Oracle Financial Services Liquidity Risk Solution

Installation Guide

Release 8.1.2.4.0

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OFS Liquidity Risk Solution Installation Guide

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1 Preface

This document provides step-by-step instructions to install the Oracle Financial Services Liquidity Risk Solution (OFS LRS) Application Pack 8.1.2.4.0 Maintenance Level Release.

This chapter discusses the following topics:

1.1 Intended Audience

The OFS LRS Application Pack Installation Guide is intended for administrators and implementation consultants who are responsible for installing and maintaining the application pack components.

1.1.1 Prerequisites for the Audience

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

- Oracle Financial Services Liquidity Risk Solution Application Pack components
- OFSAA Architecture
- UNIX Commands
- Database Concepts
- Web Server or Web Application Server

1.2 Access to Oracle Support

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support (MOS). For information, visit:

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

1.3 Related Information Sources

See the below OFS Liquidity Risk Solution Applications Pack documents available on OHC Documentation Library.

- Oracle Financial Services Liquidity Risk Measurement and Management User Guide
- Oracle Financial Services Liquidity Risk Regulatory Calculations for Reserve Bank of India User Guide
- Oracle Financial Services Liquidity Risk Regulatory Calculations for European Banking Authority User Guide
- Oracle Financial Services Liquidity Risk Measurement and Management Analytics User Guide

- Oracle Financial Services Liquidity Risk Measurement and Management US Federal Reserve
- Oracle Financial Services Liquidity Risk Regulatory Calculations for Bank of Thailand
- Oracle Financial Services Liquidity Risk Regulatory Calculations for Monetary Authority of Singapore
- Oracle Financial Services Liquidity Risk Regulatory Calculations for Hong Kong Monetary Authority
- Oracle Financial Services Liquidity Risk Regulatory Calculations for Bank Negara Malaysia
- Oracle Financial Services Deposit Insurance Calculations for Liquidity Risk Management
- Oracle Financial Services Performance Tuning User Guide
- Oracle Financial Services Analytical Applications Infrastructure User Guide
- Oracle Financial Services Analytical Applications Infrastructure Installation Guide
- Oracle Financial Services Liquidity Risk Measurement and Management Release Notes

Conventions and Acronyms 1.4

The following table lists the conventions and acronyms used in this document.

Table 1: Document Conventions

Convention	Meaning	
boldface	Boldface type indicates graphical user interface elements associated with an action or terms defined in text or the glossary.	
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you need to update specific values.	
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, file names, text that appears on the screen, or text that you enter.	
Hyperlink	Hyperlink type indicates links to external websites and internal document links.	

2 OFS LRS Release 8.1.2.4.0

OFS LRS 8.1.2.4.0 Maintenance Level (ML) release includes all the bug fixes and minor enhancements done since the previous Major release, version 8.1.2.0.0.

This ML release of OFS LRS can be installed on a setup with any OFSAA version 8.1.2.0.0 Application Pack.

2.1 Pre-installation Requirements

The prerequisites are as follows:

- Ensure that you have OFS LRS version 8.1.2.0.0 as the minimum patch set level.
- Login to My Oracle Support (MOS), download and install the OFSAAI v8.1.2.4 ML release (ID: 35681234)
- Ensure that you remove any tables or attributes that are added manually in the atomic schema.
- To resolve the Primary Key and Not Null Column changes in specific tables, follow these steps:

Table 2: Pre-installation Steps to resolve Primary Key and Not Null Column changes

Step No.	Pre-installation Steps	Example
1	Create a backup table of each of the following Tables if you upgrade from OFRLRS 8.1.2.1.0 or 8.1.2.2.0: • STG_PARTY_PARTY_RELATIONSHIP	The backup table of STG_GL_DATA can be STG_GL_DATA_LRS_8124_BKP
	FCT_PARTY_PARTY_RELATIONSHIPSTG_GL_DATA	
2	Truncate the Original Table.	Truncate the STG_GL_DATA.

• If the upgrade is from 8.1.2.2.5 to 8.1.2.4 take the backup of the table STG_INVESTMENTS into STG_INVESTMENTS_LRS_8124_BKP.

NOTE

If you have defined any custom run purpose, ensure to take a backup of the tables FSI_LRM_LOOKUP_TL and FSI_LRM_PROCESS_PURPOSE_MAP, before you install the ML.

NOTE

Starting in September 2020, OFSAA Application Minor releases out-of-the-box (OOB) data models using the latest Erwin Data Modeler version. The new Erwin Data Modeler version supported is 2020 R2. Provided a roadmap of the Erwin Data Modeler versions usage for the OFSAA out-of-the-box Data Models in the MOS Doc ID 2725208.1.

2.2 Installing this Maintenance Level Release

To install this ML release, follow these steps:

- Login to My Oracle Support (MOS) and search for 36521820 under the Patches & Updates tab.
 See the note in the Pre-installation Requirements section for details related to the Data Model patch for this release
- **2.** Download the OFS_LRS_8.1.2.4.0_LINUX.zip archive file and copy it to your OFSAA server in Binary mode.

NOTE

There are different archive files for different operating systems such as Solaris, and RHEL or OEL.

NOTE

Download the OFS LRS 8.1.2.5.0 erwin Data Model patch 36521887 from My Oracle Support. You can search for the patch number and download the patch from the Patches and Updates tab.

- **3.** Stop all the OFSAAI services. For more information, see the Stopping Infrastructure Services section in the Oracle Financial Services Liquidity Risk Solution Installation Guide.
- **4.** Login to the OFSAA server as a non-root user, navigate to the \$FIC_HOME directory, and execute the command: chmod -R 775 *
- 5. If you have Unzip utility, skip to the next step, else download the Unzip utility (OS- specific) 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 8.1.2.4.0 ML.
- 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.

- Give EXECUTE permission to the utility using the command: chmod 751 unzip_<os>
 For example, chmod 751 unzip LINUX
- **6.** Extract the contents of the 8.1.2.4.0 ML archive file using either of the following commands:

```
unzip <name of the file to be unzipped>
```

7. Update the configuration file params.conf before triggering the installation. The file params.conf is available in the directory: OFS_LRS_PACK/appsLibConfig/conf.

The following are the input parameters for params.conf file:

```
UPLOAD_MODEL= 1
MODEL_TYPE= 0
```

8. Give EXECUTE permission to the ML patch installer script. Navigate to the OFS_LRS_PACK directory and execute the command:

chmod 755 OFSAAIUpdate.sh

9. Execute the following install command:

```
./OFSAAIUpdate.sh
```

10. Verify if the ML is applied successfully by checking the log files generated in the

```
OFS_LRS_PACK/OFS_LRM_DIC/logs and OFS_LRS_PACK/OFS_LRM_LCR/logs directories.
```

You can ignore the ORA-00001 and ORA-02292 errors in the log file. In case of any other errors, contact My Oracle Support (MOS).

NOTE

See the OFS Analytical Applications Technology Matrix for a list of supported servers for OFS LRS 812 0.0

- **11.** After successful installation of the ML, perform the following steps:
 - **a.** Clear the application cache. Navigate to the following directory depending on the configured web application server and delete the files.
 - Tomcat: <Tomcat installation folder>/work/Catalina/localhost/<Application name>/org/apache/jsp
 - WebLogic: <WebLogic installation location>/domains/<Domain name>/servers/<Server name>/tmp/_WL_user/<Application name>
 - WebSphere: <WebSphere installation directory>/AppServer/profiles/<Profile name>/temp/<Node name>/server1/<Application name>/<.war file name>
 - **b.** Deploy the RPD and Web Catalog file(s)
 - i. Take a backup of deployed RPD and catalog files from the OBIEE environment.
 - ii. Navigate to the \$FIC_HOME/OFS_LRM_DASHBOARDS/12.2.1.4.0/datamodel directory which contains the Liquidity_Risk_Management_Pack.rpd.
 - **iii.** Navigate to the following catalog paths for the respective SKUs:
 - o Liquidity_Risk_Management_pack.catalog: \$FIC_HOME/
 OFS LRM DASHBOARDS/12.2.1.4.0/content/catalog
 - o BNM.catalog: \$FIC_HOME/OFS_LRM_LCR_BNM/OFS_LRM_DASHBOARDS/
 12.2.1.4.0/content/catalog
 - o Bank of Thailand.catalog: \$FIC_HOME/OFS_LRM_LCR_BOT/ OFS_LRM_DASHBOARDS/12.2.1.4.0/content/catalog
 - O HKMA.catalog: \$FIC_HOME/OFS_LRM_LCR_HKMA/OFS_LRM_DASHBOARDS/ 12.2.1.4.0/content/catalog

- o RBI.catalog: \$FIC_HOME/OFS_LRM_LCR_RBI/OFS_LRM_DASHBOARDS/
 12.2.1.4.0/content/catalog
- USFED.catalog: \$FIC_HOME/OFS_LRM_LCR_USFED/OFS_LRM_DASHBOARDS/ 12.2.1.4.0/content/catalog
- Deposit Insurance.catalog: \$FIC_HOME/OFS_LRM_DIC_USFED/ OFS LRM DASHBOARDS/12.2.1.4.0/content/catalog

NOTE

lgnore the existing files in \$FIC_HOME/
OFS LRM DASHBOARDS/12.2.1.4.0/content/ catalog folder:

- BNM.catalog
- Bank of Thailand.catalog
- HKMA.catalog
- Deposit Insurance.catalog
- RBI.catalog
- USFED.catalog
- **iv.** Modify the connection pool and set the properties.
- **v.** Any customization performed on the older RPD and Web Catalog files requires to be manually carried over to the newer ones post-deployment.
- vi. Clear OBIEE cache, if enabled.

For more information on deploying RPD and Web Catalog files, see **Deploying the application** section in Oracle Financial Services Liquidity Risk Solution Installation Guide.

- **12.** Delete the existing EAR or WAR file available in the folder \$FIC HOME/ficweb.
- **13.** Add umask 0027 in the .profile of the UNIX account which manages the web server to ensure restricted access permissions.
- **14.** Navigate to the web component deployed area. If you are deploying on a fresh environment, then delete the generated .war file. If you are installing in an existing environment, then delete the generated .war file and the folder created along with it.
- **15.** Generate the application EAR or WAR file and redeploy the application onto your configured web application server. For more information on generating and deploying the EAR or WAR file, see the Post Installation Configurations section in the Oracle Financial Services Liquidity Risk Solution Installation Guide.
- **16.** Restart all the OFSAAI services. For more information, see the Starting Infrastructure Services section in the <u>Oracle Financial Services Liquidity Risk Solution Installation Guide</u>.

2.2.1 Configuring Tomcat for User Group Authorization, Data Mapping, and Disabling WADL for the Web Service

Users with system authorization roles can access User Group Authorization. However, to make it available on Tomcat web server, you have to perform the following configuration steps:

- 1. Navigate to the \$FIC_WEB_HOME/webroot/WEB-INF/ folder and open web.xml file.
- **2.** Enter the following in the web.xml file.

```
<init-param>
<param-name>mappedfile</param-name>
<param-value>false</param-value>
</init-param>
```

3. To disable the WADL for the Web Service, navigate to the following snippet in the

```
web.xml file.
<servlet>
<servlet-name>CommonRESTServlet</servlet-name>
<servlet-class>org.glassfish.jersey.servlet.ServletContainer</servlet-class>
<init-param>
<param-name>javax.ws.rs.Application</param-name>
<param-value>com.ofs.fsapps.commonapps.util.ApplicationResourceConfig</param-value>
</init-param>
<load-on-startup>1</load-on-startup>
</servlet>
```

4. Add the following snippet before the <load-on-startup>1</load-on-startup> attribute.

```
<init-param>
<param-name>jersey.config.server.wadl.disableWadl</param-name>
<param-value>true</param-value>
</init-param>
```

5. Save and close the file.

2.3 Post-installation steps for 8.1.2.4.0 One-off patch

Perform the following post-installation steps:

1. Resave the HLCOM012, LRMLA011, and LRMLA012 and also the hierarchies mentioned in the <u>List of Hierarchies</u> chapter.

2. To resolve the Primary Key and Not Null Column changes in specific tables, follow these Postinstallation Steps:

NOTE

Perform the following steps only if you have executed the Pre-installation Steps to resolve Primary Key and Not Null Column Changes in this release.

Table 3: Post-installation Steps to resolve Primary Key and Not Null Column changes

Step No.	Post-installation Steps	Example
1.	Inspect the data duplication based on the Primary Key Columns in the backup table.	In the STG_GL_DATA_LRS_8124_BKP Table, check the data duplication based on the Primary Key Columns.
2.	Remove the duplicate records in the backup tables.	In the STG_GL_DATA_LRS_8124_BKP Table, remove the duplicate records.
3.	Move the data from the backup tables to the original tables.	Move the data from STG_GL_DATA_LRS_8124_BKP to STG_GL_DATA.

3. If the upgrade is from 8.1.2.2.5 to 8.1.2.4 populate the column data of V_ENCUMBRANCE_TYPE from the backup table STG_INVESTMENTS_LRS_8124_BKP to V_ENCUMBRANCE_TYPE_CODE in STG_INVESTMENTS.

List of Hierarchies 3

Re-save the following hierarchies after executing the SCD's.

Table 4: List of Hierarchies

Hierarchy Code	Hierarchy Name	SKU
HLCOM001	LRM - Fund	LCR
HLCOM010	LRM - Standard Issuer	LCR
HLCOM011	LRM - Standard Guarantor	LCR
HLCOM017	LMR - Purchase party	LCR
HLRM002	LRM - Legal Entity	LCR
HLRM004	LRM - Business Unit	LCR
HLRM0252	LRM - Ownership Category	LCR
HLRM0254	LRM - Insurance Scheme	LCR
HLRM027	LRM - Date	LCR
HLRM0471	LRM - Mitigant Type	LCR
HLRM0482	LRM - LRM Product	LCR
HLRM0488	LRM - Branch	LCR
HLRM205	LRM - Legal Entity - Parent Child	LCR
HLRM454	LRM - Party Type	LCR
HLRM469	LRM - Credit Line Purpose	LCR
HLRM470	LRM - Netting Agreement	LCR
HLRM471	LRM - Product Balance Sheet Category	LCR
HLRM8006	RBI LCR - GL Code	RBI
HLRMI008	LRM - Intraday - Payment Settlement Systems	LCR
HLRMI009	LRM - Intraday - Counterparty Type	LCR
LRMINS39	LRM - Ownership Category ORC	USFED
LRMLA006	LRM - MLA Instrument Currency	MAS
LRMLA027	LRM-Account Purpose	LCR

Appendix A: Frequently Asked Questions 4

What checks does the 8.1.2.0.0 Release patch perform?

Environment Check- As part of the environment check, it performs Java validation, Environment Variables validation, OS-specific validation, DB specific validation, and it shuts down all OFSAAI Services (Infrastructure Server, ICC Server, and back-end services).

Post Install check- As part of Post-install check, it checks if OFSAAI services can be successfully

Which version of erwin Data Modeler does OFS LRS support?

OFS LRS 8.1.2.5 supports erwin v9.8

OFSAA Support 5

Raise a Service Request (SR) in My Oracle Support (MOS) for gueries related to OFSAA applications.

Send Us Your Comments 5.1

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?
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- What features did you like most about this manual?

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