OFS Liquidity Risk Solution Pack
Installation Guide

Release 8.1.2.2.0

F74093-01

September 2022

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Contents

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Preface

This document provides step-by-step instructions to install the Oracle Financial Services Liquidity Risk Solution (OFS LRS) Application Pack 8.1.2.2.0 Maintenance Level Release.

This chapter discusses the following topics:

1.1 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 Documents

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

1.4 Conventions and Acronyms

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

Table 1-1   Conventions and Acronyms

Conventions	Description
Screen actions are indicated in Bold	
IR	Interim Release
ML	Maintenance Level Release
OFSAAI	Oracle Financial Services Analytical Applications Infrastructure
OFS LRS	Oracle Financial Services Liquidity Risk Solution
OFS LRM	Oracle Financial Services Liquidity Risk Management
OHC	Oracle Help Center
AIX	Advanced Interactive eXecutive
RHEL	Red Hat Enterprise Linux
OEL	Oracle Enterprise Linux
OS	Operating System
EAR or WAR	Enterprise Archive or Web Archive
J2EE	Java 2 Enterprise Edition
OTN	Oracle Technology Network

Table 1-1   (Cont.) Conventions and Acronyms

Conventions	Description
Atomic Schema	Database schema where the application data model is uploaded.
Configuration Schema	Database schema which contains setup related configurations and metadata.

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OFS LRS Release 8.1.2.2.0

OFS LRS 8.1.2.2.0 Maintenance Level (ML) release includes all the bug fixes and minor enhancements done since the previous Major release, v8.1.2.0.0.

This ML release of OFS LRS can be installed on a setup with any OFSAA v8.1.02.0.0 Application Pack.

> **Note:**
>
> If you have defined any custom run purpose, ensure to take a back up of the tables FSI_LRM_LOOKUP_TL and FSI_LRM_PROCESS_PURPOSE_MAP, before you install the ML.

2.1 Pre-installation Requirements

The prerequisites are as follows:

- Ensure that you have OFS LRS version v8.1.02.0.0 as the minimum patch set level.
- Login to My Oracle Support (MOS), download and install the OFSAAI v8.1.02.1 ML release (ID: 33865657)

> **Note:**
>
> Starting September 2020, OFSAA Application Minor releases out of the box (OOB) data models use 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:

1. Login to My Oracle Support (MOS) and search for **34398230** under the *Patches & Updates* tab. See the note in the Pre-installation Requirements section for details related to Data Model patch for this release

2. Download the `OFS_LRS_8.1.2.2.0_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 8.1.2.2.0 erwin Data Model patch 34627244 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 8.1.2.2.0 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 8.1.2.2.0 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`.

   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 8.1.2.0.0.

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 following catalog files:

    • Liquidity_Risk_Management_pack.catalog: `$FIC_HOME/OFS_LRM_DASHBOARDS/12.2.1.4.0/content/catalog`

    • BNM.catalog: `$FIC_HOME/OFS_LRM_LCR_BNM/OFS_LRM_DASHBOARDS/12.2.1.4.0/content/catalog`

    • Bank of Thailand.catalog: `$FIC_HOME/OFS_LRM_LCR_BOT/OFS_LRM_DASHBOARDS/12.2.1.4.0/content/catalog`

    • HKMA.catalog: `$FIC_HOME/OFS_LRM_LCR_HKMA/OFS_LRM_DASHBOARDS/12.2.1.4.0/content/catalog`

    • 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:**
>
> Ignore 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

    iii. Modify the connection pool and set the properties.

    iv. Any customization performed on the older RPD and Web Catalog files requires to be manually carried over to the newer ones post-deployment.

    v. 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 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 Oracle Financial Services Liquidity Risk Solution Installation Guide.

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 8.1.2.2.0 One-off patch

Perform the following post-installation steps:

1. OFS LRS 8.1.2.2 needs additional attributes in the Data Model. Extend OFS LRS 8.1.2.2 Data Model with the following attributes.

> **Note:**
>
> These columns are regularized as part of next available OFS LRS ML/IR Release.

Table 2-1   Data Model Attributes for 8.1.2.2.0 release

Physical Table Name	Column Name	Logical Name	Data Type	Domain	Null Allowed?	PK	FK	Reference Table Name	Reference Column Name	Column Comments	Bug ID
FCT_ LIQUI DITY _REP _LIN E_CO MME NT	V_RE P_LIN E_CO LLEC TION S	Repor ting Line Collec tions	VARC HAR 2(200 0)	Text_ Mess age	Yes	No	No			This attribu te stores report ing line collec tions	3452 8157
FSI_ REP_ LINE _CO MME NT	V_RE P_LIN E_CO LLEC TION S	Repor ting Line Collec tions	VARC HAR 2(200 0)	Text_ Mess age	Yes	No	No			This attribu te stores report ing line collec tions	3452 8157
FSI_ REG_ APP_ OUTP UT	F_BA SEL_ CAPI TAL_ ELIG _FLA G	Basel Capit al Eligibi lity Flag	CHA R(1)	Flag	Yes	No	No			This colum n stores the flag to indica te wheth er the instru ment is eligibl e to consi der for capita l calcul ation as per Basel guidel ines	3431 1155

Table 2-1 (Cont.) Data Model Attributes for 8.1.2.2.0 release

Physical Table Name	Column Name	Logical Name	Data Type	Domain	Null Allowed?	PK	FK	Reference Table Name	Reference Column Name	Column Comments	Bug ID
FSI_REG_APP_OUTPUT	F_ELIG_TLAC_INSTR_FLAG	Eligible Total Loss Absorbing Capacity Instrument Flag	CHAR(1)	Flag	Yes	No	No			This column will be used to indicate if the instrument meets all the eligibility criteria of a total loss absorbing capacity instrument. These eligiblity criteria are jurisdiction specific.This will be a download column and will have list of values as Y or N.	34311155

Table 2-1   (Cont.) Data Model Attributes for 8.1.2.2.0 release

Physical Table Name	Column Name	Logical Name	Data Type	Domain	Null Allowed?	PK	FK	Reference Table Name	Reference Column Name	Column Comments	Bug ID
FSI_L RM_ REP_ LINE _DTL S	V_LO B_CO DE	Line Of Busin ess Code	VARC HAR 2(20)	DESC RIPTI ON	Yes	No	No			Line of busin ess (LOB) is a functi onal unit that offers the financ ial entity' s produ cts to the custo mer. Exam ple: Corpo rate Finan ce, Trade Servic es, Privat e Wealt h Mana geme nt, Treas ury Servic es, Retail Banki ng, Cards servic es etc. This colum n stores	3448 7217

Table 2-1   (Cont.) Data Model Attributes for 8.1.2.2.0 release

Physical Table Name	Column Name	Logical Name	Data Type	Domain	Null Allowed?	PK	FK	Reference Table Name	Reference Column Name	Column Comments	Bug ID
										the unique code of the line of business applicable to the respective product.	

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Table 2-1   (Cont.) Data Model Attributes for 8.1.2.2.0 release

Physical Table Name	Column Name	Logical Name	Data Type	Domain	Null Allowed?	PK	FK	Reference Table Name	Reference Column Name	Column Comments	Bug ID
FSI_LRM_INSTRUMENT	N_PERPETUAL_MAT_TB_SKEY	Perpetual Maturity Time Bucket Surrogate Key	NUMBER(10)	SurrogateKey_Long	Yes	No	No			Stores the Perpetual Maturity Time Bucket Surrogate Key. This attribute is derived by the app based on based on Embedded options flag and Convertible Options Indicator for a certain set of identified products under Investments and Borrowings	34481885

2. Resave the hierarchies `HLCOM012`, `LRMLA011`, and `LRMLA012`.

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Appendix A: Frequently Asked Questions

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 started.

Which version of erwin Data Modeler does OFS LRS support?

OFS LRS 8.1.02.21 supports erwin v9.8

Part I

OFSAA Support

Raise a Service Request (SR) in My Oracle Support (MOS) for queries related to 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/section/page number (if available) and contact the My Oracle Support.

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