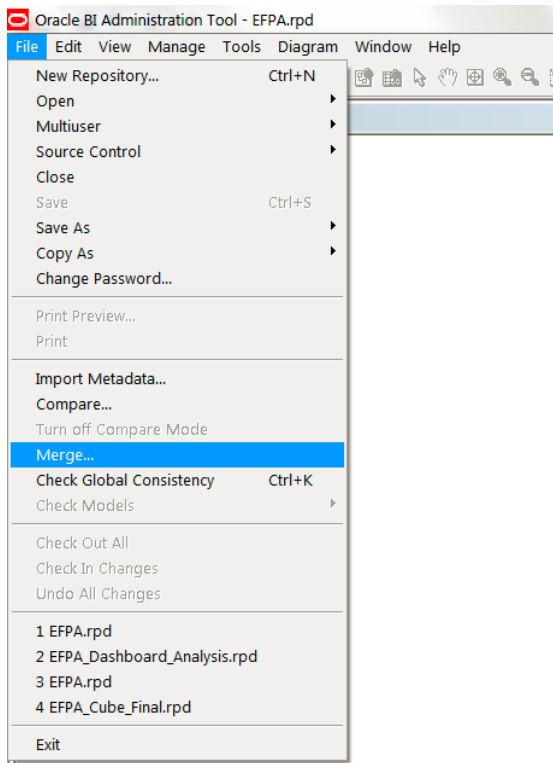
1. Create a folder “xmlpatch” in your system and copy the EFPA.rpd (Its RDBMS RPD) & EFPA_Cube_Patch.xml files.
2. Open the EFPA Repository (EFPA.rpd) in offline mode.



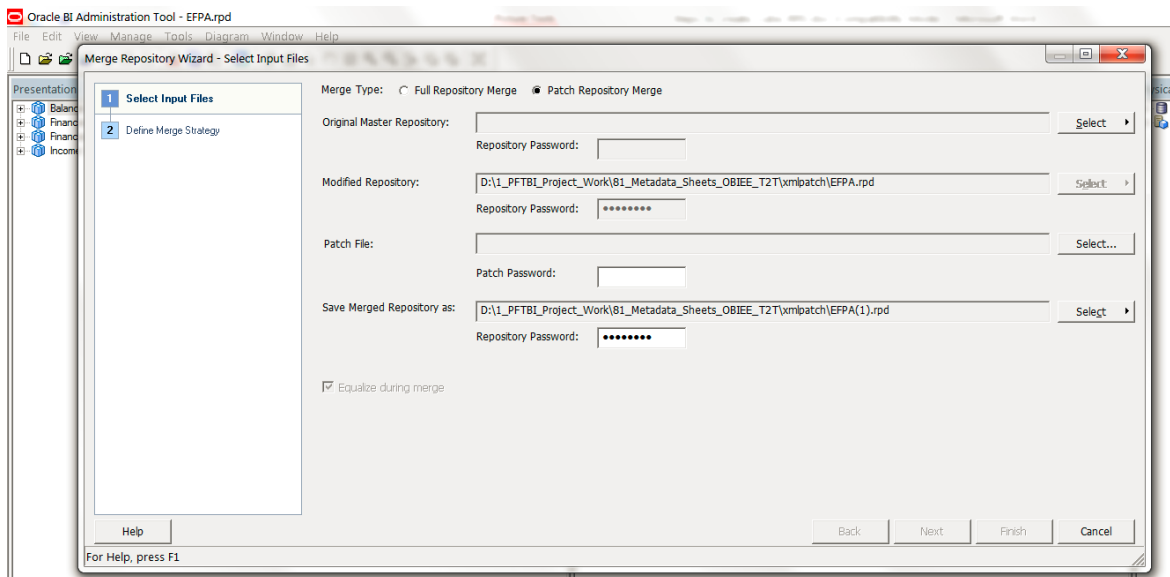
3. Give the repository password as “Admin123”.



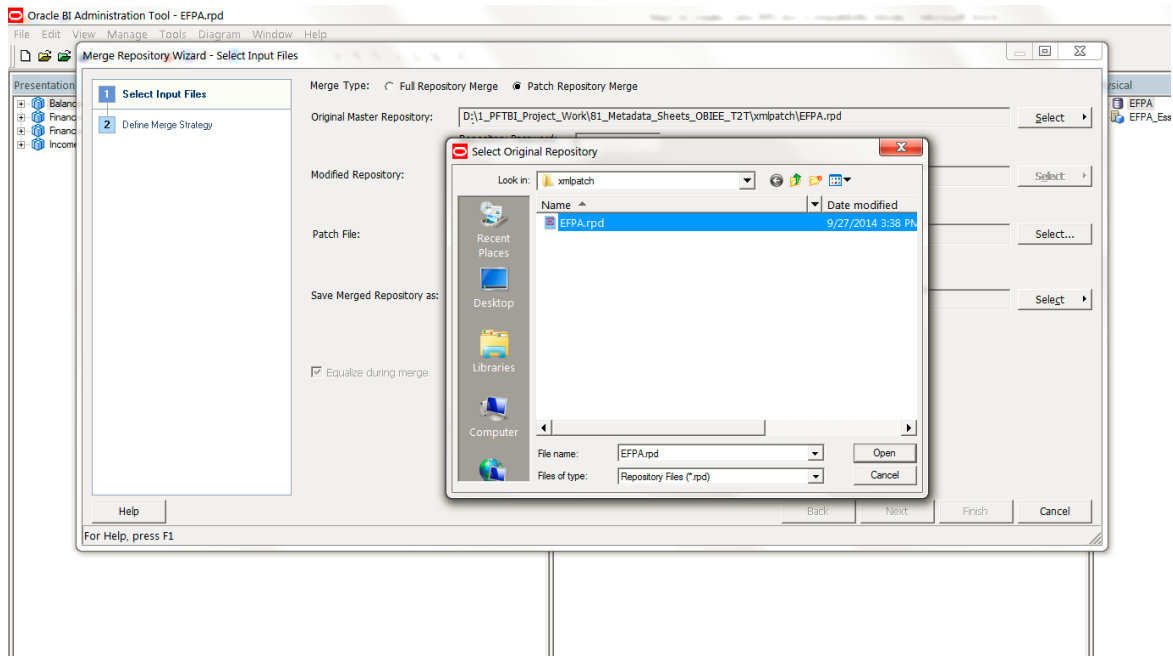
4. Choose "Merge" option from File Menu.



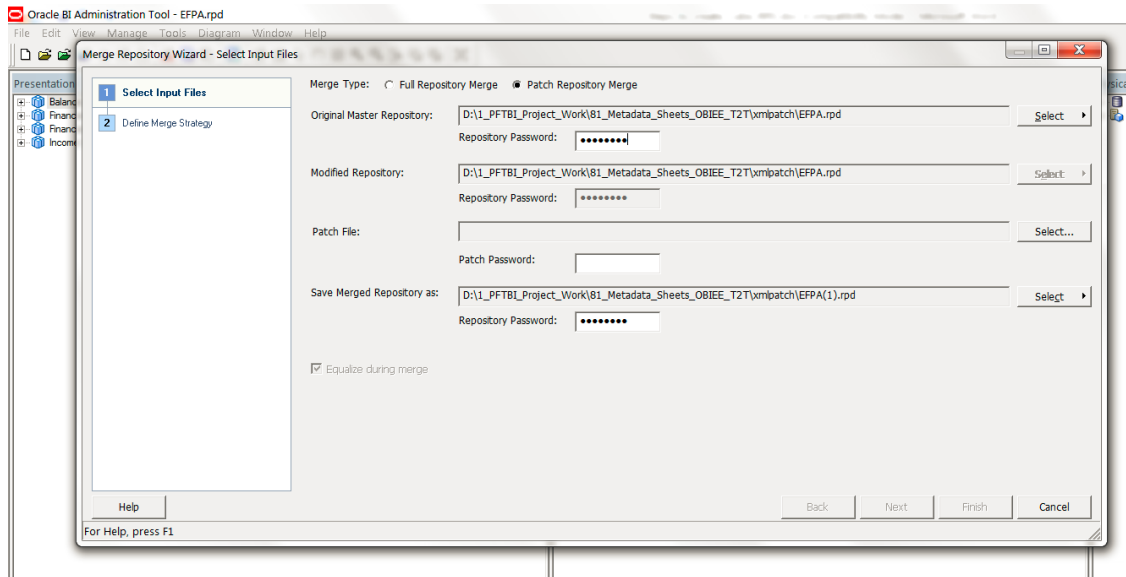
5. On the Merge Repository Wizard screen, choose option as “Patch Repository Merge”.



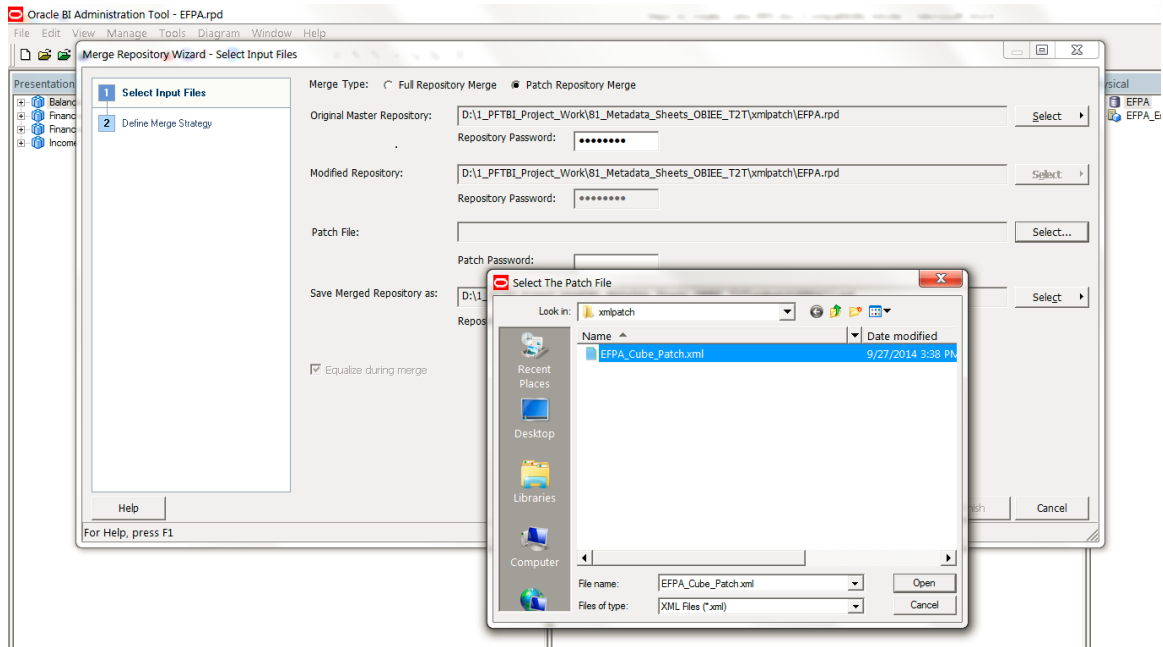
6. Select the Original Master Repository as “EFPA.rpd” from xmlpatch folder by clicking select option.



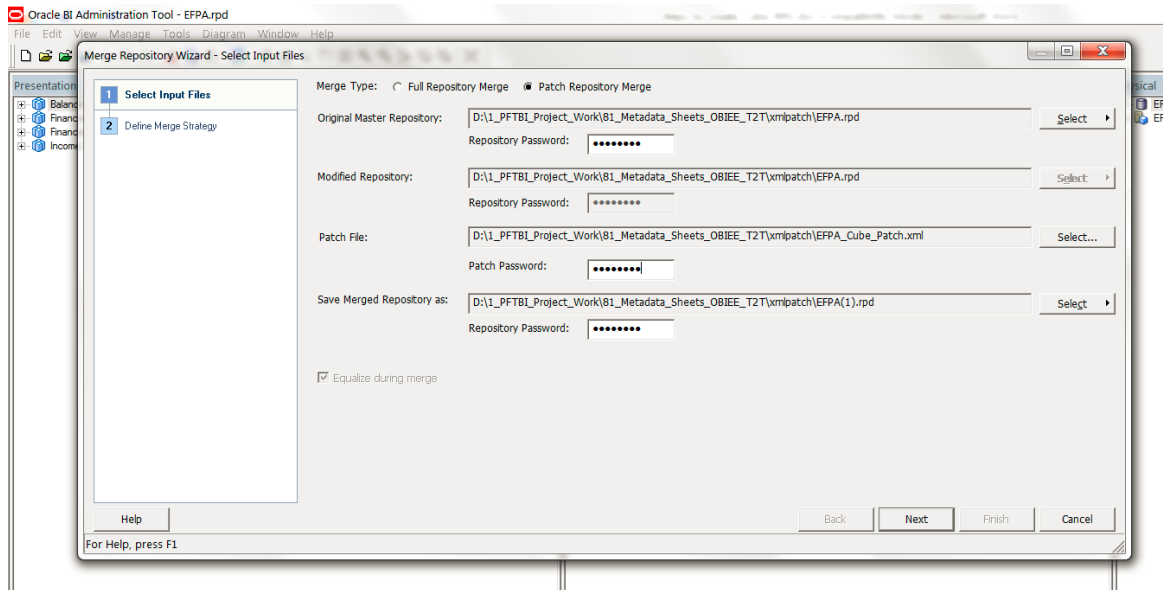
7. Give "Admin123" as password for Original repository.



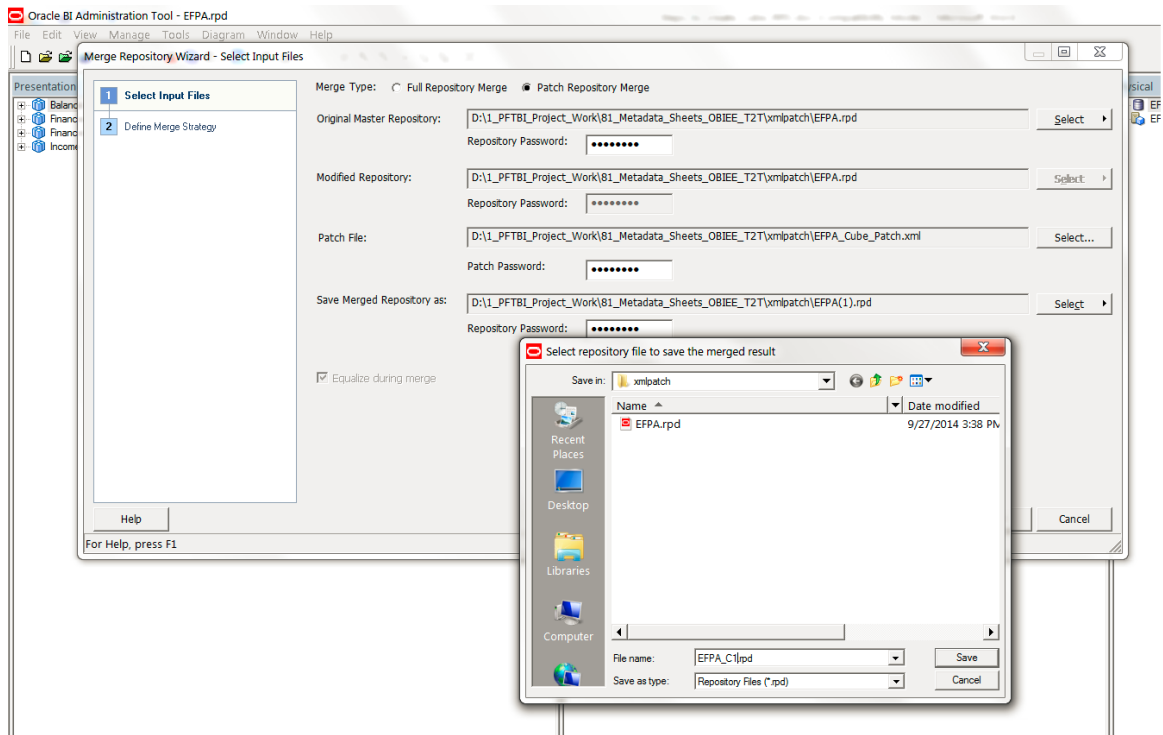
8. Select the xml patch file from the saved path (xmlpatch folder).



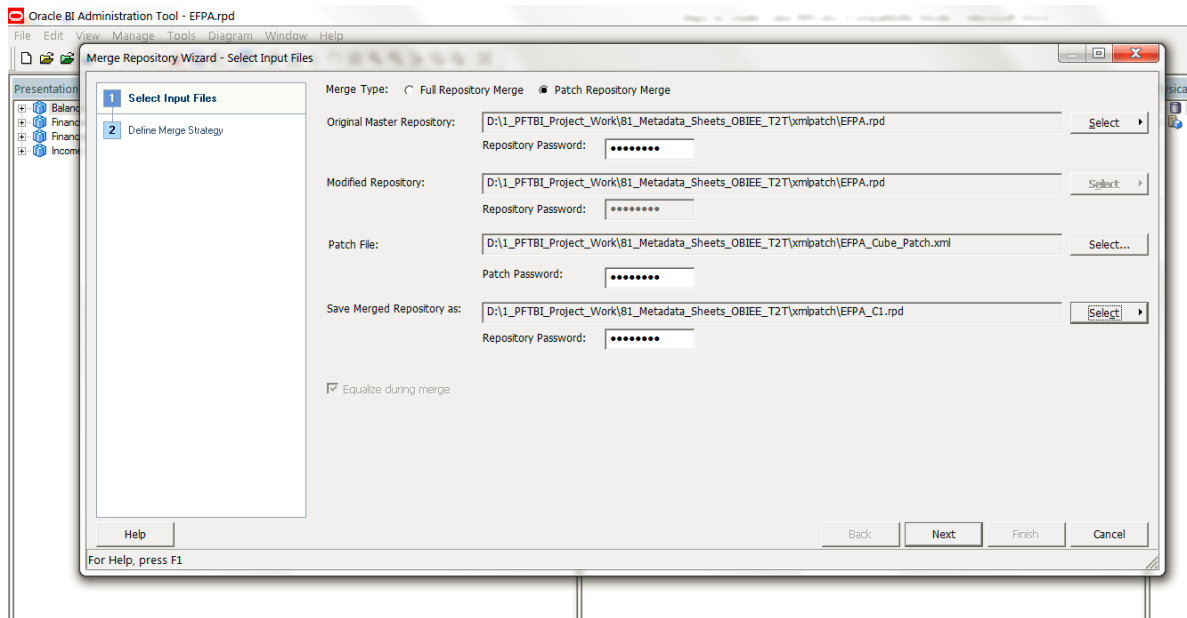
9. Give "Admin123" as Patch file password.



10. Change the name of the merged repository to "EFPA_C1.rpd".

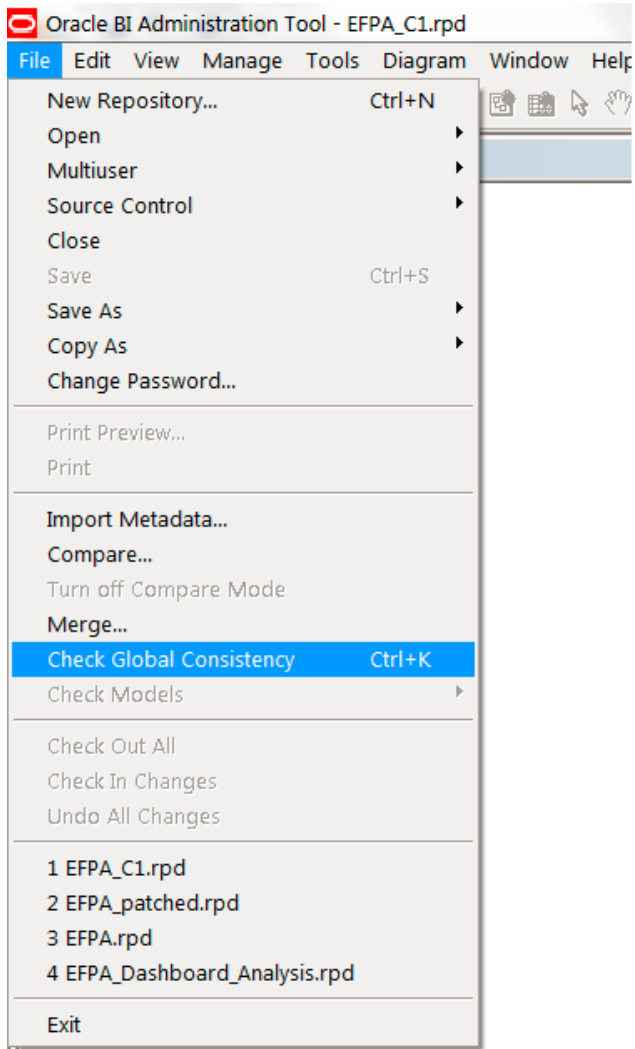


11. Click on Next.

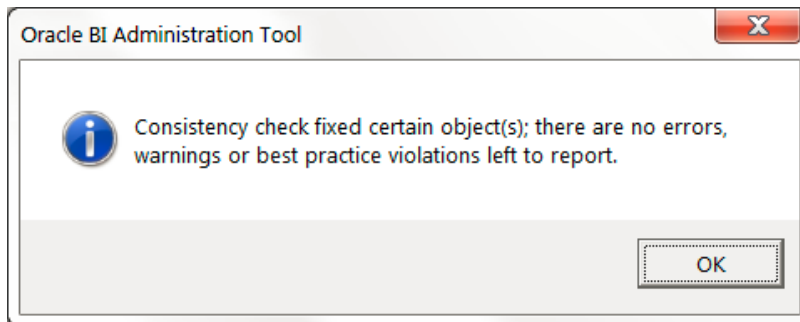


NOTE: If “Merge Repository Wizard – Define Merge Strategy” window opens up then skip the below steps and proceed from “Step: xxiii” onwards. In this case the final Cube Rpd name will be “EFPA_C1.rpd”. Otherwise proceed ahead with the below steps.

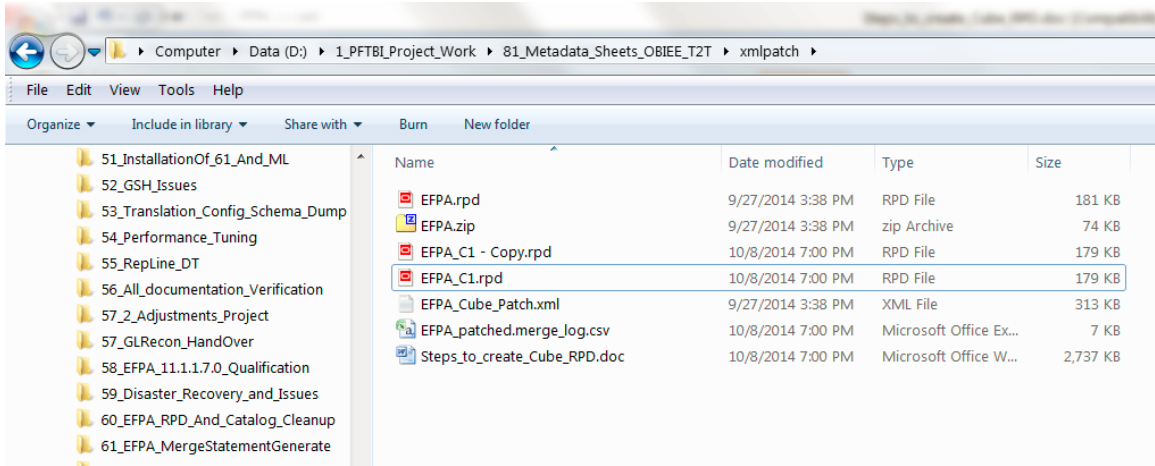
12. Check for global consistency by clicking on “Check Global Consistency Ctrl+K” under “File” menu.



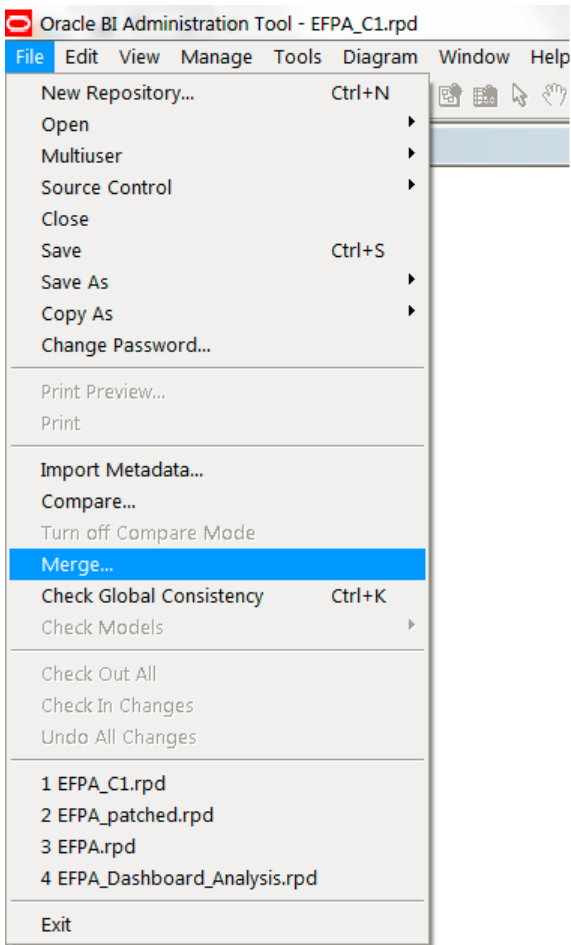
13. It should result in no errors. Click on “OK” button.



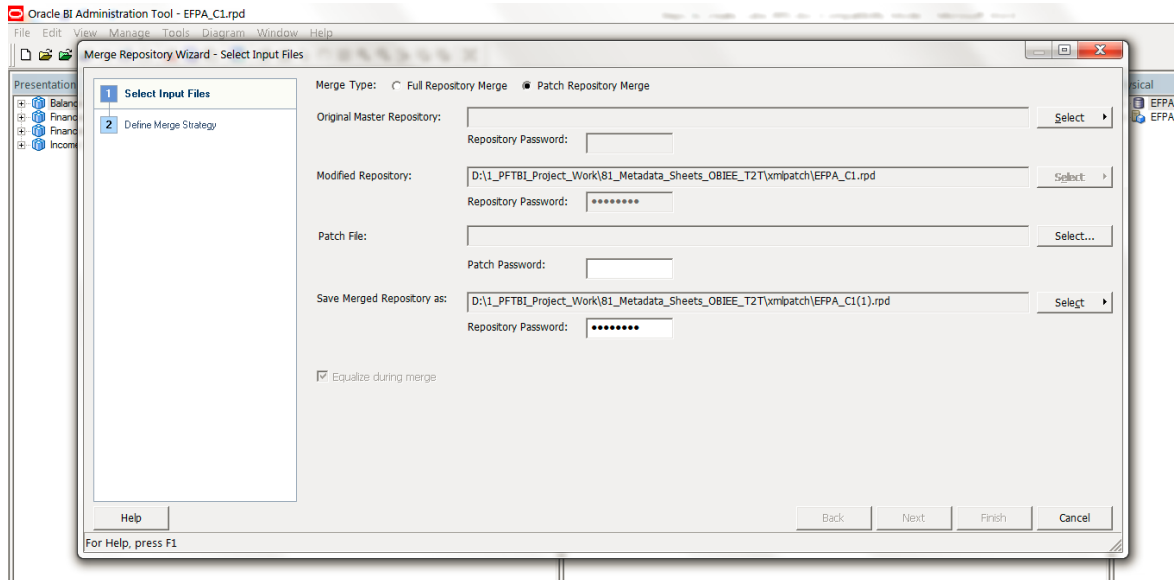
14. In “xmlpatch” folder copy “EFPA_C1.rpd” and paste so that a new duplicate rpd gets created “EFPA_C1 - Copy.rpd”.



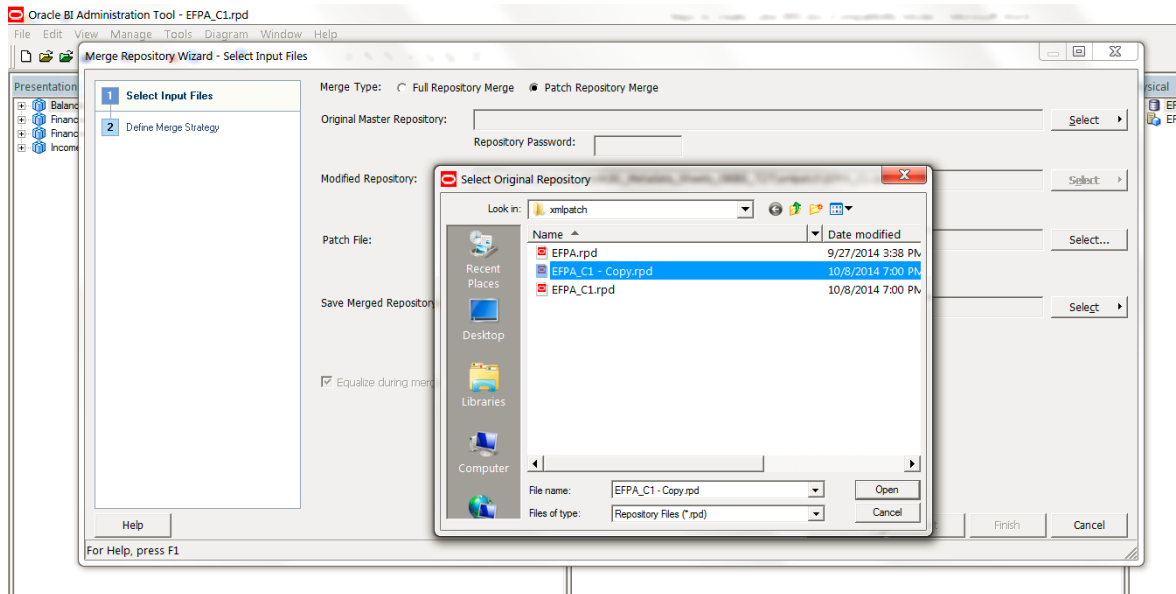
15. In the currently opened “EFPA_C1.rpd” click on “Merge...” under “File” menu.



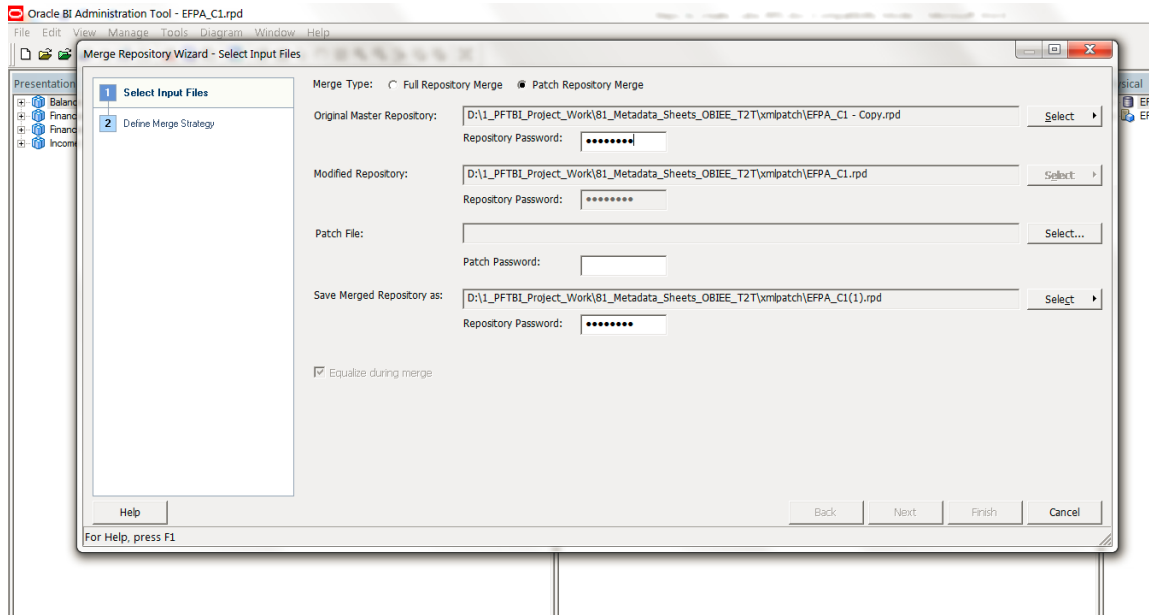
16. On the Merge Repository Wizard screen, choose option as “Patch Repository Merge”.



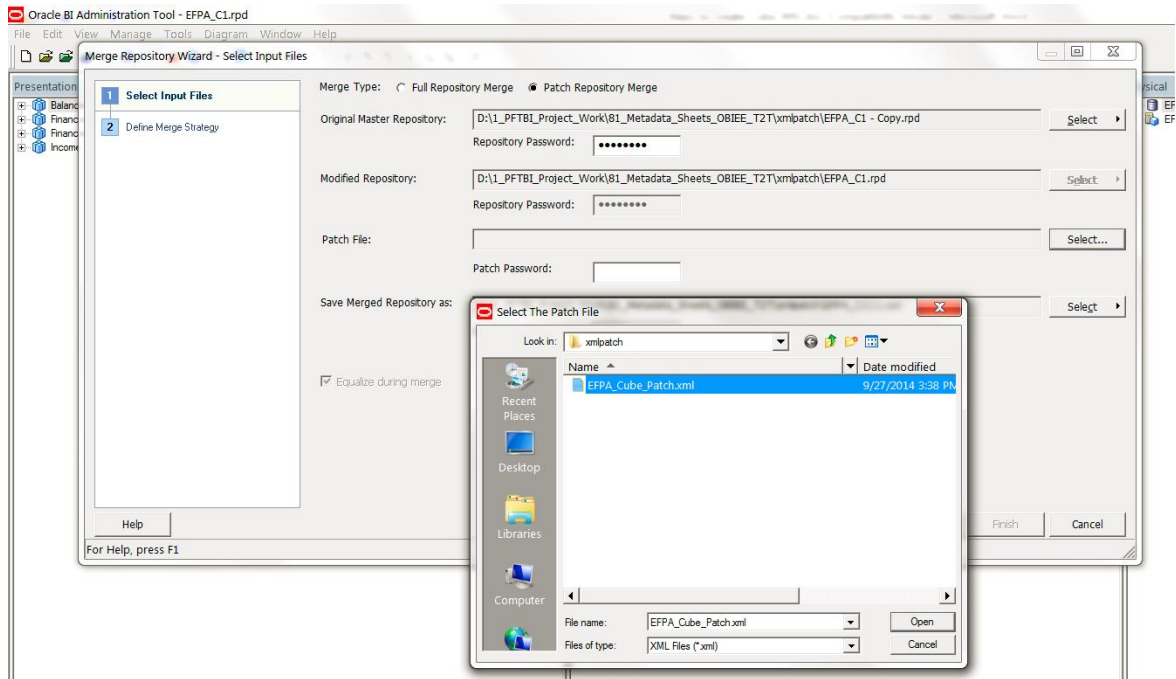
17. Select the Original Master Repository as “EFPA_C1 - Copy.rpd” from xmlpatch folder by clicking select option.



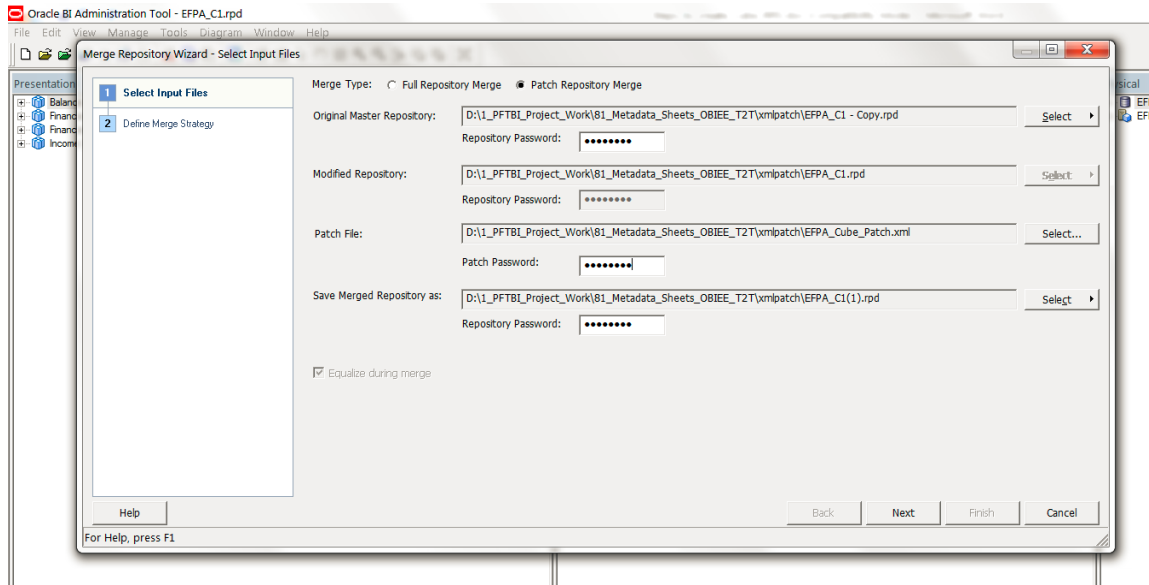
18. Give “Admin123” as password for Original repository.



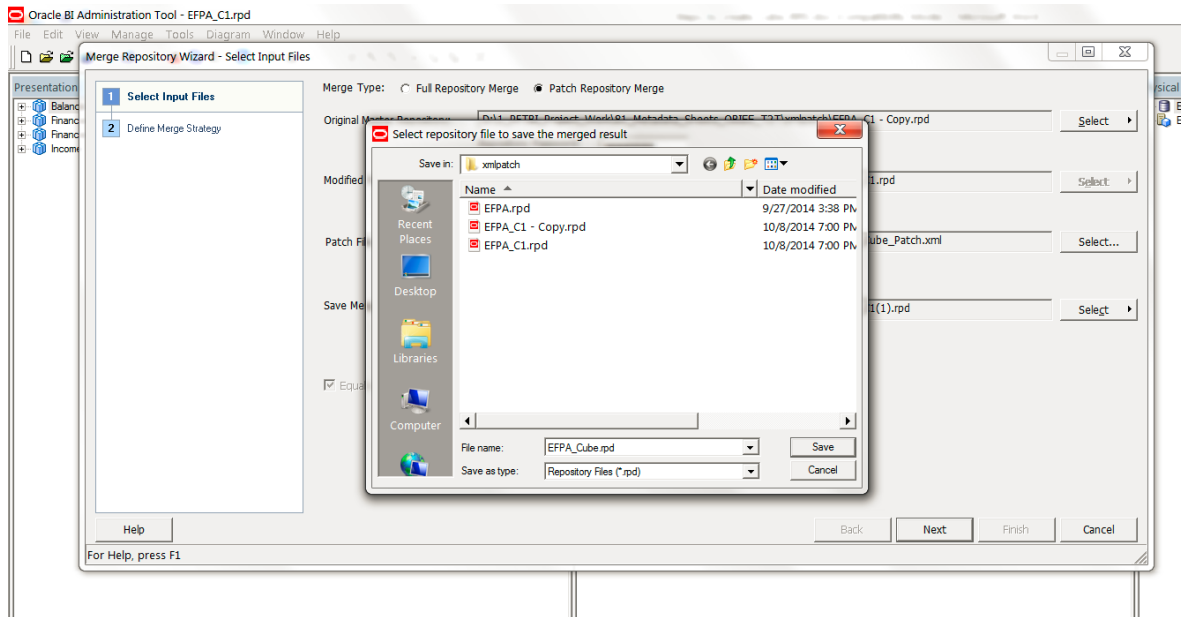
19. Select the xml patch file from the saved path (xmlpatch folder).



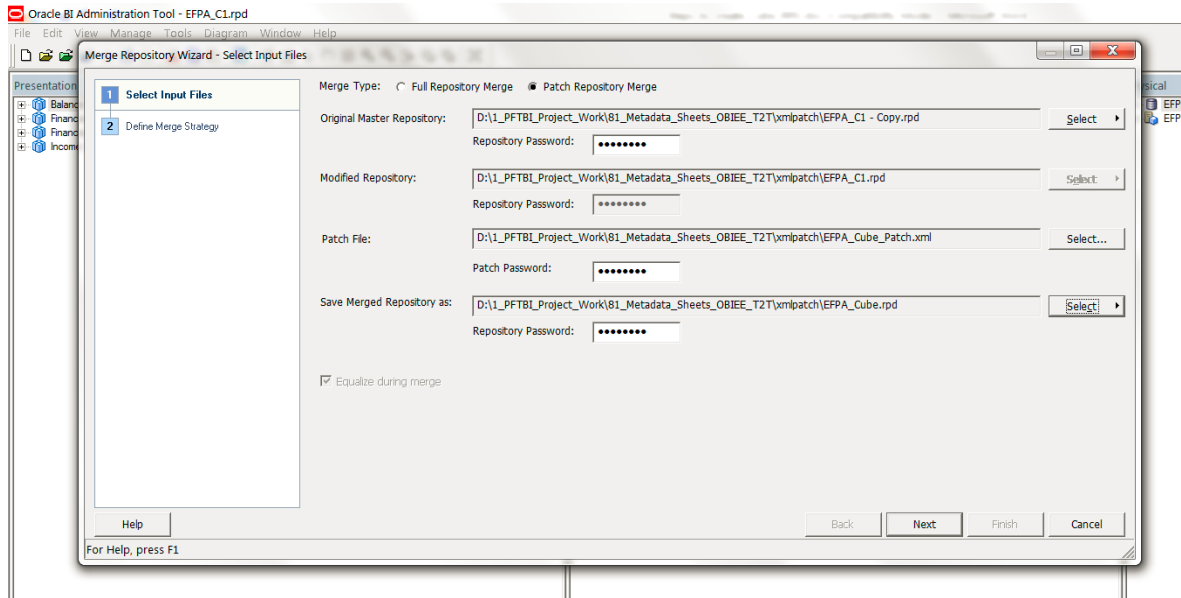
20. Give "Admin123" as Patch file password.



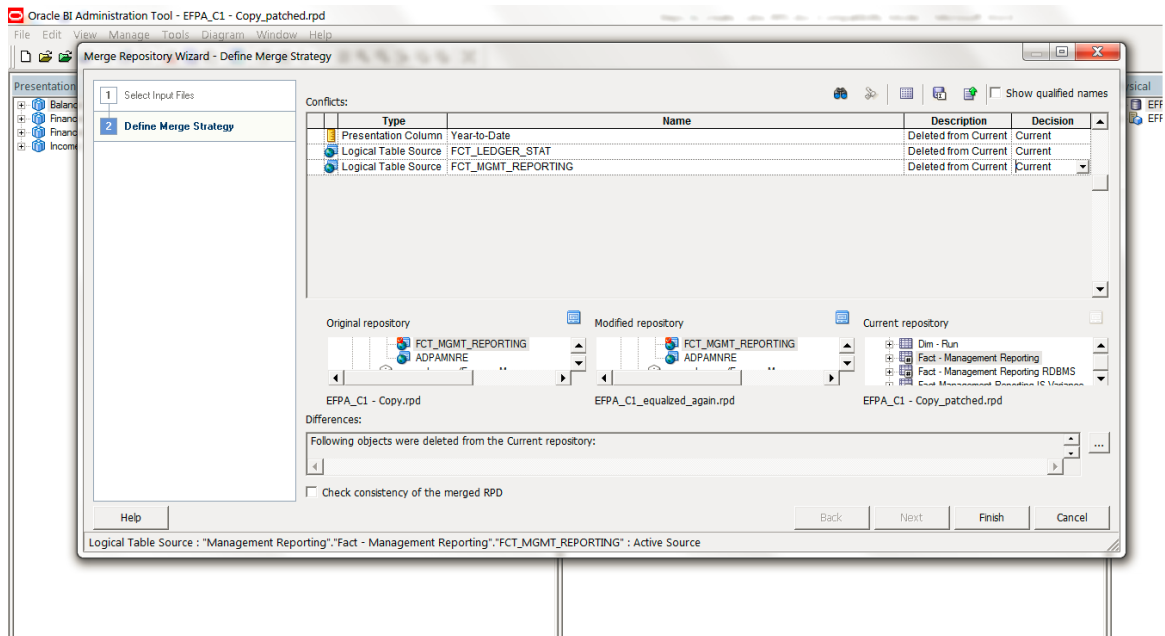
21. Change the name of the merged repository to “EFPA_Cube.rpd”.



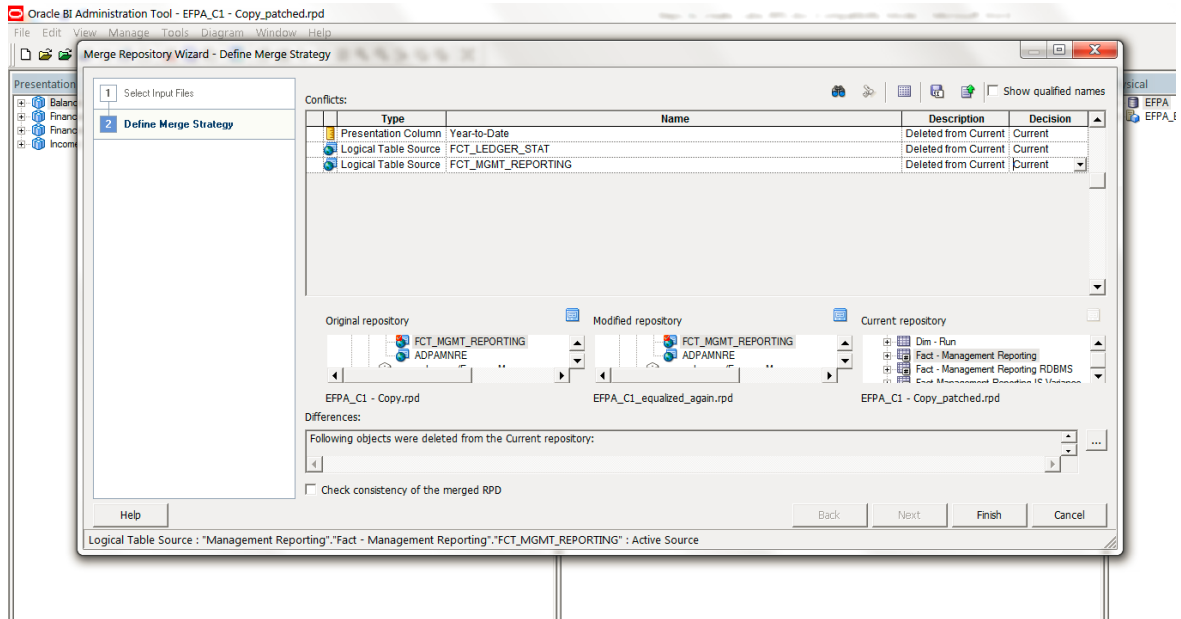
22. Click on Next.



23. The wizard asks for the confirmation for deletion. Please select option “Current” under Decision dropdown.



24. Click on Finish.



This creates a merged repository (EPPA_Cube.rpd) under xmlpatch folder.

Take the “EPPA_Cube.rpd” file and deploy it using EM console on the environment where Data is to be fetched from ESSBASE Cubes.

NOTE: Provide connection details of RDBMS in ‘OFSEFPA Connection Pool’ and ‘OFSEFPA Init Block’. This is required for LCY Label in the OBIEE reports.

29 Appendix X - Steps to Configure User Roles

1. Open Admin Console of OBIEE.
2. Click on Security Realms under Domain Structure.
3. Click on myrealm under Realms.

ORACLE WebLogic Server Administration Console

Home Log Out Preferences Record Help

Welcome, weblogic Connected to: bifoundation_dom

Home > Summary of Security Realms > myrealm > Users and Groups > BusinessAnalyst > Summary of Security Realms > myrealm > Summary of Security Realms

Summary of Security Realms

A security realm is a container for the mechanisms—including users, groups, security roles, security policies, and security providers—that are used to protect WebLogic resources. You can have multiple security realms in a WebLogic Server domain, but only one can be set as the default (active) realm.

This Security Realms page lists each security realm that has been configured in this WebLogic Server domain. Click the name of the realm to explore and configure that realm.

Customize this table

Realms (Filtered - More Columns Exist)

Click the **Lock & Edit** button in the Change Center to activate all the buttons on this page.

Name	Default Realm
myrealm	true

Showing 1 to 1 of 1 Previous | Next

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4. Click on 'User and Groups' and then on 'Groups'.

ORACLE WebLogic Server Administration Console

Home Log Out Preferences Record Help

Welcome, weblogic Connected to: bifoundation_dom

Home > Summary of Security Realms > myrealm > Users and Groups > BusinessAnalyst > Summary of Security Realms > myrealm > Summary of Security Realms > myrealm

Settings for myrealm

Configuration **Users and Groups** Roles and Policies Credential Mappings Providers Migration

Users **Groups**

This page displays information about each group that has been configured in this security realm.

Customize this table

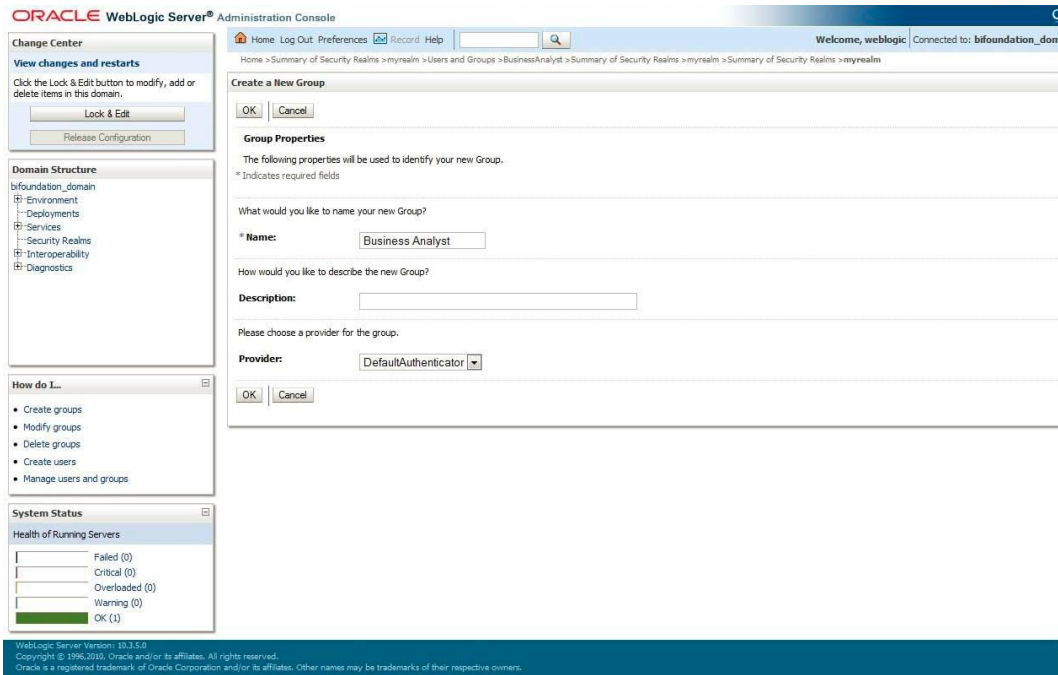
Groups

Name	Description	Provider
AdminChannelUsers	AdminChannelUsers can access the admin channel.	DefaultAuthenticator
Administrators	Administrators can view and modify all resource attributes and start and stop servers.	DefaultAuthenticator
AppTesters	AppTesters group.	DefaultAuthenticator
BankGlobalCFO		DefaultAuthenticator
BIAdministrators	BI Administrators Group	DefaultAuthenticator
BIAuthors	BI Authors Group	DefaultAuthenticator
BIConsumers	BI Consumers Group	DefaultAuthenticator
CrossDomainConnectors	CrossDomainConnectors can make inter-domain calls from foreign domains.	DefaultAuthenticator
Deployers	Deployers can view all resource attributes and deploy applications.	DefaultAuthenticator
LeBManager		DefaultAuthenticator

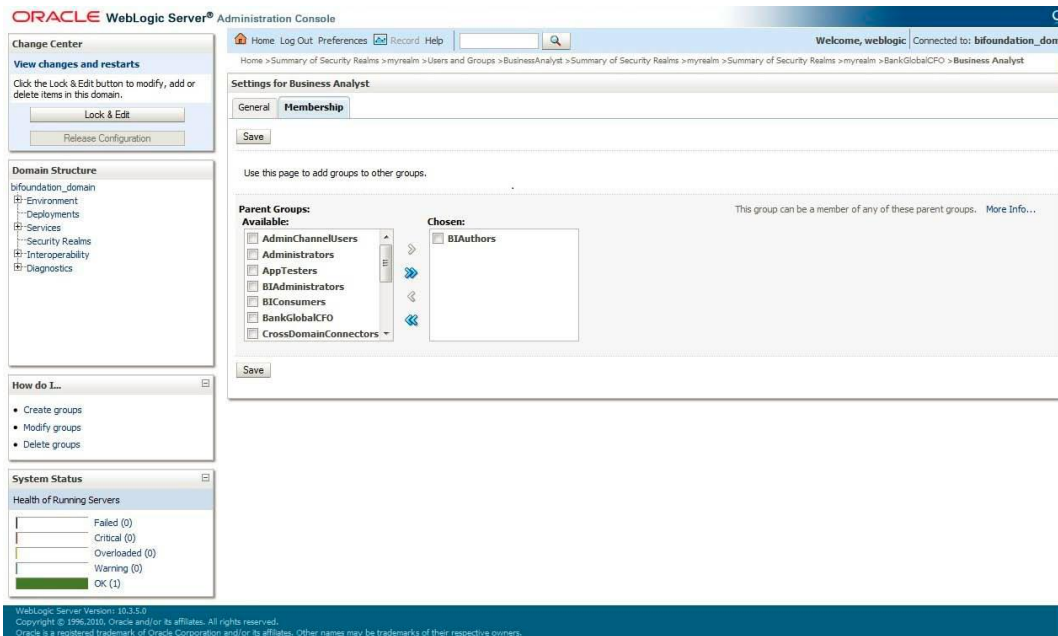
Showing 1 to 10 of 14 Previous | Next

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- Click on 'New' and create two new groups with the names 'Business Analyst' and 'LoBManager'.



- Click on newly created 'Business Analyst' group for assigning parent group.



- Create two new users under 'Users' tab of 'Users and Groups'. One user for Business Analyst and another for LoB Manager.

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help Welcome, weblogic Connected to: bifoundation_domain

Home > Users and Groups > BusinessAnalyst > Summary of Security Realms > myrealm > Summary of Security Realms > myrealm > BankGlobalCFO > Business Analyst > myrealm > Users and Groups

Settings for myrealm

Configuration **Users and Groups** Roles and Policies Credential Mappings Providers Migration

Users Groups

This page displays information about each user that has been configured in this security realm.

Customize this table

Users Showing 1 to 7 of 7 Previous | Next

<input type="checkbox"/>	Name ↕	Description	Provider
<input type="checkbox"/>	BankGlobalCFO1		DefaultAuthenticator
<input type="checkbox"/>	BISystemUser	BI System User	DefaultAuthenticator
<input type="checkbox"/>	LOBManager1		DefaultAuthenticator
<input type="checkbox"/>	LOBManager2		DefaultAuthenticator
<input type="checkbox"/>	OracleSystemUser	Oracle application software system user.	DefaultAuthenticator
<input type="checkbox"/>	RegionalHead1		DefaultAuthenticator
<input type="checkbox"/>	weblogic		DefaultAuthenticator

Showing 1 to 7 of 7 Previous | Next

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ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help Welcome, weblogic Connected to: bifoundation_domain

Home > BusinessAnalyst > Summary of Security Realms > myrealm > Summary of Security Realms > myrealm > BankGlobalCFO > Business Analyst > myrealm > Users and Groups > businessanalyst1

Settings for businessanalyst1

General Passwords Attributes **Groups**

Use this page to configure group membership for this user.

Parent Groups:

Available:

- BIAdministrators
- BIAuthors
- BIConsumers
- BankGlobalCFO
- CrossDomainConnectors
- Deployers
- LOBManager
- Monitors

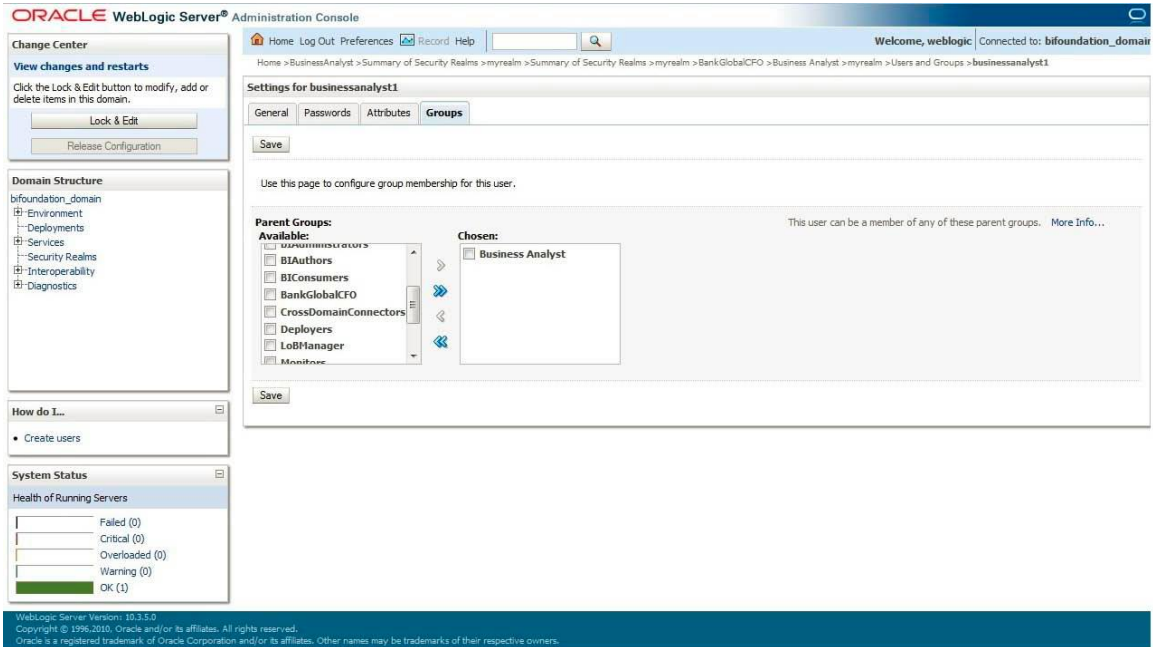
Chosen:

- Business Analyst

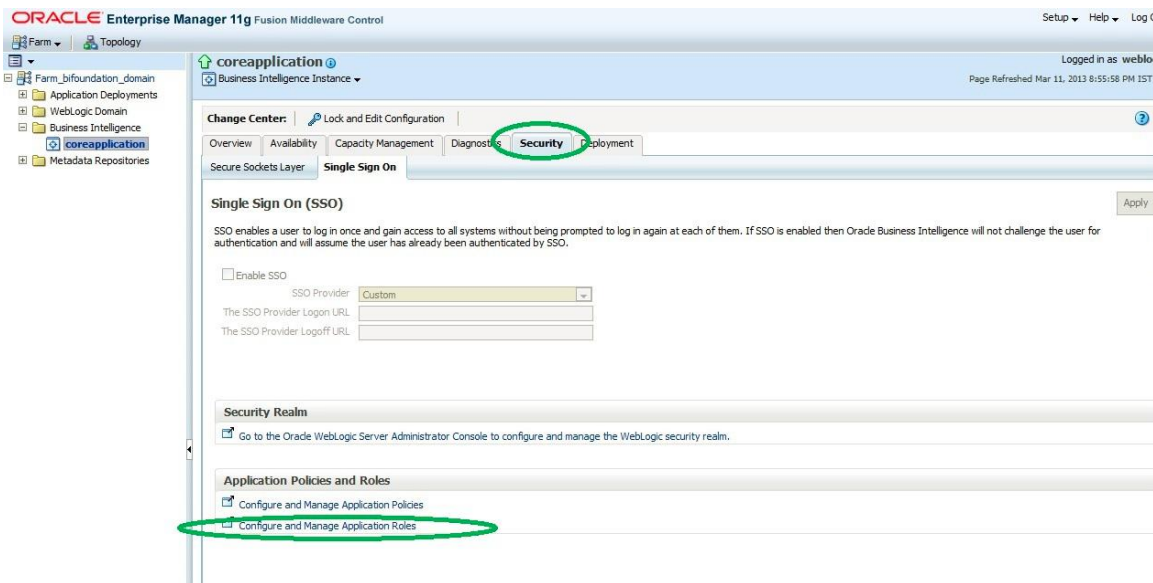
This user can be a member of any of these parent groups. More Info...

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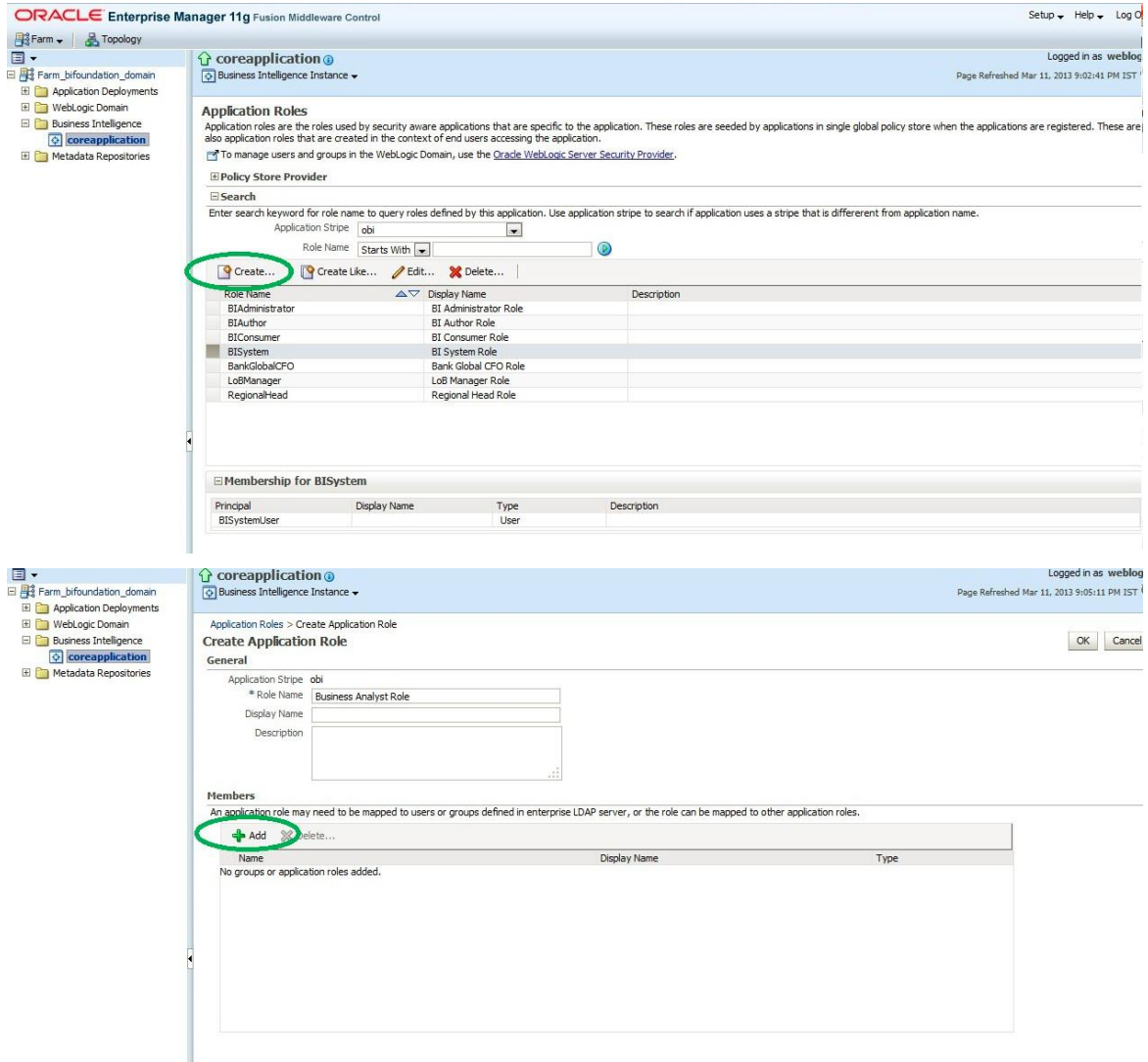
8. Map the newly created users to respective groups.



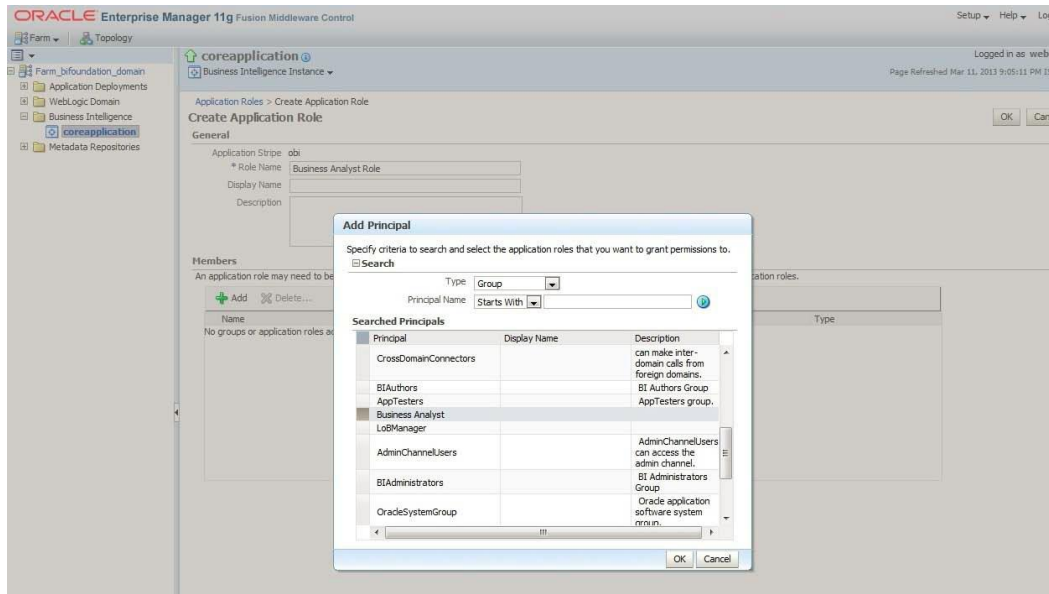
9. Close the Admin Console of OBIEE.
10. Open Enterprise Manager of OBIEE.
11. Navigate to CoreApplication > Security > Single Sign On > Configure and Manage Application Roles.



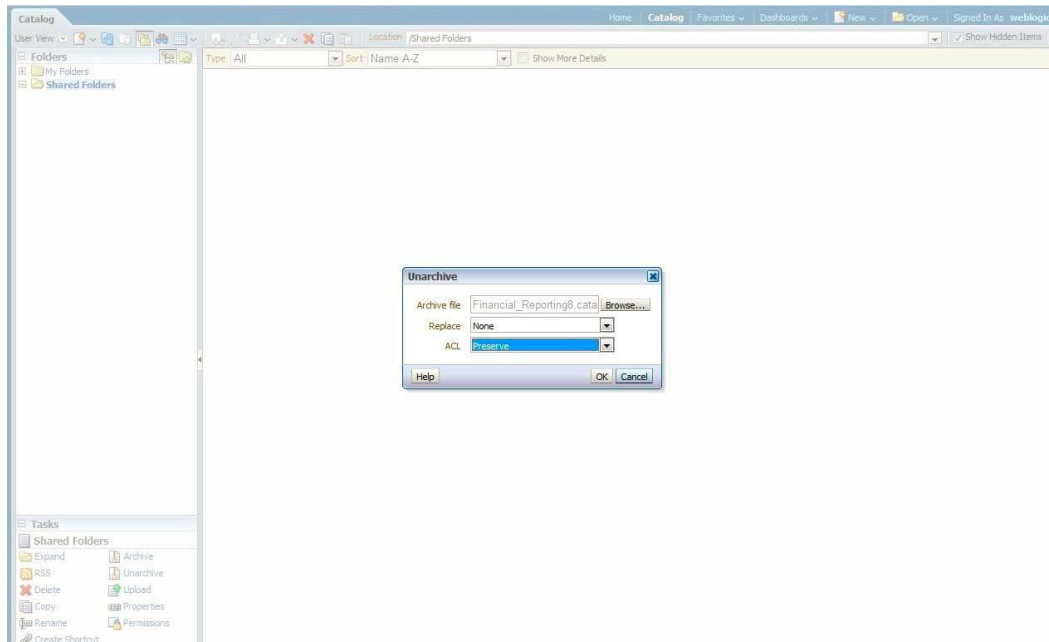
12. Create new application roles with the name 'Business Analyst Role' with display name as 'Business Analyst Role' and 'LoBManager' with display name as 'LoB Manager Role'.



13. Assign Business Analyst Group to its role and similarly 'LoB Manager' group to its respective role.



14. Unarchive the catalogs by selecting ACL as 'Preserve'.



15. After un-archiving the catalogs (Financial Reporting.catalog & Management Reporting.catalog) configure the physical tables in database PFTBI_USER_LOB_MAP to create LoB Manager and LoB mapping.

16. Login with corresponding LoB Manager User Id to verify if the respective LoBs are being selected. To verify all the reports, login with Business Analyst user id.



OFSAA Financial Services PROFITABILITY Application Pack

8.0.0.0.0 Installation Guide

Oracle Corporation
World Headquarters
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

Worldwide Inquiries:

Phone: +1.650.506.7000

Fax: +1.650.506.7200

www.oracle.com/us/industries/financial-services/

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