Oracle Financial Services Regulatory Reporting Solution for US Federal Reserve – Lombard Risk Integration Pack

Installation Guide

Release 8.0.9.8.0

December 2021





Copyright © 2021 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	Changes Log
03	December 23, 2021	Updated: Post-installation Steps section for Apache Log4j Issue
02	March 24, 2021	Updated : Final version published
01	March 15, 2021	Created: Draft published

Table of Contents

1 Pr	eface	5
1.1	Audience	5
1.2	Scope	5
1.3	Prerequisites for the Audience	6
1.4	How this Guide is Organized	6
1.5	Access to Oracle Support	6
1.6	Related Documents	6
1.7	Conventions and Acronyms	7
	ardware and Software Requirements and Specifications	8
	ardware and Software Requirements and Specifications	8
2 Ha	eparing for Installation	
2 Ha	•	8
2 Ha 3 Pr	eparing for Installation	8
2 Ha 3 Pr 3.1	Ceparing for Installation	
2 Ha 3 Pr 3.1 3.2	Obtaining the Software Prerequisites for Installation	
2 Ha 3.1 3.2 3.3	Obtaining the Software	

1 Preface

Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack helps the banks to comply with various guidelines issued by the US Federal Reserve, including BCBS 239 regulations. It provides integrating risk data reporting systems and enhances the accuracy of reporting in banks. OFS Risk Regulatory Reporting (REG REP) Solution helps in achieving the objectives by enabling preset steps based on the generalization of a set of solutions. This is made possible by:

- Providing centralized data storage for risk data through relevant subject areas of the Financial Services Data Foundation (FSDF).
- Interfacing with a third-party reporting tool such as Lombard Risk Reporter Portal to build necessary template reports to meet the regulatory expectations.

Data accuracy of risk reporting is ensured by:

Data Governance Studio (DGS).

This document provides step-by-step instructions to install the Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack (OFS REG REP US FED) Release 8.0.9.8.0.

This chapter discusses the following topics:

- Audience
- Scope
- Prerequisites for the Audience
- How this Guide is Organized
- · Access to Oracle Support
- Related Documents
- Conventions and Acronyms

1.1 Audience

This guide is meant for Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack System Administrator. It provides step-by-step instructions necessary for installing the OFS REG REP US FED application components.

1.2 Scope

This guide provides a step-wise instruction to install Oracle Financial Services Regulatory Reporting for US Federal Reserve– Lombard Risk Integration Pack.

1.3 Prerequisites for the Audience

The document assumes you have experience in installing Enterprise components. A good understanding and knowledge of the following are expected from the administrator before starting the actual installation:

- OFSAA Architecture
- Oracle Financial Services Regulatory Reporting for US Federal Reserve Lombard Risk Integration Pack Components Architecture
- Deployment of OFSAA Configuration Package on Lombard Risk AgileREPORTER Platform
- UNIX Commands
- Database Concepts and Administrator Commands
- Web Server/ Web Application Server Deployment

1.4 How this Guide is Organized

The Installation Guide is organized into the following sections:

- Prerequisites section identifies the hardware and base software environment that is required for a successful installation and functioning of the Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack.
- Installing the Application section details the steps to be followed during the installation.
- Post-installation section details the steps that are required to be performed after a successful installation of Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack.

1.5 Access to Oracle Support

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

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

1.6 Related Documents

This section identifies additional documents related to Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack. You can access Oracle documentation online from Documentation Library (OHC):

- OFS Regulatory Reporting for US Federal Reserve Lombard Risk Integration Pack User Guide
- OFS Analytical Applications Infrastructure Environment Check Utility Guide
- OFS Analytical Applications Infrastructure Installation Guide 8.0.9.0.0

1.7 Conventions and Acronyms

The following conventions and acronyms are used in the document.

Table 1: Conventions Used in this Guide

Conventions	Description	
References to sections or chapters in the guide are indicated in <i>Italics</i> . Screen names are indicated in the following manner: Introduction screen Options and buttons are indicated in Bold . Code related text is indicated in Monospace.		
OFSAAI	Oracle Financial Services Analytical Applications Infrastructure	
OFS AAAI	Oracle Financial Services Advanced Analytical Applications Infrastructure Application Pack	
RHEL	Red Hat Enterprise Linux	
Atomic Schema	Database schema where the application data model is uploaded.	
Config Schema	Database schema which contains setup-related configurations and metadata.	
OFS REG REP USFED	Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack	

2 Hardware and Software Requirements and Specifications

This section describes the various operating system, database, web server, and web application server versions and other variant details on which this release of the OFS Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack (OFS REG REP US FED) application has qualified.

See the OFS Analytical Applications Technology Matrix for Hardware and Software requirements for this release.

3 Preparing for Installation

This Maintenance Level Release of OFS REG REP US FED – Lombard Risk Integration Pack includes all enhancements and bug fixes since the OFS REG REP US FED – Lombard Integration Pack v8.0.9.0.0 release. For more information, see the OFS Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack User Guide Release v8.0.9.0.0.

3.1 Obtaining the Software

This release of OFS REG REP US FED v8.0.9.8.0 can be downloaded from My Oracle Support website. Log in and search for **32566533** under the Patches and Updates tab and download the OFS REG REP USFED 8.0.9.8.0 GENERIC.zip archive file.

You must have a valid Oracle account to download the software.

3.2 Prerequisites for Installation

This installer has fresh install capabilities and the following are the minimum prerequisites to install OFS REG REP US FED application:

- Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) 8.0.9.0.0 (patch 30330054) plus other prerequisite OFSAAI patches (see Section 2.1 Pre-installation Requirements of OFS AAI Installation Guide) needs to be installed and configured in your Machine (OHC Documentation Library).
- Oracle Financial Services Data Foundation (OFSDF) 8.0.9.4.0 (patch 32107412), 8.0.9.4.1 (patch 32310622) plus other prerequisite OFSDF patches (see Section 2.1 Pre-installation Requirements of OFSDF Installation Guide) needs to be installed and configured in your Machine (OHC Documentation Library).
- Oracle Financial Services Regulatory Reporting for US Federal Reserve Lombard Risk Integration Pack 8.0.9.0.0 (patch 30557951) or higher.
- AgileREPORTER version 21.1.0-b200.
- AgileREPORTER Templates version AgileREPORTER for FED v1.24.2.
- Ensure that you have executed the .profile file before you trigger the installation.
- Ensure that the FICServer is up and running before you trigger the installation. For information on restarting the services, See the <u>OFS Analytical Applications Infrastructure Release 8.0.2.0.0</u> Installation Guide for more information.

3.3 Installing OFS REG REP US FED 8.0.9.8.0 ML

Perform the following instructions to copy, extract, and install this ML patch:

- 1. Copy the downloaded archive file to your OFSAA server in **Binary** mode.
- 2. Shut down all the OFSAA Services. For more information, see the *Stopping Infrastructure Services* section in the OFS Advanced Analytical Applications Infrastructure Pack Installation Guide Release 8.0.7.0.0.

NOTE

Ensure that the FICSERVER is up and running.

- 3. Execute chmod -R 750 \$FIC HOME
- **4.** If you have an Unzip utility, skip to the next step.

Download the Unzip utility (OS-specific) unzip_<os>.z from the location https://updates.oracle.com/unzips/unzips.html and copy it in Binary mode to the directory that is included in your PATH variable, typically \$HOME path or directory in which you have copied the 8.0.9.8.0 ML patch.

• 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]*, contact your UNIX administrator.

- 5. Execute chmod 751 OFS REG REP USFED 8.0.9.8.0 GENERIC.zip
- 6. Execute unzip -a <name of the file to be unzipped>
 For example: unzip -a OFS REG REP USFED 8.0.9.8.0 GENERIC.zip
- 7. Configure the UPLOAD_MODEL parameter in the param.conf file present under the OFS_REG_REP_USFED/conf directory to determine if Model Upload is required or not using the following parameter values:
 - 0 = If you have already performed Model Upload and want to skip the Model Upload process
 1 = If you want to perform Model Upload
- 8. Navigate to the OFS_REG_REP_USFED/bin directory and execute ./install.sh
- 9. The installation progress can be viewed by periodically refreshing the log file in the OFS REG REP USFED/logs directory.
- **10.** After installation is completed, verify the log file for any Errors or Warnings. Contact My Oracle Support in case of any issues.

NOTE

This patch installation has taken approximately 10 minutes to complete in Oracle Labs.

3.4 Post-installation Steps

The post-installation steps required for this 8.0.9.8.0 ML release are as follows:

Apply the OFS AAI 33663417 mandatory patch.

ATTENTION

On the 10th of December 2021, Oracle released Security Alert CVE-2021-44228 in response to the disclosure of a new vulnerability affecting Apache Log4J before version 2.15. The application of the **33663417** Mandatory Patch fixes the issue.

For details, see the My Oracle Support Doc ID 2827801.1.

Ensure that you reapply the **33663417** Mandatory Patch whenever you install or upgrade the application or apply an incremental patch.

- See the log file in the **/OFS_REG_REP_USFED/logs** directory to ensure that there are no errors reported.
- After replacing ##INFODOM## with INFODOM name for USFED, execute the <u>USFED 80980 Config Post Script.sql</u> file in the Config Schema.
- Execute the USFED 80980 Atomic Post Script.sql file in the Atomic Schema.
- Generate the application EAR or WAR file and redeploy the application on the configured Web Application Server.

 For more information on generating and deploying EAR or WAR files, see the *Post Installation Configuration* section in the OFS Advanced Analytical Applications Infrastructure Pack Installation Guide Release 8.0.7.0.0.
- Derived Entities in the following batch are the processing derived entities for data aggregation
 with ready-to-use partition enabled using run Skey. Hence, these derived entities must not be
 modified for partitions.
 - INFODOM_ RESAVE_DE_REG_COMMON_REG_RUN (batch for resaving the Derived Entities of US FED RUN common Reg Fund Lend T2Ts)
- Execute this batch INFODOM_RESAVE_BASE_DE_OF_FRAS_T2T (batch for resaving the Derived Entities of US FED RUN common Reg T2Ts).
- INFODOM_REG_RUN_T2T_SEQUENCE_RESET- This batch must be executed as part of Run Chart before execution of any RUN or Batch of the execution day. This batch helps to reset the sequence of the tables which use the synthetic column as primary key.
- Resave the Derived Entity for the reports FFIEC-031, FFIEC-041, FRY-9C, FRY-15, and FFIEC-009 if you are upgrading from the REG REP USFED v8.0.9.7.0.
- Resave the Derived Entity for the reports FFIEC-031, FFIEC-041, FRY-9C, FRY-15, FFIEC-009, and FRY-14M, if you are upgrading from the REG REP USFED v8.0.9.6.3.
- Resave the Derived Entity for the reports FFIEC-031, FFIEC-041, FRY-9C, FRY-15, FFIEC-009, FRY-14M, and FRY-14Q if you are upgrading from the REG REP USFED v8.0.9.6.0.
- Restart all the OFSAA services.
 For more information, see the Starting Infrastructure Services section in the OFSs Advanced Analytical Applications Infrastructure Pack Installation Guide Release 8.0.7.0.0.
- Perform the Source Model generation for US FED Processing Source.
 For more information, see the *Generating Source Models* section in the <u>OFS Advanced Analytical</u>
 Applications Infrastructure Pack Installation Guide Release 8.0.7.0.0.

The Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack (OFS REG REP US FED) is now ready for use. If you encounter any problems during setup, contact OFSAA Support at My Oracle Support.

3.5 Post US FED Run Execution

After the US FED Run execution, follow these steps:

- 1. For prior date reporting, see the Prior Date Reporting document.
- 2. Execute the <<INFODOM>>_REG_RUNEXE_RESAVE batch to populate the RUNEXESUMM table if you are not using the FFIEC-002 or FFIEC-002S reports.

If you are using the FFIEC-002 or FFIEC-002S reports, then execute the <Installer Path>/OFS_REG_REP_USFED/Post_Scripts/RUNEXESUMM_VW.sql file in atomic schema.

Lombard AgileREPORTER would display additional filters of Run Execution ID and Run Status during report retrieval based on the RUNEXESUMM table:

- a. Run Execution ID is the Run Execution Identifier concatenated with Run Description.
- **b.** Run Status shows the status of US FED Run Execution.
- **c.** Define the entities as SOLO or CONSOLIDATED in Lombard AgileREPORTER before retrieving returns.
- 3. Execute the REFRESH batches to refresh the Derived Entities.

3.6 Deploying Config Package

This section describes the steps to deploy the config package after saving the derived entities:

- To deploy the product configuration on AgileREPORTER using the package OFSAA_REG_REP_USFED_80980.zip bundled inside the Config_Package directory of the installer:
 - **a.** Navigate to the **<LombardAgileREPORTER>/bin** directory inside the installed location.
 - **b.** Add a new configuration with the following command:

```
./config.sh -a <Config_Package Full Path>
For example:
   ./config.sh -a /scratch/kit/80980/OFS_REG_REP_USFED/
Config Package/OFSAA REG REP USFED 80980.zip
```

2. Update the Alias with the following command:

```
./config.sh -ea OFSAA_REG_REP_USFED_80980 -iv 8.0.9.8.0 -alias "OFSAA FED DATA SOURCE" -aif /scratch/agile/bin/aliasinfo.properties
```

If you encounter any problems during deployment, contact OFSAA Support at My Oracle Support.

uppo	SAA Support Contact Details				
	Raise an SR in My Oracle Support (MOS) if you have any queries related to the OFSAA application				

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 which has all the revised or recently released documents.

