

Java Accounting Installation Oracle FLEXCUBE Universal Banking Release 14.4.0.3.0 [February] [2021]

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1. Java Accounting Installation

1.1 Introduction

This chapter explains the steps to configure Application Server for Java Accounting Integration with FCUBS.

1.2 Pre-Requisites

For Java Accounting Installation, a Weblogic domain is required.

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

1.3 Server Setup

This section contains following sub-sections:

- Java Accounting Setup
- Deploying INFRA Services and Java Accounting Services
- Verifying Arguments for Reference Number Generation

1.3.1 Java Accounting Setup

Java Accounting Setup includes two sets of services:

- **INFRA Services** There are two services under this category, which are described below:
 - Discovery Service:

This service is required for Java Accounting Services Registration. On start-up, all the Java Accounting 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**

- 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 Accounting Services during service start up. Service Name: plato-config-services-5.0.0.war
- Java Accounting Service This is the Accounting Functional Service with customer balance update and deferred processing.
 Service Name: fcubs-ext-accounting-services-5.0.0.war

1.3.2 Deploying INFRA Services and Java Accounting Services

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

• **Config Server:** In this managed server, the INFRA Services must be deployed (platodiscovery-services-5.0.0.war and plato-config-services-5.0.0.war).



• Java Accounting Server: In this managed server, the Java Accounting Service must be deployed.

1.3.3 Verifying Arguments for Reference Number Generation

Do the following steps, to verify the arguments:

- 1. Click Managed Server.
- 2. Under Configuration tab, Navigate to Server Start tab.
- 3. Verify the Arguments.
- **NOTE:** Parameter '-Dserver.id=1' is required for the Reference Number Generation in Java Accounting services. If it is not set, the accounting service will fail to generate the necessary reference numbers.

Figure 1: Verify Arguments (-Dserver.id=1)

	General	Cluster	Services	Keystores	SSL	Federation Services	Deployment	Migration	Tuning	Overload	Concurrency	Health Monitoring	Server Start
Domain Structure	General	Cluster	Services	Reystores	33L	rederation services	Deployment	Migration	runing	Overload	concurrency	riealur Monitoring	Server Start
base_domain Domain Partitions	Web Servi	ces Col	herence										
Environment	Save												
Servers	Jave												
Clusters													
Coherence Clusters						can use to start, suspe remote machine.	nd, shut down,	and restart s	ervers in no	ormal or une	xpected condition	ons. Use this page to	onfigure the startup
Resource Groups	that woo	e manager	will use to	start this serv	er on a	remote machine.							
Resource Group Templates													
Machines	Java Hom	e:										(path on the machin	e running Node Mana
Virtual Hosts										use whe	n starting this se	erver. More Info	
Work Managers	Java Ven		_			-				71			
Concurrent Templates	Java vend	10 1 :								The Java	vendor value t	o use when starting t	his server. More Into
Resource Management													
How do I	BEA Hom	e:									home directory rting this server	(path on the machine r. More Info	running Node Manag
Configure startup arguments for Managed Servers Start Managed Servers from the	Root Dire	ctory:								be on th	e computer that	erver uses as its root : hosts Node Manager nain directory is used i	If you do not specify
Administration Console													
Shut down a server instance	Class Pat	h:						_			spath (path on t this server, Mo	the machine running N	lode Manager) to use
										starting	mis server. Mo	ne 100	
System Status 🖃													
Health of Running Servers as of 9:26 PM													
Failed (0)													
Critical (0)								11					
Overloaded (0)										71			
Warning (0)	-Dserve							_		me argu	ments to use w	hen starting this serv	a. more info
OK (1)	-USErve	<u>11.10</u> =1											

The data sources needs to be created for INFRA Services and Java Accounting Services. For more information on data sources refer to table.

Data Source JNDI Name	Туре	Targets
jdbc/OBAC	Non-XA Datasource	Java Accounting Server
jdbc/PLATO	Non-XA Datasource	Java Accounting Server, ConfigServer
jdbc/PLATOBATCH	Non-XA Datasource	Java Accounting Server

The specific lines for Linux Server/Windows Server must be included in setDomainEnv.cmd or setDomainEnv.sh of the Weblogic domain:



1.3.3.1 Scripts for Linux Server

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

export JAVA_OPTIONS

For example,

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/ACLogs"

export JAVA_OPTIONS

1.3.3.2 Scripts 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>

For example,

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:/ACLogs

1.3.3.3 Alternate Method

Alternatively, if the parameters are to be set specific to a Managed Server where Services are deployed, then set these properties as follows:

- 1. Select Servers.
- 2. Under Servers, select Managed Server.



3. Under Managed Server, select Server Start in the argument section.

NOTE: It will be useful only if Node-Manager is used to start managed servers.

Figure 2: Setting Servers

domain.	Configura	tion	Protocols	Logging	Debug	Monitoring	Control	Deployments	Services	Security	Notes					
Lock & Edit	General	Cluste	r Services	Keystor	es SSL	. Federatio	n Services	Deployment	Migration	Tuning	Overload	Concurrency	Health Monitoring	Server Start	Web Services	Coherence
Release Configuration	Save															
Domain Structure																
PLAT0144 A D-Domain Partitions D-Environment			a WebLogic to start this				start, suspe	nd, shut down, -	and restart se	ervers in no	ormal or une	xpected conditio	ns. Use this page to o	onfigure the star	tup settings that	Node
Servers Ousters Coherence Clusters	Java Hom	ne:											e directory (path on t erver. More Info	he machine runni	ng Node Manage	r) to use when
Resource Groups Resource Group Templates Machines	Java Vend	dor:										The Java Vend	dor value to use when	starting this serv	ver. More Info	
···Virtual Hosts ···Virtual Targets ···Work Managers	BEA Home	e:											e directory (path on th erver. More Info	ne machine runnii	ng Node Manage	r) to use when
Concurrent Templates	Root Dire	ctory:										the computer	that this server uses a that hosts Node Mana rectory is used by def	ager. If you do no	t specify a Root	must be on Directory value,
How do I		•														
Configure startup arguments for Managed Servers	Class Path	h:										The classpath this server.	(path on the machine fore Info	e running Node M	anager) to use w	hen starting
 Start Managed Servers from the Administration Console 																
Shut down a server instance																
System Status																
Health of Running Servers as of 12:00 PM		Arguments: -DplatoJtaEnabled=Y -								The arguments to use when starting this server. More Info						
Failed (0) Critical (0) Overloaded (0) Warning (0)	- <u>Uplato.services.config.uri</u> =http://10.10.10.10101 - D <u>plato.services.config.uri</u> =http://10.10.101010 - D <u>flyway.enabled</u> =false - <u>Dspring.flyway.enabled</u> =false - D <u>plato.service.logging.path=/unt/icdebug</u>															
ОК (3)	Comulty D	Delia: 6	Sile:									The exercity of	-line filler damage	d filenome en the	machina cuania	a Noda

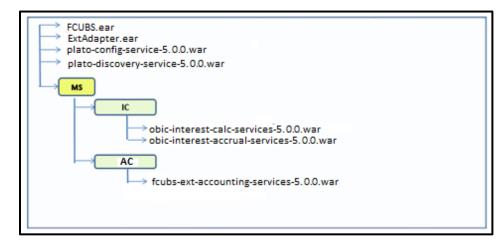


1.4 WAR Deployment after Build

In addition to FCUBS EAR, the Java Accounting Service war and INFRA war will get copied into the destination location, as a part of the FCUBS EAR build. The wars will be copied after build in the locations mentioned below:

- FCUBS Application EAR and All Adapter EARs: Available in the destination folder.
- 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.
- Java Accounting Service WAR: All the Java Accounting Service WAR will be copied in "AC" folder under the destination folder.
 Deploy the Java Accounting Service WAR are in Java Accounting Server.





1.5 Order of Server Start

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

- 1. plato-config-service
- 2. plato-discovery-service
- 3. Java Accounting Service

When the servers are restarted, make sure to start ConfigServer first and then the Java Accounting Server.

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

To check if all the services have started, the below discovery URL can be checked:

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



For example,

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 Accounting Maintenance in FCUBS

The maintenances mentioned below are required in FCUBS:

- PROPERTIES Table
- Transaction Reference Number

1.6.1 **PROPERTIES Table**

Since the properties table stores the properties required by the Services, you need to run the update scripts. The following placeholders needs to be replaced in the update scripts:

- <config-server-ip> with ip or hostname of ConfigServer Managed Server.
- <config-server-port> with port of ConfigServer Managed Server.
- <accounting-server-port> with port of Java Accounting Server Managed Server.

1.6.1.1 Update Scripts

update properties set value = 'http://<config-server-ip>:<config-server-port>/plato-discoveryservice/eureka' where key ='plato.services.eureka.uri';

update properties set value = '< accounting-server-port>' where key in ('server.port', 'plato.services.entityservices.port');

For example,

update properties set value = 'http://\${eureka.host}:\${eureka.port}/plato-discovery-service/eureka' where key ='plato.services.eureka.uri' and application='fcubs-ext-accounting-services';

update properties set value = '\${'fcubs-ext-accounting-services.server.port}' where key in ('server.port', 'plato.services.entityservices.port') and application='fcubs-ext-accounting-services'

1.6.2 Transaction Reference Number

If the Transaction reference number needs to be generated by DDA system, maintain the corresponding details using ACDPARAM with key id as PRM.





Java Accounting Installation

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