

# Java IC Installation

Oracle FLEXCUBE Universal Banking

Release 14.4.0.0.0

May 2020

**ORACLE**

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# 1. Java IC Installation

## 1.1 Introduction

This document lists steps to configure Application Server for JAVA IC Integration with FCUBS.

## 1.2 Prerequisites

Java IC installation requires a Weblogic domain.

Note: In the following sections, 10.10.10.10 IP address and 1010 port are used as an example. Please use valid IP and Port of corresponding server.

## 1.3 Server Setup

Java IC Setup includes two sets of services:

1. **INFRA Services:** There are two services under this category.
  - a. **Discovery Service:** This service is required for Java IC Services Registration. On start-up all Java IC services will be registered with Discovery Service. The registered services can make inter service calls by making use of Discovery Service.  
**Service Name: plato-discovery-services-5.0.0.war**
  - b. **Config Service:** All the configuration related details will be stored in a database table (table name: PROPERTIES). Config service provides the required configuration details for the corresponding Java IC Services during service start up.  
**Service Name: plato-config-services-5.0.0.war**
2. **Java IC Services:** These Services are Java IC Functional Services. E.g.: CALC Service, ACCR service, LIQD Service etc.

INFRA services and Java IC Services must be deployed on two separate Managed Servers (Any name can be given to Managed Servers).

1. **ConfigServer:** In this managed server, INFRA Services should be deployed (plato-discovery-services-5.0.0.war and plato-config-services-5.0.0.war).
2. **JavalCServer:** In this managed server, all the Java IC services should be deployed.

Following Data Sources have to be created for INFRA and Java IC Services:

Data Source JNDI Name	Type	Targets
jdbc/OBIC	Non-XA Datasource	JavalCServer

<b>jdbc/PLATO</b>	Non-XA Datasource	JavalCServer, ConfigServer
<b>jdbc/PLATOBATCH</b>	Non-XA Datasource	JavalCServer

Below line must be included in setDomainEnv.cmd or setDomainEnv.sh of the Weblogic domain:

**For Linux Server:**

```
JAVA_OPTIONS="{JAVA_OPTIONS} {JAVA_PROPERTIES} -Dflyway.enabled=false -
Dspring.flyway.enabled=false -Dplato.services.config.uri=http://<config-server-ip>:<config-
server-port> -Dplato.service.logging.path=<Debug Path where Logs are to be written>"
```

```
export JAVA_OPTIONS
```

E.g.:

```
JAVA_OPTIONS="{JAVA_OPTIONS} {JAVA_PROPERTIES} -Dflyway.enabled=false -
Dspring.flyway.enabled=false -Dplato.services.config.uri=http://10.10.10.10:1010 -
Dplato.service.logging.path=/mnt/FC144/ICLogs"
```

```
export JAVA_OPTIONS
```

**For Windows Server:**

```
set JAVA_OPTIONS=%JAVA_OPTIONS% %JAVA_PROPERTIES% -
Dplato.services.config.uri=http://<config-server-ip>:<config-server-port> -Dflyway.enabled=false -
Dspring.flyway.enabled=false -Dplato.service.logging.path=<Debug Path where Logs are to be
written>
```

E.g.:

```
set JAVA_OPTIONS=%JAVA_OPTIONS% %JAVA_PROPERTIES% -Dflyway.enabled=false -
Dspring.flyway.enabled=false -Dplato.services.config.uri=http://whf00bir:9005 -
Dplato.service.logging.path=D:/ICLogs
```

Alternatively, if the parameters are to be set specific to a Managed Server where Services are deployed, then these properties can be set in Servers->Managed Server->Server Start in the argument section. Note: It will be useful only if Node-Manager is used to start managed servers.

<b>Configuration</b>	Protocols	Logging	Debug	Monitoring	Control	Deployments	Services	Security	Notes					
General	Cluster	Services	Keystores	SSL	Federation Services	Deployment	Migration	Tuning	Overload	Concurrency	Health Monitoring	<b>Server Start</b>	Web Services	Coherence

[Save](#)

Node Manager is a WebLogic Server utility that you can use to start, suspend, shut down, and restart servers in normal or unexpected conditions. Use this page to configure the startup settings that Node Manager will use to start this server on a remote machine.

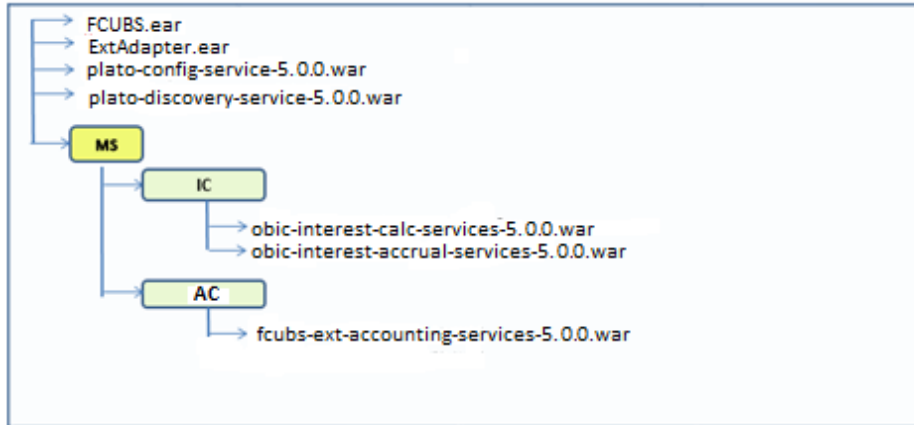
<b>Java Home:</b>	<input type="text"/>	The Java home directory (path on the machine running Node Manager) to use when starting this server. <a href="#">More Info...</a>
<b>Java Vendor:</b>	<input type="text"/>	The Java Vendor value to use when starting this server. <a href="#">More Info...</a>
<b>BEA Home:</b>	<input type="text"/>	The BEA home directory (path on the machine running Node Manager) to use when starting this server. <a href="#">More Info...</a>
<b>Root Directory:</b>	<input type="text"/>	The directory that this server uses as its root directory. This directory must be on the computer that hosts Node Manager. If you do not specify a Root Directory value, the domain directory is used by default. <a href="#">More Info...</a>
<b>Class Path:</b>	<input type="text"/>	The classpath (path on the machine running Node Manager) to use when starting this server. <a href="#">More Info...</a>
<b>Arguments:</b>	<pre>-Dflyway.enabled=false -Dspring.flyway.enabled=false - Dplato.services.config.uri=http://10.10.10:1010 - Dplato.service.logging.path=/mnt/FC144/ICLogs</pre>	The arguments to use when starting this server. <a href="#">More Info...</a>

## 1.4 WAR Deployment after Build

As part of FCUBS EAR build, in addition to FCUBS EAR, Java IC wars and Java IC INFRA wars will get copied into the destination location.

Below are the locations where the wars will be copied after build:

1. **FCUBS Application EAR and All Adapter EARs:** Available in the destination folder.
2. **INFRA Service WARs:** plato-discovery-services-5.0.0.war and plato-config-services-5.0.0.war will be available in the destination folder.  
Deploy all the INFRA Service WARs in **ConfigServer**.
3. **Java IC Service WARs:** All the Java IC Service WARs will be copied in "IC" folder under the destination folder.  
Deploy all the Java IC Service WARs are in **JavalCServer**.



## 1.5 Order of Server Start

After deployment or server restart, services have to be started in following sequence:

- a. plato-config-service
- b. plato-discovery-service
- c. Java IC Services

When servers are restarted, ensure to start **ConfigServer** first and then then **JavalCServer**.

On every restart of **ConfigServer**, plato-discovery-service must be stopped and started. This is required as Discovery requires properties entries for self-registration to be picked from plato-config-service.

In order to check if all the services have started, below discovery URL can be checked:

<http://<config-server-ip>:<config-server-port>/plato-discovery-service>

E.g.:

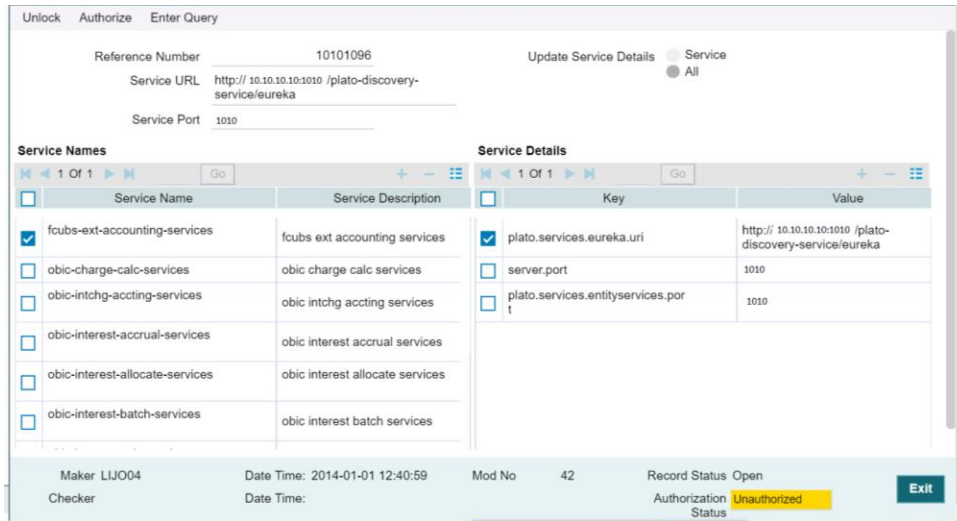
<http://10.10.10.10:1010/plato-discovery-service>

All the deployed Java IC Services should get listed in the service discovery URL.

## 1.6 OBIC Maintenance in FCUBS

Below maintenances are required in FCUBS

1. Properties Maintenance (CSDPROPM):
  - a. Launch the screen and query for entry present in LOV for Reference Number:



- b. Unlock the screen, Select All for “Update Service Details” and update the Service URL and Service Port to as below:  
 Service URL: <http://<config-server-ip>:<config-server-port>/plato-discovery-service/eureka>  
 Service Port: JavalCServer Managed Server Port

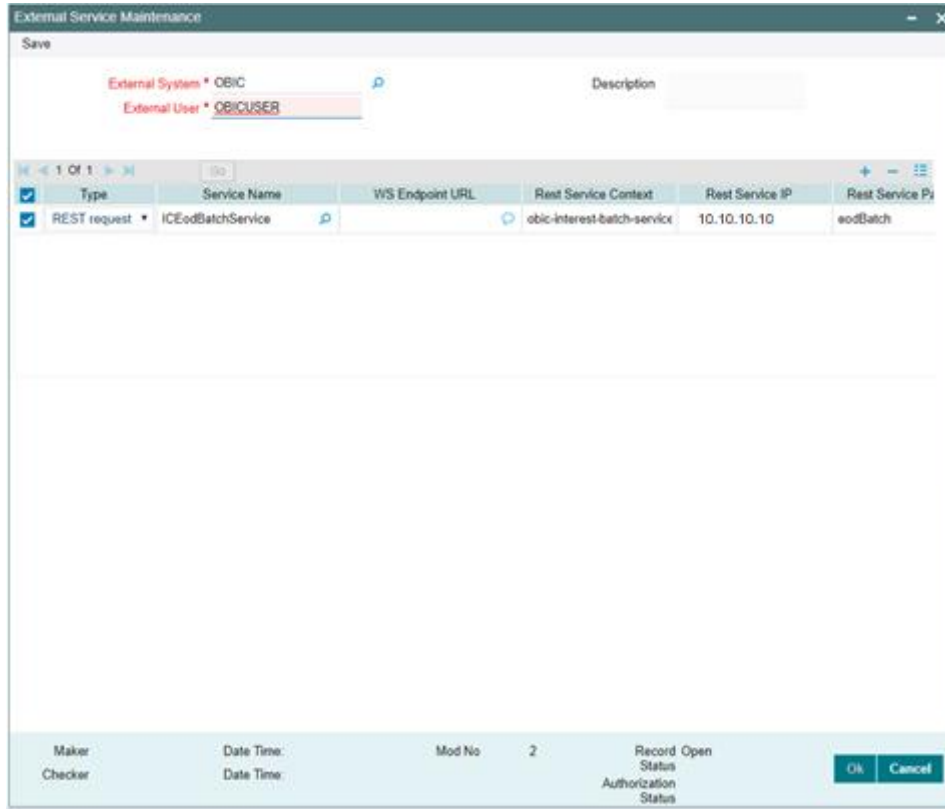
2. External Service Maintenance (IFDEXSER):

Prior to this step, user must maintain external system “OBIC” in CODSORCE screen.

User has to query for External System “OBIC” in IFDEXSER and following details have to be modified:

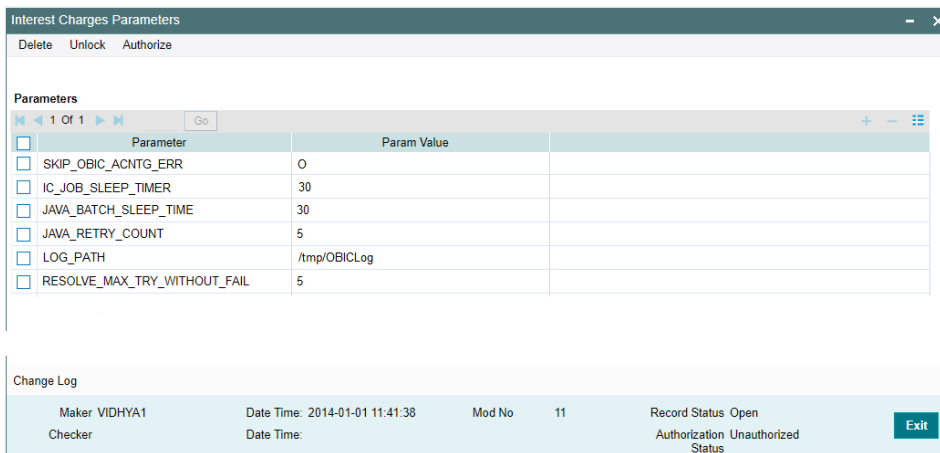
- a. Rest Service IP: The server IP where **obic-interest-batch-services.war** has been deployed.
- b. Rest Service Port: The Managed Server port where **obic-interest-batch-services.war** has been deployed.

c. External User: User ID of the Flexcube user used for invoking the Java IC Services.



3. IC Param Maintenance (ICDPARAM):

Launch the screen and unlock and modify the parameters.



Below are the parameters which can be configured as per requirement:

PARAM_NAME	PARAM_VAL	Description
JAVA_BATCH_SLEEP_TIME	5	Sleep time in seconds to verify the status of Java IC service submitted

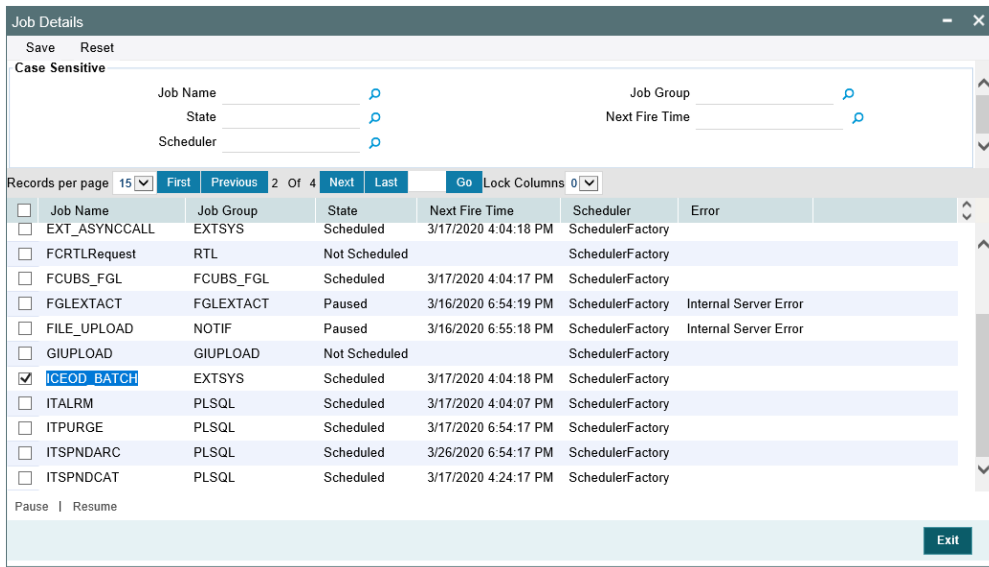


SKIP_OBIC_ACNTG_ERR	O	O -Mark the accounting failures and complete the EOC batch, E - Fails the EOC batch when getting any accounting failures.
IC_JOB_SLEEP_TIMER	30	Sleep time to check the status of IC parallel streams - Conventional IC
JAVA_RETRY_COUNT	150	Maximum retry count to fail the EOC batch when the submitted java service is not picked up by scheduler
LOG_PATH	/tmp/OBICLog	Log Path where the IC Service-related logs are to be written.
RESOLVE_MAX_TRY_WITHOUT_FAIL	5	Maximum retry to obtain account lock for resolution
IC_MULTI_DEST_AHOF	N	If Accounting Handoff is required for Multiple Source Systems, this flag must be marked Y. If N, it will be posted to single source.

- After the above maintenances, restart FCUBS Application and all the servers in the order mentioned in the section 1.5

## 1.7 Scheduler Job for Triggering IC EOD in FCUBS:

A new Scheduler Job "ICEOD\_BATCH" has been introduced in order to trigger IC EOD in Flexcube. After the above maintenances are done, resume ICEOD\_BATCH Job from SMSJOBBER screen before triggering FCUBS EOD:



### Note:

- ICEOD\_BATCH Job Scheduler interval is set by default as 5 seconds and shouldn't be maintained lesser than 5 seconds.

2. ICEOD\_BATCH Job has been released with start-up mode as Manual. Hence after every deployment of FCUBS application or restart of server, the job needs to be manually scheduled.
3. Before triggering UBS EOD job kindly ensure that ICEOD\_BATCH Job is running.

## 2. IC End of Day Batches

Following batches must be maintained for Interest processing.

For End OF Transaction Input stage following batches must be maintained in the given order. Other batches of EOC in this stage should have sequence number less than IC batch sequence number (below listed IC batches should be after all non IC batches).

EOC Group	Batch Name	Module	Frequency	Maintenance order
End OF Transaction Input	ACBCUTOF	AC	D	1
End OF Transaction Input	ICBCUTOF	IC	D	2
End OF Transaction Input	TDEOD	IC	D	3
End OF Transaction Input	ICBEOD	IC	D	4
End OF Transaction Input	DABHOFF	AC	D	5

No Other batch should be configured in between the above batches and all the batches of EOC in End OF Transaction Input stage should be of lower sequence number.

For Beginning of the day stage following batches to be maintained in the given order. Other batches of EOC in this stage should have a sequence number less than these batches (below listed IC batches should be after all non IC batches).

EOC Group	Batch Name	Module	Frequency	Maintenance order
Beginning of the Day	ICBOD	IC	D	1
Beginning of the Day	TDEOD	IC	D	2
Beginning of the Day	DABHOFF	AC	D	3



Java IC Installation  
[May] [2020]  
Version 14.4.0.0.0

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