# **Oracle® Financial Services Sanctions Pack**

Installation and Configuration Guide Release 8.0.4.0.0 E83122-01

February 2017



#### Installation and Configuration Guide, Release 8.0.4.0.0

F83122-0

Copyright © 2017, Oracle and/or its affiliates. All rights reserved.

Primary Author: Vibha Nag M S

Contributing Author: Amit Sahoo, Anil M S, Ruchi Tripathi

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the

, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

# Contents

Pr	eface	xi
	Summary	xi
	Audience	xi
	Related Documents	xii
	Conventions	xii
	Abbreviations	xii
1	About OFSAA and OFSAA Application Packs	
	About Oracle Financial Services Analytical Applications (OFSAA)	1-1
	About Oracle Financial Services Sanctions Application Pack	1-2
	About Oracle Financial Services Analytical Applications Infrastructure (OFS AAI)	1-2
	Components of OFSAAI	1-2
	OFSAA Infrastructure High Availability	1-3
2	Understanding Sanctions Pack Installation	
	Installation Overview	2-5
	Prerequisite	2-5
	Deployment Topology	2-6
	Hardware and Software Requirements	2-7
	Configurations supported for Java 7	2-7
	Configurations supported for Java 8	2-9
	Verifying System Environment	2-11
	Understanding the Installation Mode	2-11
	GUI Mode	2-11
	SILENT Mode	2-11
3	Preparing for Installation	
	Installer and Installation Prerequisites	3-13
	Common Installation Tasks	3-16
	Configuration for GUI Mode Installation	3-16
	Identifying the Installation Directory, Download and Metadata Repository Directories	3-17
	Download and Copy the OFS Sanctions Pack Installer	
	Extracting the Software	3-17
	Setting Up the Web Application Server	3-18

4	Installing the Sanctions Pack	
	Configuring and Executing the Schema Creator Utility	4-19
	Prerequisites	
	Configuring the Schema Creator Utility	4-19
	Executing the Schema Creator Utility	4-20
	Executing the Schema Creator Utility in Online Mode	4-20
	Executing the Schema Creator Utility in Offline Mode	4-22
	Executing the Schema Creator Utility with -s option	
	Installing the OFS Sanctions Pack	
	SILENT Mode Installation	
	GUI Mode Installation	
	Verifying the Log File	4-50
5	Post Installation Configurations	
	Configure Resource Reference	5-51
	Start OFSAA Infrastructure Services	5-51
	Add TNS entries in TNSNAMES.ORA file	5-51
	Configuration for Oracle Financial Services Inline Processing Engine (OFS IPE)	5-52
	Create and Deploy the Application Pack Web Archive	5-53
	Access the OFSAA Application	
	Perform Post Deployment Configurations	5-53
A	Configuring Web Server	
	Configuring Web Server	A-1
	Configuring Web Application Servers	A-1
	Configuring WebLogic for Application Deployment	A-2
	Creating Domain in WebLogic Server	A-2
	Delete Domain in WebLogic	
	WebLogic Memory Settings	A-9
В	Configuring Resource Reference in WebLogic Application Server	
	Create Data Source	B-11
	Create GridLink Data Source	B-17
	Configure Multi Data Sources	B-19
	Advanced Settings for Data Source	B-22
	JDBC Connection Pooling	B-22
С	Creating and Deploying EAR/ WAR File for WebLogic	
	Creating EAR/WAR File for WebLogic	C-23
	Deploying EAR/WAR File for WebLogic	C-24
	Explode EAR File	C-25
	Install Application	C-26
D	Starting/ Stopping Infrastructure Services	
	Starting Infrastructure Services	D-31

	Starting WebLogic Application Server	D-32
	Stopping Infrastructure Services	D-32
E	Accessing OFSAA Application	
	Access the OFSAA Application	E-35
F	Post Deployment Configurations	
	Post Deployment Configurations	F-37
	Create Application Users	
	Map Application User(s) to User Group	
	Change ICC Batch Ownership	
	Post Installation Steps	
G	Cloning OFSAA Instance	
H ^.	Configurations for Installation of OFS Sanctions Pack 8.0.4.0.0 on OFS B	D
Αţ	oplications Pack 8.0.4.0.0	
	OFSAA Landing Page	
	OFSAA Landing Page	I-45
	Applications Tab	I-45
	Sandbox Tab	
	Object Administration Tab	
	System Configuration and Identity Management Tab	
	Enabling a Product within an Application Pack	I-46
J	Additional Configuration	
	Additional Configuration	I-49
	FTP/SFTP Configuration for File Transfer	I-49
	Configuring Infrastructure Server Memory	. I-50
	Infrastructure Application Server Memory Settings	I-50
	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	
	Configuring OFSAAI Web Services	
	Configure DynamicWSConfig.xml File	
	Attributes for WEBSERVICE tag	
	Attributes for OPERATION tag	
	Attributes for INPUT tag	
	Attributes for OUTPUT tag	
	For web.xml Entries,	. I-57

	Proxy Settings	I-58
	OFSAAI Home Entry	I-59
	DynamicWSConfig.xml	I-60
	Deploying OFSAAI Web Services	I-60
	Configuration to Enable Parallel Execution of DML statements	I-60
	Configuring Message Details in Forms Designer	I-60
	Clearing Application Cache	I-61
	Configuring Passwords Changes	I-61
	OFSAA Infrastructure Config Schema password modification	
	OFSAA Infrastructure Atomic Schema password modification	I-62
	Configuring Java Virtual Machine	I-62
	Configuring Internal Service (Document Upload/ Download)	I-62
K	Patching OFSAA Infrastructure Installation	
	Patching Your OFSAA Infrastructure Installation	J-65
L	Grants for Atomic/ Config Schema	
	Grants for Atomic Schema	K-67
	Grants for Config Schema	K-68
	Grants for Config Schema Entities for Atomic Users	K-68
M	Configuring Application Pack XML Files	
	Configuring OFS_SANC_PACK.xml file	L-75
	Configuring OFS_SANC_SCHEMA_IN.xml file	L-76
N	Configuring OFSAAI_InstallConfig.xml File	
	Configuring OFSAAI_InstallConfig.xml file	M-81
0	JDBC Jar Files	
Р	Removing OFSAA	
	Uninstalling OFSAA Infrastructure	O-87
	Uninstalling EAR Files in WebLogic	O-88
Q	FAQs and Error Dictionary	
	Frequently Asked Questions	
	OFSAAI FAQs	
	Application Pack 8.0.4.0.0 FAQs	
	Forms Framework FAQs	
	Error Dictionary	
	Accessing Error Dictionary	
	Error Code Dictionary	P-116

# **List of Figures**

1–1	Components of OFSAAI	1-3
2–1	Installation Overview.	
2–2	Deployment Topology	
4–1	Schema Creation - Online Mode	
4–2	Schema Creation - Online Mode	4-22
4–2	Schema Creation - Offline Mode	4-24
4–3 4–4	Schema Creation - Offline Mode	4-25
4–4 4–5		4-23
	Schema Creator Utility with -s option	
4–6	Silent Mode Installation	4-29
4–7	Silent Mode Installation	4-30
4–8	Silent Mode Installation	4-31
4–9	Silent Mode Installation	4-31
4–10	Silent Mode Installation	4-32
4–11	Initialization Window	4-33
4–12	License Agreement	4-34
4–13	Applications Pack Details	4-35
4–14	Application Pack License Agreement window	4-36
4–15	Pre-Installation Summary	4-37
4–16	Manage Information Domains window	4-38
4–17	Pre-Pack Panel Template	4-39
4–18	Pre-installation Window	4-39
4-19	OFSAA Infrastructure Server Details	4-40
4-20	Web Application Server	4-40
4-21	Weblogic Home	4-41
4-22	Weblogic Setup Details	4-41
4–23	OLAP Details	4-42
4–24	Web Server Details	4-42
4–25	Database Details	4-43
4–26	Ports Configuration	4-44
4–27	Ports Configuration	4-44
4–28	SFTP Details	4-45
4–29	OFSAAI Post Install Details	4-46
4–30	Pre Installation Summary	4-46
4–31	Installing OFSAA Infrastructure	4-47
4–31	· · · · · · · · · · · · · · · · · · ·	4-47
4–32 4–33	Installation Summary	4-47
	Installation Complete	
4–34	Installing Sanctions Pack	4-48
4–35	Installation Summary	4-49
4–36	Installation Complete	4-49
5–1	Configuration Type	
5–2	Templates	
5–3	Administrator Account	
5–4	Domain Mode and JDK	
5–5	Advanced Configuration	
5–6	Administration Server	
5–7	Configuration Summary	
5–8	Configuration Process	
5–9	Configuration Complete	A-8
B-1	Welcome	B-12
B-2	Summary of JDBC Data Sources	B-12
5–10	Create a New JDBC Data Source	B-13
B-3	JDBC Data Source Properties	B-14
B-4	Transaction Options	B-14
B-5	Connection Properties	B-15

B-6	Test Database Connection	B-16
B–7	Select Targets	B-17
5–11	Create a New JDBC GridLinkData Source	B-18
5–12	JDBC GridLinkData Source- Connection Properties	B-18
5–13	Summary of JDBC Multi Data Sources	B-19
5–14	Configure the Multi Data Source	
5–15	Select Targets	B-21
5–16	Select Data Source Type	B-21
5–17	Add Data Sources	B-21
5–18	Settings for <data name="" source=""></data>	B-22
C-1	Creating EAR/ WAR File	
C-2	Summary of Deployments	C-25
C-3	Install Application Assistant	C-26
C-4	Install Application Assistant	C-26
C-5	Optional Settings	C-27
C-6	Deployment Summary	C-28
C-7	Settings for <deployment name=""></deployment>	C-29
C-8	Summary of Deployments	C-30
C-9	Summary of Deployments	C-30
E-1	OFSAA Login Window	E-35
I–1	Manage OFSAA Product License(s) window	I-46
I–2	License Agreement	I-47
J-1	Internet Options	I-51
J-2	internet Options	I-52
J-3	Internet Options- Popup Blocker Settings	I-53
5–19	Uninstalling OFSAA Infrastructure	
5–20	Summary of Deployments	O-88
5–21	Summary of Deployments- Messages	
Q-1	Error Code	

## **List of Tables**

2–1	OFSAA Application Pack Installation Tasks and Descriptions	2-6
2–2	Configurations Supported for Java 7	2-7
2–3	Configurations Supported for Java 8	2-9
2–4	Recommended Software Combinations	2-11
3–1	Prerequisite Information	3-14
4–1	Console Prompts - Silent Mode installation	4-30
D-1	Webserver start up options	D-32
F-1	Seeded User Groups	F-37
J-1	WEBSERVICE tag	I-56
J-2	OPERSTION tag	I-56
J-3	INPUT tag	I-57
J-4	OUTPUT tag	I-57
J-5	NotificationConfig.cfg File	I-61
M-1	OFS_SANC_PACK.xml Parameters	L-75
M-2	OFS_SANC_SCHEMA_IN.xml Parameters	L-77
N-1	OFSAA Infrastructure Installation Tasks and Descriptions	M-81
O-1	JDBC Jar files version details	N-85
Q-1	Optimized Memory Settings for New Model Upload	P-102
Q-2	Error code - OFSAAI-1001	P-116
Q-3	Error code - OFSAAI-1002	P-117
Q-4	Error code - OFSAAI-1004	P-117
Q-5	Error code - OFSAAI-1005	P-117
Q-6	Error code - OFSAAI-1006	P-117
Q-7	Error code - OFSAAI-1007	P-117
Q-8	Error code - OFSAAI-1008	P-117
Q-9	Error code - OFSAAI-1009	P-117
Q-10	Error code - OFSAAI-1010	
Q-11	Error code - OFSAAI-1011	P-118
Q-12	Error code - OFSAAI-1012	P-118
Q-13	Error code - OFSAAI-1013	P-118
Q-14	Error code - OFSAAI-1014	P-118
Q-15	Error code - OFSAAI-1015	P-118
Q-16	Error code - OFSAAI-1016	P-119
Q-17	Error code - OFSAAI-1017	P-119

# **Preface**

This Preface provides supporting information for the Sanctions Pack Installation and Configuration Guide and includes the following topics:

- ? Summary
- ? Audience
- ? Related Documents
- ? Conventions
- ? Abbreviations

# **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**

Sanctions Pack Installation and Configuration Guide is intended for administrators, and implementation consultants who are responsible for installing and maintaining the application pack components.

#### **Prerequisites for the Audience**

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

The document assumes that you have experience in installing Enterprise components and basic knowledge about the following are recommended:

- ? Sanctions pack components
- OFSAA Architecture
- 2 UNIX Commands
- 2 Database Concepts
- Web Server/ Web Application Server

# **Related Documents**

This section identifies additional documents related to OFS Transaction Filtering.

#### **OFSAAI** Related Documents

Following documents are available in OTN.

- Oracle Financial Services Advanced Analytical Applications Infrastructure Applications
  Pack Installation and Configuration Guide
- Oracle Financial Services Analytical Applications Infrastructure Administration Guide
- Oracle Financial Services Analytical Applications Infrastructure Environment Check Utility Guide
- Oracle Financial Services Analytical Applications Infrastructure User Guide
- Oracle Financial Services Forms Manager User Guide
- Oracle Financial Services Analytical Applications Infrastructure Security Guide

#### **OFS Transaction Filtering Related Documents**

Following documents are available in OTN.

- Oracle Financial Services Transaction Filtering Administration Guide
- oracle Financial Services Transaction Filtering User Guide

### **Conventions**

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# **Abbreviations**

The following table lists the abbreviations used in this document:

Abbreviation	Meaning
DBA	Database Administrator
DDL	Data Definition Language
DEFQ	Data Entry Forms and Queries
DML	Data Manipulation Language
EAR	Enterprise Archive
EJB	Enterprise JavaBean
ERM	Enterprise Resource Management
FTP	File Transfer Protocol

Abbreviation	Meaning			
GUI	Graphical User Interface			
HDFS	Hadoop Distributed File System			
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			
LDAP	Lightweight Directory Access Protocol			
LHS	Left Hand Side			
MOS	My Oracle Support			
OFSAAI	Oracle Financial Services Analytical Application Infrastructure			
OLAP	On-Line Analytical Processing			
OLH	Oracle Loader for Hadoop			
ORAAH	Oracle R Advanced Analytics for Hadoop			
OS	Operating System			
RAM	Random Access Memory			
RDBMS	Relational Database Management System			
SFTP	Secure File Transfer Protocol			
SID	System Identifier			
SSL	Secure Sockets Layer			
TNS	Transparent Network Substrate			
URL	Uniform Resource Locator			
VM	Virtual Machine			
Web Archive	WAR			
XML	Extensible Markup Language			

# **About OFSAA and OFSAA Application Packs**

This chapter includes the following topics:

- About Oracle Financial Services Analytical Applications (OFSAA)
- About Oracle Financial Services Sanctions Application Pack
- About Oracle Financial Services Analytical Applications Infrastructure (OFS AAI)

# 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.

# About Oracle Financial Services Sanctions Application Pack

Oracle Financial Services Sanctions Pack allows for real time Transaction Filtering against sanctioned lists, internal watch lists and other sources. These are key compliance requirements for financial institutions across the globe.

OFS Sanctions Pack includes the following applications:

- Financial Services Analytical Applications Infrastructure: This application 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.
- Financial Services Transactions Filtering: This application helps banking institutions to identify blacklisted, sanctioned, restricted and sanctioned individuals and entities in financial transactions processed through the Solution.
- Financial Services Inline Processing Engine: This application provides real-time monitoring, detection and interdiction of single and complex fraud events across multiple channels and lines of business.

# **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

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

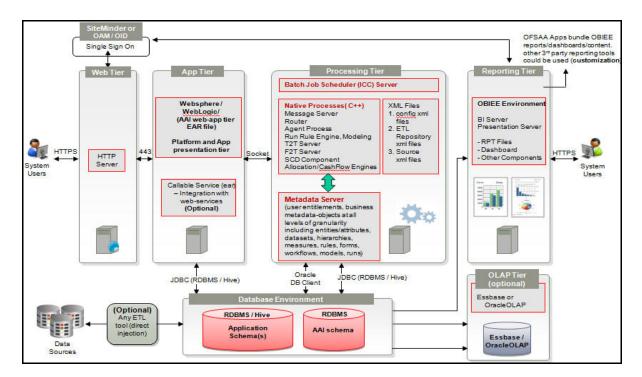


Figure 1-1 Components of OFSAAI

## **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.

hout	Oracla	Financial	Services	Analytic	al Ann	lications	Infrastructure	(OES	ΔΔΙ)
1DOUL	Oracie	rmanciai	Services	Anaivuc	ai Abb	lications	mirastructure	(UFS	AAI)

# **Understanding Sanctions Pack Installation**

This chapter includes the following topics:

- **Installation Overview**
- **Deployment Topology**
- Hardware and Software Requirements
- Verifying System Environment
- Understanding the Installation Mode

### **Installation Overview**

Users/ Administrators who wish to install a new OFS Sanctions Pack 8.0.4.0.0 instance should download this installer. Figure 2-1 shows the order of procedures you will need to follow to install a new Sanctions pack 8.0.4.0.0 instance.

# **Prerequisite**

Oracle Enterprise Data Quality for Oracle Financial Services Analytical Applications (Oracle EDQ 12.2.1.1.0) must be installed. This needs to be installed separately and not on an existing AAI or OFS pack.

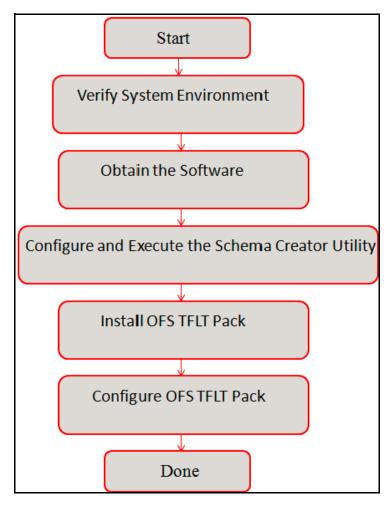


Figure 2–1 Installation Overview

Table 2-1 provides additional information and links to specific documentation for each task in the flowchart.

Table 2–1 OFSAA Application 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 OFSAA Application Pack, see Verifying System Environment.
Configure and Execute the Schema Creator Utility	For instructions on creating the database schemas, see Configuring and Executing the Schema Creator Utility.
Install Sanctions pack	For instructions on Installing OFS Sanctions Pack, see Installing the OFS Sanctions Pack.
Configure Sanctions pack	See Post Installation Configurations.

# **Deployment Topology**

The following figure depicts the logical architecture implemented for OFS Sanctions Pack.

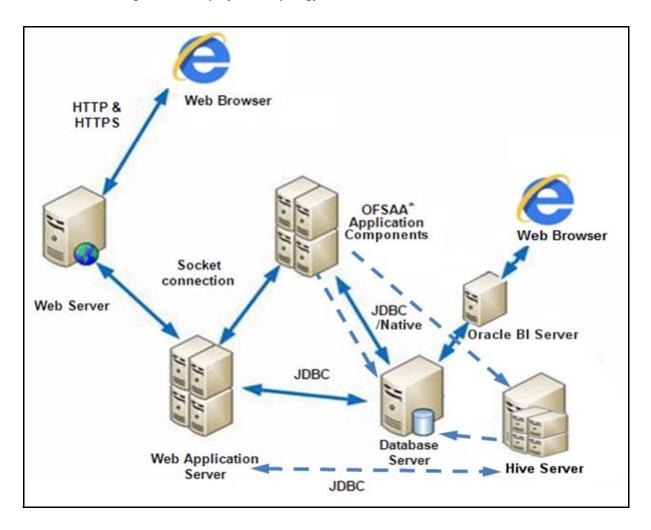


Figure 2-2 Deployment Topology

# **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 OFS Sanctions Pack has been qualified.

Note:

OFS Sanctions Pack installation can be performed on both Virtual and Physical

The following tables show the minimum hardware and software requirements for installing **OFS Sanctions Pack:** 

# Configurations supported for Java 7

Table 2–2 Configurations Supported for Java 7

**Operating System** 

#### Table 2–2 (Cont.) Configurations Supported for Java 7

Shell		7 KORN Shell (KSH)	
Note:			
If the operating commands by	U ,	CHEL, install the package lsb_release using one of the following s root user:	
yum install redhat-lsb-core			
yum install redhat-lsb			
Java Runtime Er	nvironment		
Oracle Linux / Red Enterprise Linux	Hat	Oracle Java Runtime Environment (JRE) 6.x/7.1	
Oracle Database	Server and	d Client	
oracle Databa		terprise 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 (12.1.0.2.0)- 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 (12.1.0.2.0) 64 bit
- Oracle 11g Release 2 (11.2.0.3+) JDBC driver (Oracle thin driver)
- Oracle 12C Release 1 (12.1.0.2.0) JDBC driver (Oracle thin driver)
- Oracle Distribution of R version 3.0.1 (Optional)
- Oracle R Enterprise (Server) version 1.4 (Optional)

#### Note:

Ensure that the following patches are applied:

- Oracle Server 12c, v12.1.0.1 17082699
- Oracle Server 12c, v12.1.0.2 20698050
- 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	

#### 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.

#### Web Server/ Web Application Server

#### Note:

Operating System

OFSAA Infrastructure web component deployment on Oracle WebLogic Server with Oracle JRockit is not supported.

MS Windows 7/ Windows 8/ Windows 8.1

# **Desktop Requirements**

Table 2–2 (Cont.) Configurations Supported for Java 7

	7.
Browser	MS Internet Explorer 9, 10 and 11
	Oracle Java plug-in 1.7.0+ (64- bit) / Oracle Java plug-in 1.8.0+ (64- bit)
	Turn off Pop-up blocker settings. For more information, refer Internet Explorer Settings
Office Tools	<sup>2</sup> MS Office 2007/2010/2013
	Adobe Acrobat Reader 8 or 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:	•
	ectory services software for OFSAAI installation is optional. For more guration, see <i>LDAP Configuration</i> section in OFSAAI Administration

### Configurations supported for Java 8

Table 2–3 Configurations Supported for Java 8

Operating System		
Oracle Linux / Red Hat Enterprise Linux (x86-64)	Oracle Linux Server release 6.x/7.1 - 64 bit	
, ,	Note: Same versions of RHEL is supported	
Shell	7 KORN Shell (KSH)	

#### Note:

- If the operating system is RHEL, install the package lsb release using one of the following commands by logging in as root user:
  - yum install redhat-lsb-core
  - yum install redhat-lsb

Open LDAP needs to be installed on MS Windows Server machine only.

#### Java Runtime Environment

Oracle Linux / Red Hat	Oracle.	Java Runtime Environment (JRE) 6.x/7.1 - 64 bit
Enterprise Linux		

#### **Oracle Database Server and Client**

- 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)

Table 2-3 (Cont.) Configurations Supported for Java 8

#### Note:

Ensure that the following patches are applied:

- Oracle Server 12c, v12.1.0.1 17082699
- Oracle Server 12c, v12.1.0.2 20698050
- Also for latest information, see 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

J =	
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

#### 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.

#### Web Server/ Web Application Server

#### Note:

- OFSAA Infrastructure web component deployment on Oracle WebLogic Server with Oracle JRockit is not supported.
- For deployment on Oracle WebLogic Server 12.1.3.0.0 (64 bit) with Java 8, download and install patch 18729264 from http://support.oracle.com/.

#### Desktop Requirements

• •		
Operating System	MS Windows 7/ Windows 8/ Windows 8.1	
Browser	MS Internet Explorer 9, 10 and 11	
	Oracle Java plug-in 1.7.0+ (64- bit) / Oracle Java plug-in 1.8.0+ (64- bit)	
	Turn on Pop-up blocker settings. For more information, refer Internet Explorer Settings	
Office Tools	<sup>7</sup> MS Office 2007/2010/2013	
	Adobe Acrobat Reader 8 or 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.

OFS Sanctions Pack recommends the following software combinations for deployment:

Table 2-4 Recommended Software Combinations

Operating System	Database	Web Application Server	Web Server
Oracle Linux 6.x/7.1	Oracle Database	Oracle WebLogic Server	Oracle HTTP Server

# **Verifying System Environment**

To verify your 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.

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.

# Understanding the Installation Mode

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

- **GUI Mode**
- SILENT Mode

#### **GUI Mode**

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

**Note:** For more information on configuration required for GUI Mode installation, refer Configuration for GUI Mode Installation.

### **SILENT Mode**

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

# **Preparing for Installation**

This chapter provides necessary information to review before installing the Oracle Financial Services Sanctions Pack v8.0.4.0.0. This chapter includes the following topics:

- Installer and Installation Prerequisites
- **Common Installation Tasks**

# Installer and Installation Prerequisites

Table 3-1 mentions the list of prerequisites required before beginning the installation for OFS Sanctions pack. The Installer/ Environment Check Utility notifies you if any requirements are not met.

Table 3–1 Prerequisite Information

Category	Sub-Category	Expected Value
Environment Settings	Java Settings	PATH in.profile to be set to include the Java Runtime Environment absolute path. The path should include java version (java 7 or java 8) based on the configuration.
		Note:
		Ensure the absolute path to JRE/bin is set at the beginning of PATH variable.
		For example, PATH=/usr/java/jre1.7/bin:\$ORACLE_ HOME/bin:\$PATH
		Ensure no SYMBOLIC links to JAVA installation is being set in the PATH variable.
	Oracle Database Settings	TNS_ADMIN to be set in.profile pointing to appropriate tnsnames.ora file
		ORACLE_HOME to be set in .profile pointing to appropriate Oracle Client installation
		PATH in .profile to be set to include appropriate \$ORACLE_HOME/bin path
		Provided the Ensure to add an entry (with SID/ SERVICE NAME) in the the three three three transfers on the OFSAA server.
	Oracle Essbase Settings	ARBORPATH, ESSBASEPATH, HYPERION_ HOME to be set in the profile pointing to an appropriate Oracle Essbase Client installation.
		Note:
		These settings are required only if you want to use Oracle Hyperion Essbase OLAP features.

Table 3–1 (Cont.) Prerequisite Information

Category	Sub-Category	Expected Value
OS/ File System	File Descriptor	Greater than 15000
Settings	Settings	Note:
		The value specified here is the minimum value to be set for the Installation process to go forward. For other modules, this value may depend on the available resources and the number of processes executed in parallel.
	Total Number of Process Settings	Greater than 4096
		Note:
		The value specified here is the minimum value to be set for the Installation process to go forward. For other modules, this value may depend on the available resources and the number of processes executed in parallel.
	Port Settings	Default port numbers to be enabled on the system are 6500, 6501, 6505, 6507, 6509, 6510, 6666, 9999, and 10101.
	.profile permissions	User to have 755 permission on the profile file.
	Installation Directory	A directory where the installation files will be installed.
		<sup>7</sup> Set 755 permission on this directory.
		<sup>7</sup> 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.
		<sup>2</sup> Set 775 permission on this directory.
	Temporary Directory	Default temporary directory where installation files are stored for a short period of time to support faster installation.
		For installation on UNIX OS, your UNIX
		administrator must give you the required
		read-write permissions for the /tmp directory
		and disable the NOEXEC option
		Configure adequate space on the /tmp directory.
		It is recommended that you allocate more than
		10 GB of space.
		<b>Note</b> : If NOEXEC is enabled, the extraction of files by the installer into the /tmp directory is prevented and the binaries will not execute in the directory, which will fail the installation.
	Download Directory	A directory where the product installer files will be downloaded/ copied.
		set 755 permission on this directory.
	OS Locale	Linux: en_US.utf8
		To check the locale installed, execute the following command:
		locale -a   grep -i 'en_USRteparing for Installation 3-15

Table 3–1	(Cont.)	Prerequisite Information	

Category	Sub-Category	Expected Value	
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	WebLogic	Web Application Server should be installed and profile /domain created.  You will be prompted to enter the WebLogic Domain path during OFSAAI installation.  Note:  Refer Appendix A for WebSphere Profile Creation and WebLogic Domain Creation.  For deployment on Oracle WebLogic Server 12.1.3.0.0 (64 bit) with Java 8, download and install patch 18729264 from http://support.oracle.com/.	
Web Server Others	Apache HTTP Server/ Oracle HTTP Server/ IBM HTTP Server Oracle R/ Oracle R	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.  7 This is an optional requirement.	
	Enterprise	Refer section for more details.	

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

# **Common Installation Tasks**

The following are the common pre-installation activities that you need to carry out before installing the OFS Sanctions pack.

This section includes the following topics:

- Configuration for GUI Mode Installation
- Identifying the Installation Directory, Download and Metadata Repository Directories
- Download and Copy the OFS Sanctions Pack Installer
- Extracting the Software
- Setting Up the Web Application Server

# **Configuration for GUI Mode Installation**

To install OFS Sanctions 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 the **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.

```
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
```

### Identifying the Installation Directory, Download and Metadata **Repository Directories**

To install any of the OFSAA Application Packs, the following folders/ directories are 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 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 directory.
- Ensure the user permission is set to 777 on the Staging Directory.
- Ensure the OFSAA staging directory is not set to the same path as the OFSAA installation directory and is not a sub-folder inside the OFSAA installation directory.

## Download and Copy the OFS Sanctions Pack Installer

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

- To download the OFS Sanctions 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 OFS SANC installation.

# Extracting the Software

**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 Sanctions Pack 8.0.4.0.0 in Download Directory installer archive file using the following command:

```
unzip OFS SANC 8.0.4.0.0.zip
```

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

```
chmod -R 750 OFS SANC PACK
```

### Setting Up the Web Application Server

For setting up the environment based on your selected Web Application Server, refer to Appendix A for more information.

# **Installing the Sanctions Pack**

Follow the instructions in this chapter to install the Sanctions pack depending on the mode of installation.

This chapter includes the following sections:

- Configuring and Executing the Schema Creator Utility
- Installing the OFS Sanctions Pack

# Configuring and Executing the Schema Creator Utility

This section includes the following topics:

- Prerequisites
- Configuring the Schema Creator Utility
- **Executing the Schema Creator Utility**

# **Prerequisites**

The following prerequisites must be satisfied 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.
- You must have the HOSTNAME/IP of the server on which OFSAA is getting installed.

## Configuring the Schema Creator Utility

This section explains the steps to configure the Schema Creator Utility.

To configure the Schema Creator Utility, follow these steps:

- Log in to the system as non-root user.
- 2. Navigate to the following path: OFS SANC PACK/schema creator/conf folder.
- Edit the OFS SANC SCHEMA IN.xml file in a text editor.
- Configure the elements as described in Configuring OFS SANC SCHEMA IN.xml file. For example, to create schemas only in RDBMS, populate the OFS SANC SCHEMA IN.xml file.

**Note:** If you are installing OFS Sanctions Pack 8.0.4.0.0 on OFS BD Applications Pack 8.0.4.0.0, follow the instructions given in Appendix H. 5. Save the OFS SANC SCHEMA IN.xml file.

**Note:** On successful execution of the utility, the entered passwords in the OFS SANC SCHEMA IN.xml file is nullified.

### **Executing the Schema Creator Utility**

You can execute the schema creator utility either in Online Mode or Offline Mode. 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.

#### **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 SANC PACK/schema creator/bin/
- **3.** Execute the osc. sh file using the following command:

./osc.sh

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).

**4.** Enter Y/y to proceed with the script generation.

Enter N/n to quit script creation.

- 5. Enter the DB Username with SYSDBA Privileges. For example: SYS as SYSDBA.
- **6.** Enter the User Password.

Figure 4–1 Schema Creation - Online Mode

```
$ ./osc.sh
profile Executed
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/N):
Java found in : /scratch/oracle/java/jre1.8.0_45/bin
JAVA Version found : 1.8.0_45
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: 12.1.0.2.0. Status: SUCCESS
Oracle Server version Current value: 12.1.0.2.0. Status: SUCCESS
DB specific Validation Completed. Status : SUCCESS
                            Schema Creation Started
Checking OFSAA installation...
OFSAA installation not found.
Validating the dat file OFS_SANC_CFG.dat started...
Sucessfully validated OFS_SANC_CFG.dat file
Validating the input XML file.../scratch/ofsaaapp/SANC805B1/Installer/OFS_SANC_PACK/schema_creator/conf/OFS_SANC_SCHEM Input XML file validated successfully.
Validating Connection URL ...jdbc:oracle:thin:@whf00ari.in.oracle.com:1521:DBWHFARI
Successfully connected to User - sys AS SYSDBA URL - jdbc:oracle:thin:@whf00ari.in.oracle.com:1521:DBWHFARI Connection URL successfully validated...
localhost name - whf00bls.in.oracle.com IPAddress - 10.184.158.21
Parsing TABLESPACE tags...
```

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).

Enter Y/y to proceed with the schema creation.

Enter N/n to quit schema creation.

The following message is displayed.

You have chosen to install this Application Pack on <Name of the Infodom>. Do you want to proceed? (Y/N).

Figure 4–2 Schema Creation - Online Mode

```
You have chosen to install this Application Pack on INFODOM "san805inf". Do you want to proceed? (Y/N)
Executing TableSpace Scripts started...
Skipping the creation of tablespace TFLT_INDEX_TABLE_SPACE
Skipping the creation of tablespace TFLT CONF TABLE SPACE
Skipping the creation of tablespace TFLT TABLE SPACE
Creating Schemas started...
CONFIG User san5_conf successfully created on Default TableSpace : TFLT_CONF_TABLE_SPACE on Temp TableSpace : TEMP
Grants creation scripts execution started...
Grants creation scripts execution completed ..
Successfully connected to User - san5_conf URL - jdbc:oracle:thin:@whf00ari.in.oracle.com:1521:DBWHFARI
Scripts execution for CONFIG schema started ...
Scripts execution for CONFIG schema completed ...
Jser san5_conf details updated into the dbmaster table
User san5_conf details updated into the I18NMASTER table
User san5_conf details updated into the aai_db_detail table
User san5_conf details updated into the aai_db_auth_alias table 
Skipping the creation of AAAI/IPE app.
User san5_tflt details updated into the dbmaster table
Jser san5_tflt details updated into the I18NMASTER table
Jser san5 tflt details updated into the aai_db_detail table
Jser san5_tflt details updated into the aai_db_auth_alias table
ser san5_tflt is successfully created on Default TableSpace : TFLT_TABLE_SPACE on Temp TableSpace : TEMP
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
    ma Creator executed Successfully. Please proceed with the installation.
```

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

Or

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

#### 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 SANC PACK/schema creator/logs folder for execution status. In case of any errors, contact Oracle Support.

#### **Executing the Schema Creator Utility in Offline Mode**

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

#### **Prerequisites:**

To execute the utility in Offline mode, you need to connect as any user with the 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

**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.
- Navigate to the OFS\_SANC\_PACK/schema\_creator/bin folder.
- Execute the osc.sh file using the following command:

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

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).

Enter Y /y to generate the script.

or

Enter N/n to quit the schema creation.

- Enter the DB Username with SELECT privileges.
- Enter the User Password. 7.

Figure 4–3 Schema Creation - Offline Mode

```
scratch/ofsaaapp/SANC805B1/Installer/OFS_SANC_PACK/schema_creator/bin
profile Executed
You have chosen OFFLINE mode
Triggering the utility in OFFLINE mode will generate the script. Do you wish to proceed? (Y/N):
 Java found in : /scratch/oracle/java/jrel.8.0_45/bin
JAVA Version found : 1.8.0 45
JAVA Bit Version found : 64-bit
 Java Validation Completed. Status : SUCCESS
DB specific Validation Started ...
Enter the DB User Name with the following privileges:
 . CREATE SESSION
 . SELECT on DBA_ROLES
 B. SELECT on DBA USERS

B. SELECT on DBA DIRECTORIES
 . SELECT on DBA TABLESPACES
Enter the User Name:
aya AS SYSDBA
Enter the User Password:
 Dracle Client version : 12.1.0.2.0. Status : SUCCESS
 Dracle Server version Current value : 12.1.0.2.0. Status : SUCCESS
 B specific Validation Completed. Status : SUCCESS
                             Generating Schema Creation Scripts Started
 Checking OFSAA installation...
OFSAA installation not found.
Validating the dat file OFS_SANC_CFG.dat started...
Successfully validated OFS_SANC_CFG.dat file
 alidating the input XML file.../scratch/ofsaaapp/SANC805B1/Installer/OFS_SANC_PACK/schema_creator/conf/OFS_SANC_SCHEM
Input XML file validated successfully.
Validating Connection URL ...jdbc:oracle:thin:@whf00ari.in.oracle.com:1521:DBWHFARI
Successfully connected to User - sys AS SYSDBA URL - jdbc:oracle:thin:@whf00ari.in.oracle.com:1521:DBWHFARI
 localhost name - whf00bls.in.oracle.com IPAddress - 10.184.158.21
Parsing TABLESPACE tags..
```

**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).

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

Or

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

The following message is displayed.

You have chosen to install this Application Pack on <Name of the Infodom>. Do you want to proceed? (Y/N)

Figure 4–4 Schema Creation - Offline Mode

```
chosen to install this Application Pack on "san5_tflt" ATOMIC schema. Do you want to proceed? (Y/N)
Senerating TableSpace creation Scripts started..
Skipping the creation of tablespace TFLT_INDEX_TABLE_SPACE Skipping the creation of tablespace TFLT_CONF_TABLE_SPACE
Skipping the creation of tablespace TFLT TABLE SPACE
Generating Schema creation scripts started ...
CONFIG User san5_conf creation script generated successfully on Default TableSpace : TFLT_CONF_TABLE_SPACE on Temp Tabl
Generation of grants creation scripts started...
Generation of grants creation scripts completed...
Scripts Generation for CONFIG schema started ...
Scripts Generation for CONFIG schema completed ...
User san5_conf details updated into the dbmaster table
User san5_conf details updated into the I18NMASTER table
User san5_conf details updated into the aai_db_detail table
User san5_conf details updated into the aai_db_auth_alias table Skipping the creation of AAAI/IPE app.
User san5 tflt details updated into the dbmaster table
User san5_tflt details updated into the I18NMASTER table
User san5 tflt details updated into the aai db detail table
User san5 tflt details updated into the asi db auth alias table
User san5_tflt creation script generated successfully on Default TableSpace : TFLT_TABLE_SPACE on Temp TableSpace : TEM
Generating Schema creation scripts completed...
Generating Roles creation Scripts started...
Generating Roles creation Scripts completed ...
Generating Grants creation scripts started ...
Senerating Grants creation scripts completed ...
                           Generating Schema Creation Scripts Completed
 chema Creator executed Successfully.Please execute /scratch/ofsaaapp/SANC805B1/Installer/OFS_SANC_PACK/schema_creator
 ding with the installation.
```

**10.** Enter Y/y to start the script generation.

Or

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

On successful execution of schema creator utility, the console displays the following status message:

Schema Creator executed successfully. Please execute /scratch/ofsaaapp/OFS\_SANC\_ PACK/schema\_creator/sysdba\_output\_scripts.sql before proceeding with the installation.

- 11. Navigate to the directory OFS SANC PACK/schema creator.
- **12.** Log in to SQLPLUS with a user having SYSDBA Privileges.
- **13.** 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.

**Note**: Refer log sysdba output scripts.log file for execution status. In case of any errors, contact Oracle Support. If there are no errors in the execution, this log file is empty.

```
Enter user-name: sys/complet2047. - 1987 as sysdba
Connected to:
Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, OLAP, Advanced Analytics and Real Application Testing options
SQL> @sysdba_output_scripts.sql
Warning: Package Body created with compilation errors.
Disconnected from Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, OLAP, Advanced Analytics and Real Application Testing options
```

Once the above file gets executed, a warning is displayed as shown in the above screen.

- **14.** Run the below script in config schema:
  - 1. Navigate to the <OFS SANC PACK>/schema creator/SQLScripts/oracle folder.
  - 2. Connect to the config schema through sqlplus
  - **3.** Execute the @compile objects.sql command.
  - Commit the change.

### **Executing the Schema Creator Utility with -s option**

If you intend to run the OFS Sanctions 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:

- Edit the file OFS SANC PACK/schema creator/conf/OFS SANC SCHEMA IN.xml in text editor.
- 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>.
- 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 Applications Pack Installer in GUI mode.
- To execute the utility in OFFLINE mode with SILENT option, enter the following command

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

Figure 4-5 Schema Creator Utility with -s option

```
$ ./osc.sh -s
profile Executed
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/N):
JAVA Version found : 1.8.0_45
JAVA Bit Version found : 64-bit
Java Validation Completed. Status : SUCCESS
DB specific Validation Started ...
Enter the DB User Name With SYSDBA Privileges:
aya AS SYSDBA
Enter the User Password:
Oracle Client version : 12.1.0.2.0. Status : SUCCESS
Oracle Server version Current value : 12.1.0.2.0. Status : SUCCESS
DB specific Validation Completed. Status : SUCCESS
                                Schema Creation Started
Checking OFSAA installation...
OFSAA installation not found.
Validating the dat file OFS_SANC_CFG.dat started...
Sucessfully validated OFS_SANC_CFG.dat file
Validating the input XML file.../scratch/ofsaaapp/SANC805B1/Installer/OFS_SANC_PACK/schema_creator/conf/OFS_SANC_SCHEM.
Input XML file validated successfully.
Validating Connection URL ...jdbc:oracle:thin: @whf00ari.in.oracle.com:1521:DBWHFARI
Successfully connected to User - sys AS SYSDBA URL - jdbc:oracle:thin: @whf00ari.in.oracle.com:1521:DBWHFARI
Connection URL successfully validated...
localhost name - whf00bls.in.oracle.com IPAddress - 10.184.158.21
Parsing TABLESPACE tags...
```

# Installing the OFS Sanctions Pack

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

This section includes the following topics:

- **SILENT Mode Installation**
- **GUI Mode Installation**
- Verifying the Log File

### **SILENT Mode Installation**

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

To install OFS Sanctions in SILENT mode, follow these 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:

```
FIC HOME=< OFSAA Installation Directory >
export FIC HOME
```

- **3.** Execute the user profile.
- 4. Navigate to OFS SANC PACK folder.
- 5. Edit the OFS SANC PACK/conf/OFS SANC PACK.xml to enable the product licenses.

**Note:** See Configuring OFS SANC PACK.xml file section for details on configuring this XML file.

6. Edit the OFS SANC PACK/schema creator/conf/OFS SANC SCHEMA IN.xml file to set the appropriate attribute values.

**Note:** See Configuring OFS SANC SCHEMA IN.xml file section for details on configuring this XML file. If you are installing OFS Sanctions Pack 8.0.4.0.0 on OFS BD Applications Pack 8.0.4.0.0, follow the instructions given in Appendix H.

7. Edit the OFS SANC PACK/OFS AAI/conf/OFSAAI InstallConfig.xml file to set the appropriate infrastructure installation attribute values.

Note: Refer Configuring OFSAAI\_InstallConfig.xml file for details on configuring this XML file.:

**Note:** Skip this step if you are installing OFS Sanctions Pack 8.0.4.0.0 on OFS BD Applications Pack 8.0.4.0.0.

**8.** Execute the schema creator utility.

#### Note:

- This step is mandatory and should be executed before every OFSAA Application Pack installation.
- Ensure to execute with -s option in Online/ Offline Mode.
- For more information, refer Executing the Schema Creator Utility.
- If you are installing OFS Sanctions Pack 8.0.4.0.0 on OFS BD Applications Pack 8.0.4.0.0, then the following message is displayed after executing schema creator

The following Application Packs are already installed in this OFSAA setup:

BDCRINF-"OFS\_BD\_PACK" bcr\_fccm-

Enter the following command in the console to execute the application pack installer with SILENT option.

./setup.sh SILENT

Figure 4–6 Silent Mode Installation

```
profile Executed
FIC_HOME : /scratch/ofsaaweb/SAN805B1/SAN805B1
Environment check utility started...
Java Validation Started ...
Java found in : /scratch/ofsaaweb/jdkl.8.0 77/bin
JAVA Version found : 1.8.0_7
JAVA 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/ofsaaweb
Environment Variables Validation Completed. Status : SUCCESS
S specific Validation Started ...
Checking en_US.utf8 locale. Status : SUCCESS
Unix shell found : /bin/ksh. Status : SUCCESS
Total file descriptors : 15000. Status : SUCCESS
Total number of process : 10240. Status : SUCCESS
OS version : 7. Status : SUCCESS
OS specific Validation Completed, Status : SUCCESS
DB specific Validation Started ...
Successfully connected to schema san5 tflt. 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 NLS_INSTANCE_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 : 1000. Status : SUCCESS
SELECT privilege is granted for USER IS QUOTAS view. Current value : SELECT. Status : SUCCESS Schema is granted with at least 500 MB table space. Current value : 10239.6011352539063 MB. Status : SUCCESS
Oracle Server version Current value : 12.1.0.2.0. Status : SUCCESS
DB specific Validation Completed. Status : SUCCESS
Invironment check utility Status : SUCCESS
```

**10.** Enter the Infrastructure Application/Database component FTP/SFTP password value, when prompted at the command prompt.

Figure 4–7 Silent Mode Installation

```
Welcome to Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) 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 :
                     Start of Environment Checks
scratch/ofsaaweb/SAN805B1/Installer/OFS SANC PACK/OFS SANC/conf
File log41.xml not found. Using default logging settings
                 =Validating JAVA Version=
Current JAVA Version is: 1.8.0 77
Required JAVA Version is: 1.7
                -----Checking OS----
OS Type: LINUX
OS Supported: TRUE
Current OS Version:7.1
Supported OS Version:5.5
OS Version Validation Status: SUCCESS
        -----Checking Disk Space
Available Disk Space is :153522
Required Disk Space is :500 MB
Validation for category DISK SPACE. STATUS : SUCCESS
                         Checking Temp Space=
Available Temp Space is 25627 MB
Required Temp Space is 500 MB
Validation for category TEMP SPACE. STATUS : SUCCESS
Required RAM in MB 500 MB
Validation for category RAM. STATUS : SUCCESS
                     End of Environment Checks
Environment check utility Status : SUCCESS
```

Table 4–1 Console Prompts - Silent Mode installation

Console Prompts	User Inputs
Please enter Infrastructure Application/Database component FTP/SFTP password	Enter the password to access Product Staging/Metadata repository directory in the application server.
	<b>Note</b> : In case the prompt reads as follows, enter the username/ password for accessing the product Staging/ Metadata Repository FTPSHARE
	Rerberos username [user]
	Rerberos password for user:

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

The OFSAAI License Agreement is displayed.

Figure 4-8 Silent Mode Installation

```
OFSAA APPLICATION PACK LICENSE AGREEMENT
* Oracle Financial Services Analytical Applications (OFSAA) application packs are groups of OFSAA products packaged together into a single installer. Each application pack contains OFSAA applications that address specific functional domains.*

* Every application pack also includes the following OFSAA infrastructure application options which are automatically installed by every application pack ins
   1. Oracle Financial Services Analytical Applications Infrastructure
            Oracle Financial Services Enterprise Modeling
Oracle Financial Services In-line Processing Engine
3. Oracle Financial Services In-line Processing Engine
4. Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) is the base infrastructure for all OFSAA applications and is therefore automatically installed and enabled by the application pack installer.*
The application pack installer always installed Oracle Financial Services Enterprise Modeling, Oracle Financial Services In-line Processing Engine and Otacle Financial Services Big Data Processing application opions along with the application pack applications, but enables them only if any application that requires their functionality is enabled.*
Any OFSAA application that is enabled must be licensed for use. Oracle Financial Services Analytical Applications Infrastructure, Oracle Financial Services Enterprise Modeling, Oracle Financial Services In-line Processing Engine and Oracle Financial Services Big Data Processing are individually licensable application options.*
* Application products once enabled cannot be disabled. Application products not enabled on installation, may later be enabled using the "Manage OFSAA Prod
   Application products once enabled cannot be disabled. Application products not enabled on installation, may later be enabled using the "Manage OFSAA Products once enabled using the "Manage OFSAA Products on "Manage OFSAA" Products on "Manage OFSA
 are you accepting the terms and conditions mentioned above? [Y/N]:
  tarting installation...
 Preparing to install.
 Extracting the installation resources from the installer archive... Configuring the installer for this system's environment...
 Preparing SILENT Mode Installation...
                                                                                                                                                                                                                        (created with InstallAnywhere)
```

**12.** Enter Y/y to accept the License Agreement.

Note: A default password, password, is displayed for Infrastructure administrator and authorizer users.

Figure 4–9 Silent Mode Installation

```
Installing ...
Installation Complete.
...............
CTRL characters removal started ...
Windows executable files removal started ...
Windows executable files removal over ...
We are now in /scratch/ofsaaweb/SAN805B1 ...
..............
profile Executed
profile Executed
executing "ant"
Buildfile: /scratch/ofsaaweb/SAN805B1/SAN805B1/ficweb/build.xml
     [war] Building war: /scratch/ofsaaweb/SAN805B1/SAN805B1/ficweb/SANB5.war
createear:
    [ear] Building ear: /scratch/ofsaaweb/SAN805B1/SAN805B1/ficweb/SANB5.ear
OFSAA App Layer Services start-up check started...
Starting startofsaai.sh service...
OFSAA Service - OK
Starting icc service ...
ICC service - OK
Shutting down icc service ...
Shutting down OFSAA service...
FSAAI App Layer Services check Status: SUCCESSFUL.
```

Figure 4–10 Silent Mode Installation

```
Calling agentshutdown.sh to check and kill, if any of the server is running...
OLAP Data Server service is not running.
MESSAGE Server service is not running.
Stop AM service with Proces ID : 10160
Stop ROUTER service with Proces ID : 10059
Starting ROUTER Service
ROUTER service started in background mode.
Starting AM Service
AM service started in background mode.
Starting MESSAGE SERVER Service
MESSAGE SERVER service started in background mode.
Starting OLAP DATA SERVER Service
OLAP DATA SERVER service started in background mode.
OLAP Data Server service is not running.
Stop MESSAGE Server service with Proces ID : 15874
Stop AM service with Proces ID : 15790
Stop ROUTER service with Proces ID : 15707
OFSAAI DB Layer File Services check Status: SUCCESSFUL.
 ..............
installation completed...
```

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

**13.** The following message is displayed in the console:

Installation completed...

**14.** On completion of installation, refer the installation log files.

For more information, refer Verifying the Log File.

**15.** Perform the steps mentioned in Post Installation Configurations section.

#### **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 the following:

```
FIC HOME=<OFSAA Installation Directory>
export FIC HOME
```

- **3.** Execute the user .profile.
- **4.** Navigate to the path: OFS SANC PACK.
- 5. Edit the OFS SANC PACK/schema creator/conf/OFS SANC SCHEMA IN.xml file to set the appropriate attribute values.

**Note:** See Configuring OFS SANC SCHEMA IN.xml file section for details on configuring this XML file. If you are installing OFS Sanctions Pack 8.0.4.0.0 on OFS BD Applications Pack 8.0.4.0.0, follow the instructions given in Appendix H.

**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.** Execute the following command in the console.

./setup.sh GUI

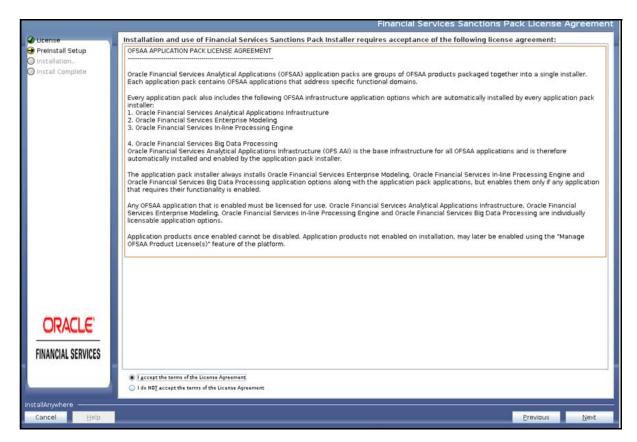
**Note:** Refer the console for any errors during Pre-install checks.

Figure 4-11 Initialization Window



The general License Agreement is displayed.

Figure 4–12 License Agreement



- Select I accept the terms if the License Agreement option.
- 10. Click Next.

The Financial Services Advanced Analytics Infrastructure Pack details are displayed.



Figure 4–13 Applications Pack Details

**11.** Select the product(s) to enable.

**Note:** Financial Services Analytical Applications Infrastructure is selected by default.

#### 12. Click Next.

The Application Pack License Agreement window is displayed.

Financial Services Sanctions Pack License Agreement nstallation and use of Financial Services Sanctions Pack Installer requires acceptance of the following license agreement: Preinstall Setup OFSAA APPLICATION PACK LICENSE AGREEMENT Oracle Financial Services Analytical Applications (OFSAA) application packs are groups of OFSAA products packaged together into a single installer. Each application pack contains OFSAA applications that address specific functional domains. Every application pack also includes the following OFSAA infrastructure application options which are automatically installed by every application pack installer: installer: 1. Oracle Financial Services Analytical Applications Infrastructure 2. Oracle Financial Services Enterprise Modeling 3. Oracle Financial Services In-line Processing Engine 4. Oracle Financial Services Big Data Processing Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) is the base infrastructure for all OFSAA applications and is therefore automatically installed and enabled by the application pack installer. The application pack installer always installs Oracle Financial Services Enterprise Modeling. Oracle Financial Services In-line Processing Engine and Oracle Financial Services Big Data Processing application options along with the application pack applications, but enables them only if any application that requires their functionality is enabled. Any OFSAA application that is enabled must be licensed for use. Oracle Financial Services Analytical Applications Infrastructure, Oracle Financial Services Enterprise Modelling, Oracle Financial Services in-line Processing Engine and Oracle Financial Services Big Data Processing are individually licensable application options. Application products once enabled cannot be disabled. Application products not enabled on installation, may later be enabled using the "Manage OFSAA Product License(s)" feature of the platform. **ORACLE** FINANCIAL SERVICES I accept the terms of the Ucense Agreement O I do NOT accept the terms of the License Agree Cancel <u>H</u>elp Previous Next

Figure 4-14 Application Pack License Agreement window

- 13. Select I accept the terms of the License Agreement option.
- 14. Click Next.

The Pre Installation Summary is displayed.

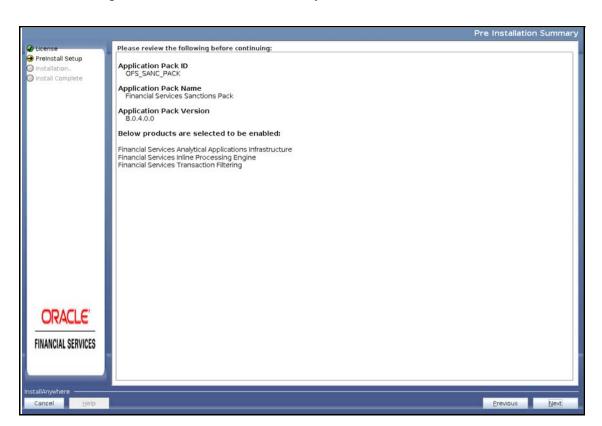


Figure 4–15 Pre-Installation Summary

15. Click Next.

The Manage Information Domains window is displayed.

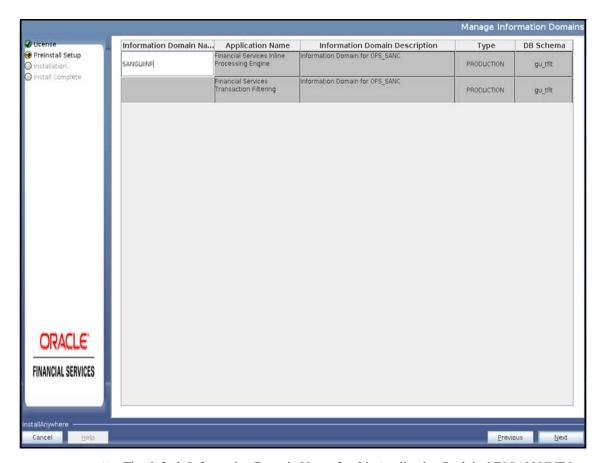


Figure 4–16 Manage Information Domains window

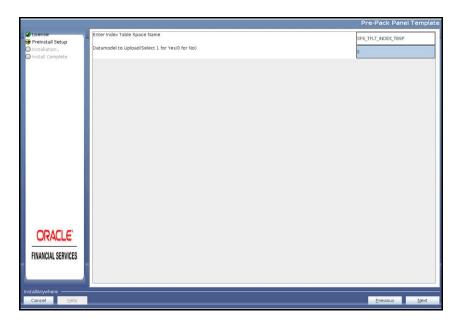
**16.** The default Information Domain Name for this Application Pack is OFSSANCINFO. Double-click the Information Domain Name field to edit.

**Note:** Permissible length is 16 characters and only alphanumeric characters are allowed. No special characters are allowed .:

#### 17. Click Next.

The Pre-Pack Panel Template window is displayed.

Figure 4–17 Pre-Pack Panel Template



For information on the different tablespace names, see Table M-2.

#### 18. Click Next.

The pre-installation window is displayed.

Figure 4–18 Pre-installation Window



#### 19. Click Next.

The OFSAA Infrastructure Server Details window is displayed.

reinstall Setup OFSAAI Server IP / Hostname : Database Server IP / Hostname : ORACLE" FINANCIAL SERVICES

Figure 4–19 OFSAA Infrastructure Server Details

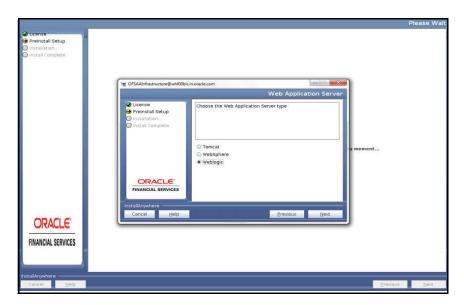
**20.** Enter the IP address or hostname of the Database Server.

**Note:** The OFSAAI Server IP/Hostname is auto-populated by default.

#### 21. Click Next.

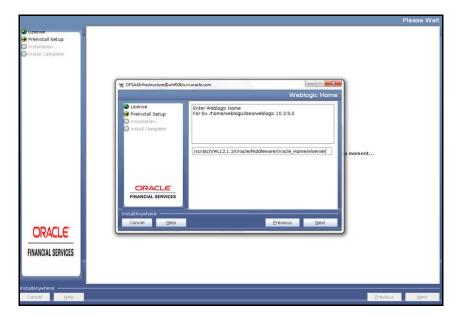
The Web Application Server window is displayed.

Figure 4-20 Web Application Server



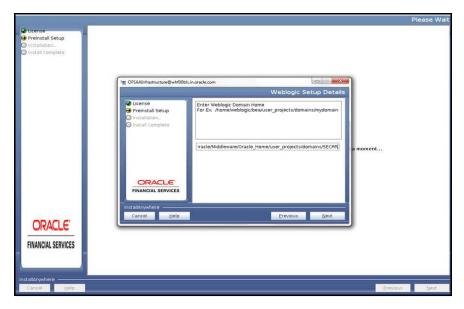
- **22.** Select the appropriate Web Application server type as WebLogic.
- **23.** Click **Next**. The Weblogic Home window is displayed.

Figure 4–21 Weblogic Home



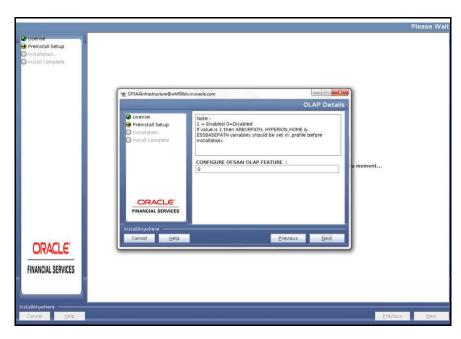
Enter the WebLogic home directory path.

Figure 4–22 Weblogic Setup Details



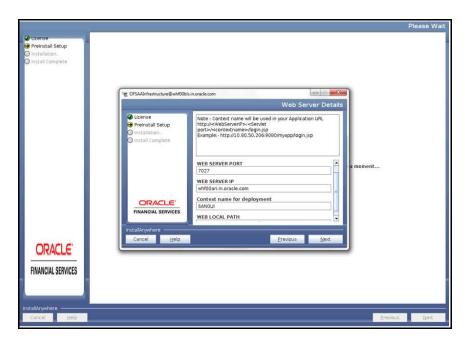
**b.** Enter the path of the Weblogic domain directory and click **Next**. The OLAP Details window is displayed.

Figure 4-23 OLAP Details



- 24. Enter 1 if you want to configure OFSAA OLAP feature using Oracle Hyperion Essbase. By default, it is set to 0.
- **25.** Click **Next**. The Web Server Details window is displayed.

Figure 4-24 Web Server Details



- 26. Select Enable HTTPS checkbox to configure HTTPS, if required, and enter the Web Server (HTTP Server) Port, Context name for deployment (URL which is used), and Local path to any folder on the WebLogic Application Server (ftpshare).
- 27. Click Next. The Database Details window is displayed.

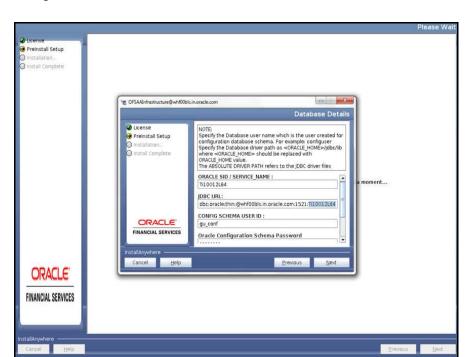


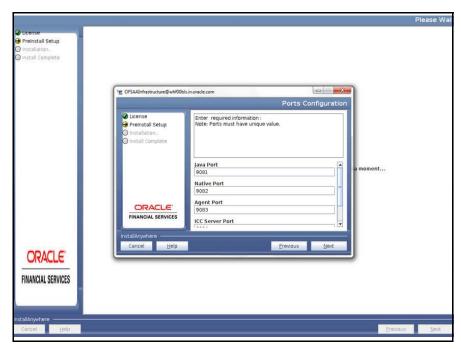
Figure 4-25 Database Details

28. Enter Oracle SID/Service Name.

#### Note:

- The JDBC URL, Configuration Schema User ID, Oracle Configuration Schema Password, and Absolute Driver Path are auto-populated.
- 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
- **29.** Click **Next**. The Ports Configuration window is displayed.

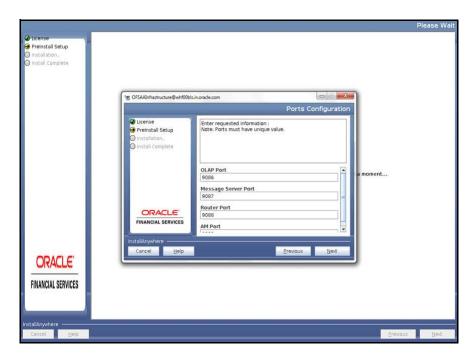
Figure 4–26 Ports Configuration



Note: The Java Port, Native Port, Agent Port, ICC Server Port, and ICC Native Ports are auto-populated. You can also modify the Ports settings. You must also ensure that these are free ports.

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

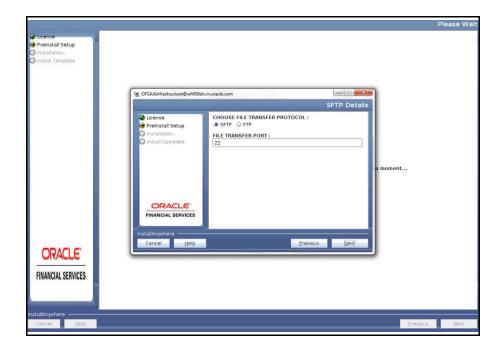
Figure 4–27 Ports Configuration



**Note:** The OLAP Port, Message Server Port, Router Port, and AM Port details are auto-populated. You can also configure the Ports settings.

**31.** Click **Next**. The SFTP Details window is displayed.

Figure 4–28 SFTP Details



### Note:

- Enable SFTP and File Transfer Port details are auto-populated.
- Ensure that the system, on which the OFSAA Infrastructure is being installed, has either FTP/SFTP enabled.
- You can also modify the SFTP settings
- 32. Click Next. The OFSAAI Post Install Details window is displayed.

Preinstall Setup FTP / SFTP USER ID lease enter Infrastructure FTP/SFTP password: ORACLE ORACLE' FINANCIAL SERVICES

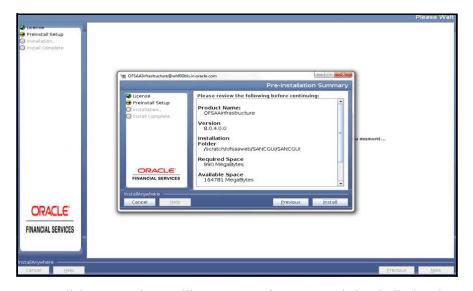
Figure 4-29 OFSAAI Post Install Details

- 33. Enter the FTPSHARE Path. This is same as the OFSAA Staging/ Metadata Repository Directory.
- **34.** Enter the FTP/SFTP User ID and Password for FTPSHARE Directory access.

**Note:** The transfer of data (files) between the OFSAA Server and the Web Application Server happens over FTP/ SFTP. Ensure the necessary host configurations are made for a successful handshake. For more details, refer FTP/SFTP Configuration for File Transfer.

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





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

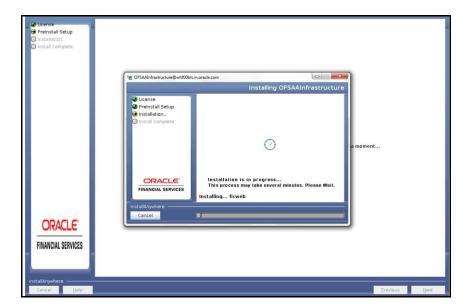
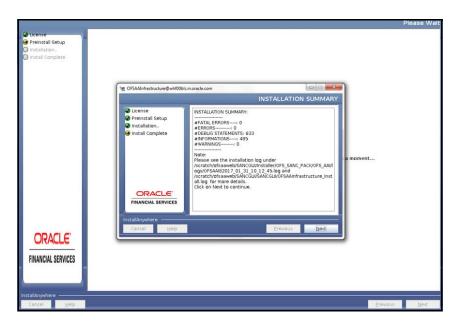


Figure 4–31 Installing OFSAA Infrastructure

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

**37.** Once completed, the Installation Summary window is displayed.

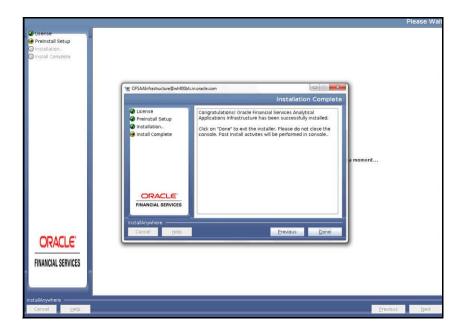




The Summary window displays the number of Fatal Errors, Errors, Debug Statements, Informations, and Warnings along with the location of log files.

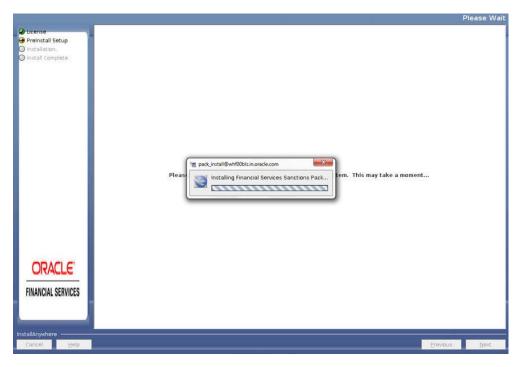
**38.** Click **Next**. The Installation Complete window is displayed.

Figure 4–33 Installation Complete



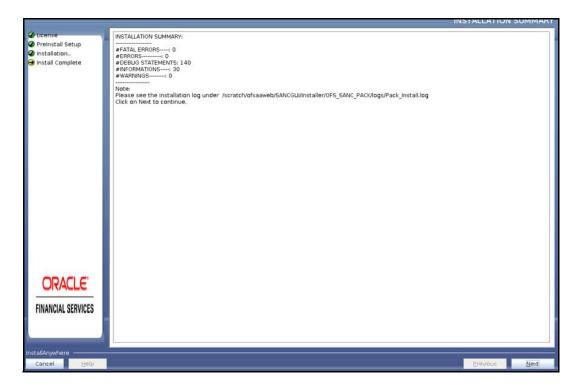
**39.** Click **Done**. The following message is displayed: Installing Financial Services Sanctions Pack...

Figure 4–34 Installing Sanctions Pack



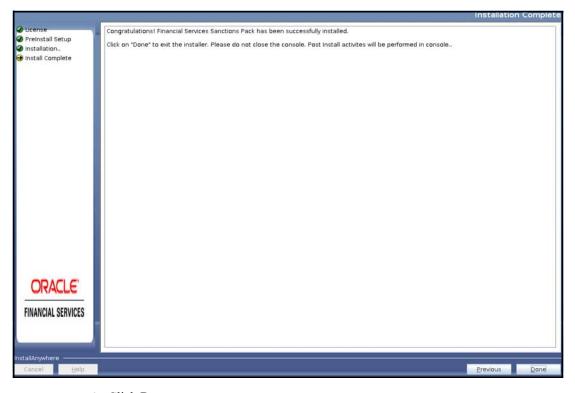
**40.** On completion of Sanctions Pack installation, the Installation Summary window is displayed.

Figure 4–35 Installation Summary



**Note:** In case of any ERRORS/ FATAL ERRORS, contact Oracle Support.

Figure 4–36 Installation Complete



41. Click Done.

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

**42.** Perform the steps mentioned in Post Installation Configurations section.

### Verifying the Log File

Refer the following logs files for more information:

- Refer the Pack Install.log located at OFS SANC PACK/logs/ folder for OFS Sanctions Pack installation log file.
- Refer the log file(s) located at OFS\_SANC\_PACK/OFS\_AAI/logs/ folder for Infrastructure installation log.
- Refer the log file(s) located at OFS SANC PACK/OFS SANC/logs/ folder for sanctions pack installation log.
- Refer the OFSAAInfrastucture Install.log located at \$FIC\_HOME folder for Infrastructure installation log file.

# **Post Installation Configurations**

On successful installation of the Oracle Financial Services Sanctions Pack, follow these post installation steps:

This chapter includes the following sections:

- Configure Resource Reference
- Start OFSAA Infrastructure Services
- Add TNS entries in TNSNAMES.ORA file
- Configuration for Oracle Financial Services Inline Processing Engine (OFS IPE)
- 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 Applications Pack Web Archive. This is applicable to the WebLogic Web Server. For more information, refer Clearing Application Cache section.

## 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 the WebLogic Application Server.

### 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.

### 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:

- Login to the application using System Administrator privileges.
- Navigate to System Configuration & Identity Management tab.
- Click Administration and Configuration >> System Configuration >> Database Details.

- **4.** Expand **Name** to get the list of TNS entry names.
- **5.** Alternatively, you can connect to the CONFIG schema and execute the following query: select dbname from db master where dbname !='CONFIG'

# **Configuration for Oracle Financial Services Inline Processing Engine (OFS IPE)**

Follow the instructions in OFS IPE Configuration Guide to configure the OFSAA instance for using OFS Inline Processing Engine. This step is mandatory if you have enabled OFS Inline Processing Engine during the installation.

# 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.

# 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.

# **Perform Post Deployment Configurations**

Prior to using the OFSAA Application perform the Post Deployment Configuration steps detailed in Appendix F.

# **Configuring Web Server**

This section covers the following topics:

- Configuring Web Server
- Configuring Web Application Servers

## **Configuring Web Server**

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

Refer the product specific installation guide to install and 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.
- 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).

### **Configuring Web Application Servers**

This step assumes the installation of the WebLogic application server as per the prerequisites. To configure the Web Application Server for OFSAA Deployment refer the following section:

Configuring WebLogic 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).
- Add umask 0027 in the .profile of the UNIX account which manages the WEB server to ensure restricted access permissions.
- Refer OFSAA Secure Configuration Guide/ Security Guide mentioned in the Related Documents section for additional information on securely configuring your Web Server.

### Configuring WebLogic for Application Deployment

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 12.1.3.0.0 (64 bit) with Java 8, download and install patch 18729264.

This section covers the following topics:

- Creating Domain in WebLogic Server
- Delete Domain in WebLogic
- WebLogic Memory Settings

#### Creating Domain in WebLogic Server

To create a new domain using Configuration Wizard in WebLogic, follow these steps:

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

./confiq.sh

The Configuration Type window is displayed.

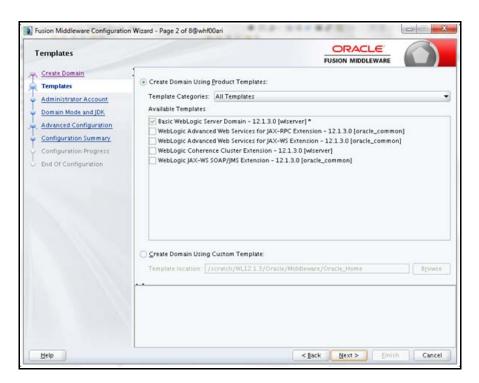
Configuration Type



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

The *Templates* window is displayed.

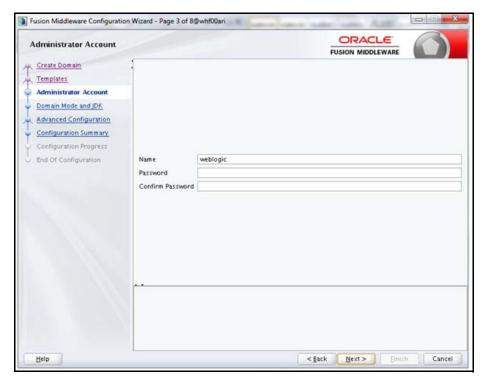
**Templates** 



Select the Create Domain Using Product Templates option and click Next.

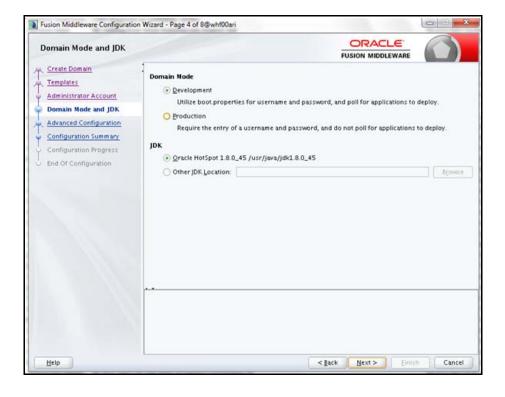
The Administrator Account window is displayed.

Administrator Account



- Enter the Name and Password to be assigned to the Administrator. Ensure that the password is of minimum 8 characters in length.
- Re-enter the password for confirmation and click Next. The *Domain Mode and JDK* window is displayed.

Figure 5-1 Domain Mode and JDK



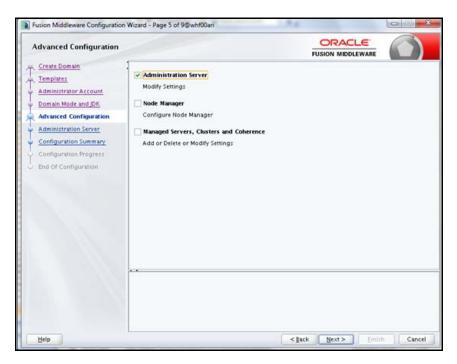
**6.** Select the following options:

In the Domain Mode section, select **Development** mode.

In the JDK section, select Oracle Hotspot 1.8.0\_45 /usr/java/jdk1.8.0\_45 and click Next.

The Advanced Configuration window is displayed.

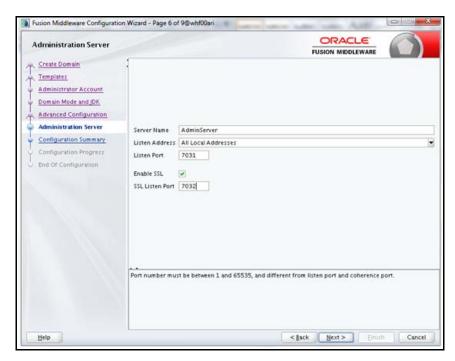
Figure 5–2 Advanced Configuration



Select Administration Server. A WebLogic Server domain must have an Administration 7. Server. You can also select Manages Servers, Clusters and Machines and RDBMS Security Store if required. Click Next.

The Administration Server window is displayed.

Figure 5–3 Administration Server



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.

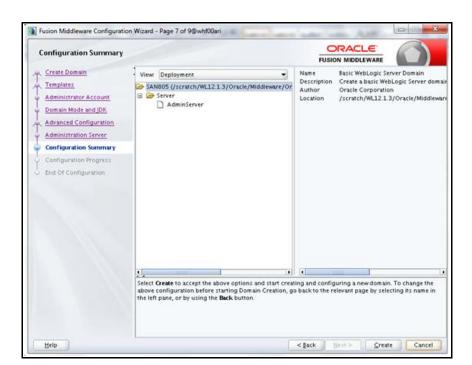
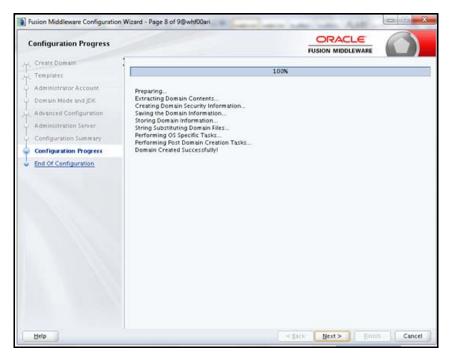


Figure 5-4 Configuration Summary

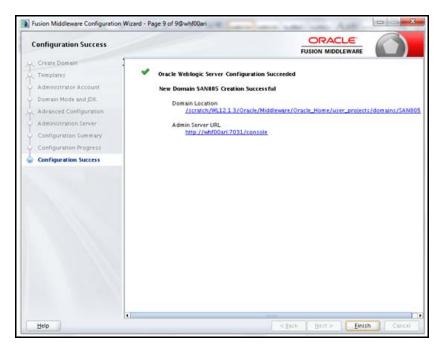
Verify the configuration details of the WebLogic domain and click Create. The Configuration Process window is displayed with the status indication of the domain creation process.

Figure 5-5 Configuration Process



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

Figure 5–6 Configuration Complete



#### 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

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

### Delete Domain in WebLogic

To delete a domain in WebLogic, follow these steps:

- **1.** Navigate to the following directory:
  - <WebLogic Installation directory>/user projects/domains/<domain</pre> name>/bin
- Execute **stopWebLogic.sh** to stop the Weblogic domain.
- Delete the Weblogic domain.

### WebLogic Memory Settings

To configure the WebLogic Memory Settings, follow these steps:

- 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.
- Edit this file for customizing memory settings and garbage collector settings depending on the available hardware configuration.

### Example 1:

```
if [ \$\{JAVA\_VENDOR\}" = \$Sun" ] ; then
         WLS_MEM_ARGS_64BIT="-Xms512m -Xmx1024m"
         export WLS_MEM_ARGS_64BIT
         \label{local_mem_args_32BIT="-Xms512m -Xmx1024m"} WLS\_MEM\_ARGS\_32BIT="-Xms512m -Xmx1024m"
         export WLS_MEM_ARGS_32BIT
    else
         \label{local_mem_args_64BIT="-Xms512m -Xmx1024m"} 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"
```

# Configuring Resource Reference in WebLogic **Application Server**

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.

### **Create Data Source**

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

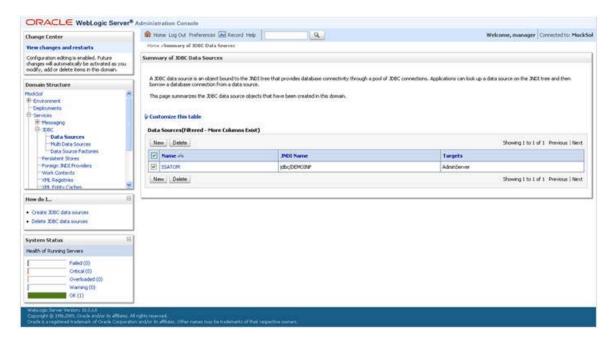
- 1. Open the following URL in the browser window: http://<ipaddress>:<administrative console port>/console. (https if SSL is enabled). The Welcome window is displayed.
- 2. Login with the Administrator Username and Password.

Figure B-1 Welcome



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

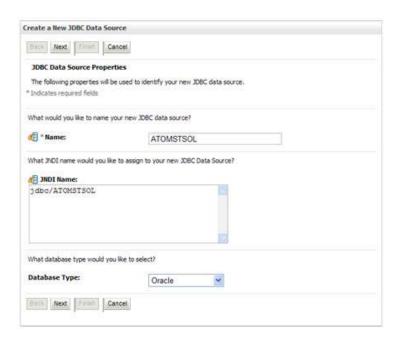
Figure B-2 Summary of JDBC Data Sources



4. 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 Create Data Sourceor Configure Multi Data Sources.

Figure 5-10 Create a New JDBC Data Source



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.

Data sources must be created for atomic and atomiccnf schemas. To do this, follow the above steps.

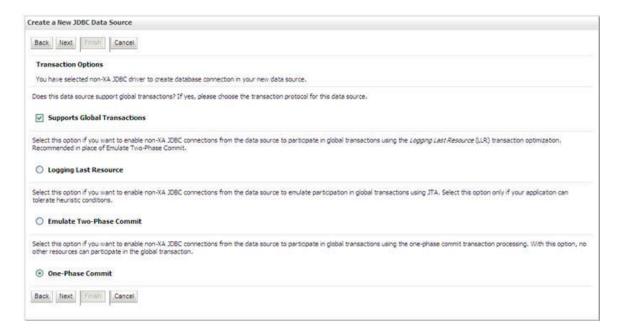
**Note:** For more information, see OFS Inline Processing Engine Configuration Guide, Configuring IPE chapter.

Figure B-3 JDBC Data Source Properties



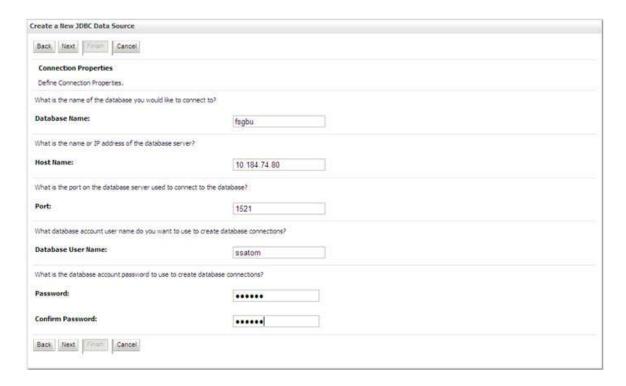
Select the **Database Driver** from the drop-down list. You need to select the Database Driver depending on database setup, that is, with or without RAC. Click **Next**.

Figure B-4 Transaction Options



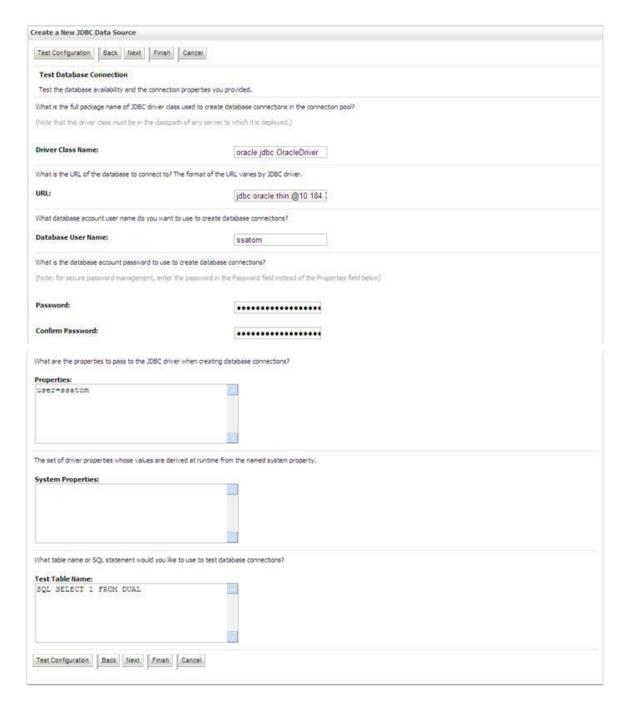
- Select the Supports Global Transactions checkbox and the One-Phase Commit option.
- Click **Next**. The Connection Properties window is displayed.

Figure B-5 Connection Properties



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

Figure B-6 Test Database Connection

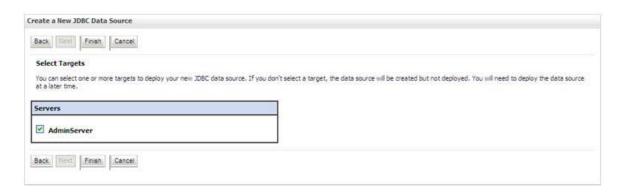


- 11. Verify the details and click **Test Configuration** and test the configuration settings. A confirmation message is displayed stating "Connection test succeeded."
- 12. Click Finish. The created "Data Source" is displayed in the list of Data Sources.

#### 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 "configuration schema".
- **13.** Select the new Data Source and click the Targets tab.

Figure B-7 Select Targets

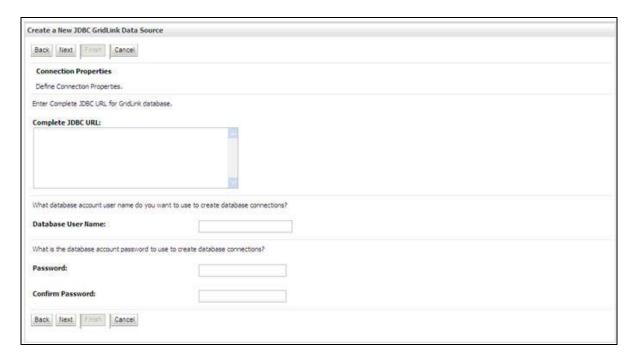


14. Select the AdminServer option and click Finish.

### **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.

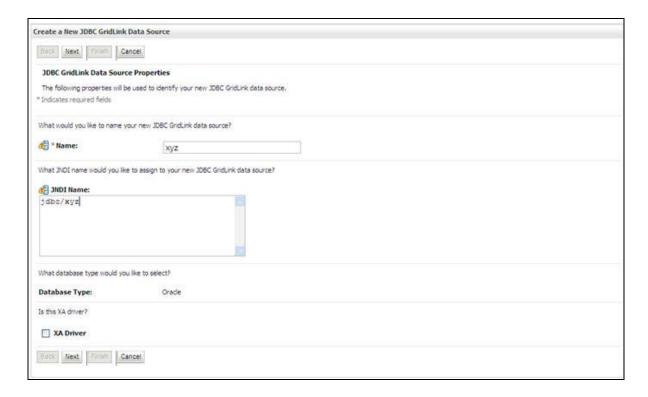
Figure 5-11 Create a New JDBC GridLinkData Source



1. Enter Data Source Name, and JNDI Name.

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

Figure 5-12 JDBC GridLinkData Source- Connection Properties



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

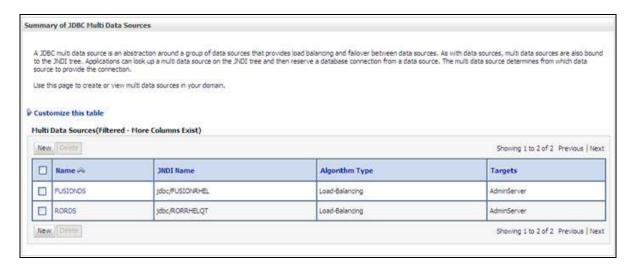
### Configure Multi Data Sources

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.

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

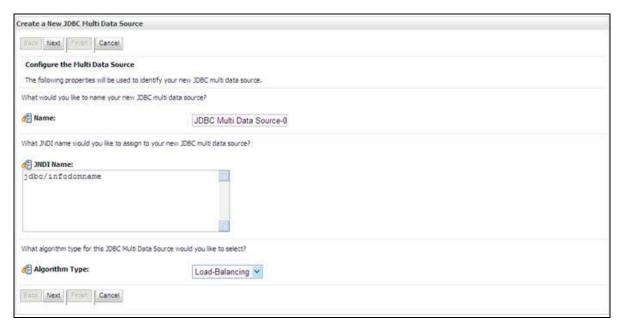
Figure 5-13 Summary of JDBC Multi Data Sources



Click **New**. The New JDBC Multi Data Source window is displayed.

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

Figure 5-14 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/infodomname.
- 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.
- 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 5–15 Select Targets



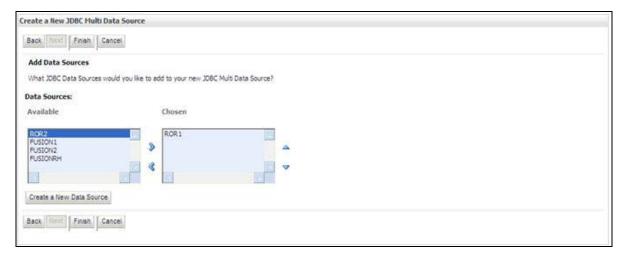
**6.** Select the **AdminServer** check box and click **Next**.

Figure 5–16 Select Data Source Type



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

Figure 5-17 Add Data Sources



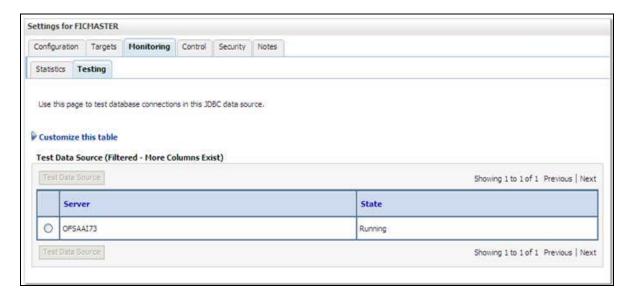
Map the required Data Source from the Available Data Sources. Click Finish. The New JDBC Multi Data Source is created with added data sources.

## **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 window, and check the Test Connection of Reserve checkbox (Enables Weblogic Server to test a connection before giving it to a client).

To verify if the data source is valid, select "Data Source name". For example, FICMASTER.

Figure 5-18 Settings for <Data Source Name>



4. Select the server and click **Test Data Source**.

A message is displayed indicating that the test was successful.

- 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 preceding steps to recreate the data source.

## 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.

# Creating and Deploying EAR/ WAR File for WebLogic

This section covers the following topics:

- Creating EAR/WAR File for WebLogic
- Deploying EAR/WAR File for WebLogic

## Creating EAR/WAR File for WebLogic

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.

Figure C-1 Creating EAR/ WAR File

```
scratch/ofsaaweb>cd /scratch/ofsaaweb/OFSA80/ficweb
/scratch/ofsaaweb/OFSA80/ficweb>
/scratch/ofsaaweb/OFSA80/ficweb>ls
                         ficwebChecksum.sh
ficweb_InstalledChecksum.txt
lib
apache-ant-1.7.1
application.xml
                        MANIFEST.MF
mycertificates
build.xml
conf
ficweb Build CheckSum.txt OFSALMINFO FusionMenu.xml
ficwebCheckSum.log unix
ficwebChecksum.properties webroot
/scratch/ofsaaweb/OFSA80/ficweb>./ant.sh
executing "ant"
Buildfile: build.xml
createwar:
      [war] Building war: /scratch/ofsaaweb/OFSA80/ficweb/AAI80.war
      [ear] Building ear: /scratch/ofsaaweb/OFSA80/ficweb/AAI80.ear
BUILD SUCCESSFUL
Total time: 2 minutes 8 seconds
scratch/ofsaaweb/OFSA80/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.

ANT warning for tools.jar can be ignored while executing ./ant.sh

# Deploying EAR/WAR File for WebLogic

Two EAR files are deployed: ofaai and tflt.

**Note:** Ensure to clear the application cache prior to the deployment of Applications Pack Web Archive. This is applicable to the WebLogic Application Server. For more information, refer Clearing Application Cache section.

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

- Navigate to the path < WebLogic Installation directory > / user\_ projects/domains/<domain name>/bin in the machine in which WebLogic is installed.
- 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 *Starting Infrastructure Services* section.

- 4. Log on to the WebLogic Server by entering the user credentials having privileges to deploy the EAR file.
- **5.** From the **Domain Structure** LHS menu, click **Deployments**. The Summary of Deployments window is displayed.

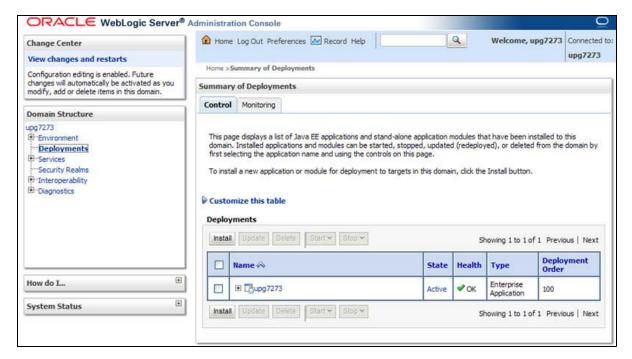


Figure C-2 Summary of Deployments

- 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.
- 3. Copy the <\$FIC WEB HOME/<context name>.ear file to <WEBLOGIC INSTALL DIR>/Bea/user projects/domains/<DOMAIN NAME>/applications/<context name>.ear.
- **4.** 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\_</pre> 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:

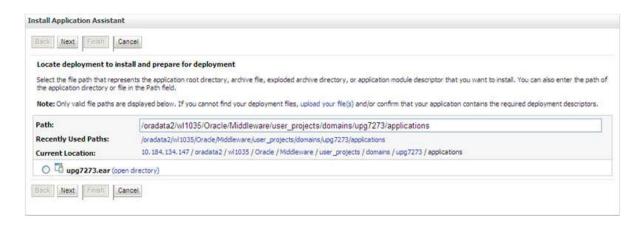
```
jar -xvf <context name>.war
```

### **Install Application**

To install Application, follow these steps:

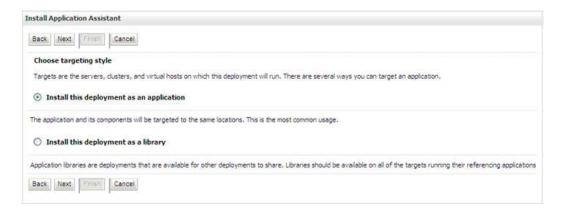
**1.** Open the Install Application Assistant.

Figure C-3 Install Application Assistant



2. Click Next.

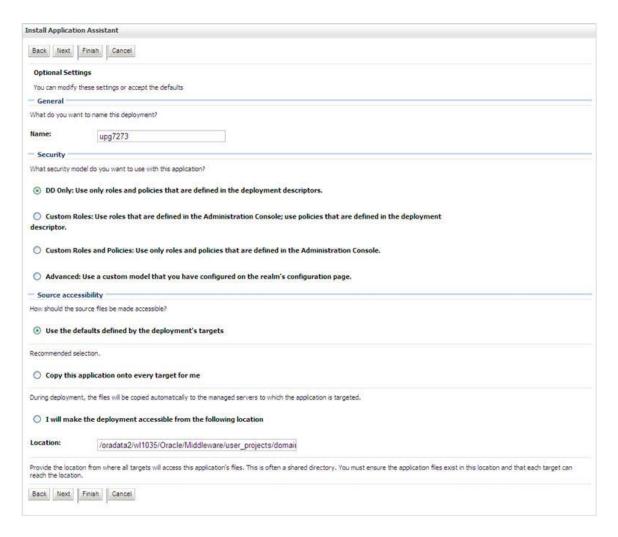
Figure C-4 Install Application Assistant



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.

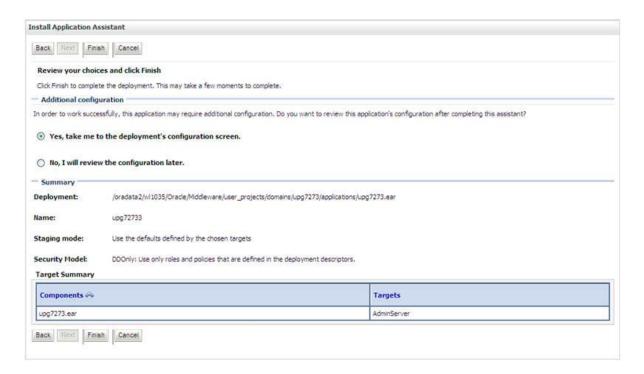
Figure C-5 Optional Settings



- **4.** Enter a **Name** for the deployment if required.
- 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.

Figure C-6 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.

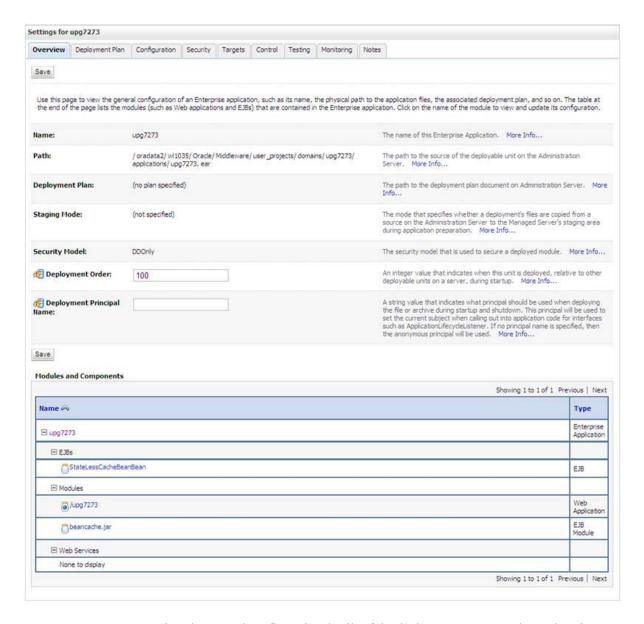
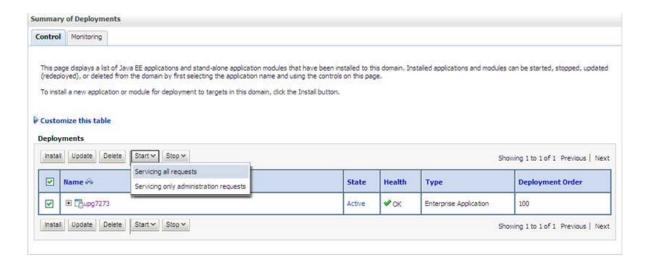


Figure C-7 Settings for < Deployment Name>

- 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**.

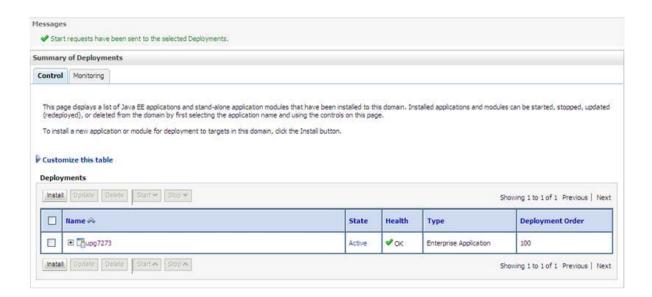
The Summary of Deployments window is displayed.

Figure C-8 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 C-9 Summary of Deployments



13. The State of the deployed application will be displayed as Active if started successfully.

# **Starting/ Stopping Infrastructure Services**

This section details about how to start and stop Infrastructure services. This appendix covers the following topics:

- **Starting Infrastructure Services**
- **Stopping Infrastructure Services**

# **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. The servers mentioned in this section 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.

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.

**Note:** IWhen you start the server, the below mentioned error is displayed:

java.io.FileNotFoundException:

/ftpshare/<INFODOM>/erwin/fipxml/<INFODOM> DATABASE.XML (No such file or directory)

This error must be ignored.

### 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.

#### Start Back-end 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:** NOTE: This agent internally starts the Router, Message Server, OLAP data server and AM services.

### Starting WebLogic Application Server

Start the WebLogic Application Server using the description below:

Table D-1 Webserver start up options

Start up Option	Description
	On the machine in which WebLogic is installed, navigate to <pre><weblogic directory="" installation="">/user_ projects/domains/<domain name="">/bin and execute the command: startWebLogic.sh -d64</domain></weblogic></pre>
	<b>Note</b> : If WebLogic is already running, access the WebLogic Admin Console. Stop and start the application <context name="">.ear</context>

# **Stopping Infrastructure Services**

To stop Infrastructure services, follow these steps:

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:

./iccservershutdown.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

# **Accessing OFSAA Application**

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

# **Access the OFSAA Application**

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

<scheme>://<IP address/</pre> hostname>:<port>/<context-name>/login.jsp For example, https://192.0.2.2/ofsaa/login.jsp The OFSAA login window is displayed.

Figure E-1 OFSAA Login Window



With installation of every OFSAA Application Pack, there are two seeded user profiles configured in the system:

SYSADMN - System Administrator

SYSAUTH - System Authorizer

**Note:** For SYSADMN and SYSAUTH, the default password is password0.

3. 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.

# **Post Deployment Configurations**

This section provides detailed information about the Post Deployment Configurations.

# **Post Deployment Configurations**

This section lists the various configurations to be completed before you use the OFSAA Applications.

- **Create Application Users**
- Map Application User(s) to User Group
- Change ICC Batch Ownership
- Post Installation Steps

## **Create 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.

## Map Application User(s) to User Group

Starting the OFSAA 8.0 release, with installation of every OFSAA 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.

User Groups seeded with the OFS Sanctions Pack are listed in the table.

Table F-1 Seeded User Groups

Name	Description
Transaction Filtering Analyst Group	User mapped to this group will have access to the alerts generated in the system. They can also escalate the alert to the supervisor group for further investigation.
Transaction Filtering Supervisor Group	User mapped to this group will have access to the alerts escalated by the analyst group. They can decide whether the alert needs to be released or blocked.

Table F-1 Seeded User Groups

Name	Description
Transaction Filtering Administrator Group	User mapped to this group will be able to configure the IPE assessment rules, the audit section, the EDQ URL, the feedback URL, and refresh the notification count interval.

Map the application user (s) to the respective Application User Group (s) and subsequently authorize the entitlements by logging in as SYSAUTH (System Authorizer) user.

For more information refer Mapping/Unmapping Users section from the *Oracle Financial* Services Analytical Applications Infrastructure User Guide.

## Change ICC Batch Ownership

This section is not applicable for OFS Sanctions Pack.

### **Post Installation Steps**

- 1. Navigate to the <INSTALLED\_AREA>/realtime\_ processing/WebContent/conf path and make the following changes in the ApplicationContext.xml file:
  - Add <import resource="Sanctions-Transformer.xml"/> in the <import> section.
  - Search for entityTypeTranformers and replace the content in the <map> tag with <entry key="Real Time Raw Data" value-ref="transactionFilteringTransformers" />
- 2. Navigate to the <INSTALLED AREA>/realtime processing/WebContent/conf path and make the following changes in the Install.properties file:
  - a. Replace the <RTI\_INFODOM> placeholder with the existing Infodom value
  - b. Replace the <RTI\_SEGMENT> placeholder with the value SF
  - c. Replace the <RTI APPID> placeholder with the value OFS TFLT
- 3. Navigate to the <INSTALLED AREA>/Transaction Processing/WebContent/conf/ext/ path and verify if the following changes have been made in the spring-postSacalert.properties file:
  - a. Replace ##TFLTINFODOM## with the existing Infodom value
  - b. Replace ## TFLTSEGMENT## with the existing Segment value
  - C. Replace ##WEB IP##:##WEB PORT##/##CONTEXT NAME## with the existing IPE details values. The web port must be non-ssl.
- Execute the ant.sh file from the <INSTALLED\_AREA>/Transaction\_Processing/path. This generates a WAR file and and EAR file. Deploy the EAR file. For more information, see Creating and Deploying EAR/ WAR File for WebLogic
- Configure IPE in web application servers in real time mode. Refer the section Configuring **IPE** in Web Application Servers for Real Time Mode in the OFS IPE Configuration Guide on OTN.
- For information on configuring the post-installation steps for real time mode and replacing the placeholders (jndi java.naming.provider.url and jndi java.naming.security.credentials parameters) in the IPE Screen, see OFS\_IPE\_SampleApp\_Pack\_8.0.4 \_Installation\_Guide, Post Installation for Real Time Mode section. Both the parameters are applicable for the CLEAN RESPONSE Transaction, HOLD RESPONSE Transaction, and TRANSACTION FILTERING FEEDBACK JMS MESSAGE actions.

- 7. For information on configuring the IPE Sample Application Client for Real Time mode, see OFS IPE SampleApp Pack 8.0.4 Installation Guide, Configuring IPE Sample Application Client for Real Time Mode section.
- 8. To do an RTI Assessments import, navigate to the <INSTALLED\_AREA> /Transaction Processing/IPEAssessmentImport/RTIExport TransactionFiltering\_IPE\_Assessments.xml path and follow these steps:
  - Login to the Server where application layer is installed.
  - Navigate to the <FIC\_HOME>/ficapp/common/FICServer/bin path.
- 9. Execute the /RTIImport.sh \$1 \$2 \$3 \$4 command.

### In the above command:

- \$1 is the File name which has to be imported along with the absolute path where file exists
- \$2 is the infodom
- \$3 is the APP ID

Note: The value of \$4 should always be false.

### For example,

```
RTIImport.sh <INSTALLED_AREA>/Transaction_
Processing/IPEAssessmentImport/RTIExport_
TransactionFiltering IPE Assessments.xml ##TFLTINFODOM## OFS
TFLT false
```

- **10.** Make the following changes in the Admin Screen:
  - Select Audit (Yes for Logging level = DEBUG, No for Logging level = INFO)
  - Enter EDQ SOAP Url b.
  - Enter Feedback Url (For sending the feedback message to the feedback queue)
  - Enter Refresh Interval (Notification Count on the Transaction Filtering Screen will get refresh after these many milliseconds)
- 11. To configure users in the AAI EMAIL CONFIG table in the Config schema, see Oracle Financial Services Analytical Applications Infrastructure Administration Guide version 8.0.0.0.0, SMTP Server Configurations section.

# **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 OFSAA Cloning Reference Guide.



# Configurations for Installation of OFS Sanctions Pack 8.0.4.0.0 on OFS BD Applications Pack 8.0.4.0.0

When you install OFS Sanctions pack 8.0.4.0.0 on OFS BD Applications Pack 8.0.4, ensure thatthe following tags in OFS\_SANC\_SCHEMA\_IN.xml are the same as the ones in OFS\_BD\_SCHEMA\_IN.xml (For more information on OFS\_BD\_SCHEMA\_IN.xml, see OFS BD Applications Pack Installation Guide on OTN.):

- ? <JDBC\_URL>
- ? <HOST>
- ? <SETUPINFO>/PREFIX\_SCHEMA\_NAME
- ? <SETUPINFO>/NAME
- ? <PASSWORD>/DEFAULT\*
- SCHEMA>/TYPE (For Atomic and Config)
- ? <SCHEMA>/INFODOM

# **OFSAA Landing Page**

This section includes the following topics:

- **OFSAA Landing Page**
- Enabling a Product within an Application Pack

# **OFSAA Landing Page**

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 window format.

The following tabs are available in the Landing Page:

- **Applications Tab**
- Sandbox Tab
- **Object Administration Tab**
- System Configuration and Identity Management Tab

# **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.

#### Sandbox Tab

This tab lists the various OFSAA Sandboxes created in the OFSAA setup and the **Select** Sandbox drop-down list displays the OFSAA Sandboxes based on the logged in user and mapped OFSAA Application User Group(s). Links to modules that operate only on Sandbox features are grouped in this tab.

# **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.

## System Configuration and 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.

For more details on how to operate on each tab, see OFSAAI User Guide available in OTN.

# **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:

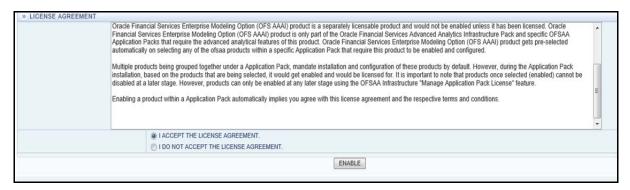
- 1. Login to the application as SYSADMN user or any user with System Administrator privileges.
- Navigate to System Configurations & Identity Management tab, expand Administration and Configuration and select System Configuration.
- Click Manage OFSAA Product License(s). The Manage OFSAA Product License(s) window is displayed.

MANAGE OFSAA APPLICATION PACK LICENSE MANAGE OFSAA APPLICATION PACK LICENSE INSTALLED APPLICATION PACKS DESCRIPTION INSTALL DATE VERSION APPLICATION PACK ID | APPLICATION PACK NAME Applications for Advanced Analytics using Oracle R, Financial Services Advanced OFS\_AAAI\_PACK Modeling & Stress Testing Framework and Inline 2015-11-02 11:13:58.0 8.0.2.0.0 Analytics Infrastructure Pack Processing Engine Financial Services Governance, Risk and Compliance OFS BGRC PACK 2015-11-04 01:35:15.0 8.0.1.0.0 OFS BGRC PACK Applications Pack Applications for Basel Basic, IRB & Analytic, Operational OFS\_CAP\_ADQ\_PACK Financial Services Capital Adequacy Applications Pack Risk Economic Capital & Analytic and Retail Portfolio 2015-11-02 16:19:44 0 8 0 1 0 0 Risk Models and Pooling in Banking and Financial Services Domain Applications for Profitability in the Banking and Financial Financial Services Profitability 2015-11-02 13:24:19.0 8.0.1.0.0 OFS PFT PACK Applications Pack Services Domain 2015-11-09 OFS\_HIVE1 PACK OFS HIVE1 PACK OFS HIVE1 PACK 8.0.2.0.0

Figure I-1 Manage OFSAA Product License(s) window

- Select an Application pack to view the products in it. The products are displayed in the Products in the Application Pack grid.
- Select the checkbox to enable a product within the Application Pack which is not enabled during installation.
- Click VIEW LICENSE AGREEMENT to view the license information. The *License* Agreement section is displayed.

Figure I-2 License Agreement



Select the option I ACCEPT THE LICENSE AGREEMENT and click ENABLE. A 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 authorize the actions by logging in as System Authorizer.
- For more information refer to Mapping/Unmapping Users section in the OFSAAI User Guide available in OTN.
- 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.

Enabling a	Product	within	an A	App	lication	Pack

# **Additional Configuration**

This section gives detailed information about the Additional Configuration regarding OFSAA Installation.

# **Additional Configuration**

This section covers the following topics:

- FTP/SFTP Configuration for File Transfer
- Configuring 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
- Configuring OFSAAI Web Services
- Deploying OFSAAI Web Services
- Configuring Message Details in Forms Designer
- **Clearing Application Cache**
- Configuring Passwords Changes
- Configuring Java Virtual Machine
- Configuring Internal Service (Document Upload/ Download)

# 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.

- Login to the web application server.
- Type sftp <user>@<OFSAA Server>

- **3.** Specify Yes when prompted for permission.
  - Are you sure you want to continue connecting (Yes/No)?
- 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.

#### Configuring Infrastructure Server Memory

The memory settings for Infrastructure Application Server WebLogic can be edited for customizing memory settings and garbage collector settings depending on the available hardware configuration as explained in the following section. 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.

#### 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:** 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="-Xms1q -Xmx1q -XX:+UseAdaptiveSizePolicy
-XX:MaxPermSize=512M -XX:+UseParallelOldGC
-XX:+DisableExplicitGC"
```

# 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.
- Select the option Every time I Visit the webpage and click OK.

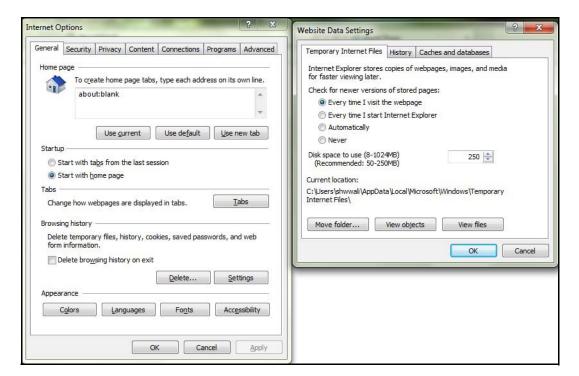
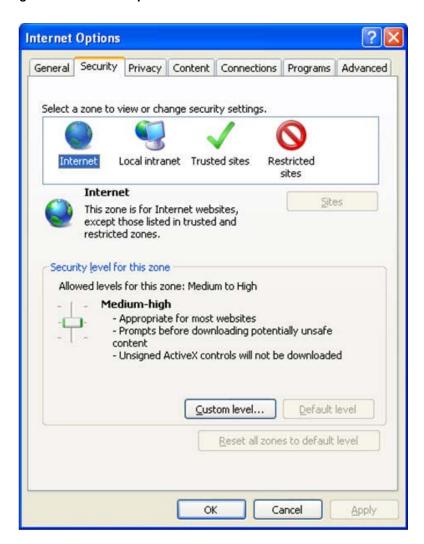


Figure J-1 Internet Options

- 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.
- Click Default Level under Security level for this zone.

Figure J-2 internet Options



- Click **OK** to save.
- In the Internet Options window, select the Privacy tab and select the Turn on Pop-up Blocker option under Pop-up Blocker settings.

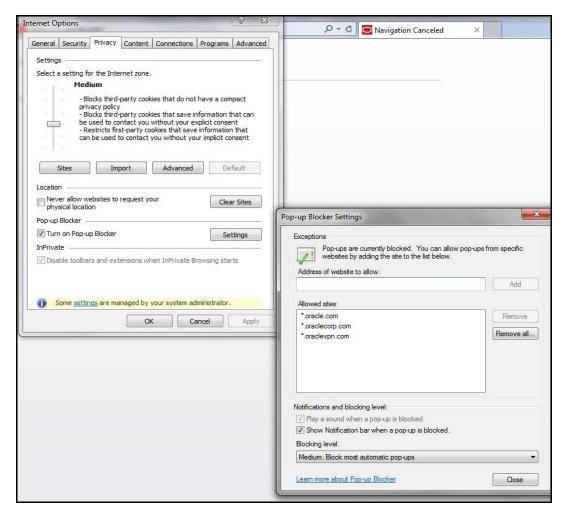


Figure J-3 Internet Options- Popup Blocker Settings

- Click **Settings**. The Pop-up Blocker Settings window is displayed.
- Enter the URL of the OFSAA Application in the Address of Website to Allow: field.
- **10.** Click **Add**. The OFSAA URL is displayed in the **Allowed Sites** section.
- 11. Click Close.
- **12.** Click **OK** in the Internet Options window.

## Retrieving Patch Information

To identify the list of patches installed on your OFSAA setup, follow these steps:

- Login to the OFSAA application as a user with Object AdminAdvanced Role.
- Navigate to Object Administration tab, expand Utilities and click Patch Information.
- The window displays the list of patches installed on the OFSAA setup across Applications/ Platform.

# 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.

#### 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.

#### 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.

# **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, refer Appendix C.

# Infrastructure LDAP Configuration

For more information on LDAP configuration, see OFSAAI Administration Guide.

#### Configuring OFSAAI Web Services

Web Services in OFSAAI is meant for exposing a web service to "asynchronously" or "synchronously" execute requested tasks offered by OFSAAI. The following configuration steps are to be done only if you are using the Web Services feature of OFSAAI.

#### 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 the WebLogic application server.

The Dynamic WSC onfig. 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.

This template is as follows:

```
<XML>
<WEBSERVICES>
<WEBSERVICE CODE="$CODE"</pre>
ENDPOINT="$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="$CODE"</pre>
NAME="$NAME"
SOAPACTION="$SOAPACTION"
STYLE="$STYLE"
PACKAGENAME="$PACKAGENAME">
<INPUT ORDER="$ORDER"</pre>
PARAMNAME="$PARAMNAME"
ARGTYPE="$ARGTYPE"
CLASSNAME="$CLASSNAME"/>
<OUTPUT PARAMNAME="$PARAMNAME"</pre>
RETURNTYPE="$RETURNTYPE"
CLASSNAME="$CLASSNAME"/>
</OPERATION>
```

- </WEBSERVICE>
- </WEBSERVICES>
- </XML>

The DynamicWSConfig.xml has the placeholders as shown in the following table. 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 as follows should be set in accordance to the parameters published in the third party wsdl files (webservices) to be accessed. The stub class specified must implement the "com.iflex.Oracle Reveleus.execution.webservice.EXEWebIF" interface.

#### Attributes for WEBSERVICE tag Table J-1 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.
\$PORTTYPENAME	wsdl port type name as mentioned in the wsdl file.
\$SESSION_MAINTAIN_PROPERTY	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).

#### **Attributes for OPERATION tag**

Ensure that the "operation tag attributes" are repeated for each of the operation tags.

Table J-2 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.

Table J-2 (Cont.) OPERSTION tag

Placeholder	Description
\$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.

#### **Attributes for INPUT tag** Table J–3 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.

#### **Attributes for OUTPUT tag** Table J-4 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.

#### For web.xml Entries, Navigate to <OFSAAI Installation

 ${\tt Directory>/EXEWebService/<WebServer>/ROOT/WEB-INF/} \ and \ edit \ the \ web.xml \ file \ as$ follows:

**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"</pre>
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"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

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 following 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>
```

#### **Proxy Settings**

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>
```

#### **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>
```

#### 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.

### Deploying 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.
- Navigate to <OFSAAI Installation Directory>/EXEWebService/<WebServer> and execute the command:

```
./ant.sh
```

This will trigger the EAR/WAR file creation, which is required for the deployment.

3. 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.

#### 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 form the OracleDB.conf file that 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.

# Configuring 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 that 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:

Description
Specify the hostname or IP address of SMTP Server.
To run SMTP service in Debug mode, set value to 'true', otherwise set value to 'false'.
Set to 'true' if SMTP server requires the client to be authenticated, otherwise set to 'false'.
Username required for logging into SMTP server, if authentication is not required use a dummy value.
Password required for logging into SMTP server, if authentication is not required use a dummy value.

Table J-5 NotificationConfig.cfg File

## **Clearing Application Cache**

SMTP\_MAILID

Prior to the deployment of Infrastructure or Application Service Packs / One-off patches, navigate to the following path and clear the cache:

Security settings)

WebLogic: <Weblogic installation location>/domains/<Domain name>/servers/<Server name>/tmp/\_WL\_user/<Application name>/qaelce/jsp\_ servlet.

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

## Configuring Passwords Changes

This section explains about how to modify the OFSAA Infrastructure Config Schema and Atomic Schema passwords.

#### OFSAA Infrastructure Config Schema password modification

To change the Config Schema password, perform the following steps:

- Change the Config schema User Password in the database.
- Delete the \$FIC HOME/conf/Reveleus.SEC file.
- Shutdown the OFSAAI App service:

```
cd $FIC APP HOME/common/FICServer/bin
```

./stopofsaai.sh

Start the Infrastructure Server in foreground directly on the server or through X-Windows software using the command:

```
./startofsaai.sh
```

- 5. 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.
- **6.** Post successful startup of the service, if required, the Infrastructure server may be shut down and restarted in the background using nohup mode.

#### 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 SYSADMN account or any user id, which has System Administrator role mapped.
- **3.** Navigate to System Configuration > Database Details window. Modify the password as explained in the following steps:
  - From the Database Master window, select the connection whose password you want to modify and click p button from the toolbar.
  - **b.** Click **p** button corresponding to the **Alias Name**. The *Alias Details* window is displayed.
  - **c.** Modify the password in the **Auth String** field.
- **4.** For the WebLogic Web server, perform the following steps:
  - 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.
  - Select the appropriate Data Source and edit the connection details. (In this case, both Config and Atomic data sources need to be modified).
- **5.** Restart the OFSAAI services.

#### **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 (fiedb layer) are installed.

# Configuring 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.

# **Patching OFSAA Infrastructure Installation**

# **Patching Your OFSAA Infrastructure Installation**

Oracle strongly recommends installing the latest available patch set so as to be up to date with the various releases of the OFSAA product.

Refer http://support.oracle.com for more information on latest release.

# **Grants for Atomic/ Config Schema**

This section mentions about the various grants required for the CONFIG, ATOMIC schemas.

This section discusses the following sections:

- Grants for Atomic Schema
- Grants for Config Schema
- Grants for Config Schema Entities for Atomic Users

# **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.

The following are the Grants for Atomic 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
```

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

grant olap\_user to &database\_username

# **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
```

# Grants for 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 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
```

# **Configuring Application Pack XML Files**

This section explains configuration of OFS SANC PACK.xml and OFS SANC SCHEMA IN.xml files.

This section includes the following topics:

- Configuring OFS\_SANC\_PACK.xml file
- Configuring OFS SANC SCHEMA IN.xml file

# Configuring OFS\_SANC\_PACK.xml file

The OFS\_SANC\_PACK.xml file holds details on the various OFSAA products that are packaged in a particular Application Pack.

The following table gives details about the various tags/ parameters available in the file and the values that need to be updated. Prior to installing the OFSAA 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.

Table M-1 OFS\_SANC\_PACK.xml Parameters

Tag Name/ Attribute Name	Description	Mandat ory (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.
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.

Table M-1 OFS\_SANC\_PACK.xml Parameters

Tag Name/ Attribute Name	Description	Mandat ory (Y/N)	Default Value/ Permissible Value	Comments
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 OFS_TFLT NO for Others	Set this attribute-value to YES against every APP_ID which is licensed and should be enabled for use.
			Permissible - YES or NO	Note: Application/ Product once enabled cannot be disabled. However, Application/ Product not enabled 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.

# Configuring OFS\_SANC\_SCHEMA\_IN.xml file

Creating database schemas, objects within schemas and assigning appropriate grants are the primary steps in the installation process of OFSAA Applications. The OFS\_SANC\_PACK>>\_ SCHEMA\_IN.xml file contains details on the various application schemas that should be created prior to the Application Pack installation.

**Note:** This file should be configured only in case of OFS Sanctions Pack installation for RDBMS ONLY target. This file is not required to be configured for an HDFS ONLY target installation.

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.

Table M-2 OFS\_SANC\_SCHEMA\_IN.xml Parameters

		Mandat		
Tag Name/ Attribute Name	Description	ory (Y/N)	Default Value/ Permissible Value	Comments
<app_pack_ ID&gt;</app_pack_ 	Seeded unique ID for the OFSAA Application Pack	Y	Seeded	DO NOT modify this value.
<jdbc_url></jdbc_url>	Enter the JDBC URL  Note: You can enter RAC/ NON-RAC enabled database connectivity URL.	Y	Example, jdbc:oracle:thin:@ <host i="" p="">:<port>:<sid> or jdbc:oracle:thin:@//[HOST][ :PORT]/SERVICE or jdbc:oracle:thin:@(DESCRI PTION=(ADDRESS_ LIST=(ADDRESS=(PROTO COL=TCP)(HOST=[HOST] )(port=[PORT]))(ADDRESS=(PROTOCOL=TCP)(HOS T=[HOST])(PORT=[PORT]) )(LOAD_</sid></port></host>	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.
			BALANCE=yes)(FAILOVE R=yes))(CONNECT_ DATA=(SERVICE_ NAME=[SERVICE]))) For example, jdbc:oracle:thin:@//dbhost.se rver.com:1521/service1 or	
ZIDDC	D. I.C. kuli. I.	V	jdbc:oracle:thin:@//dbshost.s erver.com:1521/scan-1 or jdbc:oracle:thin:@(DESCRI PTION=(ADDRESS_ LIST=(ADDRESS=(PROTO COL=TCP)(HOST=dbhost1. server.com)(port=1521))(AD DRESS=(PROTOCOL=TCP)(HOST=dbhost2.server.com)(PORT=1521))(LOAD_ BALANCE=yes)(FAILOVE R=yes))(CONNECT_ DATA=(SERVICE_ NAME=service1)))	
<pre><jdbc_ driver=""></jdbc_></pre>	By default this driver name is seeded.  Note: Do not edit this attribute value.	Y	Example, oracle.jdbc.driver.OracleDriv er	Only JDBC Thin Driver is supported.  DO NOT modify this value.
<host></host>	Enter the Hostname/ IP Address of the system on which you are installing the OFSAA components.	Y	Host Name/ IP Address	
<setupinfo>/ PREFIX_ SCHEMA_ NAME</setupinfo>	Identifies if the value specified in <setupinfo>/NAME attribute should be prefixed to the schema name.</setupinfo>	N	YES or NO	Default value is YES.

Table M-2 OFS\_SANC\_SCHEMA\_IN.xml Parameters

		Mandat		
Tag Name/ Attribute Name	Description	ory (Y/N)	Default Value/ Permissible Value	Comments
<setupinfo>/ NAME</setupinfo>	Enter the acronym for the type of implementation. This information will be displayed in the OFSAA	Y	Accepts strings with a minimum length of two and maximum of four.  Example,	This name would appear in the OFSAA Landing Page as "Connected To: xxxx"  The schemas being created
	Note: On executing the schema creator utility, this value will be prefixed with each schema name. For example: dev_ofsaaconf, uat_ofsaaatm.		DEV, SIT, PROD	would get this prefix. For E.g. dev_ofsaaconf, uat_ofsaaconf etc.
<password>/ DEFAULT*</password>	Enter the password if you want to set a default password for all schemas.	N	The maximum length allowed is 30 characters. Special characters are not	
	Note: You also need to set APPLYSAMEFORALL attribute as Y to apply the default password for all the schemas.		allowed.	
<password>/ APPLYSAMEFO RALL</password>	Enter as Y if you want to apply the password specified in DEFAULT attribute for all the schemas.	Y	Default - N Permissible - Y or N	Note: Setting this attribute value is mandatory, If DEFAULT attribute is set.
	If you enter as N, you need to provide individual passwords for all schemas.			
	Note: In case you have entered Y in APPLYSAMEFORALL attribute and also have specified individual passwords for all the schemas, then the specified individual passwords will take precedence.			
<tablespace> /NAME</tablespace>	Enter the tablespace name for the three tablespace attributes.	Y	OFS_TFLT_DATA_ TBSP/OFS_TFLT_INDEX_ TBSP/OFS_TFLT_CONF_ TBSP	Do not change this name.
<tablespace> /AUTOEXTEND</tablespace>	Enter the autoextend value.	Y	OFF	
<tablespace> /SIZE</tablespace>	Enter the tablespace size.	Y	512M	The DBA can change the size as required.
<tablespace> /DATAFILE</tablespace>	Update <change_me> place holder with the actual DATAFILE creation path</change_me>	Y	Example:/scratch/oracle/app/ oracle/oradata/	
<tablespace> /VALUE</tablespace>	As per naming conventions, User can modify the default values provided under the VALUE attribute	Y	For example, RRS_DATA_TABLE_SPACE and RRS_INDEX_TABLE_SPACE	

Table M-2 OFS\_SANC\_SCHEMA\_IN.xml Parameters

Tag Name/ Attribute Name	Description	Mandat ory (Y/N)	Default Value/ Permissible Value	Comments
<schema>/ TYPE</schema>	The different types of schemas that are supported in this release are ATOMIC, CONFIG, SANDBOX, and ADDON.  By default, the schemas types are seeded based on the Application Pack.  Note: Do not edit this attribute value.	Y	ATOMIC/CONFIG/SANDB OX/ADDON Note: SANDBOX AND ADDON schemas are not applicable for OFS Sanctions Pack.	Only One CONFIG schema can exist in the file.  This schema identifies as the CONFIGURATION schema that holds the OFSAA setup details and other metadata information.  Multiple ATOMIC/SANDBOX/ADDON schemas can exist in the file.  ATOMIC schema refers to the Information Domain schema. SANDBOX schema refers to the SANDBOX schema refers to the SANDBOX schema refers to other miscellaneous schema (not applicable for this Application Pack).
<schema>/ NAME</schema>	By default, the schemas names are seeded based on the Application Pack. You can edit the schema names if required. Note: The Schema Name will have a prefix of the SETUPINFO/NAME attribute. SCHEMA NAME must be same for all the ATOMIC Schemas of applications within an Application Pack.	Y	The permissible length is 15 characters and only alphanumeric characters allowed. No special characters allowed except underscore '_'.	SETUPINFO/ NAME attribute value would be prefixed to the schema name being created.  For E.g. if name is set as 'ofsaaatm' and setupinfo as 'uat' then schema being created would be 'uat_ ofsaaatm'.  NAME should be same where APP_GRP=1 for all SCHEMA tags (Not applicable for this Application Pack).
<schema>/ PASSWORD</schema>	Enter the password of the schema to be created.  Note:  If this attribute is left blank, then the password specified in the <password>/DEFAULT attribute is applied as the Schema Password.</password>	N	The maximum length allowed is 30 characters. Special characters are not allowed.	Note: You need to mandatorily enter the password if you have set the <password>/ APPLYSAMEFORALL attribute as N.</password>
<schema>/ APP_ID</schema>	By default, the Application ID is seeded based on the Application Pack.  Note: Do not edit this attribute value.	Y	Unique Seeded Value	Identifies the Application/ Product for which the schema is being created.  DO NOT modify this value.
<schema>/ DEFAULTTABL ESPACE</schema>	Enter the available default tablespace for DB User.  Note:  If this attribute is left blank, then USERS is set as the default tablespace.	N	Default - USERS Permissible - Any existing valid tablespace name.	Modify this value to associate any valid tablespace with the schema.

Table M-2 OFS\_SANC\_SCHEMA\_IN.xml Parameters

Tag Name/ Attribute Name	Description	Mandat ory (Y/N)	Default Value/ Permissible Value	Comments
<schema>/ TEMPTABLESP ACE</schema>	Enter the available temporary tablespace for the DB User. Note: If this attribute is left blank, then TEMP is set as the default tablespace.	N	Default - TEMP Permissible - Any existing valid temporary tablespace name.	Modify this value to associate any valid tablespace with the schema.
<schema>/ QUOTA</schema>	Enter the quota to be set on DEFAULTTABLESPACE attribute for the schema/ user. By default, the quota size is set to 500M. Minimum: 500M or Unlimited on default Tablespace	N	Example, 600M/m 20G/g UNLIMITED/unlimited	Modify this value to grant the specified quota on the mentioned tablespace to the user.
<schema>/ INFODOM</schema>	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.	N	Permissible length is 16 characters and only alphanumeric characters allowed. No special characters allowed.	

# Configuring OFSAAI\_InstallConfig.xml File

This section gives details about the OFSAAI\_InstallConfig.xml file.

# Configuring OFSAAI InstallConfig.xml file

To configure the OFSAAI\_InstallConfig.xml file, follow these steps.

- Navigate to OFS\_SANC\_PACK/OFS\_AAI/conf/.
- Open the file OFSAAI\_InstallConfig.xml in text editor.
- Configure the OFSAAI\_InstallConfig.xml as mentioned in the following table:

You need to manually set the Interaction Variable 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.

OFSAA Infrastructure Installation Tasks and Descriptions

InteractionVariable Name	Significance and Expected Value	Mandator y
	<layer name="GENERAL"></layer>	•
WEBAPPSERVERTYPE	Identifies the web application server on which the OFSAA Infrastructure web components would be deployed.	Yes
	The following numeric value should be set for WebLogic:	
	Oracle WebLogic Server = 3	
	For example, <interactionvariable name="WEBAPPSERVERTYPE">3</interactionvariable>	
DBSERVER_IP	Identifies the hostname or IP address of the system on which the Database Engine is hosted.	Yes
	Note: For RAC Database, the value should be NA.	
	For example, <interactionvariable name="DBSERVER_ IP">14.15.16.17</interactionvariable> or <interactionvariable name="DBSERVER_IP">dbhost.server.com</interactionvariable>	
ORACLE_SID/SERVICE_	Identifies the Oracle DB Instance SID or SERVICE_NAME	Yes
NAME	<b>Note</b> : The Oracle_SID value should be exactly the same as it is mentioned in JDBC_URL.	
	For example, <interactionvariable name="ORACLE_SID/SERVICE_NAME">ofsaser</interactionvariable>	

Table N–1 (Cont.) OFSAA Infrastructure Installation Tasks and Descriptions

InteractionVariable Name	Significance and Expected Value	Mandator y
ABS_DRIVER_PATH	Identifies the directory where the JDBC driver (ojdbc <version>.jar) exists. This would typically be the \$ORACLE_HOME/jdbc/lib</version>	Yes
	For example, <interactionvariable name="ABS_DRIVER_ PATH">"&gt;/oradata6/revwb7/oracle </interactionvariable>	
	<b>Note</b> : Refer Appendix O for identifying the correct "ojdbc <version>.jar" version to be copied.</version>	
OLAP_SERVER_ IMPLEMENTATION	Identifies if the OFSAA Infrastructure OLAP component needs to be configured depending on whether you intend to use the OLAP feature. The following numeric value should be set depending on the choice:	No
	<sup>2</sup> YES - 1	
	, NO - 0	
<b>Note</b> : If value for OLAP_SERVin.profile:	VER_IMPLEMENTATION is set to 1, it checks for following environment variables are	set
ARBORPATH, HYPERION_HON	ME and ESSBASEPATH.	
SFTP_ENABLE	Identifies if the SFTP (Secure File Transfer Protocol) feature is to be enabled. The following numeric value should be set depending on the choice:	Yes
	<sup>7</sup> SFTP - 1	
	<sub>?</sub> FTP - 0	
	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>	
LOCALE	Identifies the locale information to be used during the installation. This release of the OFSAA Infrastructure supports only US English.	Yes
	For example, <interactionvariable name="LOCALE">en_ US</interactionvariable>	
are set in the installation. If y	e used internally by the various OFSAA Infrastructure services. The default values to concern the continuous of the parameter value accordingly and 6.025 to 65535 and the respective port is enabled.	
JAVAPORT	9999	Yes
NATIVEPORT	6666	Yes
AGENTPORT	6510	Yes
ICCPORT	6507	Yes
ICCNATIVEPORT	6509	Yes
OLAPPORT	10101	Yes
MSGPORT	6501	Yes
ROUTERPORT	6500	Yes
		<u> </u>
AMPORT	6505	Yes

configured on your web application server.

Table N–1 (Cont.) OFSAA Infrastructure Installation Tasks and Descriptions

InteractionVariable Name	Significance and Expected Value	Mandator y
HTTPS_ENABLE	Identifies if the UI should be accessed using HTTP or HTTPS scheme. The default value set is 0. The following numeric value should be set depending on the choice:  , YES - 1  , NO - 0  For example, <interactionvariable name="HTTPS_ENABLE">0</interactionvariable>	Yes
WEB_SERVER_IP	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.  If no separate HTTP Server is available, the value should be Web Application Server IP/Hostname.  For example, <interactionvariable name="WEB_SERVER_IP">10.11.12.13</interactionvariable> or <interactionvariable name="WEB_SERVER_IP">myweb.server.com</interactionvariable>	No
WEB_SERVER_PORT	Identifies the Web Server Port. This would typically be <b>80</b> for non SSL and <b>443</b> for SSL. If no separate HTTP Server exists, the value should be the port configured for Web Server. <b>Note</b> : The port value will not be accepted as 80 if HTTPS_ENABLE is 1 and as 443, if HTTPS_ENABLE is 0.  For example, <interactionvariable name="WEB_SERVER_PORT">80</interactionvariable>	No
CONTEXT_NAME	Identifies the web application context name which will be used to built the URL to access the OFSAA applications. The context name can be identified from a URL as follows: <pre></pre>	Yes
WEBAPP_CONTEXT_ PATH	Identifies the absolute path of the exploded .ear file on the web application server.  For WebLogic, provide the WebLogic home directory path as / <weblogic directory="" home="" path="">/bea/wlserver_10.3  Note: For WebLogic, value specified for this attribute is ignored and value provided against attribute WEBLOGIC_DOMAIN_HOME is considered.</weblogic>	Yes
WEB_LOCAL_PATH	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.  Note: In case of a clustered deployment, ensure this path and directory is same on all the nodes.	Yes
WEBLOGIC_DOMAIN_ HOME	Identifies the WebLogic Domain Home.  For example, <interactionvariable name="WEBLOGIC_DOMAIN_ HOME">/home/weblogic/bea/user_ projects/domains/mydomain </interactionvariable>	Yes Specify the value only if WEBSER VERTYPE is set as 3 (WebLogic )

Table N–1 (Cont.) OFSAA Infrastructure Installation Tasks and Descriptions

InteractionVariable Name	Significance and Expected Value	Mandator y
OFSAAI_FTPSHARE_	Identifies the absolute path to the directory identified as file system stage area.	Yes
PATH	Note:	
	The directory should exist on the same system on which the OFSAA Infrastructure is being installed (can be on a separate mount).	
	The user mentioned in the following APP_SFTP_USER_ID parameter should have RWX permission on the directory.	
	For example, <interactionvariable name="APP_FTPSHARE_PATH">"&gt;/oradata6/revwb7/ftpshare</interactionvariable>	
OFSAAI_SFTP_USER_ID	Identifies the user who has RWX permissions on the directory identified under the preceding parameter APP_FTPSHARE_PATH.	Yes
HIVE_Details	HIVE_SERVER_PORT:	Yes, only
Note: The current release of Sanctions does not	Identifies the port used for the file transfer service. The default value specified is 22 (SFTP) or 21 (FTP).	for HIVE Configurat ion
support hive.	HIVE_SERVER_FTPDRIVE:	
	Identifies the absolute path to the directory identified as file system stage area of HIVE server.	
	HIVE_SERVER_FTP_USERID:	
	Identifies the user who has RWX permissions on the directory identified under the preceding parameter HIVE_SERVER_FTPDRIVE.	
	HIVE_SERVER_FTP_PROTOCOL:	
	If the HIVE_SERVER_PORT is 21, then value is FTP, else it is SFTP.	

# **JDBC Jar Files**

The ojdbc<version>.jar file should be copied based on Database & Java version. Refer to the following table for details.

Table O-1 JDBC Jar files version 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

# **Removing OFSAA**

This chapter includes the following sections:

- Uninstalling OFSAA Infrastructure
- Uninstalling EAR Files in WebLogic

# **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:

- Log in to the system as non-root user.
- Navigate to the \$FIC HOME directory and execute the command:
  - ./Uninstall.sh
- Enter the password for OFSAAI Configuration Schema when prompted as shown in the following figure.

Figure 5–19 Uninstalling OFSAA Infrastructure

```
/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>
```

#### 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 (ftpshare) have to be deleted manually.
- All the Database objects from Atomic Schemas have to be dropped manually.

# 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 window is displayed.

Figure 5–20 Summary of Deployments



- 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.

Summary of Deployments This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page. To install a new application or module for deployment to targets in this domain, click the Install button. Customize this table Deployments Install Update Delete Start → Stop → Showing 1 to 1 of 1 Previous | Next ☐ Name ↔ Deployment Order State Health Туре □ ■ □ upg7273 **₩**OK Prepared Enterprise Application 100 Install Update Delete Start - Stop -Showing 1 to 1 of 1 Previous | Next

Figure 5–21 Summary of Deployments- Messages

- Select the checkbox adjacent to the application and click **Delete** to delete the selected deployment.
- Click Yes in the confirmation dialog to remove the selected deployment from the domain configuration.

# **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
- **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.

# **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 8.0.4.0.0 FAQs
- Forms Framework FAQs

## OFSAAI FAQs

## What are the different components that get installed during OFSAAI?

The different components of OFSAAI are illustrated in Figure 1–1, "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, fiedb) 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, see 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 are the Operating system, webservers 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

## What should I do if I get the following error message during installation:

"Execute Permission denied"?

Check whether all the files provided for OFSAAI installation has execute permissions.

To give execute permissions,

Navigate to the path OFSAAI 80200 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 Post Installation Configurations.

#### What is to be done when OFSAAI Installation is unsuccessful?

OFSAAI installer generates log file OFSAAInfrastructure Install.log in the Infrastructure Installation Directory. There is also another log file created in the path configured in Log4j.xml. If the logs of any of these reported Warnings, Non Fatal Errors, Fatal Errors or Exceptions, they should be brought to the notice of the OFSAAI Oracle Support Services. 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 OFSAA Infrastructure section in this guide.

#### 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 do I 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 OFS AAI 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 OFSAA:

```
<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 do I 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 OFSAA 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 I 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 I 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 Services.

#### What should I do if the installation process is abruptly terminated or aborted?

If the installation process is abruptly terminated, then the installation will be incomplete. To recover from this, follow these 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 I do if the database connection from connection pool displays the following error message, "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 preceding 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 these steps:
  - **a.** Login to the server where the installer is copied.
  - **b.** Navigate to the directory OFSAAI 80200.
  - **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 OFSAA 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 should I do if the OFSAAI Application Server does not proceed even after providing the system password?

Ensure that, the System Password provided when prompted is "password0" 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. For details on start up parameters options, see Starting Infrastructure Services section.

For more details on the issue, refer 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 completing the 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 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, you 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 who has complete permissions on FTPSHARE directory, and the user 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.

Additionally, any new file that is created in the FTPSHARE folder of any installation layer should be granted specific/explicit permission.

Port Change utility can be used to have the Port number modified, which are currently being used by the Infrastructure application. For more information, refer Changing IP/ Hostname, Ports, Deployed Paths of the OFSAA Instance section in OFS Analytical Applications Infrastructure Administration User Guide in OTN.

#### 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 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 should exist.

## What should I do if I get the following message during the 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 SQL\*PLUS.
- 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 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 provide?

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 Data Model Management --> Data Model Maintenance --> 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.

For mor details, see Configuration for Model Upload Utility section of the OFS Analytical Applications Infrastructure User Guide available on OTN.

## 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 will require updating in those files. Contact Oracle Support Services 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 will require updating those files.

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.** For the WebLogic Web server, follow the steps:
  - **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).
- **4.** Restart the OFSAAI services

**Note:** If the modified passwords are not updated, OFSAAI logs display 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 Oracle Support Services for more details.

Why do the Business Metadata Management screens (Business Processors screen) in User Interface, take more 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 startofsaai.sh and if any of the log file (For example, 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 window 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 preceding 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).
- Restart Reveleus/OFSAAI servers (Web and APP) and check the issue.

#### 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 from OFSAAI Data Model Management --> Data Model Maintenance--> 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 follows, 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 Support Note for the workaround.

## 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 window. 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.

Table Q-1 Optimized Memory Settings for New Model Upload

Model 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

Model Upload Options	Size of Data Model XML File	X_ARGS_APP ENV Variable in OFSAAI APP Layer
Save New Erwin File In Server	106 MB	"-Xms1024m -Xmx1024m
	336 MB	"-Xms2048m -Xmx2048m
		"-Xms4096m -Xmx4096m
		"-Xms6144m -Xmx6144m

What should I do if I get the following error message, "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 to the Appendix C section.
- 5. Restart the OFSAAI Services (APP and WEB). For more information, refer to the Starting 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 as 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 version of Internet Explorer and JRE Plugin are as mentioned in the Desktop Requirements section of this manual. If not, use the qualified versions as mentioned.

#### 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 Oracle HTTP Web Server and the WebLogic Application Server 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 infodom?

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.

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 and 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.
- 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.
- 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 5000kb and number of maximum 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 hardware 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="REVSERVERAPPENDER"</pre>
class="org.apache.log4j.RollingFileAppender">
<param name="file" value="$FIC</pre>
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:

- 1. Navigate to <EAR/WAR Deploy area>/conf folder.
- **2.** Repeat step 2 from the preceding section.

## Can we modify the Log file path?

Yes, Log file path is configurable, it can be configured in RevLog4jConfig.xml file. The 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:

- 1. Create SSL related certificates and import to respective servers.
- 2. Enable SSL on a desired Port (example 9443) on your existing and already deployed web application servers.
- 3. Replace the protocol as https and new ssl port (FIC SERVLET PORT) configured and in all the URLs specified on the 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/weblogic/ROOT/WEB-INF/wsdl/EXEWebServiceImpl. wsdl
- **4.** Replace XML attribute/Node values as specified on the 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:"
- 5. Login to Config Schema and execute the 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 on 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';
```

**6.** Create EAR/WAR file and Re-Deploy.

#### What should I do if my HIVE connection fails with the following exception:

```
java.sql.SQLException: [Cloudera][HiveJDBCDriver](500164)
```

Error initialized or created transport for authentication: [Cloudera][HiveJDBCDriver](500168) Unable to connect to server: GSS initiate failed.

```
com.ibm.security.krb5.KrbException, status code: 37
                message: PROCESS_TGS at
com.ibm.security.krb5.KrbTgsRep.<init>(KrbTgsRep.java:20)
```

This happens if there is a clock skew between the client and the KDC server. To resolve this, there are two solutions:

#### **Solution 1:**

Synchronize the clocks between the servers. For more information, refer http://docs.oracle.com/cd/E19253-01/816-4557/setup-192/index.html

#### **Solution 2:**

- 1. Set clockskew parameter on the server side (KDC) krb5.conf file and replace the same file in HIVE\_LIBRARY\_PATH folder. Parameter value should be decided on the basis of the time difference between the two machines.
- 2. Get the epoch time on the two servers by firing "date +%s" on the command line.
- 3. Clockskew param value should be chosen as a value sufficiently larger than the difference of the preceding two calculated values.
- **4.** Set "clockskew = <value>" in the /etc/krb5.conf on the KDC server.
- **5.** Restart Kerberos services.

#### What should I do if my schema creator log has the following exception:

```
Failed to detect a valid hadoop home directory
java.io.IOException: HADOOP HOME or hadoop.home.dir are not set.
at org.apache.hadoop.util.Shell.checkHadoopHome(Shell.java:302)
at org.apache.hadoop.util.Shell.<clinit>(Shell.java:327)
at org.apache.hadoop.util.StringUtils.<clinit>(StringUtils.java:79) at
org.apache.hadoop.security.Groups.parseStaticMapping(Groups.java:130)
at org.apache.hadoop.security.Groups.<init>(Groups.java:94)
at org.apache.hadoop.security.Groups.<init>(Groups.java:74)
at org.apache.hadoop.security.Groups.getUserToGroupsMappingService(Groups.java:303)
org.apache.hadoop.security.UserGroupInformation.initialize(UserGroupInformation.java:283)
org.apache.hadoop.security.UserGroupInformation.setConfiguration(UserGroupInformation.jav
a:311)
at HdfsDbUtil.connect(HdfsDbUtil.java:162)
at SchemaParserUtil.validateHiveConnection(SchemaParserUtil.java:1359)
at SchemaParserUtil.checkAllPreChecks(SchemaParserUtil.java:1011)
at Main.execute(Main.java:317)
at Main.main(Main.java:145)
```

This occurs when HADOOP HOME environment variable is not set. You can ignore this exception since we do not mandate to install HIVE where OFSAA is installed.

#### 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 of saai 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

## 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.

This feature is available only after applying 7.3.5.2.0 Minor Release patch.

#### What should I do if I get the following error message, "Error while fetching open cursor value Status : FAIL''?

This error occurs while executing envCheck. sh because the user does not have access to V\$parameter. This error does not occur due to sysdba or non sysdba privileges provided they have access/grants to V\$parameter.

What should I do when an entity containing many attributes (>100 columns) is selected as Source entity and the Data Mapping (T2T definition) save operation takes longer than expected with the hourglass in the UI continuously rotating?

The workaround is:

- 1. Locate the webserver deployed area webroot/conf/excludeURLList.cfg file.
- Modify the following entries:
- [SQLIA]./dataIntegrator/to[ALL]./dataIntegrator/
- [SQLIA]./ETLExtractionServlet to [ALL]./ETLExtractionServlet
- **3.** Save the changes and restart the webserver.
- **4.** Resave the definition.

#### What should I do if I get the following error message when I try to start the OLAP server:

```
./olapdataserver: error while loading shared libraries:
libessapinu.so:
```

```
cannot open shared object file: No such file or directory
FATAL ERROR: - OLAP DATA SERVER start up failed.
```

This error occurs when OLAP component is not configured and OLAP feature in OFSAA is not used. However, this error can be ignored.

## Application Pack 8.0.4.0.0 FAQs

## What is an Application pack?

An Application Pack is suite of products. For more information, refer.

#### Can I get a standalone installer for OFSAAI 8.0?

No. AAI is part of every application pack and installs automatically.

## Where can I download OFSAA 8.0.4.0.0 Application Pack?

You can download the OFSAAI 8.0.4.0.0 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.

## Is my environment compatible with OFSAA 8.0.4.0.0 Application Pack?

Environment Check utility performs the task. It is part of install and can also be run separately.

## Does the OFSAA 8.0.4.0.0 Application Pack support all Operating systems?

OFSAA 8.0.4.0.0 Application pack supports the LINUX Operating System. Refer to Technology Matrix for the technology matrix that OFSAA suite products are/will be qualified on.

#### How can I install OFSAA 8.0.4.0.0 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 Softwares?

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 8.0.4.0.0 Application Pack installation?

US English is the language supported.

## What mode of installations OFSAA Application Pack supports? [that is., Silent, GUI]

OFSAA Application Packs supports both GUI and Silent Mode.

## Does OFSAA 8.0.4.0.0 Application Pack support Multi tier Installations?

OFSAA 8.0.4.0.0 supports only single tier installation. For more information refer to OFSAAI FAQs section.

## Does this Application Pack validate all prerequisites required for this installation like Memory, Disk Space and so on?

Yes. The pre-requisite checks are done by the respective application pack installer.

## What happens if it aborts during installation of any application/products within an Application pack?

You must restore the system and retrigger the installation

## Does this Application pack 'Roll Back' if any application installation fails due to errors?

Rollback of installation is not supported.

## Does the Application pack install all applications bundled?

All application pack system files are installed but there is an option to enable the licensed products.

#### Can I re-install any of the Application Packs?

You can retrigger in case of failure.

## Does this Application pack allow enabling / disabling any of the applications installed?

Yes, you can enable but you cannot disable once the product is enabled in an environment.

## I have installed one application in an Application pack, can I install any of new application within the Application pack later?

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 8.0.4.0.0 Application pack on an existing 'Infodom' where another OFSAA 8.0.4.0.0 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 for the 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, the 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? (For example, I want to install LRM and 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.

## Is the 'Data Model' bundled specific to an Application pack or to an 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 later?

OFS Enterprise Modeling is a separate product and can be enabled as an option later from any application pack that bundles Enterprise Modeling.

#### Does the 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, an upgrade is applied to all applications in the application pack.

#### 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.

#### Does Application Pack contain all Language Packs supported?

Language Packs need to be installed on the application packs.

## Can I install an Application Pack over another Application Pack (that is same infodom or different infodom)?

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 8.0.4.0.0 support on WebLogic 10.3.6 with Oracle 12c?

Yes, OFSAA 8.0.4.0.0 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.1111/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 Sanctions Pack version 8.0.4.0.0?

OFS Sanctions Pack supports Java 1.7.x and 1.8.x.

## Is OFS Sanctions Pack version 8.0.4.0.0 supported on Java 8?

Yes. To install this release of the OFS Sanctions Pack version 8.0.4.0.0 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.

#### Can I upgrade the Oracle Database version from 11g to 12C on which OFSAA 8.0.4.0.0 version is installed?

Yes, you can upgrade. When the DB Server was Oracle 11g, the ojdbc jar used was ojdbc6.jar. But, when the DB is upgraded to 12c, you need to upgrade the ojdbc6.jar to ojdbc7.jar.

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/

## What should I do when I get "[ERROR] - Error: APP Setup bin file failed." message during OFS Application PACK installation?

This is a generic error message that appears during application installation failure. You should check the installation log files for more information about what failed the installation.

However, if the message is displayed and the log files are not generated, it could be that it is a temp directory issue. The resolution is that your UNIX administrator has to disable the NOEXEC option. The installers extract the installation files into the /tmp directory, and if NOEXEC is enabled, execution of binaries will not happen in the directory and the installation fails. Re-run the installer after the configuration is changed. For detailed information, see the support note at https://support.oracle.com/epmos/faces/DocumentDisplay?id=2340045.1.

## 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 using 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 disabled if the number of hierarchy nodes is more than 50 and if it is a non-custom hierarchy. Hierarchy with more than 50 nodes is considered as large hierarchy and the data will be fetched dynamically when you expand the parent node.

## What is the difference between the two Searches available in the Hierarchy Browser window?

In the new *Hierarchy Browser* window introduced from 7.3.5.1.0 version, there are 2 search options available:

- **DB Search (Top search container):** It will search the required node in database and displays the result as shown below. This search is performed on full hierarchy nodes.
- UI search (Below the hierarchy): This search will find the required node in the UI and will show in tree structure.

**Note:** In case hierarchy nodes are more than 50 and if it is a non-custom hierarchy, then the UI search will not show the required node in tree structure, until all the nodes are expanded and loaded manually in the UI.

#### What is a Custom Hierarchy?

Custom hierarchies will be having the parameter configuration customQuery as shown below and the customized query will be taken from the HIERARCHY\_FILTER\_MASTER table.

Configuration in xml:

```
<CONTROL ID="1003" TYPE="41">
<CONTROLPROPS>
            <EXTRAPARAMETERS>
<PARAMETER NAME="customQuery" VALUE="Yes"/>
</EXTRAPARAMETERS>
</CONTROLPROPS>
    </CONTROL>
```

For custom hierarchy, all the hierarchy nodes are loaded in UI without any limit.

So, even if the hierarchy nodes are more than 50, the UI search will show the required node in tree structure and ExpandAll and ExpandBranch images will be enabled.

# **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:

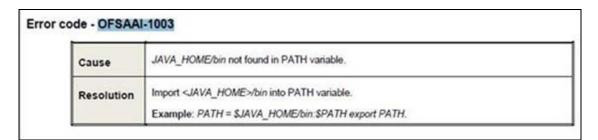
- **Accessing Error Dictionary**
- **Error Code Dictionary**

## 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.
- The *Find* dialog is displayed as indicated.
- Enter the error code that is displayed on screen during Infrastructure installation.
- Press **Enter**. The search results are displayed and highlighted as follows:

Figure Q-1 Error 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.

# **Error Code Dictionary**

## Error code - OFSAAI-1001

Table Q-2 Error code - OFSAAI-1001

Cause	Unix shell is not "korn" shell.
Resolution	Change the shell type to "korn". Use chsh unix command to change SHELL type.
	Shell type can also be changed by specifying shell path for the Unix user in /etc/passwd file.

## Error code - OFSAAI-1002

## Table Q-3 Error code - OFSAAI-1002

Cause	No proper arguments are available.
Resolution	Provide proper arguments. Invoke Setup.sh using either SILENT or GUI mode.
	Example: ./Setup.sh SILENT or ./Setup.sh GUI

## Error code - OFSAAI-1004

#### Table Q-4 Error code - OFSAAI-1004

Cause	File .profile is not present in \$HOME.
Resolution	Create .profile in \$HOME, i.e. in the home directory of user.

## **Error code - OFSAAI-1005**

## Table Q-5 Error code - OFSAAI-1005

Cause	File OFSAAInfrastructure.bin is not present in current folder.
Resolution	Copy OFSAAInfrastructure.bin into installation kit directory.

## Error code - OFSAAI-1006

#### Table Q-6 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

## Table Q-7 Error code - OFSAAI-1007

Cause	File OFSAAI_InstallConfig.xml is not present in current folder.
Resolution	Copy OFSAAI_InstallConfig.xml into installation kit directory.

## Error code - OFSAAI-1008

#### Table Q-8 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

#### Table Q-9 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

## Table Q-10 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

## Table Q-11 Error code - OFSAAI-1011

Cause	XML validation failed.
Resolution	Check InfrastructurePreValidations.Log for more details.

## Error code - OFSAAI-1012

#### Table Q-12 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

#### Table Q-13 Error code - OFSAAI-1013

Cause	$File  {\tt OFSAAI\_InstallConfig.xml/OFSAAI\_PostInstallConfig.xml} \   not found.$
Resolution	$Copy \ {\tt OFSAAI\_InstallConfig.xml/OFSAAI\_PostInstallConfig.xml} \ to the setup kit directory.$

## Error code - OFSAAI-1014

#### Table Q-14 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

## Table Q-15 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

## Table Q-16 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

## Table Q-17 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.