Oracle Financial Services AgileREPORTER Application

Installation Guide

Release 8.1.0.0.0

February 2022





OFS AgileREPORTER Application Installation Guide

Copyright © 2022 Oracle and/or its affiliates. All rights reserved.

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, then the following notice is applicable.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, 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 about 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 unless otherwise set forth in an applicable agreement between you and Oracle. 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, except as set forth in an applicable agreement between you and Oracle.

For information on third party licenses, click here.

Document Control

Version Number	Revision Date	Change Log
03	February 03, 2022	Updated: Upgrades from Prior Versions of OFSAA AgileREPORTER section
02	January 21, 2022	Updated: Final draft published
01	July 12, 2020	Created: Draft published

Table of Contents

1 Pre	eface	6
1.1	Summary	6
1.2	Audience	6
1.3	Prerequisites for the Audience	6
1.4	Access to Oracle Support	6
1.5	Conventions and Acronyms	7
2 OF	S AgileREPORTER	8
2.1	OFS AgileREPORTER Platform Architecture	8
2.2	OFS AgileREPORTER Modules	9
3 Pre	eparing for Installation	10
3.1	Installer and Installation Prerequisites	10
3.1.1	1 Supported Operating Systems	10
3.1.2	2 Required Software	10
3.1.3	3 Supported Databases	
3.1.4	4 Other Requirements	13
3.2	Download the OFS AgileREPORTER Application Pack Installer	13
3.3	Common Installation Activities	14
3.3.	1 Identifying the Installation Directory	15
3.3	2 Copying and Extracting the Software	15
4 Ins	talling the OFS AgileREPORTER Applications Pack	16
4.1	Running the OFS AgileREPORTER Applications Pack Installer	16
4.1.	1 Upgrades from Prior Versions of OFSAA AgileREPORTER	17
4.1.2	2 Running the Installer in GUI Mode	17
4.1.	3 Running the Installer in GUI Mode for Upgrade	33
4.1.4	4 Running the Installer in SILENT Mode	34
4.1.5	5 Running the Installer in SILENT Mode for Upgrade	39
4.1.0	6 Verifying the Log File	39
5 Tri	al Template Package Installation	40

5.1	Trial Template Package for US FED	40
5.2	Trial Template Package for RBI	40
5.3	Installing Trial Template Packages	40
6 St	art or Stop AgileREPORTER Services	42
6.1	Start AgileREPORTER Web Server	42
6.2	Stop AgileREPORTER Web Server	42
7 Er	ror Dictionary	43
7.1	Accessing Error Dictionary	43
7.2	Error Code Dictionary	43

1 Preface

This preface provides supporting information for the OFS AgileREPORTER Installation Guide and includes the following topics:

- Summary
- Audience
- Prerequisites for the Audience
- Access to Oracle Support
- Conventions and Acronyms

1.1 Summary

You can find the latest copy of this document in the <u>OHC</u> Library which includes all the recent additions or revisions (if any) done to date.

Before you begin the installation, ensure that you have 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 My Oracle Support.

1.2 Audience

The OFS AgileREPORTER Pack Installation and Configuration Guide is intended for Administrators, Business Users, Strategists, and Data Analysts, who are responsible for installing and maintaining the application pack components.

1.3 Prerequisites for the Audience

The document assumes you have experience in installing Enterprise components. Basic knowledge about the Oracle Financial Services Advanced Analytical Applications Infrastructure Applications Pack Components, OFSAA Architecture, UNIX Commands, Database Concepts, and Web Server or Web Application Server is recommended.

1.4 Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info
OR

Visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

1.5 Conventions and Acronyms

The conventions and acronyms used in this guide are as follows.

Table 1: Conventions and Description

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

2 OFS AgileREPORTER

OFS AgileREPORTER is a form and workflow tool that enables the creation and submission of regulatory returns. The OFS AgileREPORTER platform is configured with product configurations delivered using configuration packages. Different configuration packages are loaded into OFS AgileREPORTER to support different sets of regulatory returns, normally on jurisdictional lines.

For example, one configuration package may support US Broker or Dealer returns, whereas another configuration package may support European Common Reporting. When a regulation changes, only a new version of the related configuration package is required, there is usually no need to upgrade OFS AgileREPORTER.

A configuration package contains the following core artifacts:

- Return Template
- Description of the Submission Files for the Regulator
- XBRL Taxonomies
- Validation Rules and Edit Checks
- Bindings to the FSDF Data Model

If you are using an OFSAA - OFS AgileREPORTER Integrated Solution, two configuration packages are required. One is from VERMEG, containing artifacts 1-4 above; and one from Oracle, containing Artifact 5.

<u>Chapter 3 – Preparing for Installation</u> until <u>Chapter 6 – Start or Stop AgileREPORTER Services</u> describes how to Install, Update, Configure, Start, and Stop the OFS AgileREPORTER Platform.

2.1 OFS AgileREPORTER Platform Architecture

OFS AgileREPORTER has a web-based User Interface. Users interact with OFS AgileREPORTER to view and edit their regulatory returns using a Standard Web Browser. No browser plugins are required – the User Interface is completely standard compliant (HTML, CSS, and JavaScript).

OFS AgileREPORTER Platform contains an embedded Java EE Server. All the business logic of OFS AgileREPORTER is executed within this server. The server itself is a single Java process running on the Application Server.

OFS AgileREPORTER requires a relational database. Oracle Database is supported. For more details, see Chapter 3 - Preparing for Installation.

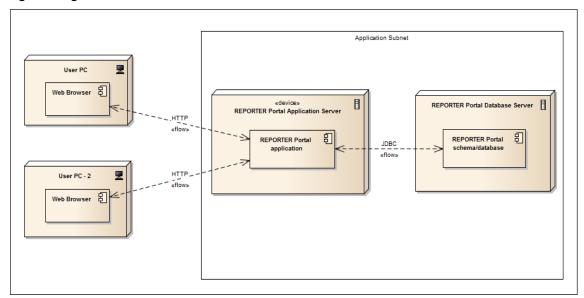


Figure 1: AgileREPORTER Platform Architecture

Installation of OFS AgileREPORTER has a prerequisite described in <u>Chapter 3 – Preparing for</u> <u>Installation</u> to correctly configure the OFS AgileREPORTER Database.

2.2 OFS AgileREPORTER Modules

If licensed sufficiently, OFS AgileREPORTER can also work with optional modules:

- REPORTER: AgileREPORTER® Suite provides Calculated Return Data and Form (template)
 Metadata for OFS AgileREPORTER. If the REPORTER Module is installed for OFS
 AgileREPORTER, the REPORTER Form (template) Metadata is used instead of OFS
 AgileREPORTER Return Metadata.
- OFSAA: The OFSAA Module for OFS AgileREPORTER provides integration with Oracle Financial Services Application Architecture. Oracle's OFSAA provides Calculated Return Data which is read directly from OFSAA's results area and applied to form (template) metadata in OFS AgileREPORTER.

3 Preparing for Installation

This chapter provides the necessary information to review before installing the OFS AgileREPORTER Applications Pack v8.1.0.0.0.

Topics:

- <u>Installer and Installation Prerequisites</u>
- <u>Download the OFS AgileREPORTER Application Pack Installer</u>
- Common Installation Activities

3.1 Installer and Installation Prerequisites

This section describes the installation prerequisites for OFS AgileREPORTER Pack.

3.1.1 Supported Operating Systems

OFS AgileREPORTER is supported on the following Operating System:

- Linux
 - Red Hat Enterprise Linux 7.x and 8.x
 - Oracle Enterprise Linux 7.x and 8.x

3.1.2 Required Software

The required software for this release are as follows:

 Java Runtime Environment (JRE) (version 8 update 202 or later updates of version 8, Oracle HotSpotTM). The JAVA_HOME environment variable should point at the JRE Installation Folder, and Java (in UNIX) or java.exe (in Windows) should be placed in the system path.

NOTE

Use the Oracle JRE distribution. Open JDK is not supported.

How Java is used?

If the Application Server that OFS AgileREPORTER is installed on has multiple versions of Java installed, OFS AgileREPORTER attempts to use Java in the following order, moving to the next location if Java cannot be found:

- JAVA_HOME properties defined in the ocelot.properties file. This is a local version of the JAVA HOME properties and does not impact other applications using this variable.
- JAVA_HOME defined at the system level (if not defined or overridden in the ocelot. properties file). This variable can be shared by other applications, therefore, be careful if you want to modify it.
- The Java executable in the system path. This is the version of Java that is used when Java is entered at the command line.

Ensure that the JAVA_HOME property points to a valid Java folder. For example, if the Java executable is in /opt/java/Jre17/bin/java, then set JAVA HOME=/opt/java/Jre17

Java Use Case Examples

Use the system-level JAVA_HOME

Ensure that the System level <code>JAVA_HOME</code> is valid and that <code>JAVA_HOME</code> is not defined in the <code>ocelot.properties</code> file.

- Use a different version of Java than the one defined by the system-level JAVA_HOME
 Define JAVA HOME in the ocelot.properties file.
- Unsure about JAVA_HOME and it is not defined on the installation computer
 Check if JAVA_HOME is defined in your system by entering the following at the command line:

Linux:

echo \$JAVA_HOME

If JAVA_HOME is not defined in your system, then check if the java -version can be run at the command line. If yes, the OFS AgileREPORTER uses the same version.

- Oracle Financial AgileREPORTER 8.0.9.2.0 (Patch ID **31830937**) if upgrading from an earlier version. This is not applicable for a fresh installation.
- Oracle Financial Services Data Foundation (OFSDF) 8.1.0.0.0 (Patch ID) plus other prerequisite
 OFSDF Patches (see Section 4.1 Pre-installation Checklist of OFSDF Installation Guide) should
 be installed and configured on your Machine.

3.1.3 Supported Databases

OFS AgileREPORTER supports Oracle Database 12c Release 1 (12.1.0.2) and Release 2 (12.2.0.1) and 19c.

NOTE

This guide mentions SQL Server throughout. Please do not use these SQL Server options and settings. Full SQL Server Support will be finalized in a later version.

3.1.3.1 Oracle-specific Settings

OFS AgileREPORTER requires a schema for installation and Runtime. The same schema can be used for both. If desired for security reasons, you can use the schemas as follows:

- An Owner Schema that has DDL privileges. This schema is only used at installation and during Configuration Manager Operations and can otherwise be locked.
- An App Schema that only has DML privileges. This schema is used at Runtime.

The Owner Schema requires the following privileges (granted by someone with System Database Administrator Privileges):

You require SYSDBA privileges to Run the last four grants.

- Grant Create Session to <owner>;
- Grant Create Trigger to <owner>;
- Grant Create Table to <owner>;
- Grant Create Sequence to <owner>;
- Grant Create View to <owner>;
- Grant Select on pending trans\$ to <owner>;
- Grant Select on dba 2pc pending to <owner>;
- Grant Select on dba pending transactions to <owner>;
- Grant Execute on dbms_xa to <owner>;

The App Schema and all accessible schemas that appear in the required alias of installed configurations are granted the following privileges (granted by someone with System Database Administrator Privileges):

You need SYSDBA Privileges to Run the last four grants.

- Grant Create Session to <app>;
- Grant Select on pending_trans\$ to <app>;
- Grant Select on dba_2pc_pending to <app>;
- Grant Select on dba pending transactions to <app>;
- Grant Execute on dbms xa to <app>;

Schema or Login examples

Following are examples of DDL (Owner) and DML (App) Schemas or logins for OFS AgileREPORTER in Oracle and SQL Server, with user-definable items shown in **bold**:

- Oracle Schema Owner
- CREATE USER RP\$OWNER IDENTIFIED BY password
- DEFAULT TABLESPACE users
- TEMPORARY TABLESPACE temp
- QUOTA UNLIMITED ON users;
- Grant Create Session to RP\$OWNER;
- Grant Create Trigger to RP\$OWNER;
- Grant Create Table to RP\$OWNER;
- Grant Create Sequence to RP\$OWNER;
- Grant Create View to RP\$OWNER;
- Grant Select on pending trans\$ to RP\$OWNER;
- Grant Select on dba 2pc pending to RP\$OWNER;
- Grant Select on dba pending transactions to RP\$OWNER;

Grant Execute on dbms xa to RP\$OWNER;

Application User

- CREATE USER RP\$APP IDENTIFIED BY password
- DEFAULT TABLESPACE users
- TEMPORARY TABLESPACE temp
- QUOTA UNLIMITED ON users;
- Grant Create Session to RP\$APP;
- Grant Select on pending_trans\$ to RP\$APP;
- Grant Select on dba 2pc pending to RP\$APP;
- Grant Select on dba pending transactions to RP\$APP;
- Grant Execute on dbms xa to RP\$APP;

Create and grant Object Privilege Role to the Application User to access the table of the Schema Owner

- CREATE ROLE RP\$RW_ROLE;
- CREATE ROLE RP\$R_ROLE;
- grant RP\$RW_ROLE to RP\$APP;

3.1.4 Other Requirements

The other requirements for this release are as follows:

- Shut down any OFS AgileREPORTER Web Server currently running on the Target Server.
- Ensure that there is a free service port for the OFS AgileREPORTER Web Server (default 8080) and a free service port for ActiveMQ (default 61616). If either default port is already being used by another application, find an alternative free port.
- To use Oracle functionality that fulfills General Data Protection Regulation (GDPR) requirements, set the db. Redacted Property equal to True in the aliasinfo.properties file.

```
For example:
```

```
config.sh -ea OFSAA_DW_DT -iv 1.11.0.1 -alias "OFSAA DS" -aif aliasinfo.properties
```

From version 1.15.5, a new property is added related to encrypted passwords. If encrypted passwords are used in the properties file, the password.encrypted property in the alias properties file must be uncommented and its value set to True.

3.2 Download the OFS AgileREPORTER Application Pack Installer

To download the OFS AgileREPORTER Application Pack installer Release v8.1.0.0.0, follow these steps:

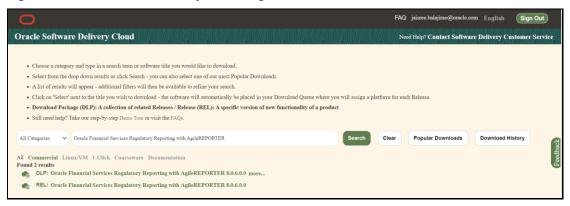
1. Log in to the Oracle Software Delivery Cloud with a valid Oracle Account.

Oracle Software Delivery Cloud Welcome - Let's get started See a quick, introductory tour of the download process

Figure 2: Oracle Software Delivery Cloud Login Page

2. Click Sign In. Search for the full product name Oracle Financial Services Regulatory Reporting with Agile REPORTER and download the Installer Archive.

Figure 3: Oracle Software Delivery Cloud Page



3. Copy the Installer Archive into the Download Directory (in Binary Mode) in the setup identified for the OFS AgileREPORTER Application Pack Installation.

Common Installation Activities 3.3

You must carry out the common pre-installation activities before installing the OFS AgileREPORTER Application.

Topics:

- **Identifying the Installation Directory**
- Copying and Extracting the Software

Identifying the Installation Directory 3.3.1

For installing any OFS AgileREPORTER Applications, the following directory can be created.

OFS AgileREPORTER Download Directory (Optional): Create a Download Directory and copy the OFS AgileREPORTER Application Installer File (Archive). You can copy the downloaded installer or patches in this directory.

NOTE

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

Copying and Extracting the Software 3.3.2

After you obtain the installer, copy the installer (in BINARY Mode) to the system on which the OFS AgileREPORTER Applications components are installed.

NOTE

You must be logged in to the UNIX Operating System as a non-root user.

- 1. Download the unzip utility (OS-specific) unzip <os>. Z, and copy it in Binary Mode to any directory, and include the directory 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

If 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 OFS AgileREPORTER Application 8.1.0.0.0 to the downloaded directory using the following command:

unzip OFS_AGILE_REPORTER_8.1.0.0.0_LINUX.zip

NOTE

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

5. Give the following permission to the installer folder. Navigate to the downloaded directory and execute the command:

chmod -R 755 OFS AGILE REPORTER

4 Installing the OFS AgileREPORTER Applications Pack

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

4.1 Running the OFS AgileREPORTER Applications Pack Installer

OFS AgileREPORTER Applications Pack Installation supports the following modes of installation:

- <u>Upgrades from Prior Versions of OFSAA AgileREPORTER</u>
- Running the Installer in GUI Mode
- Running the Installer in GUI Mode for Upgrade
- Running the Installer in SILENT Mode
- Running the Installer in SILENT Mode for Upgrade
- Verifying the Log File

Upgrades from Prior Versions of OFSAA AgileREPORTER 4.1.1

If you are using older versions of OFSAA AgileReporter, see the following table on the supported AR upgrade path to upgrade from an older version to the latest version of AgileREPORTER.

Table 2: Supported OFSAA AgileREPORTER Upgrade Versions

Upgrade to and Upgrade from	8.0.6.1.0	8.0.7.3.0	8.0.7.4.0	8.0.8.0.0	8.0.8.1.0	8.0.9.0.0	8.0.9.6.5	8.1.0.0.0
8.0.6.1.0	Yes	No						
8.0.7.3.0		Yes	Yes	Yes	Yes	Yes	Yes	No
8.0.7.4.0			Yes	Yes	Yes	Yes	Yes	Yes
8.0.8.0.0				Yes	Yes	Yes	Yes	Yes
8.0.8.1.0					Yes	Yes	Yes	Yes
8.0.9.0.0						Yes	Yes	Yes
8.0.9.6.5							Yes	No
8.1.0.0.0								Yes

4.1.2 **Running the Installer in GUI Mode**

Before proceeding, ensure that all pre-installation requirements listed in Chapter 3 - Preparing for Installation are met.

NOTE

The following screenshots are taken from a Windows System; however, they look similar in Linux Configuration for GUI Mode Installation.

To install this product in GUI Mode, ensure the following software and configuration are available:

- Install and configure any PC X Server Software such as Open Text Exceed (formerly Hummingbird Exceed) on the Desktop System of the user from which the installation is triggered.
- Configure the DISPLAY variable.

Ensure you set the DISPLAY variable (in user, profile) on the system on which the OFSAA Infrastructure is installed, to point to the Desktop System of the user where the PC X Server Software is installed.

Syntax:

```
export DISPLAY = hostname:n
```

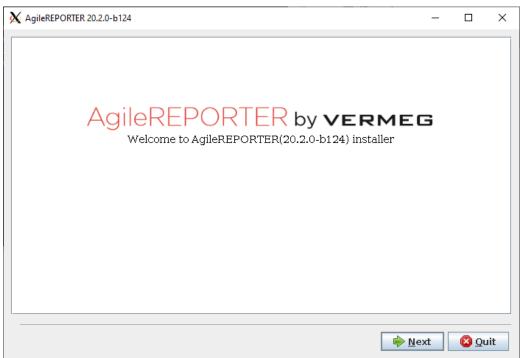
where the **hostname** is the IP Address or Hostname of the User's Desktop System and **n** is the sequence number (usually 0).

For example: 10.XXX.XXX.XXX:0000 or myhostname:0

To install OFS AgileREPORTER using the installer GUI, follow these steps (click Next to advance after each step):

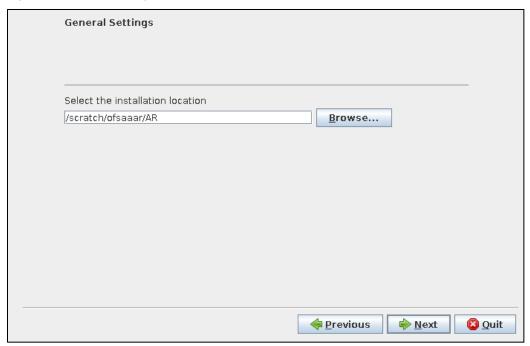
- 1. Navigate to the path where the OFS AgileREPORTER Installer Kit is unzipped.
- 2. Navigate to the OFS AGILE REPORTER/AgileREPORTER/Bin Directory.
- 3. Execute the ./Setup.sh GUI command in the Console. The initial Splash Screen is displayed.

Figure 4: Initial Splash Screen



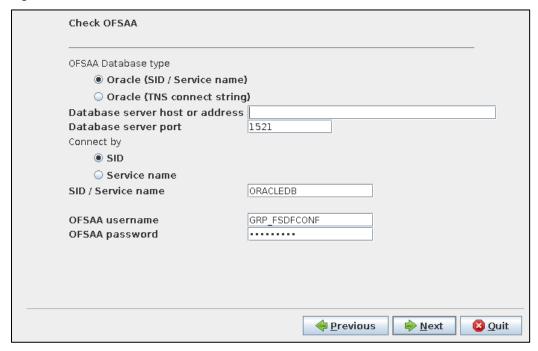
- **4.** Select **Next** to continue the installation.
- **5.** Select the location where OFS AgileREPORTER must be installed.

Figure 5: General Settings Screen



The installer checks for the OFSAA Database when the database details are entered.

Figure 6: Check OFSAA Database Screen



If Oracle FSDF is unavailable, the following message is displayed. NOTE

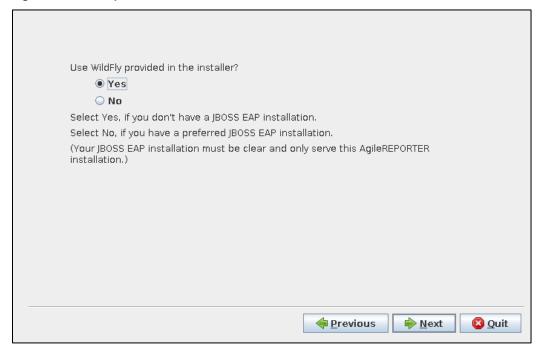
Figure 7: Validation Screen



If Oracle FSDF is available, the following screens continue as part of the installation.

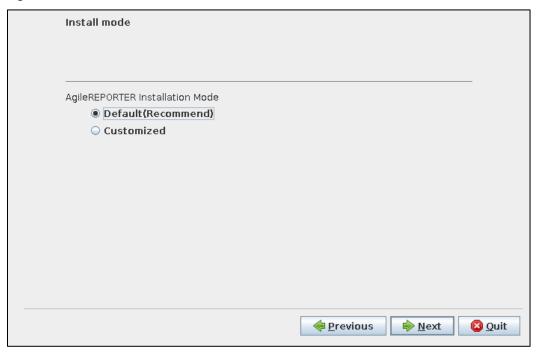
6. Select the JBOSS Options as applicable.

Figure 8: JBoss Options Screen



7. Select the Installation Mode as applicable.

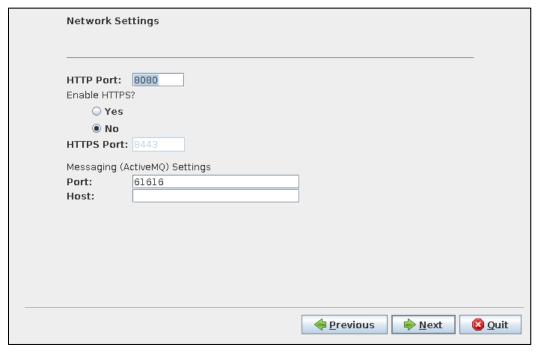
Figure 9: Install Mode Screen



8. Select the Network Settings as applicable.

To enable HTTPS for AgileREPORTER see the *Enable HTTPS for AgileREPORTER* Section in the AgileREPORTER 20.4 - Installation and Administration Guide.zip.

Figure 10: Network Settings Screen



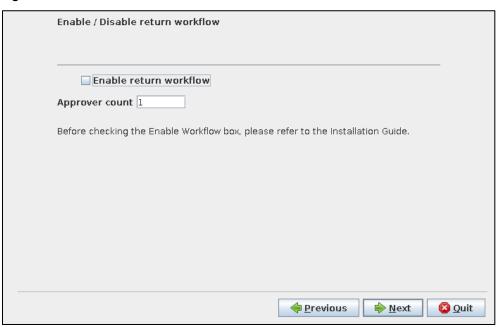
9. Provide the MQ Authentication details.

Figure 11: ActiveMQ Authentication Screen



10. Select **Enable return workflow** to enable approval workflow for changes made to returns and set how many approvers are required per change.

Figure 12: Enable or Disable return workflow Screen



NOTE

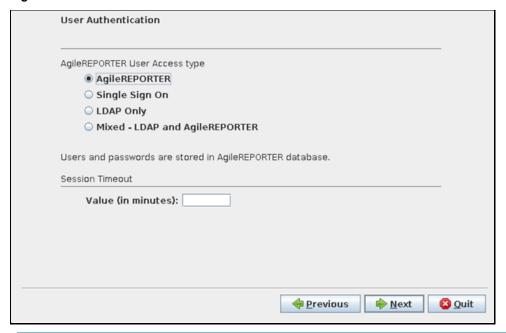
The following screenshots are taken from a Windows System but will look similar in Linux Configuration for GUI Mode Installation.

If your installation of OFS AgileREPORTER is connected to the REPORTER Module, OFS AgileREPORTER uses approval workflow settings from there instead of showing you this step.

You may require a new license to enable the approval workflow feature; contact VERMEG.

11. Select how AgileREPORTER Users must be authenticated when logging in.

Figure 13: User Authentication Screen

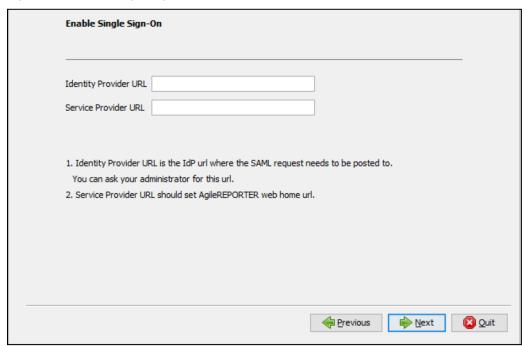


NOTE

- **Single Sign-On**: Users are managed in the AgileREPORTER database, but passwords can be optional in AgileREPORTER. An SSO Server is used to provide user authentication.
- LDAP Only: Users are managed in the AgileREPORTER Database, but passwords can be optional in AgileREPORTER. An LDAP Server is used to provide user authentication.
- Session Timeout: Users' sessions will time out after a period of inactivity. Set the Timeout Value (allowed period of inactivity) in minutes. If no value is specified, AgileREPORTER will default to 15 minutes.

12. If you select **Single Sign-On**, enter values for **Identity Provider URL** and **Service Provider URL**.

Figure 14: Enable Single Sign-On Screen



Identity Provider URL: Where OFS AgileREPORTER sends SSO requests. For example, to an Identity Provider set up within your infrastructure.

Service Provider URL: Must be http(s)://<hostname>:<port>/agilereporter/ (the OFS AgileREPORTER URL).

NOTE

OFS AgileREPORTER supports **Single Sign-On** by using the SAML v2 protocol. If you have the SAML v2 compatible Identity Provider in your IT infrastructure already, the Identity Provider can be used to authenticate users of OFS AgileREPORTER.

One possible usage of this functionality is that OFS AgileREPORTER, OBIEE, and OFSAA Web Share **Single Sign-On** using SAML v2 implemented by Oracle Identity Federation. This requires that OFS AgileREPORTER as a SAML Service Provider (SP) is configured with the details of Oracle Identity Federation as a SAML v2 Identity Provider (IdP).

The OFSAA Results Area Database Credentials are added post-installation using OFS AgileREPORTER's Configuration Manager.

For accurate SSO usage in OFS AgileREPORTER, ensure the following:

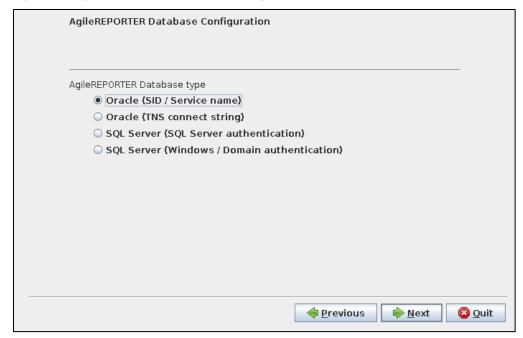
- Tme on the Identity Provider Server and the OFS AgileREPORTER Server is synchronized.
- The identity provider uses a plain text Username in the SAML assertion sent to OFS AgileREPORTER when attempting a user login.
- The same Username exists in OFS AgileREPORTER.
- The Identity Provider includes the role LRM_RP_USER in the SAML assertion sent to OFS AgileREPORTER when attempting a user login.
- **13.** Enter the database connection information and credentials for the OFS AgileREPORTER Schemas with DDL (at installation) or DML (at Application Runtime).

NOTE

Credentials must match those defined in the schemas referenced in the <u>Supported Databases</u> Section.

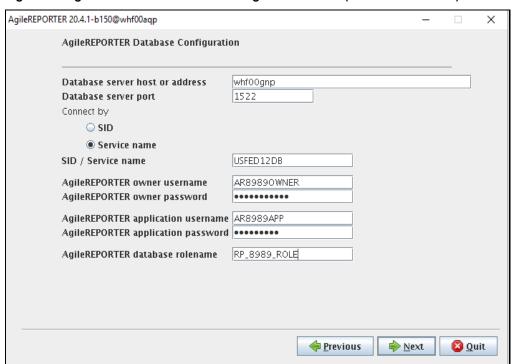
Select **Oracle (SID / Service name)**. Full SQL Server Support will be supplied in a later version.

Figure 15: AgileREPORTER Database Configuration Screen



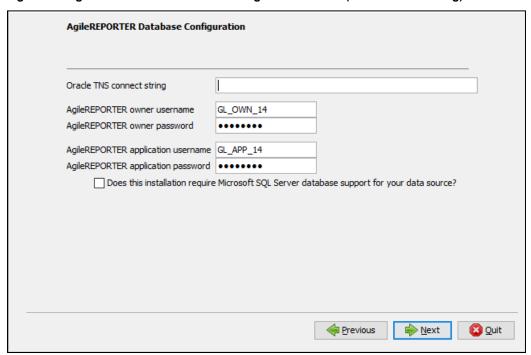
Oracle (SID / Service name)

Figure 16: AgileREPORTER Database Configuration Oracle (SID / Service name) Screen



Oracle (TNS connect string)

Figure 17: AgileREPORTER Database Configuration Oracle (TNS connect string) Screen



NOTE For domain single sign-on, enter the OFS AgileREPORTER system domain field, but leave the Domain username and

Domain password fields blank.

For domain authentication, enter **OFS AgileREPORTER system domain, Domain username**, and **Domain password**.

14. Set up the initial AgileREPORTER Administration User Account.

NOTE This step only appears during a fresh installation of OFS AgileREPORTER.

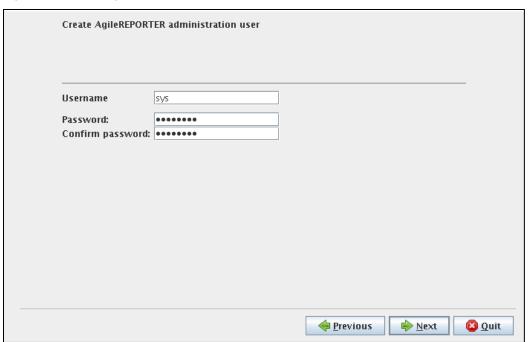
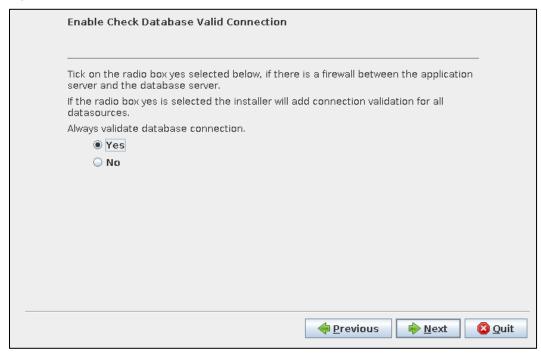


Figure 18: Create AgileREPORTER Administration User Screen

If the **Single Sign-On** is enabled, the **Username** must be a valid user in the Identity Provider and the password can be left blank. This user is created as an administrative user in OFS AgileREPORTER.

15. Select **Yes** for **Always validate database connection** to check if there is a firewall between the Application Server and Database Server.

Figure 19: Enable Check Database Valid Connection Screen



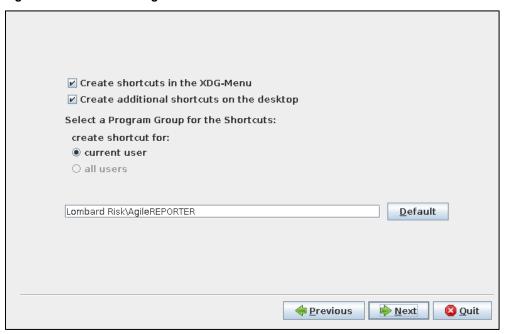
16. Enter the Java minimum and maximum heap sizes.

Figure 20: AgileREPORTER Java Settings Screen



17. Select the shortcut settings, if required.

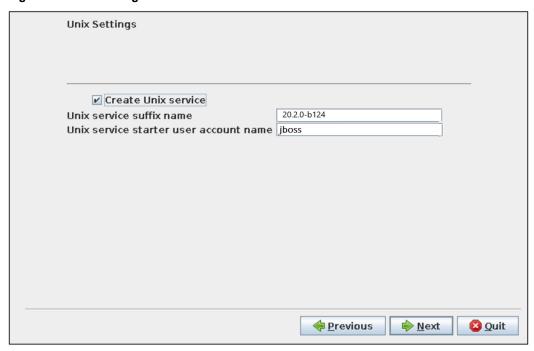
Figure 21: Shortcut Settings Screen



18. Select **Create UNIX service** to create a UNIX Service on the server where OFS AgileREPORTER is running.

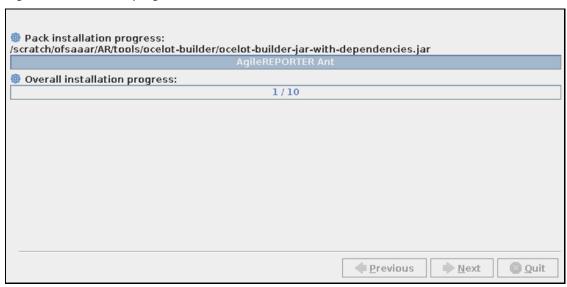
Enter the **starter user account name**, which is the Linux Operating System Account that starts the service.

Figure 22: Unix Settings Screen



19. Wait for unpacking and installation to complete.

Figure 23: Installation progress Screen



20. Select **Start AgileREPORTER now** (to open immediately) and click **Next**.

Figure 24: Start AgileREPORTER Now Screen



21. Click **Done** to finish the installation process.

Figure 25: Installation success Screen



NOTE

If required, the DDL Schema or login can be locked after successfully installing the OFS AgileREPORTER.

You can now try opening OFS AgileREPORTER in a Web Browser. For example, open Internet Explorer and enter http(s)://server>:<port> or

http(s)://<server>:<port>/agilereporter, specifying the chosen http Protocol, Server Address and Port.

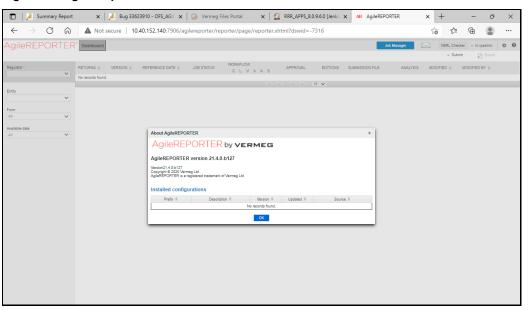


Figure 26: Agile Reporter Dashboard

4.1.3 Running the Installer in GUI Mode for Upgrade

To upgrade OFS AgileREPORTER using the installer in GUI Mode, follow these steps (click **Next** after each step to continue):

- Repeat the steps in section <u>4.1.2 Running the Installer in GUI Mode</u> till you specify the installation path.
- 2. Specify the installation path and click **Next**.
- **3.** The subsequent GUI Screens get auto-populated with the existing information. You must click **Next** to continue and complete the installation.

NOTE

After upgrading from a previous version of AgileREPORTER, any manual changes made to the AgileREPORTER configuration in the previous version must be reapplied to the configuration in the upgraded installation. For example, changes made to the standalone.xml file in the previous version will be overwritten when upgrading.

4.1.4 Running the Installer in SILENT Mode

NOTE

Before proceeding, ensure that all pre-installation requirements listed in <u>Chapter 3 – Preparing for Installation</u> are met. An additional parameter **Session Timeout** has been introduced in the AgileREPORTER 20.4 release. For more information, see <u>Table 4: Configuration Properties for Silent.props File</u>

Rename the Silent.template to Silent.props from the OFS_AGILE_REPORTER/AgileREPORTER/conf directory and then fill the Silent.props file from the OFS_AGILE_REPORTER/AgileREPORTER/conf directory before starting the installation.

The following table describes the installation properties that you must enter in the Silent.props Java Properties file. This file uses a standardized format consisting of a key followed by an equal to sign (=), followed by a value on each line.

The following characters must be appended with a backslash (\) for the Escaped version when used in keys and values.

Table 3: Installation properties for Silent.props File

Character Name	Character Symbol	Escaped Version
Equals	=	\=
Colon	:	\:
Backslash	\	\\

For example:

\:\=\\bin\\temp when un-escaped translates to :=\bin\temp

For more information, see http://docs.oracle.com/javase/6/docs/api/java/util/Properties.html#load (java.io.Reader) or contact VERMEG support.

The configurable properties with a grey background are not shown in the OFS AgileREPORTER installer user interface. Do not alter these unless instructed to do so by VERMEG Support.

NOTE

AgileREPORTER security is improved constantly. Earlier, the Blowfish Algorithm with a hard-coded secret key was used to encrypt the passwords saved in the ocelot.properties file. Now, the Blowfish Algorithm is deemed as weak encryption and therefore, AgileREPORTER uses AES (Advanced Encryption Standard) Algorithm for encryption.

Consequently, the Encoding Tool that encrypts a given password using the AES Algorithm has been updated and is delivered with AgileREPORTER.

If the password is encrypted in the properties file, the ocelot.secret.key property must be added to the Silent.props file to specify the secret key used to encrypt the password.

For upgrading an existing AR, use the existing ocelot.properties file and the installer will automatically generate a secret key for you.

For a new AgileREPORTER, use the ocelot-encoding tool to generate a secret key, then use this secret key to encrypt all passwords in the Silent.props file before you can use it to install AgileREPORTER.

To encrypt the password using an existing secret key, see *AppendixA-EncodingTool* Section in <u>AgileREPORTER 21.1</u>—Installation Guide.zip.

All passwords mentioned in the Silent.props properties file must be encrypted. Execute the following command to encrypt all passwords using the password encryption utility ocelotencoding-1.3123.0.jar under the /utility folder:

To generate a secret key:

java -jar ocelot-encoding-1.3123.0.jar -gk

To encrypt with an existing secret key:

java -jar ocelot-encoding-1.3123.0.jar -en
<PASSWORD> -k <SECRET KEY>

To encrypt with a random secret key:

java -jar ocelot-encoding-1.3123.0.jar -en
"password"

Table 4: Configuration Properties for Silent.props File

Property Name	Description of Property	Permissible Values	Comments
ocelot.install.path	AgileREPORTER Home Directory Install Path	Not applicable	For example: /scratch/ofsaaapp/reporter_ portal
singleLoginModel	Single Login Model	True False	The default value is False. NOTE : Enter True if you want to restrict to one user per session.

Property Name	Description of Property	Permissible Values	Comments
main.host.name	Current machine's IP address or hostname	Not applicable	For example: 10.XXX.XXX.XXX
activemq.port	AgileREPORTER jBoss AMQ Port	Not applicable	For example: 61616.
agile.reporter.web.app	AgileREPORTER Web Application	True False	The default value is True.
host.port	AgileREPORTER Web Host Port	Not applicable	For example: 8091.
httpsMode	HTTPS/SSL Required or Not	True False	The default value is False. The value should be True only if HTTP is false. (Optional. Required only when HTTPS is used).
host.port.https	HTTPS Port	Not applicable	(Optional. Required only when HTTPS is used). Default value: host.port.https = 0000
did.retrieve.job	DID Retrieve Job activation	True	The default value is True.
		False	
data.schedule.export.jo b	Data Schedule Export Job activation	True False	The default value is True.
other.brokers	Other ActiveMQ Broker activation	True False	The default value is False.
other.brokers.hosts	Other ActiveMQ Broker Host Name and Port	Not applicable	For example: 10.XXX.XXX.XXX
ocelot.database.type	Ocelot Database Type	Oracle	The default value is Oracle.
ocelot.jdbc.url	Ocelot JDBC URL	For SID: jdbc:oracle:thin:@ IPADDRESS:PORT:SID	For example: jdbc:oracle:thin:@10.XXX.XXX.XX X:0000:AGILERP
		For Service Name: jdbc:oracle:thin:@// IPADDRESS:PORT/SE RVICE_NAME	jdbc:oracle:thin:@//10.XXX.XXX. XXX:0000/SERVICE_NAME
ocelot.jdbc.username	RP OWNER Schema User Name	Not applicable	For example: AGILE_RPOWNER
ocelot.jdbc.password	RP OWNER Schema Password	Not applicable	For example: 5dfc52b51bd355539bd9a0b76da 9b8e7
ocelot.database.role name	RP Read/Write Role Name	Not applicable	For example: AGILE_RPRW_ROLE
ocelot.app.jdbc.user name	RP Application Schema User Name	Not applicable	For example: AGILE_RPAPP

Property Name	Description of Property	Permissible Values	Comments
ocelot.app.jdbc.passwo rd	RP Application Schema Password	Not applicable	For example: 5dfc52b51bd355539bd9a0b76da 9b8e7
check.db.valid.connecti on.enable	Database Connection Validation activation	True False	Default value: False
ocelot.user.name	AgileREPORTER User Interface Login User Name	Not applicable	For example: RP Admin
ocelot.user.password	AgileREPORTER User Interface Login Password	Not applicable	For example: 5dfc52b51bd355539bd9a0b76da 9b8e7
ocelot.user.authenticati on.mode	Agile Reporter User Interface Login Mode	SYSTEM, SSO, LDAP	Default Value: SYSTEM
sso.idp.url sso.service.provider.url	Agile Reporter UI using SSO Credentials	Not applicable	Optional. Required only if ocelot.user.authentication.mode = SSO
ldap.host ldap.port dap.baseDN ldap.adminDN ldap.username ldap.password ldap.search.filter ldap.userdn ldap.test.username ldap.test.password	Agile Reporter UI using LDAP Login Model	Not applicable	Optional. Required only if ocelot.user.authentication.mode = LDAP
jvm.parameters.Xms jvm.parameters.Xmx	Java Heap Memory	1024 2048	Optional. For example: jvm.parameters.Xms = 1024 jvm.parameters.Xmx = 2048
ocelot.ofsaa.server	OFSAA Config Database server address	Host Name or IP address of the database server that has FSDF installed	For example: 10.XXX.XXXX.XXX
ocelot.ofsaa.port	OFSAA Config Database server port	Database Port	For example: 1521
ocelot.ofsaa.dbType	OFSAA database type (SID / Service name, TNS)	Oracle	The default value is Oracle.
ocelot.ofsaa.connectTy pe	OFSAA connect by SID or Service name	SID Service Oracle TNS	For example: SID Service Oracle TNS
ocelot.ofsaa.instance	OFSAA SID or Service name to connect to OFSAA CONFIG schema	SID / Service name	For example: ORACLEDB

Property Name	Description of Property	Permissible Values	Comments
ofsaa.database.tns	OFSAA Connect string	Leave empty if SID or Service name is used. jdbc:oracle:thin:@(T NS String)	For example: jdbc:oracle:thin:@(DESCRIPTION =(ADDRESS=(PROTOCOL=TCP)(HOST=10.XXX.XXX.XXX)(PORT=1 521))(CONNECT_DATA=(SERVER =DEDICATED)(SERVICE_NAME= RP_SVC)))
ocelot.ofsaa.username	OFSAA Config Schema Username	Not applicable	For example: AGILE_RPCSOWNER
ocelot.ofsaa.password	OFSAA Config Schema password	Not applicable	For example: 5dfc52b51bd355539bd9a0b76da 9b8e7
ocelot.secret.key	The secret key used to encrypt the password	Not applicable	For example: M7zsrc2WcWyhz9a0rbkPQw== (A random secret key can be generated using the ocelotencoding tool.)
activemq.authenticatio n.user	AgileREPORTER admin user	Not applicable	For example: rpadmin
activemq.authenticatio n.password	AgileREPORTER admin password (encrypted)	Not applicable	For example: 5dfc52b51bd355539bd9a0b76da 9b8e7
ocelot.session.timeout	# HTTP session timeout (in minutes) to be defined in web.xml.	Not applicable	For example: ocelot.session.timeout=25 Default is 15 minutes if left blank.

To install OFS AgileREPORTER using the installer in SILENT Mode, follow these steps:

- **1.** Navigate to the path where the contents of the OFS AgileREPORTER installer kit have been extracted.
- 2. Navigate to the OFS AGILE REPORTER/AgileREPORTER/conf directory.
- 3. Rename the file Silent.template to Silent.props and update the file as explained in Section 4.1.4
- **4.** Navigate to the OFS AGILE REPORTER/AgileREPORTER/bin directory in the Console.
- **5.** Execute the ./Setup.sh SILENT command.

If the installation fails, check the log file at the $\ensuremath{\texttt{RP_HOME}}\xspace > \ensuremath{\texttt{log}}\xspace / \ensuremath{\texttt{l$

You can now try opening OFS AgileREPORTER in a Web Browser. For example, open Internet Explorer and enter http(s)://server>:<port>/agilereporter, specifying the chosen HTTP Protocol, Server Address, and Port.

4.1.5 Running the Installer in SILENT Mode for Upgrade

To upgrade OFS AgileREPORTER using the installer in SILENT Mode, follow these steps:

- 1. Take a backup of the ocelot.properties file that was used for installing the earlier version of AgileREPORTER and keep it for your reference to fill the Silent.props file.
- 2. Repeat the section 4.1.4 Running the Installer in SILENT Mode to upgrade AgileREPORTER.

After upgrading from one version of AgileREPORTER to another, any manual changes made to the AgileREPORTER configuration in the previous version must be reapplied to the configuration in the upgraded installation. For example, changes made to the standalone.xml file in the previous version will be overwritten when upgrading.

4.1.6 Verifying the Log File

The log file install.log can be found in the $\mbox{RP_HOME}>/\mbox{log}/\mbox{ directory.}$ The log files contain a detailed summary of the installation processes. It also shows the number of Fatal Errors, Errors, Debug Statements, Information, and Warnings.

5 Trial Template Package Installation

As part of the AgileREPORTER Installer, you are allowed to install Trial Template Packages for RBI and US FED.

5.1 Trial Template Package for US FED

OFS AgileREPORTER US FED Configuration Package Installation is a new application, which is used for submitting the Regulatory Reports to the regulator.

This installer contains the following three US FED Return Templates:

- FR Y-9C
- FFIEC-101
- FFIEC-031

NOTE This is a trial pack installer, which can be used only for three returns. Contact My Oracle Support to procure the license for complete US FED Return Templates.

5.2 Trial Template Package for RBI

OFS AgileREPORTER RBI Configuration Package Installation is a new application, which is used for submitting the Regulatory Reports to the regulator Reserve Bank of India.

This installer contains the following three RBI Return Templates:

- RCA3
- IRS
- RAO

NOTE This is a trial pack installer, which can be used only for three returns. Contact My Oracle Support to procure the license for complete RBI Return Templates.

5.3 Installing Trial Template Packages

Follow these steps to install Sample Template Packages.

- 1. Navigate to the /OFS AGILE REPORTER/Template Packages/conf Directory.
- 2. Update the parameters in params.conf file present in the directory. The update instructions are present in the file itself.

Table 5: Parameters Configuration

Parameter	Description	Values
RP_HOME	Agile Reporter Home Directory Install Path.	For example: /scratch/ofsaaapp/reporter_portal
PACK_ID	Pack ID of Trial Template Package you want to install. NOTE : Only one value at a time is permitted.	The list of values expected is RBI and USFED. For example: USFED

3. Navigate to the /OFS AGILE REPORTER/Template Packages/ Directory and execute the command:

chmod 755 *

- **4.** Navigate to the /OFS_AGILE_REPORTER/Template_Packages/bin Directory.
- **5.** Execute the install.sh file using the following command:
 - ./install.sh
- **6.** Verify if the release is applied successfully by checking the log file generated in the Installation Directory. Logs can be found in the [Installed path]/log/install.log file.

6 Start or Stop AgileREPORTER Services

This section describes the steps to start and stop the AgileREPORTER Services.

6.1 Start AgileREPORTER Web Server

Follow these steps to start the AgileREPORTER Web Server:

- 1. Navigate to the path where AgileREPORTER is installed and then go to the /bin directory under the installed location.
- **2.** Execute the nohup ./start.sh > rplog.txt & command.

6.2 Stop AgileREPORTER Web Server

Follow these steps to stop the AgileREPORTER Web Server:

- 1. Navigate to the path where AgileREPORTER is installed and then go to the /bin directory under the installed location.
- **2.** Execute the ./stop.sh command.

7 Error Dictionary

This section is intended to help you resolve installation issues, if any. It provides 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.

7.1 Accessing Error Dictionary

Rather than scrolling through the document to find the error code, you can use the PDF Search functionality. In the Find dialog available in the Adobe Acrobat version that you are using to view the PDF Document, follow the instructions to quickly find the error resolution.

- 1. With the Installation Guide PDF open, press Ctrl+F or on the Edit menu click Find.
- 2. The **Find** dialog box is displayed.
- 3. Enter the **Error code** that is displayed on-screen during infrastructure installation.
- **4.** Press **Enter**. The search results are displayed and highlighted as follows.

Table 6: Error Code - OFSAAI-1003

Cause	JAVA_HOME/bin not found in the PATH variable.	
Resolution	Import <java_home>/bin into the PATH variable.</java_home>	
	Example: PATH=\$JAVE_HOME/bin:\$PATH export PATH	

View the details of the issues, their 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 unable to resolve the issue with the steps provided in the resolution, you can contact My Oracle Support along with log files and appropriate screenshots.

7.2 Error Code Dictionary

Sample Error Code

Table 7: Sample Error Code

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

OFSAA Support

Raise a Service Request (SR) in My Oracle Support (MOS) for queries related to the OFSAA Applications.

Send Us Your Comments

Oracle welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, indicate the title and part number of the documentation along with the chapter or section or page number (if available) and contact the My Oracle Support.

Before sending us your comments, you might like to ensure that you have the latest version of the document wherein any of your concerns have already been addressed. You can access the My Oracle Support site that has all the revised or recently released documents.

