

Oracle® Financial Services

Compliance Studio Installation Guide



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A Files Packaged in This Patch

Document Control

The following table lists document control of this guide.

Table Document Control

Version Number	Revision Date	Change Log
8.1.3.2.0	October 2026	Created a new document for release 8.1.3.2.0

Preface

This section provides information on the Oracle Financial Services (OFS) Compliance Studio Installation Guide.

- [Audience](#)
- [Related Resources](#)
- [Abbreviations](#)
- [Documentation Accessibility](#)
- [Diversity and Inclusion](#)
- [Conventions](#)
- [Comments and Suggestions](#)

Audience

OFS Compliance Studio Installation Guide is intended for System Engineers who are responsible for installing and maintaining the application.

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

- UNIX commands
- Database concepts

Related Resources

This section identifies additional resources to the OFS Compliance Studio. You can access additional documents from the [Oracle Help Center](#).

Abbreviations

The following table lists the abbreviations used in this document.

Table 1 Abbreviations

Abbreviation	Meaning
OFS	Oracle Financial Services
OFSA	Oracle Financial Services Analytical Application
BD	Behavior Detection
FCDM	Financial Crime Data Model
ICIJ	International Consortium of Investigative Journalists

Table 1 (Cont.) Abbreviations

Abbreviation	Meaning
IDCS	Oracle Identity Cloud Service
ECM	Enterprise Case Management
SSO	Single Sign-On
SSH	Secure Shell

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Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which user supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that user enter.

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Introduction

OFS Compliance Studio is an advanced analytics application that supercharges anti-financial crime programs for better customer due diligence, transaction monitoring, and investigations by leveraging the latest innovations in artificial intelligence, open-source technologies, and data management. It combines Oracle's Parallel Graph Analytics (PGX), Machine Learning for AML, Entity Resolution, and notebook-based code development. It enables Contextual Investigations in one platform with complete and robust model management and governance functionality.

Users can perform the following actions:

- Install a new instance of Compliance Studio with OFSAA (Oracle Financial Services Analytical Application). Here, OFSAA is with Behavior Detection (BD) or Enterprise Case Management (ECM).

Note

If you want to install Compliance Studio without OFSAA, contact [My Oracle Support \(MOS\)](#).

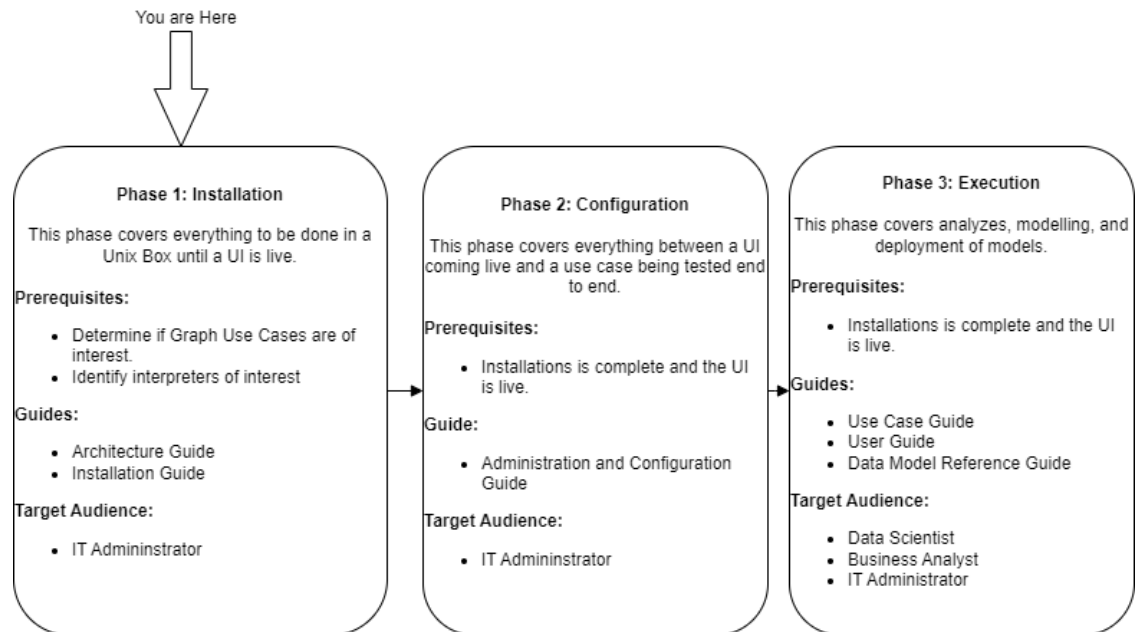
- If any issue occurs during installation, you can reinstall Compliance Studio with updated configuration.

The following use cases are supported in the Compliance Studio:

- **Entity Resolution**
- **Graph**
- **Investigation Toolkit Notebook**
- **Automated Scenario Calibration (ASC)**
- **Behavioral Model**
- **Sanctions Event Scoring**
- **AML Event Scoring**
- **Customer Segmentation and Anomaly Detection**
- **Customer Risk Scoring**
- **Shell Account Detection Scenario for AML**
- **Custom Scenario**

When to Use this Guide

The following illustration demonstrates when this guide should be used.

Figure 1-1 When to Use this Guide

2

Pre-Installation Requirements and How to Apply This Maintenance Level Release?

This chapter describes the pre-installation requirements and how to apply the Maintenance Level (ML) release of OFS Compliance Studio 8.1.3.2.0.

- [Pre-Installation Requirements](#)
This section describes the pre-installation requirements.
- [How to Apply This Maintenance Level Release in the Compliance Studio?](#)
This section describes how to apply this ML release in the Compliance Studio.

2.1 Pre-Installation Requirements

This section describes the pre-installation requirements.

1. Overview

- a. ORACLE FINANCIAL SERVICES COMPLIANCE STUDIO V 8.1.3.2.0 RELEASE
- b. MMG Upgraded to 26.2.0-5

2. Prerequisites

- a. OFS Compliance Studio 8.1.3.1.0 or 8.1.3.1.1 should be installed.
- b. Software requirements
 - i. OS requirements: RHEL/Oracle Linux 8+ or 9+
 - ii. Database Server: Oracle Database Release 19c (19.3+)Enterprise Edition or Oracle AI Database 26ai
- c. The unzip utility and sufficient disk space for the existing Conda backup and complete 8.1.3.2.0 Conda environments are required.
- d. This patch will not install Conda for OS lower than Linux 8 due to python is not supporting security updates, i.e. Linux 8 and above is preferred. The remaining patch steps will continue.

Note

Compliance Studio should be in running state. Also validate all the services has started without any error.

3. Enhancements and Bug Fixes

Oracle Financial Services Compliance Studio 8.1.3.2.0 includes the following enhancements and bug fixes.

- a. ASC
 - Refactored ASC to provide cleaner user interfaces.
- b. Behavioral Model
Refactored notebook paragraphs to improve clarity and usability, including:

- Shared data APIs and paragraphs for training and scoring.
 - Separate paragraphs for scoring, feature contribution, and table updates, allowing users to control each stage independently.
 - Simplified data reading for annual model monitoring.
 - Updated batch parameters.
- c. AML Event Scoring Model
Refactored notebook paragraphs to improve clarity and usability, including:
- Simplified new workspace creation for managing DM utility dependencies.
 - Shared data APIs and paragraphs for training and scoring.
 - Support for optional behavioral and transactional features.
 - Separate paragraphs for scoring, feature contribution, and table updates, allowing users to control each stage independently.
 - Updated batch parameters.
- d. Customer Segmentation and Anomaly Detection Model
Refactored notebook paragraphs to improve clarity and usability, including:
- Shared data APIs and paragraphs for training and scoring.
 - New inputs for behavioral and transactional features.
 - Separate paragraphs for scoring, feature contribution, and table updates, allowing users to control each stage independently.
 - Introduction of new batches.
4. **Known Issues**
- a. Bug 40113502 - ISSUE WITH "CREATE AMLES MODELING DATASET / JOIN AMLES TRAIN DATASET WITH TRANSACTIONAL FEATURES" PARAGRAPH
 - b. Bug 39944496 - THRESHOLD SET NOT LOADED IN ATL OVERLAY
 - c. Bug 40025819 - THRESHOLD CREATION AND SCENARIO EXECUTION ERROR
 - d. Bug 40146409 - LDAP_AUTH_PASSWORD PARAM IS NOT EXPORTED AS PART OF MMG-HOME/BIN/INITIALIZE-SECRETS.SH SCRIPT
 - e. Bug 40146962 - GRAPH MATCH RULE EXECUTION FAILS FOR PARALLEL_LEVEL=8 WITH ERROR "PARALLEL QUERY SERVER DIED UNEXPECTEDLY"

2.2 How to Apply This Maintenance Level Release in the Compliance Studio?

This section describes how to apply this ML release in the Compliance Studio.

Steps to apply Oracle Financial Services Compliance Studio 8.1.3.2.0 patch.
This Patch should be applied on Compliance Studio.

1. Steps to follow on Compliance Studio
 - ** Refer to the Oracle Financial Services Compliance Studio Administration and Configuration Guide for detailed prerequisites and steps.
 - a. Extract the contents of the patch archives using the following command:
unzip -a <name of the files to be unzipped>

For example

```
unzip -a 39527220_GENERIC-1of2.zip
unzip -a 39527220_GENERIC-2of2.zip
```

Note

* This patch contains 2 zip files and both must be unzipped for patch application.

* The above "-a" option is mandatory to unzip the patch. In case you notice an error message "unzip: not found [No such file or directory]" when the package is not installed, contact your UNIX administrator to resolve this issue.

2. Edit the `##PATCH_HOME##/bin/config.sh` file to update following configurations:

Table 2-1 Installation Parameters

Parameter	Description	Mandatory
COMPLIANCE_STUDIO_INSTALLATION_PATH	Absolute path where Compliance Studio is installed	YES
ER_AUTH_TOKEN_EXP_TIME	ER authentication token validity period	YES
ALLOWED_CORS_URL	Allowed URLs for cross-origin requests	NO
MMG_CONFIGURATION_SERVICE_PORT	Port for MMG Configuration Service	YES
MMG_SPRING_CLOUD_CONFIG_SERVER_PORT	Port for Spring Cloud Config Server	YES
DATASTUDIO_MONITORING_PORT	Port for Data Studio monitoring	NO
MMG_MONITORING_ENABLED	Enables or disables MMG monitoring	YES
MMG_MONITORING_SSL_CRT	SSL certificate path for monitoring	NO
MMG_MONITORING_SSL_KEY	SSL private-key path for monitoring	NO
MMG_SECURITY_HSTS_ENABLED	Enables or disables HSTS security	YES
AUTH_LDAP_AUTHENTICATED_SEARCH_BIND	Enables authenticated LDAP search	YES
AUTH_LDAP_USER_DN	LDAP service-account DN	NO
AUTH_LDAP_PASSWORD	LDAP service-account password	NO
MMG_SECURITY_HSTS_VALUE	Defines the HSTS security policy	NO
MMG_UI_ACCESS_LOG_CUSTOM_FORMAT	Custom access-log format for MMG UI	NO
MMG_SERVICE_ACCESS_LOG_CUSTOM_FORMAT	Custom access-log format for MMG Service	NO

Note

Refer to the install guide for more information for above parameters default values.

3. Execute applyPatch.sh in the ##PATCH_HOME##/bin folder.

```
cd ##PATCH_HOME##/bin  
./applyPatch.sh -cs
```

The patch installs the complete Conda distribution from the archive under ##PATCH_HOME##/minicondaFiles.

Note

- a. This patch will stop Compliance Studio. It will create a backup of the affected jars, files or directories and then update respective jars, files and directories.
- b. After the replacement, it will re-install Compliance Studio to update the configuration.
- c. After re-install, the patch will start Compliance Studio.
- d. Any manual configurations to the files which are available in section A has to be reconfigured after applying the patch.

3

Post-Installation Steps

This section describes post-installation steps for Compliance Studio.

- [Registering the Conda Environment](#)
This section describes how to register the Conda environment.
- [Graph Use Case](#)
This section describes the post-installation steps for Graph use case.
- [Graph Matching with OT](#)
Use Financial Crime Graph Refresh to refresh graph data in Compliance Studio and, optionally, perform OT matching. This guide describes installation, execution, and running the batch without matching.
- [ML4AML Use Case](#)
This section describes the post-installation steps for ML4AML use case.

3.1 Registering the Conda Environment

This section describes how to register the Conda environment.

To register the conda environment:

1. Navigate to the <COMPLIANCE_STUDIO_INSTALLATION_PATH>/bin directory.
2. Execute the command: `./compliance-studio.sh -e` or `./compliance-studio --enroll`.

The Compliance Studio installer has three pre-seeded conda environments as follows:

- `default_<CS Version>`
- `sane_<CS Version>`
- `ml4aml_<CS Version>`

3.2 Graph Use Case

This section describes the post-installation steps for Graph use case.

To perform post-installation activity for Graph:

1. Navigate to the <COMPLIANCE_STUDIO_INSTALLATION_PATH>/deployed/ficdb/graphmetadata/bin directory.
2. To initialize the OOB graph (FINANCIAL_CRIME_GLOBAL_GRAPH) schema, execute the following.

```
./InitializeECMSchema.sh -w <ecm_schema_wallet_alias>
```

3. To initialize the graph schema, execute the following.

```
./InitializeGraphSchema.sh -gw <graph_wallet_alias> -es <ecm_schema_name>
```

Auto Scheduling of Transactional Tasks in the Graph Batch

This section explains how to set up batch deltas to run for a specified period of time relative to the system date.

If you are initializing "FINANCIAL_CRIME_GLOBAL_GRAPH" schedule with matching component enabled, then execute the following command.

```
./Initialize00BGraphBatchScheduleECM.sh -ew <datasource name of the ECM
atomic schema> -sdg <Start-day-gap> -edg <End-day-gap> -gd
<graph_datasource> -u <complianceStudioUserName>
```

The sample script for Weekly, Monthly, Yearly and, Periodically is given in the following table.

Table 3-1 Schedule Transactional Task

Batch Schedule	Sample Script
Weekly (7 Days)	<pre>./Initialize00BGraphBatchScheduleECM.sh -ew <datasource name of the ECM atomic schema> -sdg 7 - edg 0 -gd <graph_datasource> -u <complianceStudioUserName></pre> For example, SYSDATE/ Current Date is 20/12/24 and you need to load one week data then use the following logic. Start Day Gap: 2024_12_20 - 7 = 2024_12_13 End Day Gap: 2024_12_20 - 0 = 2024_12_20 The transaction data from 2024_12_13 (12:00:00 AM) to 2024_12_19 (11:59:59 PM) will be considered for processing. As 2024_12_20 is the current date, complete data for the same date is not yet available in the Banking Domain for processing.
Monthly (30 Days)	<pre>./Initialize00BGraphBatchScheduleECM.sh -ew <datasource name of the ECM atomic schema> -sdg 30 - edg 0 -gd <graph_datasource> -u <complianceStudioUserName></pre>
Yearly (365 Days)	<pre>./Initialize00BGraphBatchScheduleECM.sh -ew <datasource name of the ECM atomic schema> -sdg 365 - edg 0 -gd <graph_datasource> -u <complianceStudioUserName></pre>
Periodically	<pre>./Initialize00BGraphBatchScheduleECM.sh -ew <datasource name of the ECM atomic schema> -sdg 21 - edg 1 -gd <graph_datasource> -u <complianceStudioUserName></pre> For example, Suppose today's date is 2024_12_20 and users want to load data from 2024_11_29 to 2024_12_18 (both dates are inclusive). You are running a batch on 2024_12_20, therefore end-day-gap should be given as edg=1 and start-day-gap should be given as -sdg=21 where number of days between two dates is 22.

If you are initializing "FINANCIAL_CRIME_GLOBAL_GRAPH" schedule with matching component disabled, then execute the following command.

```
./Initialize00BGraphBatchScheduleECM.sh -ew <datasource name of the ECM
atomic schema> -gd <graph_datasource> -sdg <Start-day-gap> -edg
<Enddaygap> -u <complianceStudioUserName> -sm
```

4. Perform the following steps after applying patch 8.1.3.2.0:
 - a. Navigate to the path: /scratch/fccstudio/CS81320_OCT_CPU/compStudio_13041141/OFS_COMPLIANCE_STUDIO/deployed/mmg-home/mmg-load-to-graph/graph-service/utility/bin
 - b. Run the policy_manager.sh shell script.
./policy_manager.sh sync -s <src_datasource> -t <tgt_datasource> -o <objective_id>

For example: ./policy_manager.sh sync -s CS -t GS -o 853e4164-0968-4cb6-a6f3-2b4930614a8b
 - c. Open the sys database and provide the following grants:

GRANT EXECUTE ON DBMS_RLS TO GRAPH SCHEMA;

GRANT EXECUTE ON DBMS_REDACT TO GRAPH SCHEMA;

GRANT SELECT ON REDACTION_POLICIES TO GRAPH SCHEMA;

GRANT SELECT ON REDACTION_COLUMNS TO GRAPH SCHEMA;

GRANT EXECUTE ON SYS.DBMS_SESSION TO GRAPH SCHEMA;
GRANT CREATE ANY CONTEXT TO GRAPH SCHEMA;

3.3 Graph Matching with OT

Use Financial Crime Graph Refresh to refresh graph data in Compliance Studio and, optionally, perform OT matching. This guide describes installation, execution, and running the batch without matching.

To perform post-installation activity for Graph:

- Overview
- Prerequisites
- Installation Procedure
 1. Import Graph Assets
 2. Initialize the ECM Schema
 3. Initialize the Graph Schema
 4. Initialize the ECM Graph Batch Schedule
 5. Install the OOB Graph Batch
 6. Confirm Database Permissions
 7. Run Graph Service Runtime Setup
 8. Prepare OT Matching
 9. Initialize Graph User Security
 10. Synchronize OOB Graph Metadata
 11. Initialize the Property Graph
 12. Configure Subgraph Loading if Required

Installation Completion Checklist

User Guide

- Before You Begin
- Execute the Batch
- Schedule the Batch
- Run the Batch Without Matching
- Monitor Batch Execution
- Complete Initial Setup

Documentation Placement Instructions

- Installation Guide Changes
- User Guide Changes
- Cross-References and Navigation

Overview

Financial Crime Graph Refresh is recommended over the older OS-based OOB Graph Batch FinancialCrimeGlobalGraph for faster and more efficient graph data refresh. The batch supports graph refresh with or without matching. When matching is enabled, it uses OT. To run only the graph refresh tasks, follow the matching removal or exclusion instructions in the User Guide.

Table 3-2 Matching removal or exclusion instructions

Item	Value
Batch display name	Financial Crime Graph Refresh
Batch identifier	FINANCIAL_CRIME_GRAPH_REFRESH
Matching option	Optional; matching uses OT when enabled.
Recommended use	Graph data refresh, with optional OT matching
Execution location	Orchestration > Schedule Batch

By default, the batch includes graph-data refresh tasks, matching preparation for Customer, ICIJ External Entity, and ICIJ External Address, and a final matching task. Compliance Studio uses the configured dependencies to determine when each task can run. The matching tasks can be removed or excluded when only graph refresh is required.

Prerequisites

Before installing the batch, complete the applicable Graph Use Case setup in the OFS Compliance Studio Installation Guide.

- Compliance Studio and Graph Service are deployed and available.
- The Graph and ECM datasources are registered in the workspace. The Studio datasource is available for metadata synchronization.
- Wallet connections and database permissions are configured. See Setup the Password Stores for Database User Accounts and the Graph schema permissions sections in the Installation Guide.
- PGX and its keystore configuration are available. See Generate the graph-keystore.p12 File and Configure the PGX Service in the Installation Guide.

- When matching is required, Entity Resolution is available, OT matching is configured, and the graph pipeline identifier is available.
- The installation account can run the utilities on the server. The Compliance Studio account can access the workspace and the scheduling functions.

Installation Procedure

Run the following steps in order. If the graph assets, schemas, or ECM schedule have already been initialized for this environment, verify that setup before repeating the corresponding steps.

Replace /OFS_COMPLIANCE_STUDIO with the actual installation directory and replace all values in angle brackets with the environment values. Datasource names are case-sensitive and must match the names registered in the workspace. Wallet aliases and database schema names are supplied separately where indicated.

Initial setup with matching: Synchronize metadata with -p false, execute the batch and matching tasks successfully, and then initialize the Property Graph. For refresh-only execution against an existing graph, retain the existing graph setup. A new graph used without matching requires the applicable Graph Use Case setup for the installed release.

1. Import Graph Assets

Open a shell on the Compliance Studio server and run:

```
cd /OFS_COMPLIANCE_STUDIO/deployed/ficdb/graph-metadata/bin
./importGraph.sh
```

2. Initialize the ECM Schema

```
cd /OFS_COMPLIANCE_STUDIO/deployed/ficdb/graph-metadata/bin
./InitializeECMSchema.sh -w <ECM_SCHEMA_WALLET_ALIAS>
```

3. Initialize the Graph Schema

```
cd /OFS_COMPLIANCE_STUDIO/deployed/ficdb/graph-metadata/bin
./InitializeGraphSchema.sh \
-gw <GRAPH_WALLET_ALIAS> \
-es <ECM_SCHEMA> \
-bs <BD_SCHEMA>
```

4. Initialize the ECM Graph Batch Schedule

Complete the ECM schedule initialization if it has not already been performed as part of Graph Use Case setup. Supply numeric start and end day offsets for the required data period. The Financial Crime Graph Refresh batch is installed separately in the next step.

```
cd /OFS_COMPLIANCE_STUDIO/deployed/ficdb/graph-metadata/bin
./Initialize00BGraphBatchScheduleECM.sh \
-ew <ECM_DATASOURCE> \
-sdg <START_DAY_OFFSET> \
-edg <END_DAY_OFFSET> \
-gd <GRAPH_DATASOURCE> \
-u <COMPLIANCE_STUDIO_USERNAME>
```

5. Install the OOB Graph Batch

Use the deployed OOB Graph Batch directory and the script name shown below. The filename is case-sensitive.

```
cd /OFS_COMPLIANCE_STUDIO/deployed/ficdb/oob-graph-batch/bin
./InitializeOOBGraphBatch.sh -d <GRAPH_DATASOURCE>
```

For a Graph datasource named GS, the command is:

```
./InitializeOOBGraphBatch.sh -d GS
```

Confirm that the utility reports **OOB Graph Batch metadata was updated successfully**.

6. Confirm Database Permissions

Verify that the Graph schema has the permissions required by the installed release. See Assign Pre-installation Grants for Graph Schema and Assign Postinstallation Grants for Graph Schema in the OFS Compliance Studio Installation Guide. Complete this prerequisite before runtime setup.

7. Run Graph Service Runtime Setup

```
cd /OFS_COMPLIANCE_STUDIO/deployed/mmg-home/mmg-load-to-graph/graph-service/
utility/bin
./ExecuteGraphRunTimeLiquibase.sh -d <GRAPH_DATASOURCE>
```

8. Prepare OT Matching

Run the OT matching setup utility using the Graph datasource and the graph pipeline identifier configured for the deployment. Confirm that all selected preparation actions complete successfully.

```
cd /OFS_COMPLIANCE_STUDIO/deployed/mmg-home/mmg-load-to-graph/graph-service/
utility/bin
./PrepareGraphOTMatching.sh --all \
--graph-datasource <GRAPH_DATASOURCE> \
--pipeline-id <PIPELINE_ID>
```

This utility is part of OT matching setup. When matching is included in a batch run, the batch runs its scheduled matching-preparation tasks during execution.

9. Initialize Graph User Security

```
cd /OFS_COMPLIANCE_STUDIO/deployed/mmg-home/mmg-load-to-graph/graph-service/
utility/bin
./InitializeAtomicSchemaForUserSecurity.sh
```

10. Synchronize OOB Graph Metadata

Run this step after Graph user security initialization. Use -p false during initial setup. For a run with matching enabled, complete Property Graph initialization after the first successful batch and matching run.

```
cd /OFS_COMPLIANCE_STUDIO/deployed/mmg-home/mmg-load-to-graph/graph-service/
utility/bin
./SyncOOBMetadataAndPgGraph.sh \
-c <STUDIO_DATASOURCE> \
-g <GRAPH_DATASOURCE> \
-s <ECM_DATASOURCE> \
-p false
```

Consider an environment with the following datasource names:

Table 3-3 a

Datasource	Example name	Command option
Compliance Studio datasource	CS	-c
Graph datasource	GS	-g
ECM datasource	ECM	-s

Using these datasource names, run the following command. Replace the example names with those configured in your environment:

```
./SyncOOBMetadataAndPgGraph.sh -c CS -g GS -s ECM -p false
```

11. Initialize the Property Graph

For initial setup with matching, execute Financial Crime Graph Refresh as described in the User Guide and confirm that the batch and matching tasks have completed successfully. Then initialize the Property Graph using the command below. Alternatively, run the synchronization command in step 10 with -p true.

```
cd /OFS_COMPLIANCE_STUDIO/deployed/mmg-home/mmg-load-to-graph/graph-service/
utility/bin
./SyncOOBMetadataAndPgGraph.sh -g <GRAPH_DATASOURCE> -o true
```

For a Graph datasource named GS, run:

```
./SyncOOBMetadataAndPgGraph.sh -g GS -o true
```

Confirm that initialization completes successfully. Graph-only mode requires the earlier setup and metadata synchronization to be complete. An existing Property Graph is retained during standard initialization.

12. Configure Subgraph Loading if Required

Complete this step when the deployment includes Investigation Hub subgraph loading.

1. Install Investigation Hub using the installation instructions for the deployed release.

2. Run Policy Manager synchronization with the datasource and objective values configured for the environment.

```
cd /OFS_COMPLIANCE_STUDIO/deployed/mmg-home/mmg-load-to-graph/graph-service/  
utility/bin  
./policy_manager.sh sync \  
-s <SRC_DATASOURCE> \  
-t <TGT_DATASOURCE> \  
-o <OBJECTIVE_ID>
```

Installation Completion Checklist

- All required installation utilities have completed successfully.
- The Graph and ECM datasources are available in the intended Compliance Studio workspace. OT matching is configured if it will be used.
- PGX starts successfully with the configured keystore and Studio keys.
- Financial Crime Graph Refresh is available under Orchestration > Schedule Batch.
- The first batch run and all included tasks have completed successfully. This includes the matching tasks when matching is enabled.
- The Property Graph is initialized or the existing graph is available for use.
- Investigation Hub and Policy Manager synchronization are complete if subgraph loading is required.

3.4 ML4AML Use Case

This section describes the post-installation steps for ML4AML use case.

Note

For new user - Refer **Compliance Studio Use Case Guide**

For an existing user follow below steps:

1. Perform following post installation steps for ML4AML use cases
 - a. Execute `importWorkspaceSQL.sh`
 - b. Execute `importNotebooksSM.sh`
 - c. Execute `importNotebooksASC.sh`
 - d. Execute `importNotebooksAIF.sh`
 - e. Execute `importNotebooksSES.sh`
 - f. Execute `importNotebooksAMLES.sh`
2. Usage of Scenario conversion utility (SCU)
 - a. This Patch provides updated materialized views. To bring SCU SQL Scripts into SCU/ASC DB Schema and notebooks into Compliance Studio UI:
 - i. `importWorkspaceSQLSCU.sh`
 - ii. `importNotebooksSCU.sh`

Refer section: Import Workspace Metadata for SCU (for more details refer OFS Compliance Studio Administration and Configuration Guide)

3. Usage of Automated scenario calibration (ASC)

Note

Above step 2 is pre-requisite for ASC

- a. Create new ASC Definitions.
Refer following section in Compliance Studio Use Case Guide

- i. Admin Activity Notebook

4. Usage of AML Event Scoring(AMLES)

- a. Perform following post installation steps for AMLES use cases
 - i. `importAMLESDMSQL.sh`

4

Frequently Asked Questions (FAQs) and Error Dictionary

This section consists of resolutions to the frequently asked questions and error codes noticed during the Compliance Studio installation.

The Compliance Studio installer performs all the pre-requisite validation checks during installation. Any error encountered in the process is displayed with an appropriate Error Code. You can refer to the Error Dictionary to find the exact cause and resolution to rectify the error.

- [Frequently Asked Questions in Compliance Studio](#)
This section describes the Frequently Asked Questions (FAQs) in Compliance Studio.

4.1 Frequently Asked Questions in Compliance Studio

This section describes the Frequently Asked Questions (FAQs) in Compliance Studio.

You can refer to the Frequently Asked Questions, which are developed with interest to help you resolve some of the Compliance Studio Installation and Configuration issues. This intends to share problem resolution knowledge to a few of the known issues. This is not an official support document and just attempts to share problem resolution knowledge to a few known issues.

1. Why does my console show an unsuccessful message during wallet creation?

You can check if you have run the following commands correctly.

For more information on wallet creation, see [Setup Password Stores with Oracle Wallet](#).

- a. `mkstore -wrl <wallet_location> -create` //creates a wallet in the specified location.
- b. `mkstore -wrl <wallet_location> -createCredential <alias-name> <database-user-name>` //creates an alias in the studio schema.
- c. `mkstore -wrl <wallet_location> -createCredential <alias-name> <database-user-name>` //creates an alias in the atomic schema.
- d. `mkstore -wrl <wallet_location> -createCredential <alias-name> <database-user-name>` //creates an alias in the config schema.

If your issue is still not resolved, contact [My Oracle Support \(MOS\)](#).

2. Where can I find my created wallet?

Your wallet will be in the directory you have set as your wallet location.

If your issue is still not resolved, contact [My Oracle Support \(MOS\)](#).

3. When should I create a Database link, and if yes, how do I do it?

Create a Database link to connect the Atomic and Config database schemas to the Studio database schema if the databases are different. You must create the link in the Studio database.

In the following example, a link has been created from the config schema to the atomic schema by running the following script:

```
create public database link <studio database link>
connect to <Config Schema>
identified by password
using ' (DESCRIPTION = ADDRESS_LIST = (ADDRESS = (PROTOCOL = TCP) (HOST
=<host name> (PORT = <port number>)) (CONNECT_DATA = (SERVICE_NAME =
<service name>))) ' ;
Config schema : <Config Schema>/password
' (DESCRIPTION = ADDRESS_LIST = (ADDRESS = (PROTOCOL = TCP) (HOST =<host
name> (PORT = <port number>)) (CONNECT_DATA = (SERVICE_NAME = <service
name>))) ' ;
```

After running the script, run the FCDM connector and ICIJ connector jobs.

4. Why does my installed studio setup not have any notebooks?

Some default notebooks are ready to use when you install Compliance Studio. If you do not see any notebooks when you log in to the application, you may not be assigned any roles.

Check the <COMPLIANCE_STUDIO_INSTALLATION_PATH>/deployed/logs directory to see if you have been assigned any roles, and if not, contact your administrator.

If your issue is still not resolved, contact [My Oracle Support \(MOS\)](#).

5. What can I do if the schema creation fails?

If the Atomic schema creation fails, login to the BD and ECM Atomic schemas and run the following query:

```
select * from fcc_orahive_datatypemapping;
```

The fcc_orahive_datatypemapping table must not have duplicate data types.

If the Compliance Studio schema creation fails, login as a Studio user and run the following query:

```
select * from fcc_datastudio_schemaobjects
```

Run the following query to replace all Y values with "":

```
update fcc_datastudio_schemaobjects set SCHEMA_OBJ_GENERATED=''
```

After the schema creation is successful, the value of the SCHEMA_OBJ_GENERATED attribute changes to Y.

You can also check for errors in the application log file in the <COMPLIANCE_STUDIO_INSTALLATION_PATH>/deployed/logs directory.

If your issue is still not resolved, contact [My Oracle Support \(MOS\)](#).

6. What can I do if the Import_training_model batch execution fails?

Batch execution status always displays success in case of success or failure.

You can also check for errors in the application log file in the <COMPLIANCE_STUDIO_INSTALLATION_PATH>/deployed/logs directory.

According to the log details, you can fix the failure and rerun the same batch.

7. Why is the PGX Server not starting?

The PGX server starts only after the FCDM tables are created after the FCDM connector job is run. Check if all FCDM tables are created, and start the PGX server.

You can also check for any errors in the application log file in the
<COMPLIANCE_STUDIO_INSTALLATION_PATH>/deployed/logs directory.

If your issue is still not resolved, contact [My Oracle Support \(MOS\)](#).

8. What should I do if there is a below Error while selecting edges in manual DecisionUI?

```
java.lang.IllegalStateException: Unable to create
PgxFutureWrapperjava.lang.IllegalStateException: Unable to create
PgxFutureWrapper at
oracle.datastudio.interpreter.pgxFuture.CombinedPgxFutureDriver.getOrCreateSession(C
ombinedPgxFutureDriver.java:147) at
oracle.pgxFuture.graphviz.driver.PgxFutureDriver.getGraph(PgxFutureDriver.java:334) at
oracle.pgxFuture.graphviz.library.QueryEnhancer.createEnhancer(QueryEnhancer.j
ava:223) at
oracle.pgxFuture.graphviz.library.QueryEnhancer.createEnhancer(QueryEnhancer.j
ava:209) at
oracle.pgxFuture.graphviz.library.QueryEnhancer.query(QueryEnhancer.java:150)
at
oracle.pgxFuture.graphviz.library.QueryEnhancer.execute(QueryEnhancer.java:136
) at
oracle.pgxFuture.graphviz.interpreter.PgxFutureInterpreter.interpret(PgxFutureInterprete
r.java:131) at
oracle.datastudio.interpreter.pgxFuture.PgxFutureInterpreter.interpret(PgxFutureInterprete
r.java:120) at
org.apache.zookeeper.interpreter.LazyOpenInterpreter.interpret(LazyOpenIn
terpreter.java:103) at
org.apache.zookeeper.interpreter.remote.RemoteInterpreterServer$Interpret
Job.jobRun(RemoteInterpreterServer.java:632) at
org.apache.zookeeper.scheduler.Job.run(Job.java:188) at
org.apache.zookeeper.scheduler.FIFOExecutor$1.run(FIFOExecutor.java:140
) at java.base/
java.util.concurrent.Executors$RunnableAdapter.call(Executors.java:515) at
java.base/java.util.concurrent.FutureTask.run(FutureTask.java:264) at
java.base/
java.util.concurrent.ScheduledThreadPoolExecutor$ScheduledFutureTask.run
(ScheduledThreadPoolExecutor.java:304) at java.base/
java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.jav
a:1128) at java.base/
java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.ja
va:628) at java.base/java.lang.Thread.run(Thread.java:834)Caused by:
java.util.concurrent.ExecutionException:
oracle.pgxFuture.common.auth.AuthorizationException: PgxFutureUser(FCCMDSADMIN) does
not own session 6007f00a-8305-4576-9a56-9fa0f061586f or the session does
not exist code: PGX-ERROR-CQAZPV67UM4H at java.base/
java.util.concurrent.CompletableFuture.reportGet(CompletableFuture.java:
395) at java.base/
java.util.concurrent.CompletableFuture.get(CompletableFuture.java:1999) at
oracle.pgxFuture.api.PgxFuture.get(PgxFuture.java:99) at
oracle.pgxFuture.api.ServerInstance.getSession(ServerInstance.java:670) at
oracle.datastudio.interpreter.pgxFuture.CombinedPgxFutureDriver.getOrCreateSession(C
ombinedPgxFutureDriver.java:145) ... 17 moreCaused by:
oracle.pgxFuture.common.auth.AuthorizationException: PgxFutureUser(FCCMDSADMIN) does
not own session 6007f00a-8305-4576-9a56-9fa0f061586f or the session does
not exist code: PGX-ERROR-CQAZPV67UM4H at
oracle.pgxFuture.common.marshalers.ExceptionMarshaler.toUnserializedException( Ex
ceptionMarshaler.java:107) at
```

```

oracle.pgx.common.marshalers.ExceptionMarshaler.unmarshal(ExceptionMarsh
aler.java:123) at
oracle.pgx.client.RemoteUtils.parseExceptionalResponse(RemoteUtils.java:
130) at
oracle.pgx.client.HttpRequestExecutor.executeRequest(HttpRequestExecutor
.java:198) at
oracle.pgx.client.HttpRequestExecutor.get(HttpRequestExecutor.java:165)
at
oracle.pgx.client.RemoteControlImpl$10.request(RemoteControlImpl.java:313)
at
oracle.pgx.client.RemoteControlImpl$ControlRequest.request(RemoteControl
Impl.java:119) at
oracle.pgx.client.RemoteControlImpl$ControlRequest.request(RemoteControl
Impl.java:110) at
oracle.pgx.client.AbstractAsyncRequest.execute(AbstractAsyncRequest.java
:47) at
oracle.pgx.client.RemoteControlImpl.request(RemoteControlImpl.java:107)
at
oracle.pgx.client.RemoteControlImpl.getSessionInfo(RemoteControlImpl.jav
a:296) at
oracle.pgx.api.ServerInstance.lambda$getSessionInfoAsync$14(ServerInstan
ce.java:490) at java.base/
java.util.concurrent.CompletableFuture.uniComposeStage(CompletableFuture
.java:1106) at java.base/
java.util.concurrent.CompletableFuture.thenCompose(CompletableFuture.jav
a:2235) at oracle.pgx.api.PgxFuture.thenCompose(PgxFuture.java:158)

```

You can perform the following steps as a workaround:

Export the "Manual Decision" Notebook.

Add the link parameter just below Description.

For example: "link": "manual Decision",

Figure 4-1 Link Parameter

```

[ {
  "name" : "manual Decision",
  "description" : null,
  "link": "manualDecision",
  "tags" : null,
  "version" : "5",
  "layout" : "zeppelin",
  "type" : "Default",
  "readOnly" : false,

```

Truncate the table "fcc_er_paragraph_manual" in Studio Schema.

Import the modified notebook again.

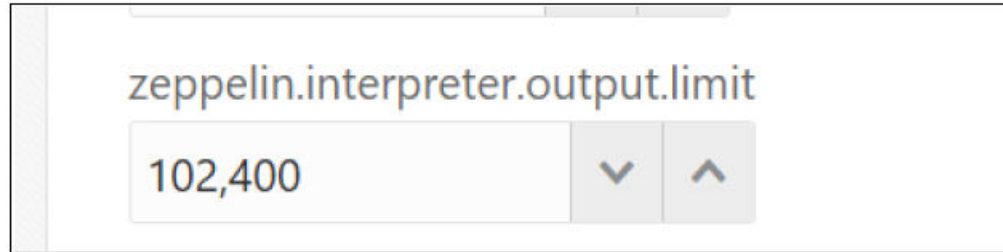
9. What should I do when the result set is truncated if the size goes above '102400' bytes?

Perform the following steps:

Login to Compliance Studio.

Navigate to interpreter `zeppelin.interpreter.output.limit`.

Figure 4-2 Interpreter zeppelin parameter



Set the value to the required size.

Restart the Studio Application.

10. What should I do when the spark interpreter is not working?

- a. Log in to the server where Compliance Studio is installed.
- b. Navigate to `$SPARK_HOME` directory. If the path is not set, then navigate to the `<COMPLIANCE_STUDIO_INSTALLATION_PATH>/deployed/mmg-home/mmg-studio/interpreter-server/spark-interpreter-<version>/extralibs` directory.
- c. Export the following environment variables:

```
export HADOOP_CONF_DIR=<HADOOP Configuration Directory path>
export SPARK_HOME=<SPARK CLIENT DIRECTORY path>
export SPARK_CONF_DIR=<spark-defaults.conf directory path>
export SPARK_SUBMIT_OPTS="-Djava.security.krb5.conf=<kerberos directory path>/krb5.conf"
```

- d. Run the following commands for specific cases:

The result of the following command should be Pie value. (It ensures that the client is configured successfully.

```
./bin/run-example --master yarn SparkPi 10
```

The result of the following command is displayed as a Pie value. (It ensures that the client can successfully connect to the remote cluster.

```
./bin/spark-submit --class org.apache.spark.examples.SparkPi -- master
yarn <SPARK_HOME/examples/jars/>/spark-examples_<Version>.jar 10
```

For example, in case of spark 2.11-2.4.0, the command is as follows:

```
./bin/spark-submit --class org.apache.spark.examples.SparkPi -- master
yarn <SPARK_HOME/examples/jars/>/spark-examples_2.11- 2.4.0.jar 10
```

The result of the following command displays the list of databases that exist in HIVE.

```
./bin/spark-submit --class org.apache.spark.sql.hive.thriftserver.
SparkSQLCLIDriver --master yarn -e "Show databases"
```

The result of the following command ensures that the client can query from the HIVE schema.

```
./bin/spark-submit --class org.apache.spark.sql.hive.thriftserver.
SparkSQLCLIDriver --master yarn -e "select * from <hiveSchema>.<tableName>
limit 10"
```

11. How can I increase the memory of entity resolution and matching services?

For more information on increasing memory of entity resolution and matching services, see **Appendix - Setting Memory of Entity Resolution and Matching Services** in the [OFS Compliance Studio Administration and Configuration Guide](#).

12. What should I do when a runtime error occurs while executing a paragraph in Compliance Studio?

When Compliance Studio is just started (restart/upgrade/fresh installation), every interpreter gives a runtime error for the first time. Re-run the paragraph to get a result.

In addition, a user with admin privileges has to run a dummy notebook with a simple paragraph of all the used interpreters once.

13. What should I do if I encounter an error on the login?

If you log in to Compliance Studio for the first time, log out and log back in to resolve the error.

14. How can I retain the logs after restarting the Compliance Studio?

- a. Log in to the Compliance Studio.
- b. Navigate to the <COMPLIANCE_STUDIO_INSTALLATION_PATH>/bin directory.
- c. Open the compliance-studio.sh file and modify the following for service(s) as per your requirement:

Search with "**\$LOGS_FOLDER**" text for each service and add > (Greater than) special character and space before the text as specified below:

```
"$DEPLOY_APP_HOME"/<service name>/bin/<service name> >> "$LOGS_FOLDER"/
<service name>.log
```

For example: batchservice, entity-resolution

```
function start_services() { service=$1 case $service in batchservice)
export JAVA_OPTS="-Djavax.net.ssl.trustStore=$DEPLOY_APP_HOME/ mmg-home/
mmg-studio/conf/<studio server> -
Djavax.net.ssl.trustStorePassword=$STUDIO_SERVER_SSL_PASSWORD" sh
"$DEPLOY_APP_HOME"/batchservice/bin/batchservice >> "$LOGS_FOLDER"/
batchservice.log 2>&1 & unset JAVA_OPTS ;; entity-resolution) export
JAVA_OPTS=<JAVA Options> export
ER_LOG_PATH="$COMPLIANCE_STUDIO_INSTALLATION_PATH/ deployed" export
ER_LOG_LEVEL=INFO export
LD_LIBRARY_PATH="$COMPLIANCE_STUDIO_INSTALLATION_PATH/ deployed/python-
packages/saneVirtualEnv/lib/python<version>/sitepackages/
jep:$COMPLIANCE_STUDIO_INSTALLATION_PATH/deployed/pythonpackages/
saneVirtualEnv/lib/":$LD_LIBRARY_PATH export PATH_ORG=$PATH export
PATH=$DEPLOY_APP_HOME/python-packages/saneVirtualEnv/ bin:$PATH export
TNS_ADMIN=$TNS_ADMIN_PATH export PYTHONPATH_ORG=$PYTHONPATH
export PYTHONPATH="$DEPLOY_APP_HOME"/python-packages/
saneVirtualEnv/lib/python<version>/site-packages:$PYTHONPATH_ORG sh
"$DEPLOY_APP_HOME"/entity-resolution/bin/entity-resolution >>
"$LOGS_FOLDER"/entity-resolution.log & unset JAVA_OPTS export
PATH=$PATH_ORG ;;
```

- d. For load to OpenSearch, you need to add one more > (Greater than) special character as specified below:


```
sh "$DEPLOY_APP_HOME"/load-to-open-search/bin/load-to-open-search
>>"$DEPLOY_APP_HOME"/logs/load-to-open-search.log &
```
 - e. Restart Compliance Studio. To do this, run the following command:


```
./compliance-studio.sh -restart
```

 Or


```
./compliance-studio.sh -r script
```
15. What should I do if the following error message is displayed while starting Compliance Studio services? Java Memory error: unable to create new native thread
- a. Login to the Linux server as a root user where Compliance Studio is installed.
 - b. Open the /etc/security/limits.conf file.
 - c. Add the following parameters in the file:


```
soft nofile 65536
hard nofile 65536
<linux username> soft nproc 10240
@svrtech soft memlock 500000
@svrtech hard memlock 500000
```
 - d. Save the file.
 - e. Restart the Compliance Studio.
16. What must I do when only a few of the services start and the Compliance Studio start up displays the error message *Compliance Studio may have partially initiated or has encountered a startup failure*?
- There may be a case where a few of the Compliance Studio services may not start up and the following error message will appear on the console or terminal:
Compliance Studio may have partially initiated or has encountered a startup failure
- During the Compliance Studio startup, each service encounters a health check API to find the service health.
- If this error is encountered, then there may be PROXY settings that might be blocking this API from returning the expected status code. If any proxy settings are enabled, disable them and restart Compliance Studio to rule out any issues due to this.
17. What should I do when unable to refresh Graph and fail due to the following error?
- ```
Failed to load graph '<Graph name>' in PGX server: http:// <hostname>:7007
08:22:54.878 [se-nio-7059-exec-1] ERROR
s.fccm.graphService.service.GraphExecutorService - Failed to refresh PGX
Graph, <Graph name>, in all PGX servers
```
- a. Stop the PGX server.
  - b. Log in to Studio schema.
  - c. Delete the entries that are related to the graph in the tables - **fcc\_graph\_m\_config\_json** and **fcc\_pgx\_m\_config**.
  - d. Start the PGX server.

- e. Re-execute the Batch for the Graph pipeline or Refresh the Graph task. See the **Managing Graph Pipeline** section in the [OFS Compliance Studio User Guide](#).

**18.** What should I do if there is a below error in the umm-service logs?

```
[29-06-22 07:30:48,095 GMT AM] [INFO] [WEB] [UMM] [NA]
[GETUSERSESSION] Exception occurred while getting x-auth-token in
initSession method of GetUserSession classjavax.net.ssl.SSLKeyException:
Hostname verification failed:
HostnameVerifier=weblogic.security.utils.SSLWLSHostnameVerifier,
hostname=129.80.90.202.
```

Perform the steps described [here](#).

**19.** What should I do when upgrading the version JDK 11.0.13 to 11.0.15 using shellscript?

To upgrade bundled JDK:

- a. Use the wget command to download jdk 11.0.15 from [here](#).
  - b. Change the directory where mmg-studio is installed and navigate to <COMPLIANCE\_STUDIO\_INSTALLATION\_PATH>/deployed/mmg-home/mmg-studio/interpreter-server/pgx-interpreter-bundledJRE-<version>.
  - c. Run the ./update-jdk.sh [-j JDK11\_HOME ] [-o OUTPUT\_DIR] script.  
<JDK11\_HOME> specifies the downloaded JDK11 path, and <OUTPUT\_DIR> specifies where the updated interpreter is saved.
  - d. Replace the <COMPLIANCE\_STUDIO\_INSTALLATION\_PATH>/deployed/mmg-home/mmg-studio/interpreter-server/pgx-interpreter-bundledJRE-<version> directory with <OUTPUT\_DIR>/pgxjava.
- 20.** What should I do when unable to update the SSO token to the latest value while reinstalling the Compliance Studio?
- a. Log in to Studio schema.
  - b. Edit the table NEXTGENEMF\_CONFIG and change the SSO token to the proper value.
  - c. Commit the changes.
  - d. Restart the Compliance Studio.
- 21.** What should I do If it is a time-out issue observed in the Graph Pipeline?
- a. Navigate to the <COMPLIANCE\_STUDIO\_INSTALLATION\_PATH>/deployed/mmg-home/mmgpipeline/pipeline/data-pipeline-service-<version>/conf/application.properties directory.
  - b. Change the value from 1200000 to 120000000 in the server.jetty.connectionidle-timeout=property file.
  - c. Navigate to the <COMPLIANCE\_STUDIO\_INSTALLATION\_PATH>/deployed/mmg-home/mmgpipeline/ pipeline/pipeline-service-<version>/conf/application.properties directory.
  - d. Change the value from 1200000 to 120000000 in the server.jetty.connectionidle-timeout= property file.

**22.** What should I do if there is a below error in the Graph Pipeline?

```
08/Aug/2022 10:21:26,761- [LoggerConnection] LoggerConnection: Trying to
fetch connection for log.
```

```
08/Aug/2022 10:21:26,761- [LoggerConnection] LoggerConnection: isJNDI
value retrieved is true
08/Aug/2022 10:21:26,769- [LoggerConnection] LoggerConnection: Trying
to fetch connection for log.
08/Aug/2022 10:21:26,769- [LoggerConnection] LoggerConnection: isJNDI
value retrieved is true
08/Aug/2022 10:21:26,760- [DatabaseLogger] ExecutionLogger: Exception
while executing queries
java.lang.Exception:
at
com.oracle.fccm.amlxe.dataPipelineService.sequencer.impl.SequencerDAOImp
l.getQueries(SequencerDAOImpl.java:152) ~[classes!/:?]
at
com.oracle.fccm.amlxe.dataPipelineService.sequencer.impl.SequencerDAOImp
l$$$FastClassBySpringCGLIB$$7e36e608.invoke(<generated>) ~[classes!/:?]
at
org.springframework.cglib.proxy.MethodProxy.invoke(MethodProxy.java:218)
~[spring-core-5.2.5.RELEASE.jar!/:5.2.5.RELEASE]
at
org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.in
vokeJoinpoint(CglibAopProxy.java:771) ~[spring-aop-5.2.5.RELEASE.jar!/:
5.2.5.RELEASE]
at
org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(Ref
lectiveMethodInvocation.java:163) ~[spring-aop-5.2.5.RELEASE.jar!/:
5.2.5.RELEASE]
at
org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.pr
oceed(CglibAopProxy.java:749) ~[spring-aop-5.2.5.RELEASE.jar!/:
5.2.5.RELEASE]
at
org.springframework.dao.support.PersistenceExceptionTranslationIntercept
or.invoke(PersistenceExceptionTranslationInterceptor.java:139) ~[springtx-
5.2.5.RELEASE.jar!/:5.2.5.RELEASE]
at
org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(Ref
lectiveMethodInvocation.java:186) ~[spring-aop-5.2.5.RELEASE.jar!/:
5.2.5.RELEASE]
at
org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.pr
oceed(CglibAopProxy.java:749) ~[spring-aop-5.2.5.RELEASE.jar!/:
5.2.5.RELEASE]
at
org.springframework.aop.framework.CglibAopProxy$DynamicAdvisedIntercepto
r.intercept(CglibAopProxy.java:691) ~[spring-aop-5.2.5.RELEASE.jar!/:
5.2.5.RELEASE]
at
com.oracle.fccm.amlxe.dataPipelineService.sequencer.impl.SequencerDAOImp
l$$$EnhancerBySpringCGLIB$$c38b7c42.getQueries(<generated>) ~[classes!/:
:]
at
com.oracle.fccm.amlxe.dataPipelineService.impl.ExecutorDAOImpl.executePi
pline(ExecutorDAOImpl.java:247) ~[classes!/:?]
at
com.oracle.fccm.amlxe.dataPipelineService.impl.ExecutorDAOImpl$$$FastClas
sBySpringCGLIB$$14f27fdb.invoke(<generated>) ~[classes!/:?]
```

```
at
org.springframework.cglib.proxy.MethodProxy.invoke(MethodProxy.java:218)
~[spring-core-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.in
vokeJoinpoint(CglibAopProxy.java:771) ~[spring-aop-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(Ref
lectiveMethodInvocation.java:163) ~[spring-aop-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.pr
oceed(CglibAopProxy.java:749) ~[spring-aop-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
org.springframework.dao.support.PersistenceExceptionTranslationIntercept
or.invoke(PersistenceExceptionTranslationInterceptor.java:139) ~[springtx-
5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(Ref
lectiveMethodInvocation.java:186) ~[spring-aop-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.pr
oceed(CglibAopProxy.java:749) ~[spring-aop-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
org.springframework.aop.framework.CglibAopProxy$DynamicAdvisedIntercepto
r.intercept(CglibAopProxy.java:691) ~[spring-aop-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
com.oracle.fccm.amlxe.dataPipelineService.impl.ExecutorDAOImpl$$Enhancer
BySpringCGLIB$$3277859b.executePipeline(<generated>) ~[classes!/:?]
at
com.oracle.fccm.amlxe.dataPipelineService.services.ExecutorService execu
tePipeline(ExecutorService.java:154) ~[classes!/:?]
at sun.reflect.GeneratedMethodAccessor112.invoke(Unknown Source) ~[?:?]
at
sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessor
Impl.java:43) ~[?:1.8.0_321]
at java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_321]
at
org.springframework.web.method.support.InvocableHandlerMethod.doInvoke(I
nvocableHandlerMethod.java:190) ~[spring-web-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
org.springframework.web.method.support.InvocableHandlerMethod.invokeForR
equest(InvocableHandlerMethod.java:138) ~[spring-web-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
org.springframework.web.servlet.mvc.method.annotation.ServletInvocableHa
ndlerMethod.invokeAndHandle(ServletInvocableHandlerMethod.java:105)
~[spring-webmvc-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.web.servlet.mvc.method.annotation.RequestMappingHand
```

```
lerAdapter.invokeHandlerMethod(RequestMappingHandlerAdapter.java:879)
~[spring-webmvc-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.web.servlet.mvc.method.annotation.RequestMappingHand
lerAdapter.handleInternal(RequestMappingHandlerAdapter.java:793)
~[spring-webmvc-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.web.servlet.mvc.method.AbstractHandlerMethodAdapter.
handle(AbstractHandlerMethodAdapter.java:87) ~[spring-webmvc-
5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.web.servlet.DispatcherServlet.doDispatch(DispatcherS
ervlet.java:1040) ~[spring-webmvc-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.web.servlet.DispatcherServlet.doService(DispatcherSe
rvlet.java:943) ~[spring-webmvc-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.web.servlet.FrameworkServlet.processRequest(Framewor
kServlet.java:1006) ~[spring-webmvc-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.web.servlet.FrameworkServlet.doPost(FrameworkServlet
.java:909) ~[spring-webmvc-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at javax.servlet.http.HttpServlet.service(HttpServlet.java:652)
~[tomcat-embed-core-9.0.37.jar!/4.0.FR]
at
org.springframework.web.servlet.FrameworkServlet.service(FrameworkServle
t.java:883) ~[spring-webmvc-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at javax.servlet.http.HttpServlet.service(HttpServlet.java:733)
~[tomcat-embed-core-9.0.37.jar!/4.0.FR]
at
org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:755)
~[jetty-servlet-9.4.26.v20200117.jar!/9.4.26.v20200117]
at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHan
dler.java:1617) ~[jetty-servlet-9.4.26.v20200117.jar!/9.4.26.v20200117]
at
org.springframework.web.filter.RequestContextFilter.doFilterInternal(Req
uestContextFilter.java:100) ~[spring-web-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequ
estFilter.java:119) ~[spring-web-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHan
dler.java:1604) ~[jetty-servlet-9.4.26.v20200117.jar!/9.4.26.v20200117]
at
org.springframework.web.filter.FormContentFilter.doFilterInternal(FormCo
ntentFilter.java:93) ~[spring-web-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequ
estFilter.java:119) ~[spring-web-5.2.5.RELEASE.jar!/5.2.5.RELEASE]
at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHan
dler.java:1604) ~[jetty-servlet-9.4.26.v20200117.jar!/9.4.26.v20200117]
at
org.springframework.boot.actuate.metrics.web.servlet.WebMvcMetricsFilter
```

```
.doFilterInternal(WebMvcMetricsFilter.java:109) ~[spring-boot-actuator-
2.2.6.RELEASE.jar!/:2.2.6.RELEASE]
at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequ
estFilter.java:119) ~[spring-web-5.2.5.RELEASE.jar!/:5.2.5.RELEASE]
at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHan
dler.java:1604) ~[jetty-servlet-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.springframework.web.filter.CharacterEncodingFilter.doFilterInternal(
CharacterEncodingFilter.java:201) ~[spring-web-5.2.5.RELEASE.jar!/
:5.2.5.RELEASE]
at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequ
estFilter.java:119) ~[spring-web-5.2.5.RELEASE.jar!/:5.2.5.RELEASE]
at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHan
dler.java:1604) ~[jetty-servlet-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:54
5) ~[jetty-servlet-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java
:143) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.security.SecurityHandler.handle(SecurityHandler.java:5
90) ~[jetty-security-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.ja
va:127) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.ScopedHandler.nextHandle(ScopedHandler.
java:235) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.
java:1607) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.ScopedHandler.nextHandle(ScopedHandler.
java:233) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.
java:1297) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.ScopedHandler.nextScope(ScopedHandler.j
ava:188) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:485
) ~[jetty-servlet-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.j
ava:1577) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.ScopedHandler.nextScope(ScopedHandler.j
ava:186) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.j
```

```
ava:1212) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java
:141) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.ja
va:127) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at org.eclipse.jetty.server.Server.handle(Server.java:500) ~[jettyserver-
9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.HttpChannel.lambda$handle$1(HttpChannel.java:38
3) ~[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at org.eclipse.jetty.server.HttpChannel.dispatch(HttpChannel.java:547)
[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:375)
[jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:2
70) [jetty-server-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractC
onnection.java:311) [jetty-io-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:103)
[jetty-io-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.io.ssl.SslConnection$DecryptedEndPoint.onFillable(SslC
onnection.java:543) [jetty-io-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.io.ssl.SslConnection.onFillable(SslConnection.java:398
) [jetty-io-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.io.ssl.SslConnection$2.succeeded(SslConnection.java:16
1) [jetty-io-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:103)
[jetty-io-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at org.eclipse.jetty.io.ChannelEndPoint$2.run(ChannelEndPoint.java:117)
[jetty-io-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.util.thread.strategy.EatWhatYouKill.runTask(EatWhatYou
Kill.java:336) [jetty-util-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.util.thread.strategy.EatWhatYouKill.doProduce(EatWhatY
ouKill.java:313) [jetty-util-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.util.thread.strategy.EatWhatYouKill.tryProduce(EatWhat
YouKill.java:171) [jetty-util-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.util.thread.strategy.EatWhatYouKill.run(EatWhatYouKill
.java:129) [jetty-util-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at
org.eclipse.jetty.util.thread.ReservedThreadExecutor$ReservedThread.run(
ReservedThreadExecutor.java:388) [jetty-util-9.4.26.v20200117.jar!/:
9.4.26.v20200117]
at
org.eclipse.jetty.util.thread.QueuedThreadPool.runJob(QueuedThreadPool.j
ava:806) [jetty-util-9.4.26.v20200117.jar!/:9.4.26.v20200117]
```

```

at
org.eclipse.jetty.util.thread.QueuedThreadPool$Runner.run(QueuedThreadPo
ol.java:938) [jetty-util-9.4.26.v20200117.jar!/:9.4.26.v20200117]
at java.lang.Thread.run(Thread.java:750) [?:1.8.0_321]
08/Aug/2022 10:21:26,786- [LoggerConnection] LoggerConnection: Trying
to fetch connection for log.
08/Aug/2022 10:21:26,786- [LoggerConnection] LoggerConnection: isJNDI
value retrieved is true

```

Re-execute the failed graph pipeline from the scheduler service.

To execute the Graph pipeline, see the **Using Scheduler Service** section in the [OFS Compliance Studio User Guide](#).

23. What should I do if there is a below error while executing the ER job 2 - ./ER\_Run\_Bulk\_Similarity\_Job.sh in matching-service.log?

```

ERROR ss.fccm.matchingservice.service.BulkQueryService - Exception
occurred in bulk processingERROR
ss.fccm.matchingservice.service.BulkQueryService - Exception occurred in
bulk processingjava.lang.IndexOutOfBoundsException: Index 1 out of
bounds for length 1 at
jdk.internal.util.Preconditions.outOfBounds(Preconditions.java:64)
~[?:?] at
jdk.internal.util.Preconditions.outOfBoundsCheckIndex(Preconditions.java
:70) ~[?:?] at
jdk.internal.util.Preconditions.checkIndex(Preconditions.java:248)
~[?:?] at java.util.Objects.checkIndex(Objects.java:372) ~[?:?] at
java.util.ArrayList.get(ArrayList.java:459) ~[?:?] at
com.oracle.ofss.fccm.matchingservice.service.BulkQueryService.preProcess
(BulkQueryService.java:159) [classes!/:?] at
com.oracle.ofss.fccm.matchingservice.controller.BulkUsingApiController2.
executeAsyncBulkQueryMatch(BulkUsingApiController2.java:76) [classes!/:
?] at jdk.internal.reflect.GeneratedMethodAccessor164.invoke(Unknown
Source) ~[?:?] at
jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMetho
dAccessorImpl.java:43) ~[?:?] at
java.lang.reflect.Method.invoke(Method.java:566) ~[?:?] at
org.springframework.web.method.support.InvocableHandlerMethod.doInvoke(I
nvocableHandlerMethod.java:205) [spring-w

```

This error is displayed only when the OpenSearch index does not have the proper data.

- a. Fix the data in the pre tables and cleanup the ER schema.
  - b. Re-run the job again. To run the job, see the **Perform Matching** section in the [OFS Compliance Studio Administration and Configuration Guide](#).
24. What should I do if interpreter settings are changed after restarting the Compliance Studio?

To retain the interpreter settings:

- a. Navigate to the <COMPLIANCE\_STUDIO\_INSTALLATION\_PATH>/deployed/mmg-home/mmgstudio/conf directory.
- b. Open the application.yml file and change the value of **overwrite-builtin** to **false** in the interpreter parameter.

**Note**

While upgrading Compliance Studio, you should change the value to **true**.

- c. Restart Compliance Studio.
25. What should I do if ER Bulk similarity job fails due to metadata indices?  
To load the indices:
  - a. Execute the following cleanup scripts:
    - ER\_Run\_Bulk\_Similarity\_Job.sh
    - ER\_Create\_And\_Load\_Data\_Into\_Index.sh
  - b. Delete the indices.
  - c. Verify that the indices are deleted completely.
  - d. Set the **F\_IS\_RECENTLY\_CHANGED** flag to **Y** in the **fcc\_idx\_m\_lookup**, and **fcc\_idx\_m\_matching\_lookup** tables.
  - e. Execute ER\_Create\_And\_Load\_Data\_Into\_Index.sh.
  - f. Ensure all the indices are created (Generally, it should create 19).
  - g. If all the indices are available, then execute ER\_Run\_Bulk\_Similarity\_Job.sh.
26. Unable to open UI (Ruleset details, Manual Decisioning and Merge and Split Global Entities) in the Firefox browser?  
**Possible reason:** Compliance Studio UI does not open in the Firefox browser if self-signed certificates are used while installation.
27. The UI (Ruleset details, Manual Decisioning and Merge and Split Global Entities) takes more time to load in other browsers?  
**Possible reason:** The Compliance Studio UI screens are not cached if self-signed certificates are used and it takes time to load screen every time.
28. What should I do if the workspaces are not displayed and below error is encountered in the server.log?

```
12:02:16.272 [se-nio-7008-exec-2] ERROR
er.network.base.exception.ExceptionHandlerAdvice - Internal server
error.
io.jsonwebtoken.security.SignatureException: JWT signature does not
match locally computed signature. JWT validity cannot be asserted and
should not be trusted.
```

To resolve the error:

- a. Generate the public and private keys. For more information, see the [Generate Public and Private Keys](#) section.
- b. Replace the keys in the paths as mentioned in the see the [Generate Public and Private Keys](#) section.
- c. Generate the SSO (API) token. For more information, see the [Generate API Token for CS API User](#) section.
- d. Replace token in the config.sh file. For more information, see the parameter "SSO\_TOKEN" in **Table 14** in [Configure config.sh File](#).

- e. Stop Compliance Studio.
  - f. Reinstall Compliance Studio.
  - g. Replace the value of SSO\_TOKEN in the nextgenemf\_config table in the studio schema.
  - h. Start Compliance Studio.
29. What should I do if a particular patch version is not applied to the CS build?

To apply the patch:

- You must manually delete the entry for that particular patch version from the **FCC\_COMPLIANCE\_STUDIO\_PATCHES** table in the Studio Schema.

30. How to configure a new/cloned interpreter?

To configure a new/cloned interpreter:

- a. Create a new/clone an existing interpreter in the UI.
- b. Navigate to the <COMPLIANCE\_STUDIO\_INSTALLATION\_PATH>/deployed/mmg-home/mmgstudio/bin directory.
- c. Open the startup.sh file and add the following line before the line containing "counter=1";

```
nohup <path_to_interpreter_binary_file> &>> <path_to_save_the_logs>/
<log_file_name>.log &
```

**Figure 4-3 Snapshot of startup.sh file**

```
#export PLAINR_INTERPRETER_OPTS="$PLAINR_INTERPRETER_OPTS -DAPP_BASE_NAME='plainr-i
#nohup "$DIR"/../interpreter-server/plainr-interpreter-23.4.2/bin/plainr-interprete
To start Spark interpreter
nohup "$DIR"/../interpreter-server/spark-interpreter-23.4.0/bin/spark-interpreter &
counter=1;
while [[$counter -lt 20]]
do
 dsHealth=`curl -s --insecure https://ofss-mum-1779.snbomprshared1.gbucdsint02bc
```

- d. Save and close the file.
- e. Open the shutdown.sh file and add following line before the line containing "SL=".

```
I8004=`ps -eaf | grep java | grep RemoteInterpreterServer | grep 8004 |
awk '{print $2}'` if [["" != "$I8004"]]; then kill -9 $I8004; fi
```

**Figure 4-4 Snapshot of shutdown.sh file**

```
To shutdown Spark interpreter
I8004=`ps -eaf | grep java | grep RemoteInterpreterServer | grep 8004 | awk '{print $2}'`
if [["" != "$I8004"]];
then kill -9 $I8004;
fi
SL=`ps -eaf | grep java | grep oracle.datastudio.starter.App | awk '{print $2}'`
if [["" != "$SL"]];
then kill -9 $SL;
fi
```

**Note**

In the above steps, the port number for the new/cloned interpreter is assumed to be 8004, the default port that comes with the installer. If a different port is used, then change the configuration accordingly.

- f. Save and close the file.
- g. Navigate to the <COMPLIANCE\_STUDIO\_INSTALLATION\_PATH>/bin directory.
- h. Restart Compliance Studio using the command: `./compliance-studio.sh -restart`.
- i. Verify if the spark-interpreter has started using the command: `netstat -nltp | grep 8004`.

**31. What should I do if import failed in the Graph Pipeline?**

After installation, query the table `FCC_M_PIPELINE_IMPORT_LOG` to check the imported pipeline status. The `_V_IMPORT_STATUS_` column denotes the status and should be 'SUCCESS' for all the imported pipelines.

If any pipelines have the status of 'FAILED,' perform the following steps to reimport:

- a. Find the entry for the failed pipeline in the `FCC_M_EXTERNALSERVICE_RUN` table of the `_C_TABLELIST_` column.
- b. Remove that entry from the table. If the entry is not there, skip this step.
- c. Navigate to the <COMPLIANCE\_STUDIO\_INSTALLATION\_PATH>/deployed/mmg-home/mmgpipeline/ pipeline/data-metadata-job-<version>/bin directory.
- d. Run the `import_metadata.sh` shell script using the command: `./import_metadata.sh`.
- e. Once the script is executed, verify the status in the `FCC_M_PIPELINE_IMPORT_LOG` to ensure that the status is a success.

**32. How do I update the BE\_PORT value after reinstalling the Compliance Studio?**

To update the `BE_PORT` value:

- a. Login to Compliance Studio schema.
- b. Open the `NEXTGENEMF_CONFIG` table.
- c. Verify the `V_NAME` columns (`EMFSTUDIO_SERVICE_URL` and `BASE_URL`).

If "BE\_PORT" is not replaced, change `V_VALUE` to the required port number or set it to the default port value. i.e., **7002**.

- d. Restart the Compliance Studio.

**33. What should I do if delta matches are not reflected in the sub graph (OOB)?**

To reflect delta matches in the sub graph:

- a. Re-run the Refresh Graph task.
- b. Restart the PGX and then load the sub graph.

**34. What should I do if any Compliance Studio service fails with the following error?**

```
ERROR c.z.h.p.HikariPool - HikariPool-72 - Exception during pool
initialization.
java.sql.SQLException: ORA-02391: exceeded simultaneous SESSIONS_PER_USER
limit
```

<https://docs.oracle.com/error-help/db/ora-02391/at>  
oracle.jdbc.driver.T4CTTIoer11.processError(T4CTTIoer11.java:709)

To Resolve this issue, follow these steps:

- a. Check the current value of SESSION\_PER\_USER for the Studio schema using the following query.

```
select PROFILE, LIMIT from dba_profiles a, dba_users b WHERE
a.PROFILE=b.PROFILE and a.RESOURCE_NAME = 'SESSIONS_PER_USER' and
a.PROFILE = '<Studio schema>';
```

- b. Get the Studio Schema profile using the following query.

```
select profile from dba_users where username = '<Studio schema>';
```

- c. Change the profile obtained in Step b using the following query.

```
ALTER PROFILE <profile> LIMIT SESSIONS_PER_USER UNLIMITED;
```

# A

## Files Packaged in This Patch

This chapter describes the files modified and files impacting database objects due to this Patch in the Compliance Studio. It also provides additional information that supports the installation activity.

### Note

<PATCH\_HOME> indicates the path where patch contents are extracted.

### List of files modified/included as part of this patch

```
##PATCH_HOME##/bin/applyPatch.sh
##PATCH_HOME##/bin/config.sh
##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/bin/importNotebooksSCU.sh
##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/bin/
importWorkspaceSQLCommon.sh
##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/bin/importWorkspacesSQLSCU.sh
##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/DynamicDatasets/
dataset9999999.txt
##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/model/datamodel/
scu_atomic_8.1.2.9.8.xml
##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/model/datamodel/
scu_atomic_8.1.3.2.0.xml
##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/model/datamodel/
scu_atomic.xml
##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/model/SQLScripts/SCU/
Functions/function_8.1.3.2.0.sql
##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/model/SQLScripts/SCU/Views/
view_8.1.2.9.8.sql
##PATCH_HOME##/files/bin/compliance-studio.sh
##PATCH_HOME##/files/bin/install.sh
##PATCH_HOME##/files/bin/replace.sh
##PATCH_HOME##/files/entity-resolution/bin/**
##PATCH_HOME##/files/entity-resolution/conf/application.yml
##PATCH_HOME##/files/entity-resolution/conf/log4j2.xml
##PATCH_HOME##/files/entity-resolution/lib/**
##PATCH_HOME##/files/event-service/bin/**
##PATCH_HOME##/files/event-service/lib/**
##PATCH_HOME##/files/fcc-ui/bin/**
##PATCH_HOME##/files/fcc-ui/conf/application.yml
##PATCH_HOME##/files/fcc-ui/conf/log4j2.xml
##PATCH_HOME##/files/fcc-ui/lib/**
##PATCH_HOME##/files/ficdb/oob-graph-batch/**
##PATCH_HOME##/files/ficdb/separateSchemaJars/lib/**
##PATCH_HOME##/files/load-to-open-search/bin/**
##PATCH_HOME##/files/load-to-open-search/conf/application.properties
##PATCH_HOME##/files/load-to-open-search/lib/**
##PATCH_HOME##/files/matching-rules/bin/**
```

```
##PATCH_HOME##/files/matching-rules/conf/application.properties
##PATCH_HOME##/files/matching-rules/lib/**
##PATCH_HOME##/files/matching-service-ot/bin/**
##PATCH_HOME##/files/matching-service-ot/conf/application.properties
##PATCH_HOME##/files/matching-service-ot/conf/log4j2.xml
##PATCH_HOME##/files/matching-service-ot/lib/**
##PATCH_HOME##/files/matching-service/bin/**
##PATCH_HOME##/files/matching-service/conf/application.properties
##PATCH_HOME##/files/matching-service/lib/**
##PATCH_HOME##/files/mmg-home/bin/config.sh
##PATCH_HOME##/files/mmg-home/bin/initialize-install.sh
##PATCH_HOME##/files/mmg-home/bin/install-helper/lib/mmg-configuration-
manager-*.jar
##PATCH_HOME##/files/mmg-home/bin/install.sh
##PATCH_HOME##/files/mmg-home/bin/pre-install-check.sh
##PATCH_HOME##/files/mmg-home/bin/python-env-health-check.sh
##PATCH_HOME##/files/mmg-home/bin/shutdown.sh
##PATCH_HOME##/files/mmg-home/bin/startup.sh
##PATCH_HOME##/files/mmg-home/conf/properties/**
##PATCH_HOME##/files/mmg-home/mmg-config-server/**
##PATCH_HOME##/files/mmg-home/mmg-configuration-service/**
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-data-metadata-job/conf/
application.properties
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-data-metadata-job/lib/
dtp-data-metadata-job-10.0.1.1.0.jar
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-data-pipeline-service-
ui/conf/application.properties
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-data-pipeline-service-
ui/lib/dtp-data-pipeline-service-ui-10.0.1.1.0.war
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-data-pipeline-service/
conf/application.properties
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-data-pipeline-
service/lib/dtp-data-pipeline-service-10.0.1.1.0.war
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-pipeline-gateway/conf/
application.properties
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-pipeline-gateway/lib/
dtp-pipeline-gateway-0.0.1-SNAPSHOT.jar
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-pipeline-service-ui/
conf/application.properties
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-pipeline-service-
ui/lib/dtp-pipeline-service-ui-10.0.1.1.0.war
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-pipeline-service/conf/
application.properties
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-pipeline-service/lib/
dtp-pipeline-service-10.0.1.1.0.war
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-scenario-metadata-job/
conf/application.properties
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-scenario-metadata-
job/lib/dtp-scenario-metadata-job-10.0.1.1.0.jar
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-scenario-pipeline-
service-ui/conf/application.properties
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-scenario-pipeline-
service-ui/lib/dtp-scenario-pipeline-service-ui-10.0.1.1.0.war
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-scenario-pipeline-
service/conf/application.properties
##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/dtp-scenario-pipeline-
```

```

service/lib/dtp-scenario-pipeline-service-10.0.1.1.0.war
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##PATCH_HOME##/files/mmg-home/mmg-dtp/dtp-pipeline/installation/
set_parameter.sh
##PATCH_HOME##/files/mmg-home/mmg-gateway/bin/**
##PATCH_HOME##/files/mmg-home/mmg-gateway/conf/**
##PATCH_HOME##/files/mmg-home/mmg-gateway/lib/mmg-gateway.jar
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/bin/**
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/conf/
application.yml
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/conf/model/
SQLScripts/8.1.3.1-1/**
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/conf/model/
SQLScripts/8.1.3.2.0-1/**
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/conf/model/
datamodel/GraphService.xml
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/conf/model/
datamodel/GraphService_8132-1.xml
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/conf/
runtimeliquibase/model/Runtime_Graph_schema.xml
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runtimeliquibase/model/Graph_Schema_8132-1.xml
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/conf/
runtimeliquibase/model/Graph_Schema_8132-2.xml
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runtimeliquibase/scripts/Release24.11.01/Oracle_Text/Candidate_Selector/
PARTITION_LOCK.sql
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runtimeliquibase/SQLScripts/8.1.3.2.0-1/**
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runtimeliquibase/SQLScripts/8.1.3.2.0-2/**
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/utility/fonts/**
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/lib/graph-
service-*.jar
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/utility/bin/
ResetGraphMetadata.sh
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/utility/bin/
SyncOOBMetadataAndPgGraph.sh
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/utility/bin/
ImportNotebookUtility.sh
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/utility/bin/
PrepareGraphOTMatching.sh
##PATCH_HOME##/files/mmg-home/mmg-load-to-graph/graph-service/utility/bin/
ImportNotebookDefaultConfig.json
##PATCH_HOME##/files/mmg-home/mmg-monitor/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/data-metadata-
job-10.0.1.1.0/conf/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/data-metadata-
job-10.0.1.1.0/lib/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/data-pipeline-
service-10.0.1.1.0/conf/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/data-pipeline-
service-10.0.1.1.0/lib/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/data-pipeline-service-
UI-10.0.1.1.0/conf/**

```

```
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/data-pipeline-service-
UI-10.0.1.1.0/lib/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/installation/config.sh
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/installation/
set_parameter.sh
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/pipeline-
service-10.0.1.1.0/conf/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/pipeline-
service-10.0.1.1.0/lib/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/pipeline-service-
UI-10.0.1.1.0/conf/**
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UI-10.0.1.1.0/lib/**
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liquibase/lib/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/pipelinegateway/conf/**
##PATCH_HOME##/files/mmg-home/mmg-pipeline/pipeline/pipelinegateway/lib/**
##PATCH_HOME##/files/mmg-home/mmg-schema-creator/bin/**
##PATCH_HOME##/files/mmg-home/mmg-schema-creator/conf/**
##PATCH_HOME##/files/mmg-home/mmg-schema-creator/lib/mmg-schema-creator.war
##PATCH_HOME##/files/mmg-home/mmg-schema-creator/scripts/**
##PATCH_HOME##/files/mmg-home/mmg-service/bin/**
##PATCH_HOME##/files/mmg-home/mmg-service/conf/**
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##PATCH_HOME##/files/mmg-home/mmg-studio/**
##PATCH_HOME##/files/mmg-home/mmg-ui/bin/**
##PATCH_HOME##/files/mmg-home/mmg-ui/conf/**
##PATCH_HOME##/files/mmg-home/mmg-ui/lib/mmg-ui.war
##PATCH_HOME##/files/scoring-engine/bin/**
##PATCH_HOME##/files/scoring-engine/conf/application.properties
##PATCH_HOME##/files/scoring-engine/conf/log4j2.xml
##PATCH_HOME##/files/scoring-engine/lib/**
##PATCH_HOME##/minicondaFiles/OFS_COMPLIANCE_STUDIO_8.1.3.2.0_LINUX_2of2.zip
##PATCH_HOME##/ml4aml/bin/enablePushPullBTLSSamples.sh
##PATCH_HOME##/ml4aml/bin/enableRangeAutoPartition.sh
##PATCH_HOME##/ml4aml/bin/enableVPD.sh
##PATCH_HOME##/ml4aml/bin/importAMLESMSQL.sh
##PATCH_HOME##/ml4aml/bin/importNotebooksAIF.sh
##PATCH_HOME##/ml4aml/bin/importNotebooksAMLES.sh
##PATCH_HOME##/ml4aml/bin/importNotebooksASC.sh
##PATCH_HOME##/ml4aml/bin/importNotebooksCS.sh
##PATCH_HOME##/ml4aml/bin/importNotebooksScenario.sh
##PATCH_HOME##/ml4aml/bin/importNotebooksSES.sh
##PATCH_HOME##/ml4aml/bin/importNotebooksSM.sh
##PATCH_HOME##/ml4aml/bin/importWorkspaceSQL.sh
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##PATCH_HOME##/ml4aml/model/datamodel/ml4aml_amles_atomic_8.1.1_DM.xml
##PATCH_HOME##/ml4aml/model/datamodel/ml4aml_amles_atomic_8.1.1.xml
##PATCH_HOME##/ml4aml/model/datamodel/ml4aml_amles_atomic_8.1.2.1_DM.xml
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##PATCH_HOME##/ml4aml/model/datamodel/ml4aml_amles_atomic_8.1.2.9.6_DM.xml
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```

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Package_Bodies_8.1.3.2.sql
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fcc_dm_definition_8.1.1.sql
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pkg_asc_body_8.1.3.2.sql
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##PATCH_HOME##/ml4aml/notebooks/AIF/Supervised/User/SB873_1743588187279_0.zip
##PATCH_HOME##/ml4aml/notebooks/AIF/Unsupervised/User/

```

```
SM8132_1788524433263_0.zip
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CSMODEL_1738921010799_0.zip
##PATCH_HOME##/ml4aml/notebooks/CustomScenario/default/
CSMODEL_1738921022596_0.zip
##PATCH_HOME##/ml4aml/notebooks/CustomScenario/User/
CSMODEL_1760541848775_0.zip
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BUILD81280_1723807857470_0.zip
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##PATCH_HOME##/ml4aml/notebooks/Sanctions/default/SB81280_1723466745693_0.zip
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SESSB81280_1733986016170_0.zip
##PATCH_HOME##/ml4aml/notebooks/Sanctions/User/SES81290_1743661224517_0.zip
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##PATCH_HOME##/scripts/replaceMl4aml.sh
##PATCH_HOME##/scripts/replacePGX.sh
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##PATCH_HOME##/ficdb/Scenario-Conversion-Utility/notebooks/
ASC3_1773386208580_0.zip
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core-2.26.1.jar
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##PATCH_HOME##/ml4aml/notebooks/ASC/analysis/ASC003_1781512069546_0.zip
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BM871_1776739040052_0.zip
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BM871_1776739046559_0.zip

```

### Existing Schema Objects modified

Views: VW\_REVIEW

Materialized Views: VW\_SCNRO\_BIND\_MD, VW\_SCNRO\_CHKPT\_BIND\_MD,  
VW\_SCNRO\_CHKPT\_MD, VW\_SCNRO\_CONSTRAINT\_MD, VW\_SCNRO\_DATASET\_JOB\_MD,  
VW\_SCNRO\_HIGHLIGHT\_MD

Functions: FUNC\_RETURN\_PRCNSG\_BATCH, FUNC\_RETURN\_CAL

Packages: PKG\_ASC, PKG\_SCENARIO\_MODEL\_81320

Package Bodies: PKG\_AIF, PKG\_AIF\_CREATE\_EVENT, PKG\_AIF\_UTILITY, PKG\_ASC,  
PKG\_SCENARIO\_MODEL\_81320

Tables: AIF\_CSAD\_EXECUTION\_STATUS, AMLES\_MODEL\_METADATA\_MASTER,  
ASC\_BINDING\_PARAM\_LOOKUP, ASC\_INVESTIGATED\_ENTITIES, ASC\_KDD\_TSHLD\_PAIR,  
ASC\_PROD\_TEST\_MAPPING, ASC\_RUNID\_LOOKUP, CSAD\_MODEL\_METADATA\_MASTER,  
FCC\_DM\_DEFINITION, FCC\_DM\_FIELD\_MAPPING, AAICL\_SS\_BATCH, AAICL\_SS\_TASK,  
NEXTGENEMF\_CONFIG

Indexes: ASC\_KDD\_TSHLD\_PAIR\_IDX1, ASC\_KDD\_TSHLD\_PAIR\_IDX2,  
IDX\_AIE\_ATTR\_LOOKUP, IDX\_AIE\_ENTITY\_ATTR, IDX\_AIF\_CSAD\_EXEC\_STATUS\_1,  
IDX\_AIF\_CSAD\_EXEC\_STATUS\_2, IDX\_APTM\_DEF\_VER\_SCOPE, IDX\_ARL\_DEF\_VER\_SCOPE,  
IDX\_ARL\_PP\_STATUS\_SCOPE

**List of files to edit**

```
##PATCH_HOME##/bin/config.sh
```