

Scheduler JAVA JOB Creation
Oracle FLEXCUBE Investor Servicing
Release 14.5.0.0.0
[May] [2021]



Table of Contents

1.	INTRODUCTION	1-3
2.	BACKGROUND.....	2-1
3.	EXAMPLE	3-1

1. Introduction

This document introduces the reader to the procedure to be followed for Scheduler JAVA JOB Creation for Oracle FLEXCUBE Investor Servicing.

2. Background

This document is based on the requirement of creating JAVA Jobs to be executed by Quartz Scheduler.

This document describes the procedure to be followed to accomplish the above.

3. Example

This section describes job creation:

1. Launch the job maintenance screen STDJOBMT for creation of a Job. User can maintain Interface, Reports and PL SQL Jobs.

Interface Job definition

Event Based:

For Interface Job maintenance, user has to maintain `com.ofss.scheduler.quartz.fcis.FCISImpExpSchExecutor` class.

For Event Based Job Scheduling, EVENTCODE need to be maintained in Parameters. Valid Event Codes are available in Eventstbl.

The screenshot displays the 'Job Maintenance' window with the following sections:

- Job Description:** Includes fields for Job Code (marked with a red asterisk), Job Description, Job Group, Job Type (dropdown), Max Number Instances (marked with a red asterisk), Scheduler (SchedulerFactory), Trigger Type (dropdown), Scheduler Type (dropdown), Priority (dropdown), and Message Queue. A 'Validate' button is located below these fields.
- Job Details:** Includes fields for Cron Expression, Class Or Procedure, No of Submissions, Interval In Seconds, Trigger Listener, Active checkbox, Ds Name, Logging Required checkbox, Veto Blocked Trigger checkbox, and Startup Mode (dropdown).
- Parameter Details:** A table with columns for Parameter Name, Data Type, and Parameter Value. The table is currently empty.
- Footer:** Contains fields for Maker, Checker, Date Time, Mod No, Record Status, Authorization Status, and a 'Cancel' button.

Time Based:

To maintain time based job, we have to maintain cron expression.

The screenshot shows the 'Job Maintenance' window with the 'Job Description' and 'Job Details' tabs. The 'Job Description' tab is active, showing fields for Job Code, Job Description, Job Group, Job Type, Max Number Instances, Scheduler, SchedulerFactory, Trigger Type, Scheduler Type, Priority, and Message Queue. The 'Job Details' tab is also visible, showing fields for Cron Expression, Class Or Procedure, No of Submissions, Interval In Seconds, Trigger Listener, Active checkbox, Ds Name, Logging Required checkbox, Veto Blocked Trigger checkbox, and Startup Mode. Below the tabs is a 'Parameter Details' section with a table for Parameter Name, Data Type, and Parameter Value. At the bottom, there are fields for Maker, Checker, Date Time, Mod No, Record Status, Authorization Status, and a 'Cancel' button.

TimeZone Based

For Timezone based job scheduling, valid timezone need to be maintained in parameters. Timezone parameter should have standard Quartz supported timezone value.

This screenshot is identical to the one above, showing the 'Job Maintenance' window. The 'Job Description' and 'Job Details' tabs are visible, along with the 'Parameter Details' section and the bottom status bar. The form is designed for maintaining time-based jobs, with fields for job configuration and scheduling parameters.

REPORT Job definition

To schedule BIP report generation, user has to maintain
`com.ofss.scheduler.quartz.fcis.FCISReportSpollExecutor` class

The screenshot shows a 'Job Maintenance' window with a 'Save' button at the top left. The form is divided into two main sections: 'Job Description' and 'Job Details'.

Job Description:

- Job Code ***: Text input field.
- Job Description**: Text input field.
- Job Group**: Text input field.
- Job Type**: Dropdown menu.
- Max Number Instances ***: Text input field.
- Scheduler**: Text input field.
- SchedulerFactory**: Text input field.
- Trigger Type**: Dropdown menu.
- Scheduler Type**: Dropdown menu.
- Priority**: Dropdown menu.
- Message Queue**: Text input field.
- Validate**: Button.

Job Details:

- Cron Expression**: Text input field.
- Class Or Procedure**: Text input field.
- No of Submissions**: Text input field.
- Interval In Seconds**: Text input field.
- Trigger Listener**: Text input field.
- Active**: Check box.
- Ds Name**: Text input field.
- Logging Required**: Check box.
- Veto Blocked Trigger**: Check box.
- Startup Mode**: Dropdown menu.

Parameter Details:

A table with columns: Parameter Name, Data Type, Parameter Value. The table is currently empty.

Footer:

Maker	Date Time:	Mod No	Record Status
Checker	Date Time:		Authorization Status

Cancel: Button.

User has to maintain TASKID parameter to specify the Report Parameters. UTDTASK is the screen to maintain Report Parameters.

A Java job can be stateful or stateless.

Stateful Job

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 java class.

To make a class as Stateful, please add two annotations to the job class.

- @PersistJobDataAfterExecution
- @DisallowConcurrentExecution

Stateless Job

If the job is configured as STATELESS, threads can be run in parallel and can execute the same java class.

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.

The class defined in the class field has to be provided a fully qualified name.



Job params can be added to a particular java job in this screen as shown above.



Scheduler JAVA JOB Creation
[May] [2021]
Version 14.5.0.0.0

Oracle Financial Services Software Limited
Oracle Park
Off Western Express Highway
Goregaon (East)
Mumbai, Maharashtra 400 063
India

Worldwide Inquiries:
Phone: +91 22 6718 3000
Fax: +91 22 6718 3001
www.oracle.com/financialservices/

Copyright © [2007], [2021], Oracle and/or its affiliates.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software" or "commercial computer software documentation" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

