

Financial Services

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

Release 8.0.7.0.0

Installation GuideDecember 2021



Document Versioning

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Executive Summary

This document includes the necessary instructions to apply 8.0.7.0.0 maintenance level release for Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack and perform the required post install configurations. You can find the latest copy of this document in OHC Documentation Library.

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

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Preface

Oracle Financial Services Regulatory Reporting for US Federal Reserve (OFS_REG_REP_USFED) allows the customers to enable the banks to comply with BCBS 239 regulations. It integrates risk data reporting systems and enhances the accuracy of reporting in banks. OFS Risk Regulatory Solution (RRS) helps in achieving the objectives by enabling preset steps based on the generalization of a set of solutions. This is made possible by:

- Providing a centralized data storage for risk data through relevant subject areas of Financial Services Data Foundation (FSDF).
- Interfacing with a Regulatory Reporting tool Lombard AgileREPORTER to build necessary template reports to meet the regulatory expectations.
- Managing accuracy of risk reporting through 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_USFED) Release 8.0.7.0.0.

This chapter discusses the following topics:

- Audience
- Scope
- Prerequisites for the Audience
- How this Guide is Organized?
- Documentation Accessibility
- Access to Oracle Support
- Recommended Environment
- Related Documents
- Conventions and Acronyms

Audience

This Manual 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_USFED application components.

Scope

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

Prerequisites for the Audience

This Installation Guide is intended for administrators and implementation consultants who are responsible for installing and maintaining the application pack components.

The document assumes you have experience in installing Enterprise components. Basic knowledge about the Oracle Financial Services Data Foundation Application Pack components, OFSAA Architecture, UNIX commands, Database concepts and Web Server/ Web Application Server is recommended.

How this Guide is Organized?

The Installation Manual is organized into the following chapters.

- Pre Requisites 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 Activities 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.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc

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 for hearing impaired customers.

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):

- Oracle Financial Services Regulatory Reporting for US Federal Reserve Lombard Risk Integration Pack User Guide
- Oracle Financial Services Data Foundation Installation Manual Release 8.0.7.0.0 Java 7 and Java 8
- Oracle Financial Services Analytical Applications Infrastructure Environment Check Utility Guide (present in this <u>OHC</u> Documentation Library)

Conventions and Acronyms

The following conventions and acronyms are used in this document.

Conventions	Description				
References to sections or chapters in the manual are displayed in <i>Italics</i> .					
Screen names are display	yed in the following manner: Introduction screen				
Options and buttons are	displayed in Bold.				
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 contains the application data model to be uploaded.				
Config Schema	Database schema contains setup related configurations and metadata.				
OFS_REG_REP_USFED	Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard				
	Risk Integration Pack				

Hardware and Software Requirements and Specifications

This section describes the various Operating System, Database, Web Server, and Web Application Server version and other variant details on which this release of the OFS Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack (OFS REG REP USFED) application has qualified.

Refer to the Technology Matrix for Hardware and Software requirements for this release.

Preparing for Installation

This chapter provides necessary information to review before installing the OFS_REG_REP_USFED Application v8.0.7.0.0. This chapter includes the following topics:

- Obtaining the Software
- Prerequisites for Installation
- Configuration for GUI Mode Installation
- Copying and Extracting the Software

Obtaining the Software

Login to https://support.oracle.com/ and search for **28877382** under the Patches and Updates tab to download the OFS_REG_REP_USFED v8.0.7.0.0 archive file.

Prerequisites for Installation

The prerequisite software that must be installed are:

- Oracle Financial Services Analytical Applications Infrastructure (OFSAAI) 8.0.7.0.0 (patch 28226275) plus other prerequisite OFSAAI patches (see Section 1.1 Pre-Installation Requirements of OFS AAI Installation Guide) should be installed and configured in your Machine (OHC Documentation Library).
- Oracle Financial Services Data Foundation (OFSDF) 8.0.7.0.0 (patch 28929704) plus other
 prerequisite OFSDF patches (see Section 3.1 Installer and Installation Prerequisites of OFSDF
 Installation Guide) should be installed and configured in your Machine (OHC Documentation
 Library).
- AgileREPORTER version 1.16.1.1-b134
- AgileREPORTER Templates version ARforFED_v1.15.1.3

• Following columns to be added on top of FSDF 8.0.7 data model and sliced model upload should be performed.

Column	Physical Table	Column Name	Logical	Data Type	Domain	Null	PK	FK	Reference	Reference	Column Comments
Change	Name		Name			Allowed?			Table	Column	
Туре									Name	Name	
Add	FCT_PARTY_	F_PRIMARY_	Primary	CHAR(1)	Flag	YES	NO	NO			This column indicates
Column	IDENTIFICATION	DOCUMENT_	Document								that the party
	_DOC	FLAG	Flag								submitted the
											corresponding
											document as his or her
											primary document.
											There can be more than
											one document getting
											submitted by party. This
											flag identifies the
											primary document. List
											of values are Y if the
											document is primary
											document. N if the
											document is not
											primary document.
Add	FCT_REG_PARTY	N_RUN_SKEY	Run	NUMBER(10)	SurrogateKey	NO	YES	Identifying	DIM_RUN	N_RUN_	This column stores the
Column	_IDENTFCTN_D		Surrogate		_Long					SKEY	surrogate key of the
	OC		Key								run.
Add	STG_CUSTOMER	N_JOINT_	Joint	NUMBER(15,11)	Percent_Long	YES	NO	NO			This column stores the
Column	_RELATIONSHIP	LIABILITY_	Liability								joint liability share in
		PERCENT	Percentage								percentage per debtor
											as per the contractual
											agreement.

Add	STG_PARTY_	F_PRIMARY_	Primary	CHAR(1)	Flag	YES	NO	NO		This column indicates
Column	IDENTIFICATION	DOCUMENT_	Document							that the party
	_DOC	FLAG	Flag							submitted the
										corresponding
										document as his or her
										primary document.
										There can be more than
										one document getting
										submitted by party. This
										flag identifies the
										primary document. List
										of values are Y if the
										document is primary
										document. N if the
										document is not
										primary document.

- Ensure that you have executed **.profile** before you trigger the installation.
- Ensure that the FIC Server is up and running before you trigger the installation. For information on restarting the services, see *Oracle Financial Services Analytical Applications Infrastructure Release 8.0.2.0.0 Installation Guide* (OHC Documentation Library) for more information.

Configuration for GUI Mode Installation

To install OFS_REG_REP_USFED in GUI mode, you need to ensure the below software and configurations are available:

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

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

Syntax:

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

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

For example: 10.11.12.13:0.0 or myhostname: 0.0

Copying and Extracting the Software

Once you obtain the installer, copy the installer (in BINARY mode) to the system on which the OFS_REG_REP_USFED application 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: 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 OFS_REG_REP_USFED 8.0.7.0.0 in the Download Directory installer archive file using the following command:

```
unzip OFS REG REP USFED 8.0.7.0.0 <os>.zip
```

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

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

```
chmod -R 755 OFS REG REP USFED
```

GUI Mode Installation

The OFS_REG_REP_USFED installer can be installed in both GUI and silent mode.

For executing the installer in silent mode, refer to the section <u>Silent Mode Installation</u>.

For running in GUI mode, follow these steps:

- 1. Log in to the system as non-root user
- 2. Execute the user .profile file
- 3. Navigate to installer location OFS REG REP USFED/bin
- 4. Run the installer in GUI Mode by executing the command:
 - ./Setup.sh GUI



Installation Splash Screen

5. The **Introduction** screen displays the prerequisites for installation. Ensure that the prerequisites are satisfied before you proceed.



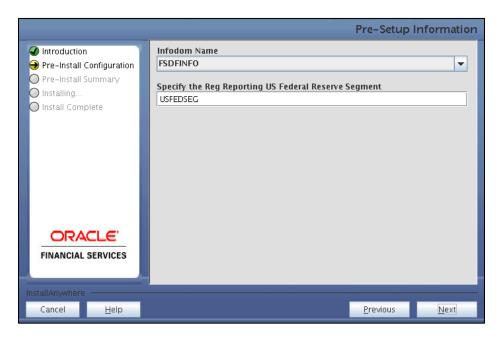
Introduction Screen

6. Choose the **Log Mode** for this installer. If you select, **Debug**, the Passwords are printed in the log file.



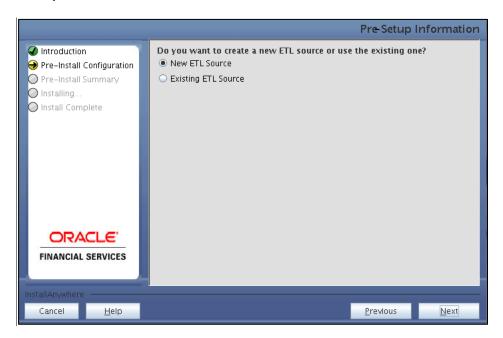
Pre-Setup Information - Log Mode Screen

7. In the **Pre-Setup Information** screen, specify the existing infodom name to be used for the application installation and click **Next**.



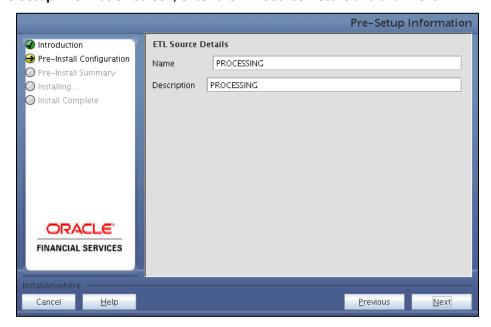
Pre-Setup Information - Infodom Type Screen

8. In the **Pre-Setup Information** screen, select **New ETL Source** and click **Next**.



Pre-Setup Information – ETL Source Selection Screen

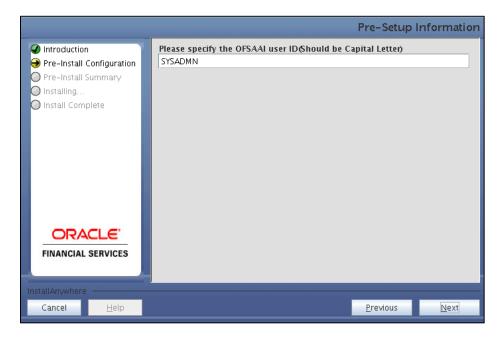
9. In the Pre-Setup Information screen, enter the ETL Source Details and click Next.



Pre-Setup Information - ETL Source Details Screen

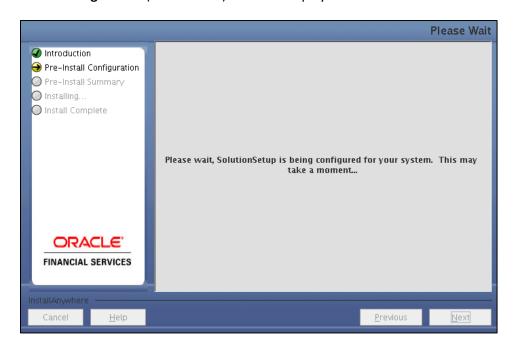
10. In the Pre-Setup Information screen, enter the OFSAAI User ID and click Next.

Default Value is: SYSADMN



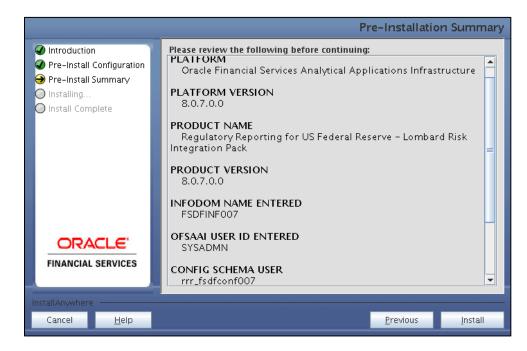
Pre-Setup Information - OFSAAI User ID Screen

11. The Pre-Install Configuration (Please Wait) screen is displayed.



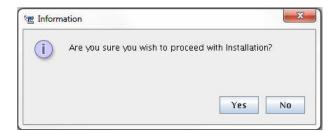
Pre-Install Configuration - Please Wait Screen

12. Review the settings in the **Pre-Installation Summary** screen and click **Install**.



Pre-Installation Summary Screen

13. The following message is displayed. Select **Yes** to begin the installation process.

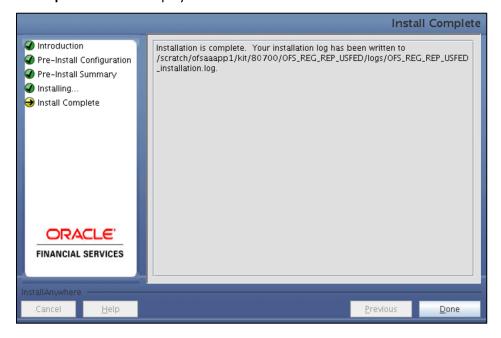


14. The Installing SolutionSetup screen is displayed.



Installing Solution Setup Screen

15. The **Install Complete** screen is displayed.



Install Complete Screen

- 16. Refer to the log file created in the path /OFS_REG_REP_USFED/logs of installer directory for any error messages.
- 17. Click **Done** to complete the installation.

Silent Mode Installation

Silent installation is achieved via a properties file (Silent.props) that must be updated with proper values, before attempting to install using the silent mode. Follow these steps to install in Silent Mode:

- 1) Navigate to installer directory OFS REG REP USFED/conf containing the template file Silent.template.
- 2) Create a copy of this file and rename the copy as **Silent.props**.
- 3) Edit the Silent.props file and specify the parameters as per the requirements.

The following table lists all the properties that must be specified.

Property Name	Description of Property	Permissible Values	Comments
LOG_MODE	Mode for logging	1 = Debug 0 = General	OPTIONAL. Default is 0.
INFODOM_NAME	Specify name of Information Domain (Infodom) into which you wish to install.	For example: FSDFINFO	MANDATORY. Specify Infodom Name Value where FSDF Application is installed.
APPFTP_LOG_PATH	Specify the Infodom App Maintenance log path	For example: /scratch/ofsaaapp1/ftpshare/FSDFINFO/logs	MANDATORY. Path value must be same as the path which was given during FSDF installation.
DBFTP_LOG_PATH	Specify the Infodom DB Maintenance log path	For example: /scratch/ofsaaapp1/ftpshare/FSDFINFO/logs	MANDATORY. Path value must be same as the path which was given during FSDF installation.
SEGMENT_1_CODE	Specify the US Federal Reserve Segment Code	For example: USFEDSEG	MANDATORY
ETL_APPSRC_TYPE	Specify if you want to create new ETL Source or use an existing one.	0 = If you want to create a new ETL Source 1 = If you want to use an existing Source	MANDATORY. Default is 0.

Property Name	Description of Property	Permissible Values	Comments
ETL_SRC_1_NAME	Specify the ETL Source Name where ETL Area Definitions are deployed	For example: PROCESSING	MANDATORY
ETL_SRC_1_DESC	Specify the description for the ETL Source	For example: PROCESSING	MANDATORY WHEN ETL_APPSRC_TYPE = 0

- 4) Log in to the system as **non-root** user
- 5) Execute the user .profile
- 6) Navigate to installer location OFS_REG_REP_USFED/bin
- 7) Run the installer in SILENT Mode with the following command:
 - ./Setup.sh SILENT

Refer to the console log for any error messages.

Post Installation Steps

Perform the following instructions after successful installation of the IR patch:

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 <u>2827801.1</u>.

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

- Refer to the log file in the /OFS_REG_REP_USFED/logs directory to ensure that there are no
 errors reported.
- Execute the following script in the CONFIG SCHEMA after replacing the placeholders:

DSRHCM01.sql

Drilldown UsedTables.sql

• Execute the following scripts in the CONFIG SCHEMA after replacing the placeholders for getting the dataflow of the above manual columns:

DM T2T FDB STG TD CONTRACTS.sql

DM T2T FCT ACCT CUST RELATIONSHIP.sql

DM T2T FCT PARTY IDENTIFCTN DOC.sql

NOTE: As and when another application patch (containing these three T2Ts) version lower than OFSDF 8.0.7.1.0 is applied, the three T2T changes can get overwritten. Therefore, the mappings must be executed each and every time.

- Execute the following script in the ATOMIC SCHEMA for Drilldown:
 Drilldown Atomic.sql
- Generate the application EAR / WAR file and redeploy the application on the configured Web
 Application Server. For more information on generating and deploying EAR / WAR file, refer to
 the Post Installation Configuration section in <u>Oracle Financial Services Advanced Analytical</u>
 <u>Applications Infrastructure Pack Installation Guide Release 8.0.2.0.0</u>.
- Restart all the OFSAA services. For more information, see the Start/Stop Infrastructure Services section in <u>Oracle Financial Services Advanced Analytical Applications Infrastructure Pack</u>
 Installation Guide Release 8.0.2.0.0.
- Execute ##INFODOM##_SYNC_ADJUSTMENT_CELLS batch for creating adjustment entries.

- Execute all the batches to Resave the Derived Entities.
- Perform Source Model generation for US FED Processing Source. For more information, see the Generating Source Models section in <u>Oracle Financial Services Advanced Analytical Applications</u> <u>Infrastructure Pack Installation Guide – Release 8.0.2.0.0</u>
- Perform the additional configurations if required as mentioned under the *Additional Configurations* section in *OFS AAAI Release 8.0.2.0.0 Installation Guide*.

The Oracle Financial Services Regulatory Reporting for US Federal Reserve – Lombard Risk Integration Pack is now ready for use. If you encounter any problems during the installation, contact OFSAA Support at Oracle Support Services.

List of Migration Activities (Only for Previous RUN Executions)

List of New Attributes used in Existing Reports

OFS REG REP US FED 8.0.7.0.0 contains new data model attributes which are getting used in existing report. The following are the list of new tables/columns getting used in existing reports:

New Tables

FCT_REG_CREDIT_LINE_DETAILS

New Columns

Table Name	Column Name			
FCT_REG_ACCOUNT_SUMMARY	N_GL_ACCOUNT_SKEY			
FCT_REG_ACCOUNT_SUMMARY	N_GL_TYPE_SKEY			
FCT_REG_ACCOUNT_SUMMARY	N_REG_BRANCH_ACCT_COUNTRY_SKEY			

Hence, it is recommended that the following scripts must be executed in the ATOMIC SCHEMA for uptaking those changes in previously performed RUN executions.

- Execute the following scripts in the ATOMIC SCHEMA to migrate new columns (one time activity):
 - o **NEW TABLE.sql**
 - o NEW COLUMNS.sql

Standard Party Type v/s Standard Issuer Type

Up to OFSDF version 8.0.5.0.0, there was only one column for storing Standard Party Type irrespective of the role the Party holds. In OFSDF version 8.0.6.0.0, there were multiple columns added for Standard Party Type, such as Standard Issuer Type, Standard Guarantor Type, and so on.

If the customer is not ready to update this change, it is preferable to include the PMUS_MIGRATION_RULES_PROCESS process in the US Regulatory Reporting Run just before the current Rules Process (PRUS_COMMON_RULES_PROCESS). This migration process will take care of data movement from Standard Party Type to Standard Issuer Type.

Conversion of Tables into Views

The following two tables are converted as Views with effect from 8.0.7.0.0 for all Regulatory Reporting applications.

- 1. FSI M CELL DEFN
- 2. FSI_M_CELL_DIM_VAL

NOTE: After we upgrade any Regulatory Reporting application to 8.0.7.0.0, the subsequent lower version patches (for example: 8.0.5.1.5, 8.0.6.1.2, and so on) of other Regulatory Reporting applications can result in the following error during installation, which can be ignored completely as the View will take care of the contents expected by the application:

"Error:ORA-01732: data manipulation operation not legal on this view".

Post US FED Run Execution

Perform the following instructions after US FED Run Execution:

- 1. For prior date reporting, please see the Prior Date Reporting document.
- 2. Execute << INFODOM>>_REG_RUNEXE_RESAVE batch to populate RUNEXESUMM table. Lombard AgileREPORTER would display additional filters of Run Execution ID and Run Status during report retrieval based on RUNEXESUMM table.
 - a. Run Execution ID is 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 all the REFRESH batches to refresh the Derived Entities.

Deploying Config Package

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

- 1. To deploy the product configuration on Lombard AgileREPORTER using the package OFSAA_REG_REP_USFED_80700.zip bundled inside the Config_Package folder of installer:
 - a. Navigate to <LombardAgileREPORTER>/bin under the installed location
 - b. Add a new configuration with the following command:

```
./config.sh -a <Config_Package_1 Full Path>
For example:
```

- ./config.sh -a /scratch/kit/807/OFS_REG_REP_USFED/Config_Package/OFSAA_REG_REP_USFED_80700.zip
- c. Update the Alias with the following command:

```
./config.sh -ea OFSAA_REG_REP_USFED_80700 -iv 8.0.7.0.0 -alias "OFSAA FED DATA SOURCE" -aif <LombardAgileREPORTER>/bin/aliasinfo.properties
```

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



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