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Java TD Installation

Oracle FLEXCUBE Universal Banking

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Table of Contents

1.   Java TD Installation

1.1   Introduction

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

1.2   Prerequisites

Java TD 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.

Java IC Installation is mandatory for TD.

1.3   Server Setup

Java TD 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 TD Services Registration. On start-up all Java TD 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.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 TD Services during service start up.
        Service Name: plato-config-services.war

Note: INFRA services are common for IC and TD. If already deployed for IC, deployment shouldn't be done for TD again. Further in the document, INFRA services related setup and deployment can be skipped if already done for IC.

2. **Java TD Services:** These Services are Java TD Functional Services. E.g.: Maturity Service, Deposit service, Maturity Calc Service etc.

INFRA services and Java TD 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 and plato-config-services).
2. **JavaTDServer:** In this managed server, all the Java TD services should be deployed.

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

Data Source JNDI Name	Type	Targets
jdbc/PLATO	Non-XA Datasource	JavaTDServer, ConfigServer
jdbc/PLATOBATCH	Non-XA Datasource	JavaTDServer
jdbc/FCUBS	Non-XA Datasource	JavaTDServer

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>" -Dserver.id=<server id>

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/TDLogs" -Dserver.id=1

export JAVA_OPTIONS

For Windows Server:

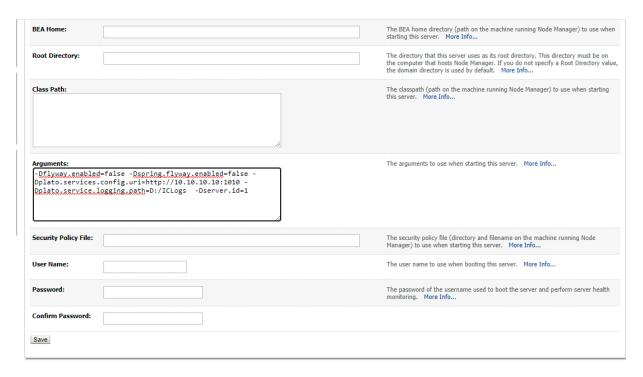set JAVA_OPTIONS=%JAVA_OPTIONS% %JAVA_PROPERTIES% -Dplato.services.config.uri=http://<config-server-ip> :<config-server-port> -Dflyway.enabled=false -Dspring.flyway.enabled=false -Dplato.service.logging.path=<Debug Path where Logs are to be written>   -Dserver.id=<server id>

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:/TDLogs -Dserver.id=1

server id parameter should be a number used to uniquely identify an application instance. If only one deployment of a service is present they this value has to be set to 1. In case of multiple deployment, number from 1 to the number of instances can be assigned to the server where deployment is done.

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.

1.4   WAR Deployment after Build

As part of FCUBS EAR build, in addition to FCUBS EAR, Java TD wars and Java TD 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-6.0.0.war and plato-config-services-6.0.0.war will be available in the destination folder.

    Deploy all the INFRA Service WARs in **ConfigServer**.
3. **Java TD Service WARs:** All the Java TD Service WARs will be copied in "TD" folder under the destination folder.

    Deploy all the Java TD Service WARs are in **JavaTDServer**.

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 TD Services

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

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 TD Services should get listed in the service discovery URL.

2. TD Maintenance in FCUBS

2.1 Required Maintenance for Java TD:

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: JavaTDServer Managed Server Port

2. External Service Maintenance (IFDEXSER):

   Prior to this step, user must maintain external system "FCJAVA" in CODSORCE screen.

   User has to query for External System "FCJAVA" in IFDEXSER and following details have to be modified:

   a. Rest Service IP: The server IP where **fcubs-co-batch-services.war** has been deployed.

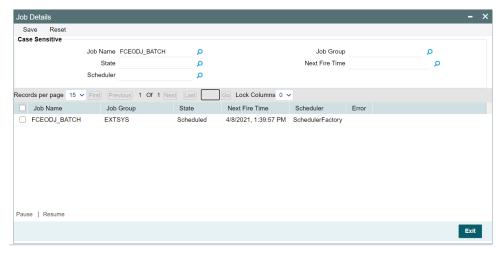   b. Rest Service Port: The Managed Server port where **fcubs-co-batch-services.war** has been deployed.

c. External User: User ID of the Flexcube user FCUBSUSER is used for invoking the Java TD Services.

3. PLATO_LOGGER_PARAM_CONFIG has to be updated with the log path for IC logs corresponding to LOG_PATH param value.

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

2.2 Scheduler Job for Triggering TD EOD in FCUBS:

A new Scheduler Job "FCEODJ_BATCH" has been introduced in order to trigger TD EOD in Flexcube. After the above maintenances are done, resume FCEODJ_BATCH Job from SMSJOBBR screen before triggering FCUBS EOD:

Note:

1. FCEODJ_BATCH Job Scheduler interval is set by default as 5 seconds and shouldn't be maintained lesser than 5 seconds.

2. FCEODJ_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 FCEODJ_BATCH Job is running.

3.   TD End of Day Batches

Following batches must be maintained for TD 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 TD batch sequence number (below listed TD batches should be after all non TD batches).

EOC Group	Function Id	Service Code	Frequency	Maintenance order	Module
End of Transaction Input	TDJEOD	PTEOD	D	1	TD
End of Transaction Input	TDJEOD	RPRT	D	2	TD
End of Transaction Input	TDJEOD	AHOL	D	2	TD
End of Transaction Input	TDJEOD	ICBT	D	3	TD
End of Transaction Input	TDJEOD	INTR	D	4	TD
End of Transaction Input	TDJEOD	PACT	D	5	TD
End of Transaction Input	TDJEOD	ACCT	D	5	TD
End of Transaction Input	TDJEOD	POSTACCT	D	6	TD
End of Transaction Input	TDJEOD	POSTPACT	D	6	TD
End of Transaction Input	TDJBOD	TDJBOD	D		TD
End of Transaction Input	TDJEOD	UCLM	D	6	TD
End of Transaction Input	TDJEOD	UCBT	D	7	TD
End of Transaction Input	TDJEOD	INTR	D	8	TD
End of Transaction Input	TDJEOD	PACT	D	9	TD

End of Transaction Input	TDJEOD	ACCT	D	9	TD
End of Transaction Input	TDJEOD	POSTACCT	D	10	TD
End of Transaction Input	TDJEOD	POSTPACT	D	10	TD
End of Transaction Input	TDJEOD	PLIQ	D	11	TD
End of Transaction Input	TDJEOD	TDMAT	D	9	TD
End of Transaction Input	TDJEOD	UCMA	D	9	TD
End of Transaction Input	TDJEOD	MATY	D	10	TD
End of Transaction Input	TDJEOD	ROLL	D	10	TD
End of Transaction Input	TDJEOD	MCLS	D	11	TD

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. As part of EOTI, TDJBOD is to be configured post ICBT batch.

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.

EOC Group	Function Id	Service Code	Frequency	Maintenance order	Module
Beginning of the Day	TDJBOD	PTBOD	D	1	TD
Beginning of the Day	TDJBOD	PUCL	D	2	TD
Beginning of the Day	TDJBOD	RCDP	D	2	TD
Beginning of the Day	TDJBOD	TDCD	D	2	TD

Beginning of the Day	TDJBOD	ICBT	D	3	TD
Beginning of the Day	TDJBOD	INTR	D	4	TD
Beginning of the Day	TDJBOD	PACT	D	5	TD
Beginning of the Day	TDJBOD	ACCT	D	5	TD
Beginning of the Day	TDJBOD	POSTACCT	D	6	TD
Beginning of the Day	TDJBOD	POSTPACT	D	6	TD
Beginning of the Day	TDJBOD	PLIQ	D	7	TD
Beginning of the Day	TDJBOD	TDMAT	D	9	TD
Beginning of the Day	TDJBOD	MALC	D	10	TD
Beginning of the Day	TDJBOD	MATY	D	10	TD
Beginning of the Day	TDJBOD	ROLL	D	10	TD
Beginning of the Day	TDJBOD	MCLS	D	11	TD

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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
https://www.oracle.com/industries/financial-services/index.html