

# Oracle® FLEXCUBE Investor Servicing Scheduler PLSQL JOB Creation



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# Preface

**Oracle FLEXCUBE Investor Servicing** is a comprehensive mutual funds automation software from Oracle® Financial Servicing Software Ltd.©.

You can use the system to achieve optimum automation of all your mutual fund investor servicing processes, as it provides guidelines for specific tasks, descriptions of various features and processes, and general information.

This topic contains the following sub-topics:

- [Purpose](#)
- [Audience](#)
- [Documentation Accessibility](#)
- [Critical Patches](#)
- [Diversity and Inclusion](#)
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## Purpose

This manual is designed to help acquaint you with the installation of **Oracle FLEXCUBE Investor Servicing** application.

## Audience

This manual is intended for the following User/User Roles:

**Table 1 Users and Roles**

| Users               | Roles                                                       |
|---------------------|-------------------------------------------------------------|
| Implementation team | Implementation of Oracle FLEXCUBE Investor Servicing        |
| Presales team       | Install Oracle FLEXCUBE Investor Servicing for demo purpose |
| Bank personnel      | Who installs Oracle FLEXCUBE Investor Servicing             |

## Documentation Accessibility

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

## Access to Oracle Support

Oracle customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

## Critical Patches

Oracle advises customers to get all their security vulnerability information from the Oracle Critical Patch Update Advisory, which is available at [Critical Patches, Security Alerts and Bulletins](#). All critical patches should be applied in a timely manner to ensure effective security, as strongly recommended by [Oracle Software Security Assurance](#).

## Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

## Conventions

The following text conventions are used in this document:

| Convention             | Meaning                                                                                                                                |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>boldface</b>        | 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 you supply particular values.                          |
| <code>monospace</code> | Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter. |

## Screenshot Disclaimer

Personal information used in the interface or documents is dummy and does not exist in the real world. It is only for reference purposes.

## Acronyms and Abbreviations

The list of the acronyms and abbreviations used are as follows:

**Table 2 Acronyms and Abbreviations**

| Abbreviation | Description                        |
|--------------|------------------------------------|
| FCIS         | Oracle FLEXCUBE Investor Servicing |
| OEM          | Oracle Enterprise Manager          |

**Table 2 (Cont.) Acronyms and Abbreviations**

| Abbreviation | Description                  |
|--------------|------------------------------|
| EMS          | Electronic Messaging Service |
| EJB          | Enterprise Java Bean         |
| MDB          | Message Driven Beans         |

# 1

## Scheduler PLSQL JOB Creation

This topic explains the procedure to be followed for Scheduler PLSQL JOB creation for **Oracle FLEXCUBE Investor Servicing**.

# 2

## Background

This topic provides information on background of Scheduler PLSQL JOB creation.

This topic is based on the requirement of creating PLSQL Jobs to be executed by Quartz Scheduler and it describes the procedure to be followed to accomplish the above.



# 3

## Procedure

This topic provides the instruction to create PLSQL job using **Job Maintenance** screen.

1. Launch the job maintenance screen **STDJOBMT** for creation of a PLSQL Job.
2. Specify the values for the fields.

For information regarding individual fields refer to **Installation Docs**.

A PLSQL job can be Stateful or Stateless.

- [Stateful Job](#)  
This topic provides the instruction to create Stateful Job.
- [Stateless Job](#)  
This topic provides the instruction to create Stateless Job.

### 3.1 Stateful Job

This topic provides the instruction to create Stateful Job.

1. If the job is configured to be **STATEFUL**, then missed instances will be queued up so that scheduler would start executing once the long running job ends. It means, there will be no parallel execution of the procedure.
2. To make a executing class as Stateful, please add two annotations to the job class:
  - `@PersistJobDataAfterExecution`
  - `@DisallowConcurrentExecution`

### 3.2 Stateless Job

This topic provides the instruction to create Stateless Job.

1. If the job is configured as STATELESS, threads can be run in parallel and can execute the same java class.
2. If the job is configured as stateless, the value of field Max Number Instances will denote the number of threads that can be executed in parallel .If the job is configured as stateful, then the above value will denote the number of missed instances that will be queued up so that quartz scheduler would start executing them once a long running job ends. This field specifies the number of such job instances that needs to be queued up.
3. The class defined in the class field has to be provided a fully qualified name.

 **Note:**

- For every PLSQL job, the executing class is FCPLSQLJobInvoker.java, which is configured as stateless.
- Job params can be added to a particular PLSQL job in this screen as shown above which are passed to the procedure maintained.

# 4

## PLSQL job

This topic describes on creating PLSQL Jobs.

### Scheduling EOD (End of Day)

Suppose we have created a new PLSQL job for EOD activity of FMG. Here it is a PLSQL job, where the procedure to be executed is `pkgfmgEODBOD.spFmgEODBODScheduler`.

Procedure Parameters need to be provided in Parameter Details.

Pre-EOD Event [BEPREEOD] is maintained to initiate End of Day.

**Figure 4-1 Pre-EOD Event**

The screenshot displays the 'Job Maintenance' window, which is divided into several sections for configuring a new job. The 'Job Description' section on the left includes fields for 'Job Code', 'Job Description', 'Job Group', 'Job Type', 'Max Number Instances', 'Scheduler' (set to 'ScheduleFactory'), 'Trigger Type', 'Scheduler Type', 'Priority', and 'Message Queue'. The 'Job Details' section on the right includes 'Cron Expression', 'Class Or Procedure', 'No. of Submissions', 'Interval In Seconds', 'Trigger Listener', 'Active' checkbox, 'On Name', 'Logging Required' checkbox, 'Veto Stopped Trigger' checkbox, and 'Startup Mode'. Below these sections is the 'Parameter Details' section, which contains a table with columns for 'Parameter Name', 'Data Type', and 'Parameter Value'. At the bottom of the window, there is a status bar with fields for 'Maker', 'Checker', 'Data Time', 'Date Time', 'Mod No', 'Record Status', 'Authorization Status', and a 'Cancel' button.

### Scheduling BOD (Beginning of Day)

Suppose we have created a new PLSQL job for BOD activity of FMG. Here it is a PLSQL job, where the procedure to be executed is `pkgfmgEODBOD.spFmgEODBODScheduler`.

Parameters for this procedure need to be maintained in Parameter Details.

Example shows End of Day event [BE00003] to initiate Beginning Of Day.

Figure 4-2 End of Day event

The screenshot displays the 'Job Maintenance' window, which is used for configuring jobs. The window is divided into several sections:

- Save:** A button at the top left.
- Job Description:** Fields for Job Code, Job Description, Job Group, Job Type, Max Number Instances, Scheduler (set to SchedulerFactory), Trigger Type, Scheduler Type, Priority, and Message Queue. A 'Validate' button is located below these fields.
- Job Details:** Fields for Cron Expression, Class Or Procedure, No of Submissions, Interval In Seconds, Trigger Listener (with an 'Active' checkbox), Ds Name, Logging Required (checkbox), Veto Disabled Trigger (checkbox), and Startup Mode.
- Parameter Details:** A table with columns for Parameter Name, Data Type, and Parameter Value. The table is currently empty.
- Footer:** A table with columns for Maker, Date Time, Mod his, and Record Status. The 'Record Status' column has a sub-column for Authorization Status. A 'Cancel' button is located at the bottom right.