

Oracle Financial Services Investigation Hub

Administration Guide

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OFS Investigation Hub Administration Guide

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Document Control

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1 Preface

This guide provides information related to end-user tasks in the Oracle Financial Services (OFS) Investigation Hub application.

1.1 Audience

This guide is intended for Data Analysts and Data Scientists and the basic knowledge of the following is recommended:

- UNIX commands
- Database concepts
- Big Data
- Python
- Scala
- Spark
- Oracle R
- SQL
- Groovy
- Markdown

1.2 Related Documents

You can access the following additional documents related to the OFS Crime and Compliance Studio application from the [Oracle Help Center \(OHC\)](#) Documentation Library:

- Oracle Financial Services Investigation Hub Installation Guide
- Oracle Financial Services Investigation Hub Administration Guide
- Oracle Financial Services Investigation Hub Release Notes and Readme

1.3 Abbreviations

The following table lists the abbreviations used in this document.

Table 1: Abbreviations

Abbreviation	Meaning
OFS	Oracle Financial Services
IH	Investigation Hub
OFSA	Oracle Financial Services Analytical Application

PGX	Parallel Graph AnalytiX
AML	Anti-money Laundering
FCDM	Financial Crime Data Model
BD	Behavior Detection
OOB	Out-of-the-Box

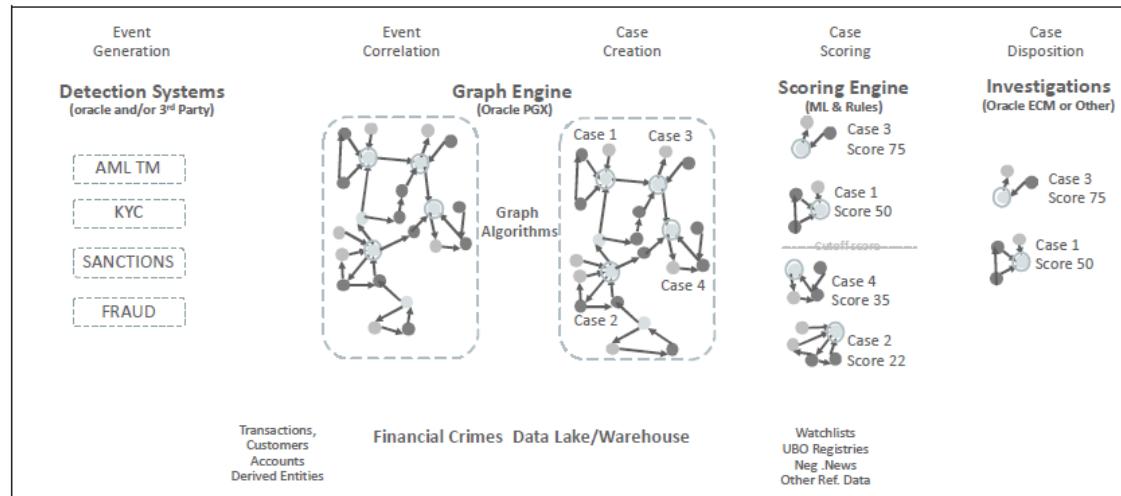
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Introduction to Investigation Hub

In order to effectively monitor anti-money laundering and anti-fraud programs in financial institutions, the most challenging need is to quickly detect and investigate the financial crime data.

Oracle Financial Services Investigation Hub is a comprehensive analytics toolkit for Financial crimes detection and investigation. This application provides the modular building blocks for developing the advanced analytical applications to counter financial crime. Investigation Hub application serves as a springboard for innovation in anti financial crime programs.

Investigation Hub uses Graph Analytics and Graph Query methods to investigate the case using various interpreters.



3 Administration and Configuration Activities

In the Investigation Hub, you need to configure your Notebooks. The notebooks can be configured as follows:

- **1_Graph_demo**

It loads the graph into memory and publishes it so other notebooks can access and use it.

- **2_Generate Correlated Networks**

It creates the correlated networks of related events (alerts) for Level 2 investigators as a starting point of their investigation. You can map this to existing cases or used to generate new cases.

NOTE

The Notebook mentioned in the above is an example on how you can create and use a notebook.

After the notebooks are created you can carry out the following tasks to load data into your notebook and also execute to view the insights:

- Create New CSV file
- Load the Graphs
- Execute the Notebook

3.1 Creating a New CSV

The data is loaded into the graphs using the CSV files. You can create a new CSV file as per requirements, which can be used for loading data into the graphs.

To create a new CSV file, perform the following steps:

1. Create an Excel file with required data and save it as .csv.
2. Place this CSV file at following location <IH_Installation_Path>/Datasource directory.
3. Navigate to <IH_Installation_Path>/Datasource directory and modify CONFIG.JSON file.

When you are creating a new csv file, the attributes (column names of Excel) of this csv file must be manually entered in CONFIG.JSON file in below mentioned format:

```
{ "name" : "Tax Country", "type" : "string"} ,
```

Here,

Name should be same as attribute of csv file

Type is the data type (string, float, boolean, etc)

NOTE

- Column headers are not required in csv files.
- Last column of the csv file cannot be blank (including space).

- Update the blank columns of csv file with Null or Space.

3.2 Load Data to Graphs

Graph load is used to create the graph from the underlying data. It gives the.pgb file and config.json of the GLOBALGRAPH, which are further used in IH to view or query using PGQL and PGX interpreters. This chapter provides information on configuring graphs in application.

To load the data into the graphs, perform the following steps:

1. Log in to the **Investigation Hub** application.
2. Navigate to the **1_Graph_demo** notebook.
3. Click the plain text icon and paste the copied path for config_path attribute.

```
%pgx
config_path='<PATH_TO_CONFIG_JSON>/config.json'
graph_name = 'IH_GRAPH'
g = session.readGraphWithProperties(config_path, graph_name)
```

PgxGraph(name=IH_GRAPH, n=80, E=71, created=1555928875683)

4. Enter the Name of graph for the **graph_name** attribute.
5. Click **Execute Paragraph** to execute the paragraph. The graph is loaded and displayed.

3.3 Execute the Notebook

The published scenario notebook can be scheduled for execution with a set of threshold values as seemed required for generating alert or trends.

To execute a Notebook, perform the following steps:

1. Log in to the **Investigation Hub** application.
2. Select the Notebook that you want to execute.
3. Click the **Execute Notebook** icon to excute the complete notebook.

3.4 Adding New Dynamic Search Parameters

The Dynamic Search enables you to identify the for non-case entities within the notebook.

NOTE

- These parameters can only be added to the ECM Integration and Special Investigation Notebooks.
- Apart from the Tax Id, Name, Address, and Date paramters, other parameters related to the search can be added using the below steps.

To add the Dynamic Search parameters within the notebook, follow these steps:

1. Add new variable and getter setter methods for the input field in `SearchEntry` class and result class in Initialization 3.
2. Add a new field in input search results. For example: `String givenTaxId = cleanString("${Tax Id}");`.
3. Make the required changes in blacklist object of `seacrhEntry` class in input search results.
 - For fuzzy matching, update the `getMatches` function and add the new input field entries in the required places.
 - For exact matching, update the `getMatchesForPGQLQuery` function and add the new input field entries in the required places.
4. Add the query for the input field in the `getMatchesForPGQLQuery`.
5. Update the merging answers section and add the new search field functions (getter and setter).
6. Update the `readInResultData` function and add the new search field to the `VertexBuilder` node.

OFSA Support

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