Configuration and Deployment Guide

Oracle Banking Origination

Release 14.7.0.3.0

Part Number F87319-01

August 2023

Table of Contents

1 Preface

1.1 Purpose

This guide is a supporting document for the installation of Oracle Banking Microservices Architecture applications. The user can find the reference in the respective installation guides.

1.2 Audience

This guide is intended for WebLogic admin or ops-web team who are responsible for installing OFSS Banking Products.

1.3 Document 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.

1.4 Acronyms and Abbreviations

Abbreviation	**Description**
LDAP	Lightweight Directory Access Protocol

1.5 Related Documents

The Related document list are as follows:

- Oracle Banking Microservices Architecture Installation Guides
- Product Installation Guides

2 Configuration and Deployment

2.1 Introduction

This guide is a supporting document for the installation of Oracle Banking Microservices Architecture applications. You can find the reference in the respective installation guides.

2.2 Placeholder Update for Oracle Banking Microservices Architecture Services

The Placeholder update can be performed in the following methods:

- Method 1 – Via **setUserOverrides.sh** file
- Method 2 – Via passing the **-D params** in the Server start argument
- Method 3 – Using **env** files and **setUserOverrides.sh** file
- Method 4 – Via Workflow creation in Plato O

2.2.1 Method 1 – Via setUserOverrides.sh file

Perform the following steps:

1. Create a file called **setUserOverrides.sh** inside the Weblogic bin location.
2. The following formats of the **setUserOverrides.sh** file and the list of parameters that need to be passed in order to run Oracle Banking Microservices Architecture services properly.

NOTE: Below are the list of **-D params** (ENV Variables) which needs to be set for all the individual services. Set a single **–Dparam** as follows:

```
JAVA_OPTIONS="${JAVA_OPTIONS} -DParam =<ParamValue>”
export JAVA_OPTIONS
```

//**Common Properties**

-Dplato.services.config.port= <CONFIG_SERVICE_PORT>

-Dplato.services.config.uri= http://<CONFIG_SERVICE_HOSTNAME>:<CONFIG_SERVICE_PORT>

-Deureka.client.serviceUrl.defaultZone= http://<DISCOVERY_SERVICE_HOST>:<DISCOVERY_SERVICE_PORT>/plato-discovery-service/eureka

```
-Dplato.services.entityservices.port= <PLATO_ORCH_SERVICE_PORT>

-Dplato.service.logging.path= <LOGGING PATH>

-Dspring.main.allow-circular-references=true

//Flyway Common Placeholders

-Dflyway.domain.placeHolders.eureka.host= <DISCOVERY_SERVICE_HOST>

-Dflyway.domain.placeHolders.eureka.port= <DISCOVERY_SERVICE_PORT>

-Dflyway.domain.placeHolders.plato-api-gateway.server.port= <API_GATEWAY_PORT>

-Dflyway.domain.placeHolders.zipkin.host= <ZIPKIN_HOSTNAME>

-Dflyway.domain.placeHolders.zipkin.port= <ZIPKIN_PORT>

//SMS - Needed for other services also

-Dflyway.domain.placeHolders.sms.username= <SMS_SCHEMA_USERNAME>

-Dflyway.domain.placeHolders.sms.password= <SMS_SCHEMA_PASSWORD>

-Dflyway.domain.placeHolders.sms.jdbcUrl= <SMS_SCHEMA_URL>

-Dflyway.domain.placeHolders.sms.schemas= <SMS_SCHEMA_NAME>

//Plato Config Service - Needed for other services also

-Dflyway.domain.placeHolders.plato-config.username= <PLATO_DB_USERNAME>

-Dflyway.domain.placeHolders.plato-config.password= <PLATO_DB_PASSWORD>"

-Dflyway.domain.placeHolders.plato-config.jdbcUrl= <PLATO_DB_URL>

-Dflyway.domain.placeHolders.driver.className= oracle.jdbc.driver.OracleDriver

-Dflyway.domain.placeHolders.plato-config.schemas= <PLATO_DB_SCHEMANAME>

-Dspring.cloud.compatibility-verifier.enabled=false

//Plato Api Gateway - Needed for other services also

-Dflyway.domain.placeHolders.api-gateway.username= <SECURITY_DB_USERNAME>
```

-Dflyway.domain.placeHolders.api-gateway.password= <SECURITY_DB_PASSWORD>

-Dflyway.domain.placeHolders.api-gateway.jdbcUrl= <SECURITY_DB_URL>

-Dflyway.domain.placeHolders.api-gateway.schemas= <SECURITY_SCHEMANAME>

-Dflyway.domain.placeHolders.apigateway.host= <APIGATEWAY_ROUTER_HOSTNAME>

-Dflyway.domain.placeHolders.apigateway.port= <APIGATEWAY_ROUTER_PORT>

-Dflyway.domain.placeHolders.USER.STORE= <USER.STORE>

-Dflyway.domain.placeHolders.LDAP.CORS.allowed.origin= <LDAP_CORS>

-Dflyway.domain.placeHolders.LDAP.credential.SALT= <LDAP_CREDENTIALS_SALT>

-Dflyway.domain.placeHolders.JWT.EXPIRY.seconds= <JWT_EXPIRY_SECONDS>

-Dflyway.domain.placeHolders.LDAP.url = <LDAP_SERVER_URL >

-Dflyway.domain.placeHolders.LDAP.userId = <LDAP_SERVER_USER>

-Dflyway.domain.placeHolders.LDAP.server.base = <LDAP_SERVER_BASE>

-Dflyway.domain.placeHolders.LDAP.server.credential = <LDAP_CREDENTIALS>

-Dflyway.domain.placeHolders.LDAP.usersearch.base = <LDAP_USER_BASE>

-Dflyway.domain.placeHolders LDAP.user.prefix = <LDAP_USER_PREFIX>

-Dflyway.domain.placeHolders.LDAP.provider = <LDAP_PROVIDER>

-Dflyway.domain.placeHolders.TOKEN.autoregenerate = <TOKEN_AUTOREGENERATION>

-Dflyway.domain.placeHolders.SSO.enabled = <SSO_ENABLED>

-Dflyway.domain.placeHolders.TOKEN.regeneration.enabled = <TOKEN_ALWAYSNEW_GENERATION >

-Dplato-api-gateway.enableAudit=true

//**Plato Discovery Service**

-Dflyway.domain.placeHolders.plato-discovery-service.server.port=<DISCOVERY_SERVICE_PORT>

//**Plato UI-Config Services**

-Dflyway.domain.placeHolders.plato-ui-config-services.server.port=<UICONFIG_SERVICE_PORT>

-Dflyway.domain.placeHolders.plato-ui-config.username=<UICONFIG_SCHEMA_USERNAME>

-Dflyway.domain.placeHolders.plato-ui-config.password=<UICONFIG_SCHEMA_PASSWORD>

-Dflyway.domain.placeHolders.plato-ui-config.jdbcUrl=<UICONFIG_SCHEMA_URL>

-Dflyway.domain.placeHolders.plato-ui-config.schemas=<UICONFIG_SCHEMA_NAME>

//**Plato Apigateway Router Service**

-Dflyway.domain.placeHolders.plato-apigateway-router.server.port= <APIGATEWAY_ROUTER_PORT>

-Dflyway.domain.placeHolders.plato-apigateway router.router.protocol=<ROUTER_PROTOCOL>

-Dflyway.domain.placeHolders.plato-apigateway-router.router.meadmin.port=<ROUTER_PORT>

//**Plato Feed Services**

-Dflyway.domain.placeHolders.plato-feed-services.feed.upload.directory=<FEED_SERVICE_UPLOAD_PATH>

-Dflyway.domain.placeHolders.plato-feed-services.server.port=<FEED_SERVICE_PORT>

-Dflyway.domain.placeHolders.plato-feed-services.username=<FEED_DB_USERNAME>

-Dflyway.domain.placeHolders.plato-feed-services.password=<FEED_DB_PASSWORD>

-Dflyway.domain.placeHolders.plato-feed-services.jdbcUrl=<FEED_DB_URL>

-Dflyway.domain.placeHolders.plato-feed-services.schemas=<FEED_SCHEMA_NAME>

//**Plato Batch Server**

-Dflyway.domain.placeHolders.plato-batch-server.server.port=<BATCH_SERVER_PORT>

-Dflyway.domain.placeHolders.plato-batch-server.plato.eventhub.kafka.brokers=<EVETNHUB_KAFKA_BROKERS>

-Dflyway.domain.placeHolders.plato-batch-server.plato.eventhub.zk.nodes=<ZK_NODES>

-Dflyway.domain.placeHolders.plato-batch-server.username=<BATCH_SCHEMA_USERNAME>

-Dflyway.domain.placeHolders.plato-batch-server.password=<BATCH_SCHEMA_PASSWORD>

-Dflyway.domain.placeHolders.plato-batch-server.jdbcUrl=<BATCH_SCHEMA_URL>

-Dflyway.domain.placeHolders.plato-batch-server.schemas=<BATCH_SCHEMA_NAME>

// **Plato-Alerts-Management-Services**

-Dflyway.domain.placeHolders.plato-alerts-management-services.server.port=<ALERTS-MANAGEMENT-SERVER-PORT>

-Dflyway.domain.placeHolders.plato-alerts-management-services.plato.eventhub.kafka.brokers=<EVETNHUB_KAFKA_BROKERS>

-Dflyway.domain.placeHolders.plato-alerts-management-services.plato.eventhub.zk.nodes=<ZK_NODES>

-Dflyway.domain.placeHolders.plato-alerts-management-services.username=<ALERTS_SCHEMA_USERNAME>

-Dflyway.domain.placeHolders.plato-alerts-management-services.password=<ALERTS_SCHEMA_PASSWORD>

-Dflyway.domain.placeHolders.plato-alerts-management-services.jdbcUrl=<ALERTS_SCHEMA_URL>

-Dflyway.domain.placeHolders.plato-alerts-management-services.schemas=<ALERTS_SCHEMA_NAME>

//**Plato Orch Service**

-Dflyway.domain.placeHolders.plato-orch-service.server.port=<ORCH_SERVICE_PORT>

-Dflyway.domain.placeHolders. plato-orchestrator.hostname=<CONDUCTOR-EUREKA-HOSTNAME >

//**Conductor**

-Dconductor.properties=<CONDUCTOR_CONFIG_FILE_PATH>

//**Common core NLP services**

-Dflyway.domain.placeholders.cmc-nlp-annotator-services.server.port=<CMC_NLP_ANNOTATOR_SERVICES_PORT>

-Dflyway.domain.placeholders.cmc-nlp-dashboard-widget-services.server.port=<CMC_NLP_DASHBOARD_SERVICES_PORT>

-Dflyway.domain.placeholders.cmc-nlp-model-mngmnt-services.server.port=<CMC_NLP_MODEL_MANGEMENT_PORT>

-Dflyway.domain.placeholders.cmc-nlp-online-processing-services.server.port=<CMC_NLP_ONLINE_PROCESSING_PORT>

-Dflyway.domain.placeholders.cmc-nlp-tag-maint-services.server.port=<CMC_NLP_TAG_MAINTENANCE_PORT>

-Dflyway.domain.placeholders.cmc-nlp-text-extraction-services.server.port=<CMC_NLP_TEXT_EXTRACTION_PORT>

-Dflyway.domain.placeholders.cmc-nlp-txn-log-services.server.port=<CMC_NLP_TXN_LOG_SERVICES_PORT>

-Dflyway.domain.placeholders.cmc-nlp-util-services.server.port=<CMC_NLP_UTIL_SERVICES_PORT>

// **Common core NLP Poller service**

-Dflyway.domain.placeholders.cmc-fc-ai-ml-services.server.port=<Server_Port>

-Dflyway.domain.placeholders.cmc-fc-ai-ml-services.server.postingPath=<Posting_Path>

-Dflyway.domain.placeholders.cmc-fc-ai-ml-services.server.pollingPath=<Polling_Path>

-Dflyway.domain.placeholders.cmc-fc-ai-ml-services.server.pollingEmail=<Polling_Email>

-Dflyway.domain.placeholders.cmc-fc-ai-ml-services.server.emailServerHost=<Email_Server_Host>

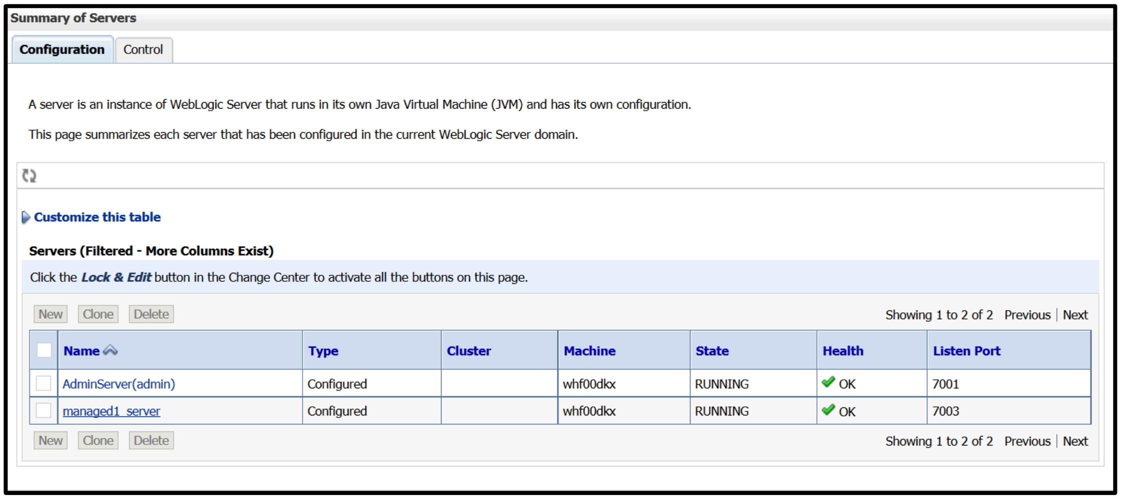
-Dflyway.domain.placeholders.cmc-fc-ai-ml-

```
services.server.emailServerPort=<Email_Server_PORT>
-Dflyway.domain.placeholders.cmc-fc-ai-ml-
services.server.pollingFrequency=<Polling_Frequency>
-Dflyway.domain.placeholders.cmc-fc-ai-ml-
services.server.pollerInitialDelay=<Poller_Initial_Delay>
-Dflyway.domain.placeholders.cmc-fc-ai-ml-
services.server.emailPassword=<Poller_Email_Password>
```

2.2.2 Method 2 – Via passing the -D params in the Server start argument

All the above mentioned -D parameters can be passed through the Server start argument in respective managed server. Perform the following steps:

1. Navigate to the Server **Configuration** tab and click the managed server to which you want to pass the values.



Summary of Servers

A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (JVM) and has its own configuration.

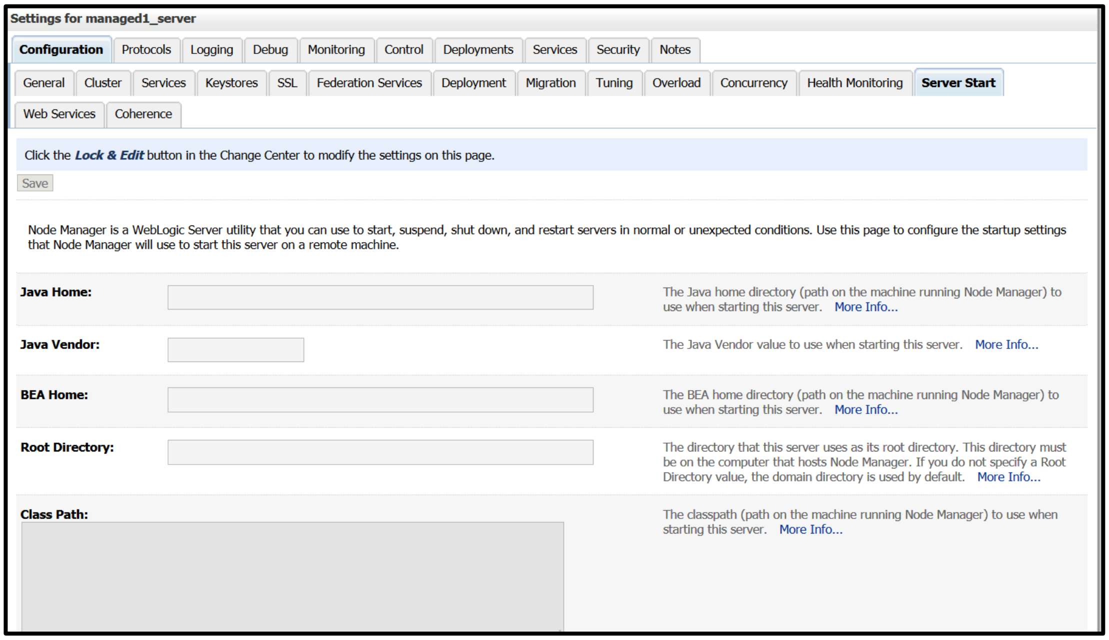
This page summarizes each server that has been configured in the current WebLogic Server domain.

Servers (Filtered - More Columns Exist)

Click the ***Lock & Edit*** button in the Change Center to activate all the buttons on this page.

☐	Name	Type	Cluster	Machine	State	Health	Listen Port
☐	AdminServer(admin)	Configured		whf00dkx	RUNNING	✓ OK	7001
☐	managed1_server	Configured		whf00dkx	RUNNING	✓ OK	7003

2. Select **Server Start** tab in the next screen.



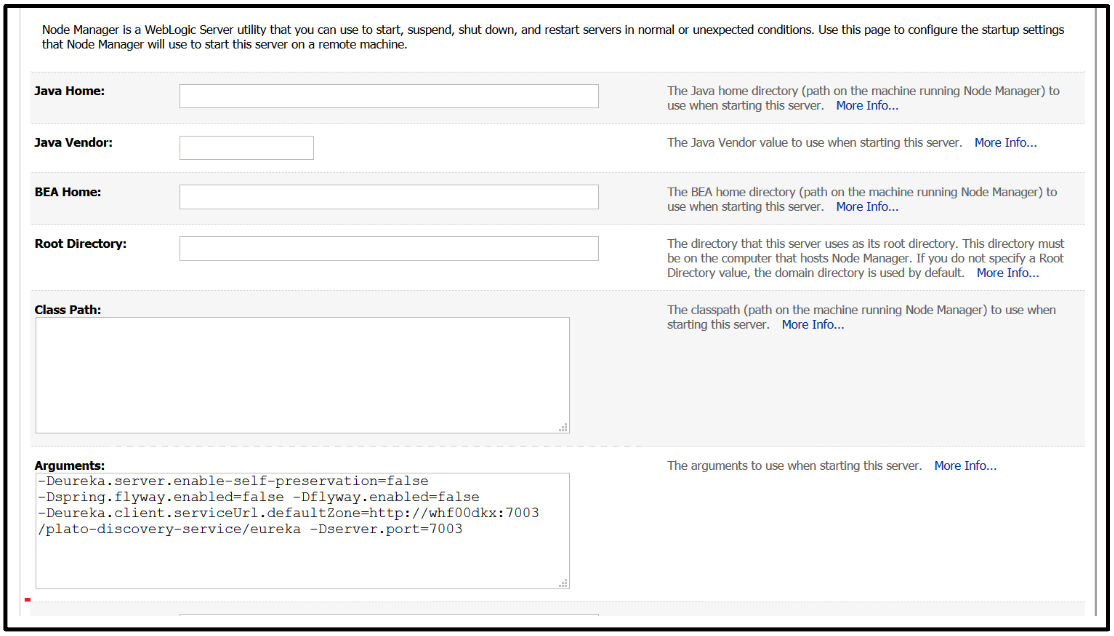
Settings for managed1_server

Click the ***Lock & Edit*** button in the Change Center to modify the settings on this page.

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.

Java Home:		The Java home directory (path on the machine running Node Manager) to use when starting this server. More Info...
Java Vendor:		The Java Vendor value to use when starting this server. More Info...
BEA Home:		The BEA home directory (path on the machine running Node Manager) to use when starting this server. More Info...
Root Directory:		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. More Info...
Class Path:		The classpath (path on the machine running Node Manager) to use when starting this server. More Info...

3. Edit the **Arguments** field and pass all the environment parameters required for the service to run.



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.

Java Home:		The Java home directory (path on the machine running Node Manager) to use when starting this server. More Info...
Java Vendor:		The Java Vendor value to use when starting this server. More Info...
BEA Home:		The BEA home directory (path on the machine running Node Manager) to use when starting this server. More Info...
Root Directory:		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. More Info...
Class Path:		The classpath (path on the machine running Node Manager) to use when starting this server. More Info...
Arguments:		The arguments to use when starting this server. More Info...

Arguments:

```
-Deureka.server.enable-self-preservation=false
-Dspring.flyway.enabled=false -Dflyway.enabled=false
-Deureka.client.serviceUrl.defaultZone=http://whf00dkx:7003
/plato-discovery-service/eureka -Dserver.port=7003
```

4. Save the configuration and restart the managed server. After you restart, the service can be started or deployed properly.

2.2.3 Method 3 – Using env files and setUserOverrides.sh file

Perform the following steps:

1. Copy the **setUserOverrides.sh** file to each of the <domain>/bin folder. The example of the file is given below:

```
#!/bin/bash

# shellcheck disable=SC1090

# Common functions

set -e -x

config_file=""

PLATO_CONFIG_MANAGED_SERVER_NAME=""

# This file is used only for PLATO-CONFIG service

plato_config_file="${DOMAIN_HOME}/bin/plato-config-deploy.env"

# This file is used for rest of the services

domain_config_file="${DOMAIN_HOME}/bin/domain-config-deploy.env"

if [ -f "$plato_config_file" ] ; then
```

```
PLATO_CONFIG_MANAGED_SERVER_NAME=`cat ${DOMAIN_HOME}/bin/plato-config-deploy.env | grep "PLATO_CONFIG_MANAGED_SERVER_NAME" | cut -d'=' -f2`
fi
if [ "${SERVER_NAME}" = "${PLATO_CONFIG_MANAGED_SERVER_NAME}" ] ; then
# This will get executed only for Plato-config service entries
config_file="${plato_config_file}"
else
# This will get executed for all other services
config_file="${domain_config_file}"
fi
if [ -f "$config_file" ]
then
while read -r prop || [ -n "$prop" ]
do
case "$prop" in \#*) continue ;; esac
if [ -z "${prop}" ]; then
continue
else
PLACEHOLDERS=${PLACEHOLDERS}" "$(echo -D$prop)
PLACEHOLDERS="${PLACEHOLDERS}"
fi
done < "$config_file"
else
echo "$config_file not found. please provide the property file to set -D parameter"
exit 1
fi
PLACEHOLDERS="${PLACEHOLDERS}"
```

```
JAVA_OPTIONS="${JAVA_OPTIONS}${PLACEHOLDERS}"

export JAVA_OPTIONS

echo "${JAVA_OPTIONS}"
```

2. Place the **env** files containing all the key value pairs of the **-D params** in the respective <domain>/env folder.

NOTE: The plato-config-deploy.env file contains all the key value pairs specific only to the plato-config-service and needs to be placed in the bin folder of the plato-domain. The domain-config-deploy.env file contains the key-value pairs for the rest of the services and should be placed in each <domain>/bin folder.

The sample for each of the files are given below:

plato-config-deploy.env

```
### Managed server name of plato-config service ###

PLATO_CONFIG_MANAGED_SERVER_NAME=

### plato config flyway connection entries ###

flywayTask=migrate

flyway.enabled=true

spring.flyway.enabled=false

plato-config.flyway.domain.db.username=

plato-config.flyway.domain.db.password=

plato-config.flyway.domain.db.jdbcUrl=

plato-config.flyway.domain.schemas=

plato-config.flyway.domain.locations=db/migration/domain/plato,db/migration/domain/sms,db/migration/domain/cmc,db/migration/domain/obvam

#### Kafka properties for all services ####

flyway.domain.placeholders.plato.eventhub.broker.hosts=

flyway.domain.placeholders.plato.eventhub.zookeper.hosts=

#### Kafka Security for all services ####

flyway.domain.placeholders.plato.eventhub.broker.hosts=
flyway.domain.placeholders.plato.eventhub.zookeper.hosts=
flyway.domain.placeholders.kafka.ssl.truststore.location=
flyway.domain.placeholders.kafka.ssl.truststore.password=
flyway.domain.placeholders.kafka.broker.username=
flyway.domain.placeholders.kafka.broker.password=
### common entries for all services ###
flyway.domain.placeholders.driver.className=oracle.jdbc.driver.OracleDriver
### eureka entries for all services ###
flyway.domain.placeholders.eureka.host=
flyway.domain.placeholders.eureka.port=
### zipkin entries for all services ###
flyway.domain.placeholders.zipkin.host=
flyway.domain.placeholders.zipkin.port=
### plato config flyway placeholder entries ###
flyway.domain.placeholders.plato-config.username=
flyway.domain.placeholders.plato-config.password=
flyway.domain.placeholders.plato-config.jdbcUrl=
flyway.domain.placeholders.plato-config.schemas=
flyway.domain.placeholders.plato-config.sessionIdleTimeout=
flyway.domain.placeholders.plato-config.sessionIdleWarningTime=
flyway.domain.placeholders.plato-config.environment=
### plato api-gateway flyway placeholder entries ###
flyway.domain.placeholders.api-gateway.host=
flyway.domain.placeholders.api-gateway.username=
flyway.domain.placeholders.api-gateway.password=
flyway.domain.placeholders.api-gateway.jdbcUrl=
flyway.domain.placeholders.api-gateway.schemas=

flyway.domain.placeholders.plato-api-gateway.server.port=

### plato api-gateway LDAP flyway placeholder entries ###

flyway.domain.placeholders.USER.STORE=

flyway.domain.placeholders.LDAP.CORS.allowed.origin=

flyway.domain.placeholders.LDAP.credential.SALT=

flyway.domain.placeholders.JWT.EXPIRY.seconds=

flyway.domain.placeholders.LDAP.url=

flyway.domain.placeholders.LDAP.userId=

flyway.domain.placeholders.LDAP.server.base=

flyway.domain.placeholders.LDAP.server.credential=

flyway.domain.placeholders.LDAP.usersearch.base=

flyway.domain.placeholders.LDAP.user.prefix=

# Allowed values for LDAP provider are: EMBEDDED_WEBLOGIC, PLATO

# If LDAP is running in weblogic then value should be EMBEDDED_WEBLOGIC

# If spring based LDAP(which is run through a jar provided) is used, then the value should be PLATO

flyway.domain.placeholders.LDAP.provider=

flyway.domain.placeholders.TOKEN.autoregenerate=

flyway.domain.placeholders.SSO.enabled=

flyway.domain.placeholders.TOKEN.regeneration.enabled=

### plato-ui-config flyway placeholder entries ###

flyway.domain.placeholders.plato-ui-config.username=

flyway.domain.placeholders.plato-ui-config.password=

flyway.domain.placeholders.plato-ui-config.jdbcUrl=

flyway.domain.placeholders.plato-ui-config.schemas=

flyway.domain.placeholders.plato-ui-config-services.server.port=
flyway.domain.placeholders.apigateway.host=
flyway.domain.placeholders.apigateway.port=
### plato-discovery flyway placeholder entries ###
flyway.domain.placeholders.plato-discovery-service.server.port=
### plato-apigateway-router flyway placeholder entries ###
flyway.domain.placeHolders.plato-apigateway-router.server.port=
flyway.domain.placeHolders.plato-apigateway-router.router.protocol=
flyway.domain.placeHolders.plato-apigateway-router.router.meadmin.port=
### plato-orch flyway placeholder entries ###
flyway.domain.placeholders.plato-orch-service.server.port=
flyway.domain.placeholders.plato-orchestrator.hostname=
### plato-feed flyway placeholder entries ###
flyway.domain.placeholders.plato-feed-services.username=
flyway.domain.placeholders.plato-feed-services.password=
flyway.domain.placeholders.plato-feed-services.jdbcUrl=
flyway.domain.placeholders.plato-feed-services.jndi=jdbc/PLATOFEED
flyway.domain.placeholders.plato-feed-services.schemas=
flyway.domain.placeholders.plato-feed-services.feed.upload.directory=
flyway.domain.placeholders.plato-feed-services.server.port=
### plato-batch flyway placeholder entries ###
flyway.domain.placeholders.plato-batch-server.username=
flyway.domain.placeholders.plato-batch-server.password=
flyway.domain.placeholders.plato-batch-server.jdbcUrl=
flyway.domain.placeholders.plato-batch-server.schemas=
flyway.domain.placeholders.plato-batch-server.server.port=
flyway.domain.placeholders.plato-batch-server.plato.eventhub.kafka.brokers=
flyway.domain.placeholders.plato-batch-server.plato.eventhub.zk.nodes=
flyway.domain.placeholders.plato-batch-server.jndi=jdbc/PLATOBATCH
### plato-alerts-management flyway placeholder entries ###
flyway.domain.placeholders.plato-alerts-management-services.username=
flyway.domain.placeholders.plato-alerts-management-services.password=
flyway.domain.placeholders.plato-alerts-management-services.jdbcUrl=
flyway.domain.placeholders.plato-alerts-management-services.schemas=
flyway.domain.placeholders.plato-alerts-management-services.server.port=
### sms flyway placeholder entries ###
flyway.domain.placeholders.sms-core-services.server.port=
flyway.domain.placeholders.sms.username=
flyway.domain.placeholders.sms.password=
flyway.domain.placeholders.sms.jdbcUrl=
flyway.domain.placeholders.sms.schemas=
### cmncore flyway placeholder entries ###
flyway.domain.placeholders.cmncore.username=
flyway.domain.placeholders.cmncore.password=
flyway.domain.placeholders.cmncore.jdbcUrl=
flyway.domain.placeholders.cmncore.schemas=
flyway.domain.placeholders.cmc-corebanking-adapter-service.server.port=
flyway.domain.placeholders.cmc-currency-services.server.port=
flyway.domain.placeholders.cmc-account-services.server.port=
flyway.domain.placeholders.cmc-base-services.server.port=
flyway.domain.placeholders.cmc-external-virtual-account-services.server.port=
flyway.domain.placeholders.cmc-branch-services.server.port=
flyway.domain.placeholders.cmc-customer-services.server.port=
flyway.domain.placeholders.cmc-external-chart-account-services.server.port=

flyway.domain.placeholders.cmc-external-system-services.server.port=

flyway.domain.placeholders.cmc-advice-services.server.port=

flyway.domain.placeholders.cmc-facilities-services.server.port=

flyway.domain.placeholders.cmc-txn-code-services.server.port=

flyway.domain.placeholders.cmc-settlement-services.server.port=

flyway.domain.placeholders.cmc-businessoverrides-services.server.port=

flyway.domain.placeholders.cmc-resource-segment-orchestrator-service.server.port=

flyway.domain.placeholders.cmc-screenclass-services.server.port=

flyway.domain.placeholders.cmc-datasegment-services.server.port=

flyway.domain.placeholders.cmc-settlements-services.server.port=

flyway.domain.placeholders.cmc-transactioncontroller-services.server.port=

flyway.domain.placeholders.cmc-report-services.server.port=

flyway.domain.placeholders.cmc-nlp-annotator-services.server.port=

flyway.domain.placeholders.cmc-nlp-dashboard-widget-services.server.port=

flyway.domain.placeholders.cmc-nlp-model-mngmnt-services.server.port=

flyway.domain.placeholders.cmc-nlp-online-processing-services.server.port=

flyway.domain.placeholders.cmc-nlp-tag-maint-services.server.port=

flyway.domain.placeholders.cmc-nlp-text-extraction-services.server.port=

flyway.domain.placeholders.cmc-nlp-txn-log-services.server.port=

flyway.domain.placeholders.cmc-nlp-util-services.server.port=

flyway.domain.placeholders.cmc-batch-services.server.port=

flyway.domain.placeholders.cmc-fc-ai-ml-services.server.port=

flyway.domain.placeholders.cmc-fc-ai-ml-services.postingPath=

flyway.domain.placeholders.cmc-fc-ai-ml-services.pollingEmail=

flyway.domain.placeholders.cmc-fc-ai-ml-services.emailServerPort=
flyway.domain.placeholders.cmc-fc-ai-ml-services.emailServerHost=

flyway.domain.placeholders.cmc-fc-ai-ml-services.pollingFrequency=

flyway.domain.placeholders.cmc-fc-ai-ml-services.pollerInitialDelay=

flyway.domain.placeholders.cmc-fc-ai-ml-services.emailPassword=

flyway.domain.placeholders.cmc-fc-ai-ml-services.pollingPath=

### biPublisher related cmc-report-service entries ###

flyway.domain.placeholders.weblogic.userid=

flyway.domain.placeholders.weblogic.password=

flyway.domain.placeholders.biPublisher.host=

flyway.domain.placeholders.biPublisher.port=

flyway.domain.placeholders.runReportTemplate=

flyway.domain.placeholders.emailTemplate=

flyway.domain.placeholders.dms.host=

flyway.domain.placeholders.dms.port=

### flyway jndi connection details for shared services placeholder entries ###

flyway.domain.placeholders.plato.jndi=jdbc/PLATO

flyway.domain.placeholders.plato-config.jndi=jdbc/PLATO

flyway.domain.placeholders.plato-sec.jndi=jdbc/PLATO_SECURITY

flyway.domain.placeholders.plato-ui-config.jndi=jdbc/PLATO_UI_CONFIG

flyway.domain.placeholders.sms.jndi=jdbc/sms

flyway.domain.placeholders.cmncore.jndi=jdbc/CMNCORE

### flyway jndi connection details for obvam services placeholder entries ###

flyway.domain.placeholders.eie.jndi=jdbc/EIE

flyway.domain.placeholders.eie.server.port=

flyway.domain.placeholders.eie.schemas=

flyway.domain.placeholders.elm.jndi=jdbc/ELM
flyway.domain.placeholders.elm.server.port=
flyway.domain.placeholders.elm.schemas=
flyway.domain.placeholders.vam.jndi=jdbc/VAM
flyway.domain.placeholders.vam.server.port=
flyway.domain.placeholders.vam.schemas=
flyway.domain.placeholders.vac.jndi=jdbc/VAC
flyway.domain.placeholders.vac.server.port=
flyway.domain.placeholders.vac.schemas=
flyway.domain.placeholders.vab.jndi=jdbc/VAB
flyway.domain.placeholders.vab.server.port=
flyway.domain.placeholders.vab.schemas=
flyway.domain.placeholders.vae.jndi=jdbc/VAE
flyway.domain.placeholders.vae.server.port=
flyway.domain.placeholders.vae.schemas=
flyway.domain.placeholders.eda.jndi=jdbc/EDA
flyway.domain.placeholders.eda.server.port=
flyway.domain.placeholders.eda.schemas=
flyway.domain.placeholders.vai.jndi=jdbc/VAI
flyway.domain.placeholders.vai.server.port=
flyway.domain.placeholders.vai.schemas=
flyway.domain.placeholders.van.jndi=jdbc/VAN
flyway.domain.placeholders.van.server.port=
flyway.domain.placeholders.van.schemas=
flyway.domain.placeholders.vap.jndi=jdbc/VAP
flyway.domain.placeholders.vap.server.port=
flyway.domain.placeholders.vap.schemas=
flyway.domain.placeholders.vas.jndi=jdbc/VAS

flyway.domain.placeholders.vas.server.port=

flyway.domain.placeholders.vas.schemas=

flyway.domain.placeholders.vat.jndi=jdbc/VAT

flyway.domain.placeholders.vat.server.port=

flyway.domain.placeholders.vat.schemas=

flyway.domain.placeholders.vaj.server.port=

flyway.domain.placeholders.platoorch.domain.jndi=jdbc/PLATO-O

flyway.domain.placeholders.platoorch.domain.schemas=

flyway.domain.placeholders.plato.alerts.email.userId=

flyway.domain.placeholders.plato.alerts.email.password=

flyway.domain.placeholders.plato.alerts.cmc.userId=

flyway.domain.placeholders.plato.alerts.cmc.branchCode=

flyway.domain.placeholders.plato.alerts.cmc.appId=

flyway.domain.placeholders.plato-rule.hostname=

flyway.domain.placeholders.plato-rule-service.server.port=

flyway.domain.placeholders.platorule.domain.jndi=

flyway.domain.placeholders.platorule.domain.schemas=

flyway.domain.placeholders.obrh.import.data.disable-modify=

flyway.domain.placeholders.cmc-obrh-services.kafka.server.path=

flyway.domain.placeholders.cmc-obrh-services.zookeeper.server.path=

flyway.domain.placeholders.cmc.schemas=

flyway.domain.placeholders.cmc-nlp-opennlp-services.server.port=

flyway.domain.placeholders.cmc-nlp-maintenance-services.server.port=

flyway.domain.placeholders.cmc-nlp-pipeline-services.server.port=

flyway.domain.placeholders.cmc-nlp-docview-services.server.port=
flyway.domain.placeholders.cmc-ml-indb-services.server.port=
flyway.domain.placeholders.cmc-obrh-services.kafka.enabled=
flyway.domain.placeholders.cmc-sla-services.server.port=
flyway.domain.placeholders.cmc-obcbs-services.schemas=
flyway.domain.placeholders.obcbs.server.port=
flyway.domain.placeholders.orch.cmc.brn=
flyway.domain.placeholders.orch.cmc.user=
flyway.domain.placeholders.orch.enableDynamicAllocation=
flyway.domain.placeholders.orch.enableSLA=
flyway.domain.placeholders.report-service.server.port=
flyway.domain.placeholders.report-service.hostname=
flyway.domain.placeholders.report-service.domain.jndi=jdbc/PLATOREPORT
flyway.domain.placeholders.report-service.template-metadata-directory=
flyway.domain.placeholders.report-service.output-directory=
flyway.domain.placeholders.report-service.fop-config-file=
### generic entries for all services ###
spring.cloud.config.uri=
apigateway.url=
service.logging.environment=
service.logging.path=
```

domain-config-deploy.env

```
### domain config flyway connection entries ###
flywayTask=migrate
flyway.enabled=true
spring.flyway.enabled=false
### generic entries for all services ###
```

```
spring.cloud.config.uri=

apigateway.url=

service.logging.environment=

service.logging.path=
```

2.2.4 Method 4 – Workflow Configuration

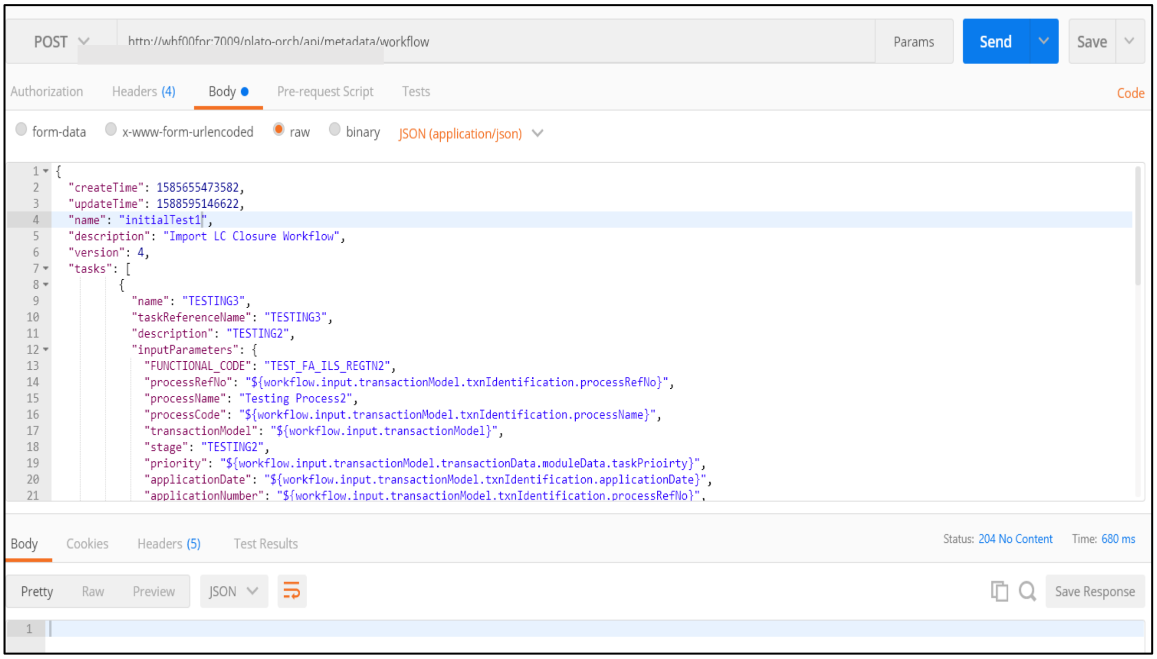
Follow the below steps to create a workflow:

1. Metadata of the workflow creation. The sample DSL for workflow creation is given below:

```
{

"name": "initialTest",

"description": "Test workflow",

"version": 4,

"tasks": [

{

"name": "TEST",

"taskReferenceName": "TESTING3",

"description": "TESTING2",

"inputParameters": {

"FUNCTIONAL_CODE": "TEST_FA_ILS_REGTN2",

"processRefNo": "${workflow.input.transactionModel.txnIdentification.processRefNo}",

"processName": "Testing Process2",

"processCode": "${workflow.input.transactionModel.txnIdentification.processName}",

"transactionModel": "${workflow.input.transactionModel}",

"stage": "TESTING2",

"priority": "${workflow.input.transactionModel.transactionData.moduleData.taskPrioirty}",

"applicationDate": "${workflow.input.transactionModel.txnIdentification.applicationDate}",

"applicationNumber": "${workflow.input.transactionModel.txnIdentification.processRefNo}",
"processRefNumber":

"${workflow.input.transactionModel.txnIdentification.processRefNo}",

"branch": "${workflow.input.transactionModel.txnIdentification.branchCode}",

"user": "${workflow.input.transactionModel.txnIdentification.currentUser}",

"customerNumber":
"${workflow.input.transactionModel.transactionData.moduleData.customerId}",

"amount": "${workflow.input.transactionModel.transactionData.moduleData.amount}",

"currencyCode": "${workflow.input.transactionModel.transactionData.moduleData.currency}",

"TASK_OUTCOMES": [

"PROCEED"

],

"moduleCode": "OBTFPM",

"customFilter": [

{

"key": "contractRefNo",

"label": "Back Office Reference"

},

{

"key": "otherRefNo",

"label": "External Reference"

}

]

},

"type": "WAIT",

"startDelay": 0,

"optional": false,

"asyncComplete": false
```

```
}
],
"outputParameters": {
"stage": "CLMO_FA_SNPOAR_APPEN",
"taskOutcome": "PROCEED_WITH_PARTICIPANT"
},
"schemaVersion": 2,
"restartable": true,
"workflowStatusListenerEnabled": false
}
```

Call the API (/api/metadata/workflow) and pass the DSL in body. The following screen depicts the sample workflow:



```
{
  "createTime": 1585655473582,
  "updateTime": 1588595146622,
  "name": "initialTest1",
  "description": "Import LC Closure Workflow",
  "version": 4,
  "tasks": [
          {
            "name": "TESTING3",
            "taskReferenceName": "TESTING3",
            "description": "TESTING2",
            "inputParameters": {
              "FUNCTIONAL_CODE": "TEST_FA_ILS_REGTN2",
              "processRefNo": "${workflow.input.transactionModel.txnIdentification.processRefNo}",
              "processName": "Testing Process2",
              "processCode": "${workflow.input.transactionModel.txnIdentification.processName}",
              "transactionModel": "${workflow.input.transactionModel}",
              "stage": "TESTING2",
              "priority": "${workflow.input.transactionModel.transactionData.moduleData.taskPrioirty}",
              "applicationDate": "${workflow.input.transactionModel.txnIdentification.applicationDate}",
              "applicationNumber": "${workflow.input.transactionModel.txnIdentification.processRefNo}",
```

Status: 204 No Content Time: 680 ms

2. Workflow Creation

Call the API (/api/workflow) to create the workflow. This API provides the information to the workflow metadata which we have created using previous call.

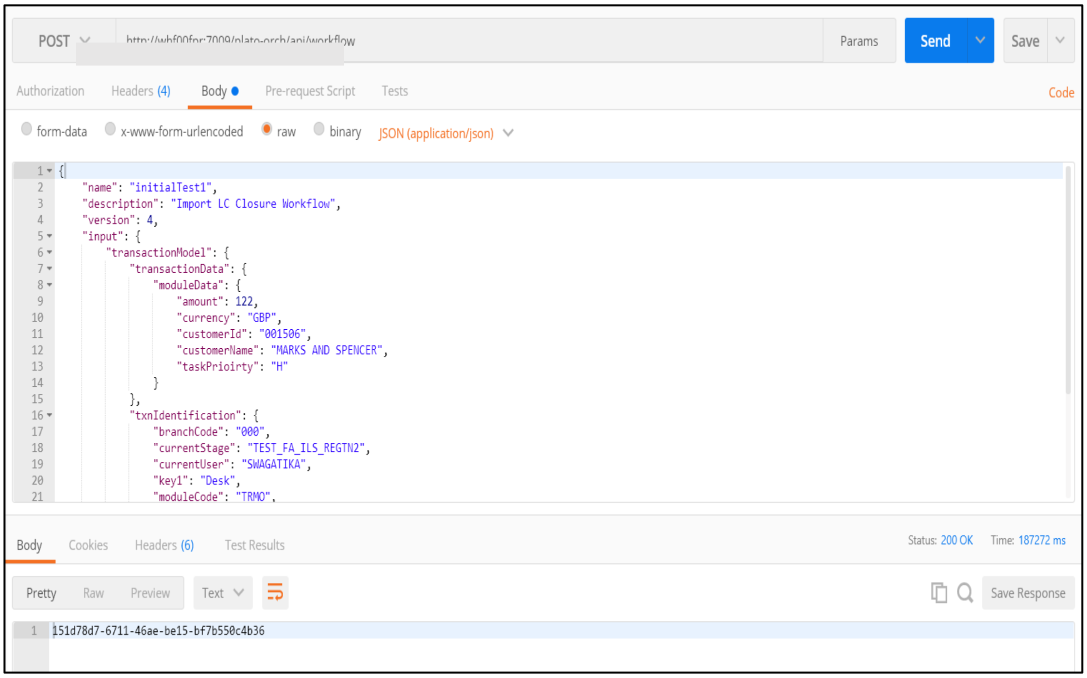
Body:

```
{
```

```
"name": "initialTest",
"description": "initialTest",
"version": 4,
"input": {
"transactionModel": {
"transactionData": {
"moduleData": {
"amount": 122,
"currency": "GBP",
"customerId": "001506",
"customerName": "MARKS AND SPENCER",
"taskPrioirty": "H"
  }
},
"txnIdentification": {
"branchCode": "000",
"currentStage": "TEST_FA_ILS_REGTN2",
"currentUser": "SWAGATIKA",
"key1": "Desk",
"moduleCode": "TRMO",
"processName": "Testing Process2",
"processRefNo": "300ILCI012260",
"applicationDate": 1588582461960,
"taskOutcome": "PROCEED",
"taskPrioirty": "H"
 }
```

```
        }
    }
}
```

The following screen depicts the sample workflow:



http://whf00fpr:7009/plato-orch/api/workflow

```
{
    "name": "initialTest1",
    "description": "Import LC Closure Workflow",
    "version": 4,
    "input": {
        "transactionModel": {
            "transactionData": {
                "moduleData": {
                    "amount": 122,
                    "currency": "GBP",
                    "customerId": "001506",
                    "customerName": "MARKS AND SPENCER",
                    "taskPrioirty": "H"
                }
            },
            "txnIdentification": {
                "branchCode": "000",
                "currentStage": "TEST_FA_ILS_REGTN2",
                "currentUser": "SWAGATIKA",
                "key1": "Desk",
                "moduleCode": "TRMO",
```

Status: 200 OK Time: 187272 ms

```
151d78d7-6711-46ae-be15-bf7b550c4b36
```

2.3 How to Create Domain and Cluster Configuration

This section contains the following sub-sections:

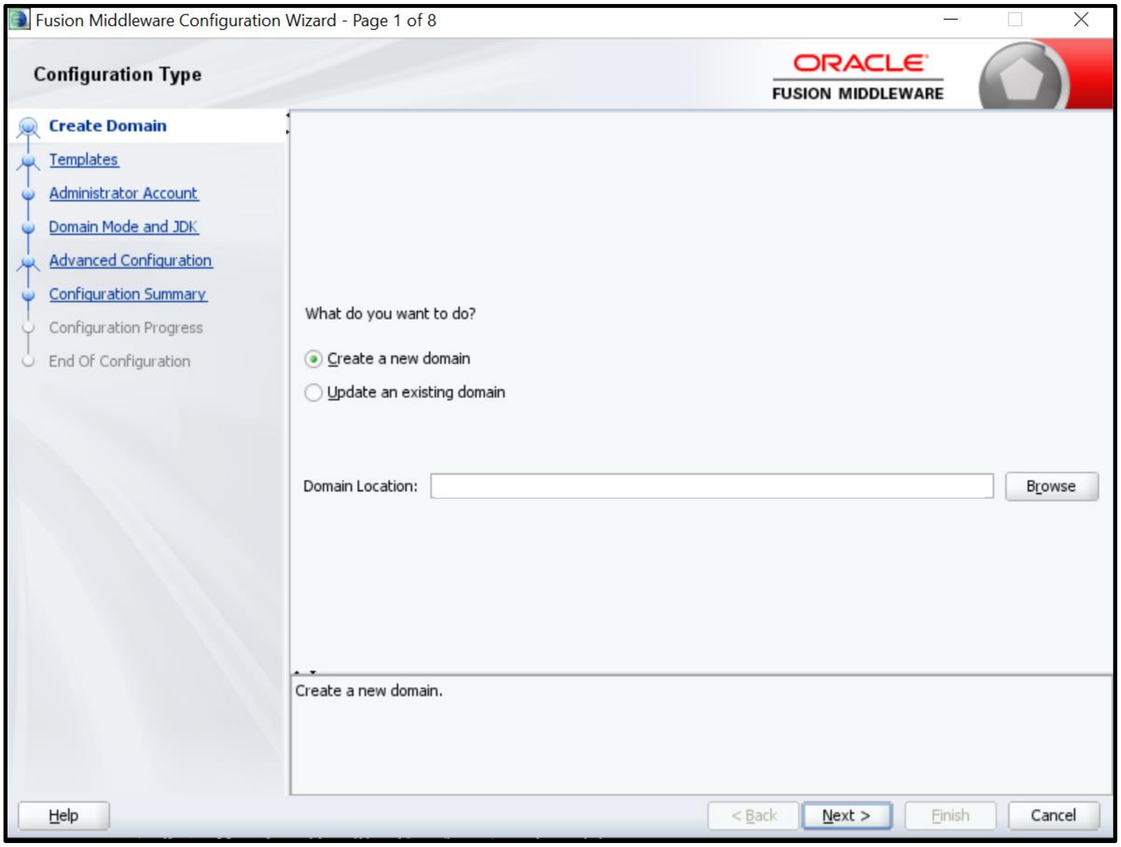
- Domain Creation Configuration
- Post Domain Creation Configurations

2.3.1 Domain Creation Configuration

Perform the following steps for domain and cluster configuration:

NOTE: Name need not to be same as provided in Screenshot.

1. Open **/oracle_common/common/bin** and run **config.cmd** (or **.sh** if operating system is linux). Create domain with required cluster and server configurations. Refer to the screenshots below.
2. Select **Create a new domain** and provide domain name. For example, **platoinfra_domain**.



What do you want to do?

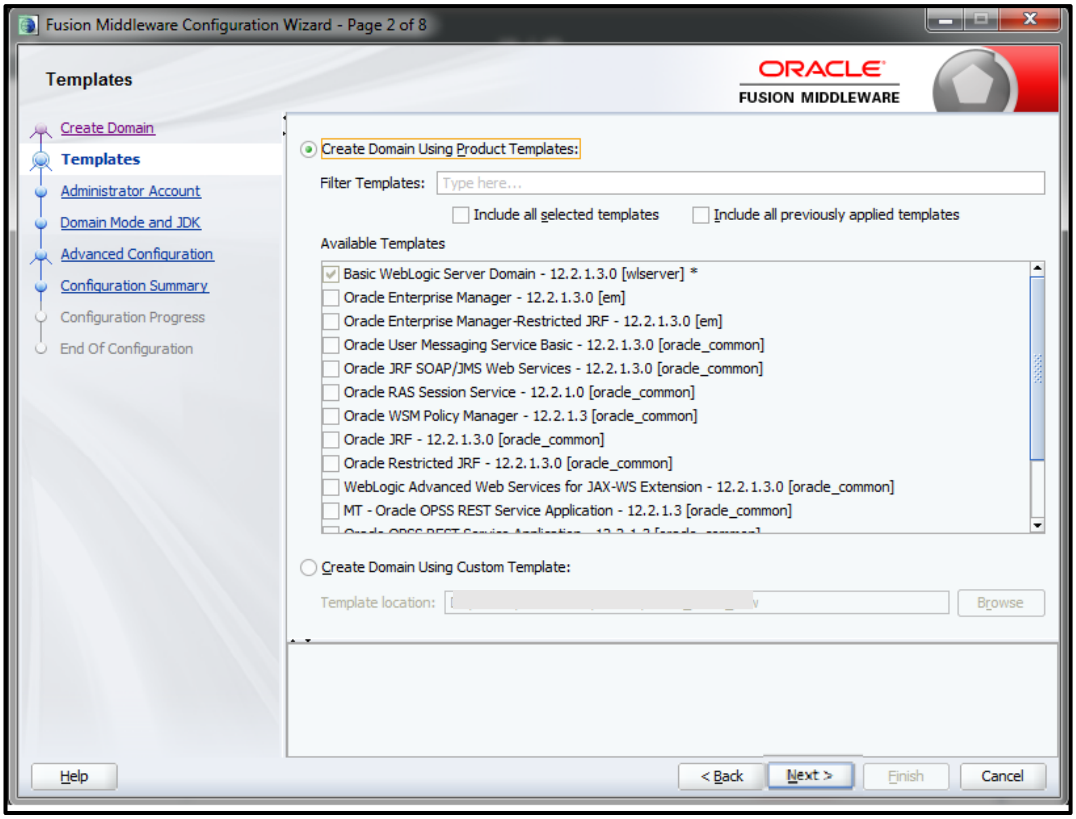
● Create a new domain

○ Update an existing domain

Domain Location:

Create a new domain.

3. Click **Next** to create simple domain with default templates.



● Create Domain Using Product Templates:

Filter Templates: Type here...

☐ Include all selected templates ☐ Include all previously applied templates

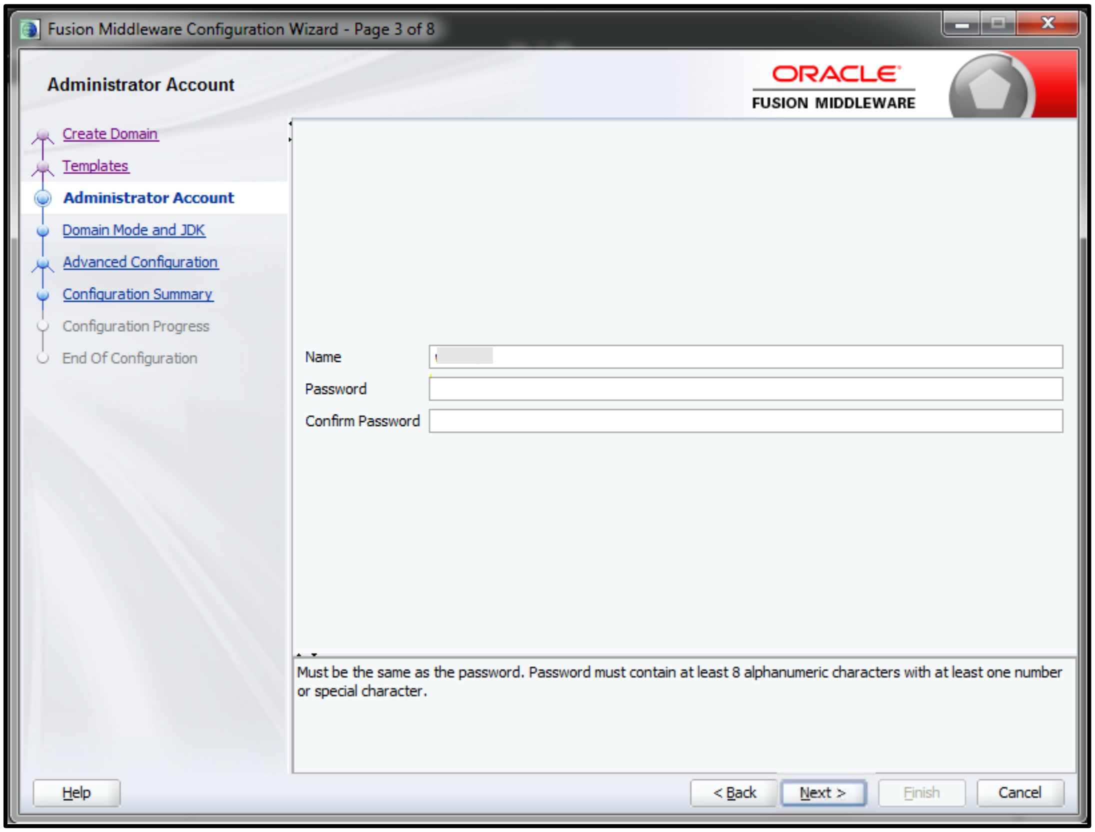
Available Templates

☑ Basic WebLogic Server Domain - 12.2.1.3.0 [wlserver] *
☐ Oracle Enterprise Manager - 12.2.1.3.0 [em]
☐ Oracle Enterprise Manager-Restricted JRF - 12.2.1.3.0 [em]
☐ Oracle User Messaging Service Basic - 12.2.1.3.0 [oracle_common]
☐ Oracle JRF SOAP/JMS Web Services - 12.2.1.3.0 [oracle_common]
☐ Oracle RAS Session Service - 12.2.1.0 [oracle_common]
☐ Oracle WSM Policy Manager - 12.2.1.3 [oracle_common]
☐ Oracle JRF - 12.2.1.3.0 [oracle_common]
☐ Oracle Restricted JRF - 12.2.1.3.0 [oracle_common]
☐ WebLogic Advanced Web Services for JAX-WS Extension - 12.2.1.3.0 [oracle_common]
☐ MT - Oracle OPSS REST Service Application - 12.2.1.3 [oracle_common]

○ Create Domain Using Custom Template:

Template location:

4. Set password and confirm, click **Next** to proceed.



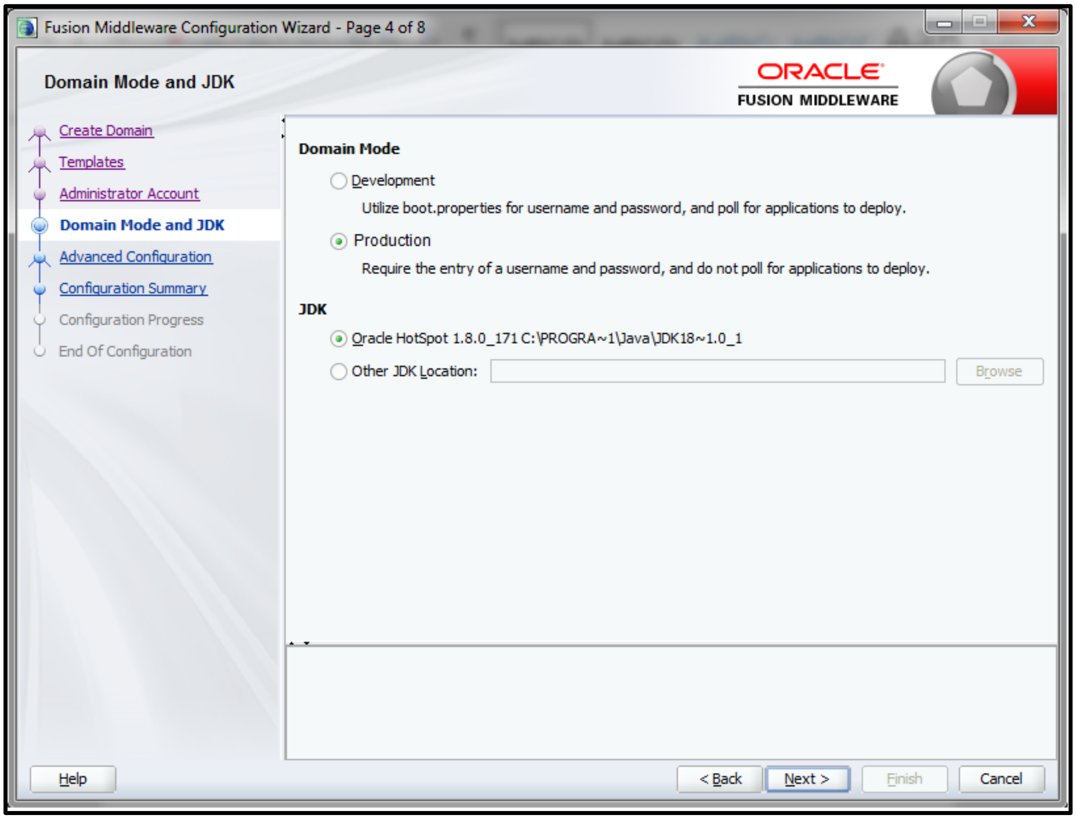
Name

Password

Confirm Password

Must be the same as the password. Password must contain at least 8 alphanumeric characters with at least one number or special character.

5. Select **Domain Mode** as **Production** and select **JDK**.



Domain Mode and JDK

Domain Mode

○ Development

Utilize boot.properties for username and password, and poll for applications to deploy.

● Production

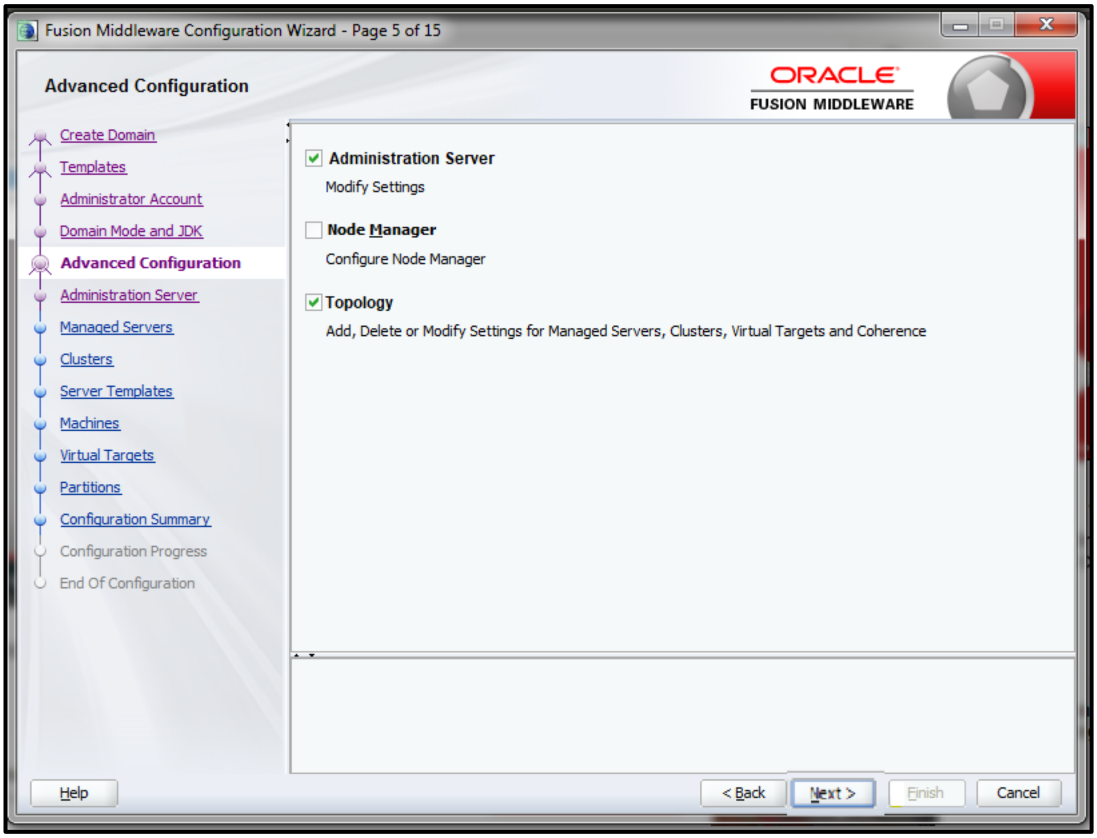
Require the entry of a username and password, and do not poll for applications to deploy.

JDK

● Oracle HotSpot 1.8.0_171 C:\PROGRA~1\Java\JDK18~1.0_1

○ Other JDK Location:

6. Select **Administration Server** and **Topology** in advanced configurations.

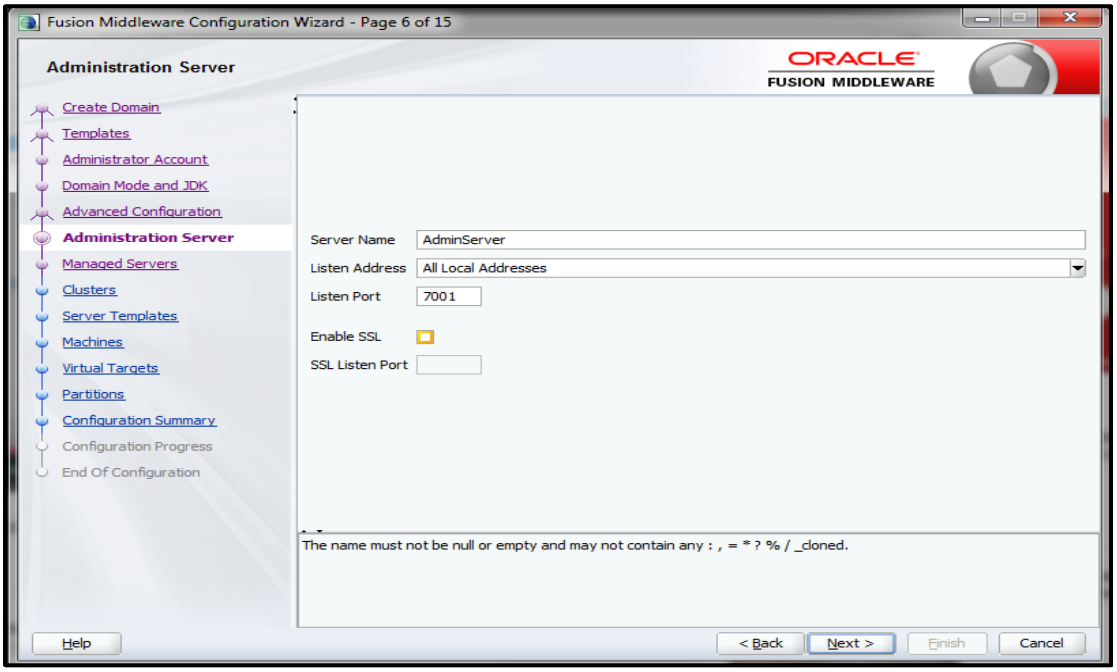


☑ **Administration Server**
Modify Settings

☐ **Node Manager**
Configure Node Manager

☑ **Topology**
Add, Delete or Modify Settings for Managed Servers, Clusters, Virtual Targets and Coherence

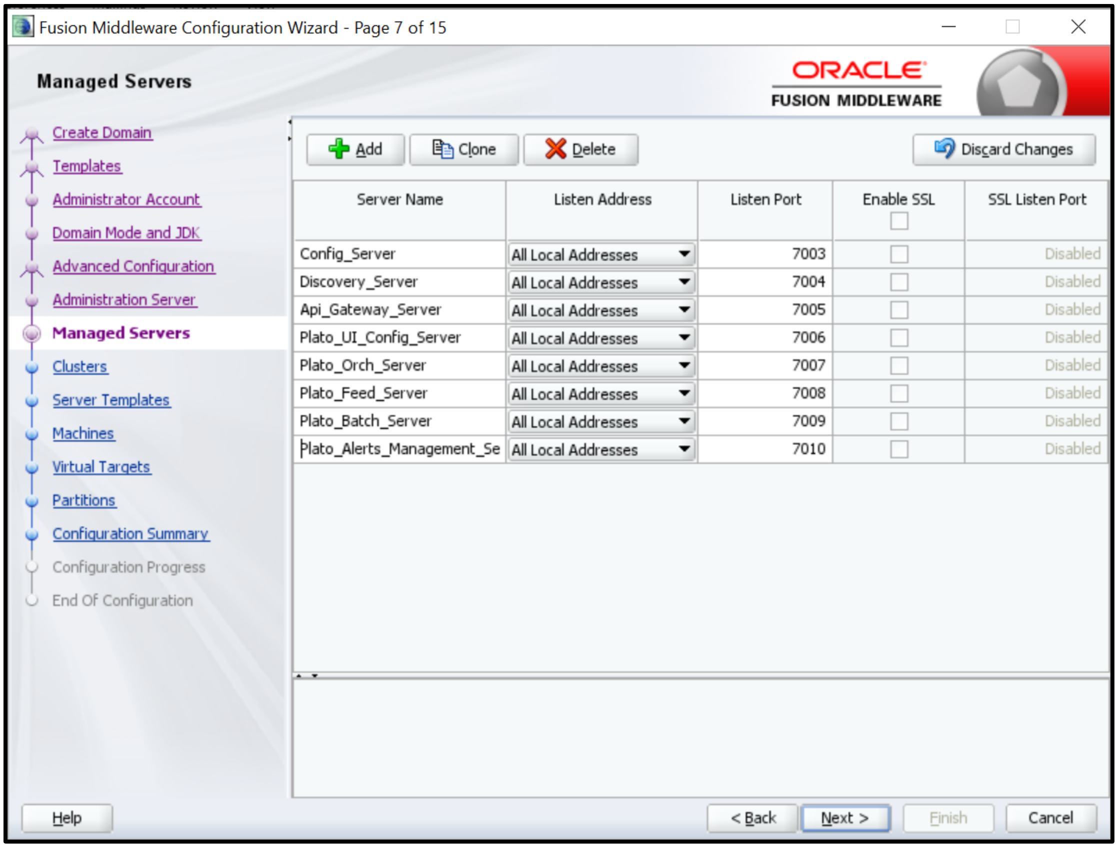
7. Edit the port and host configurations as required and click **Next**.



Server Name: AdminServer
Listen Address: All Local Addresses
Listen Port: 7001
Enable SSL: ☐
SSL Listen Port:

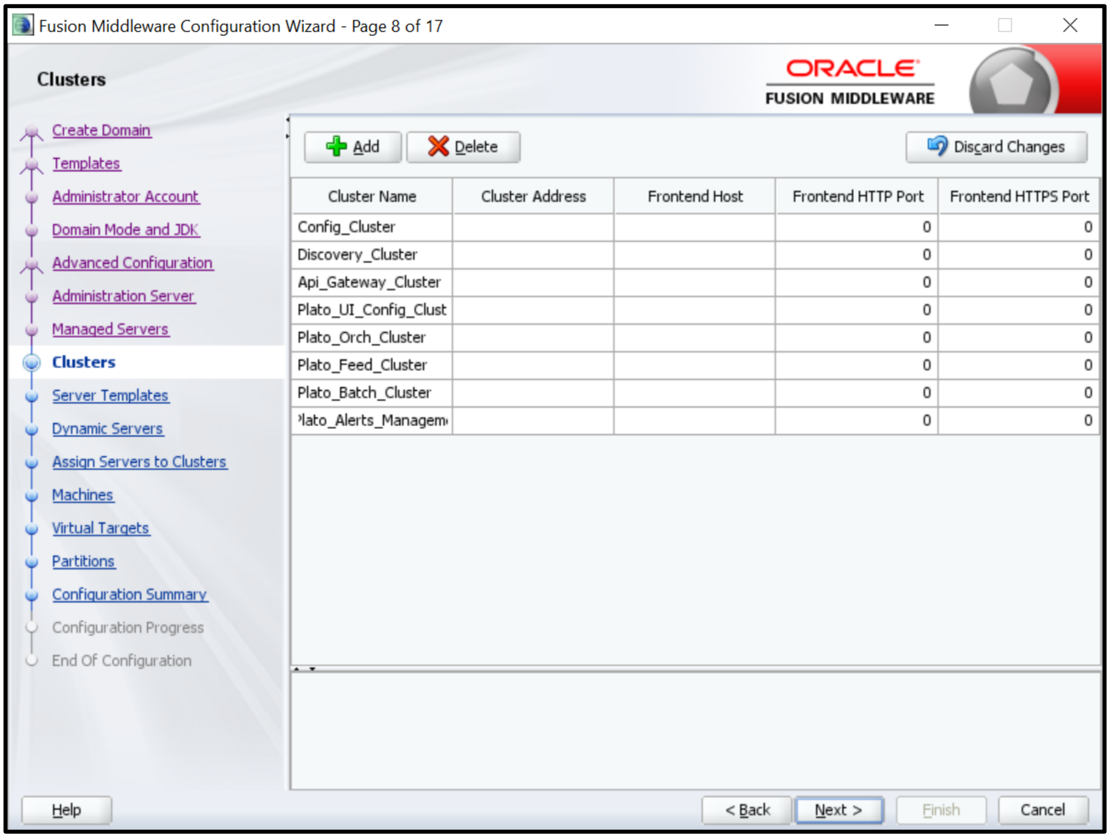
The name must not be null or empty and may not contain any : , = * ? % / _cloned.

8. Add managed servers and provide meaningful **Server Name**, edit listen address and port as required.



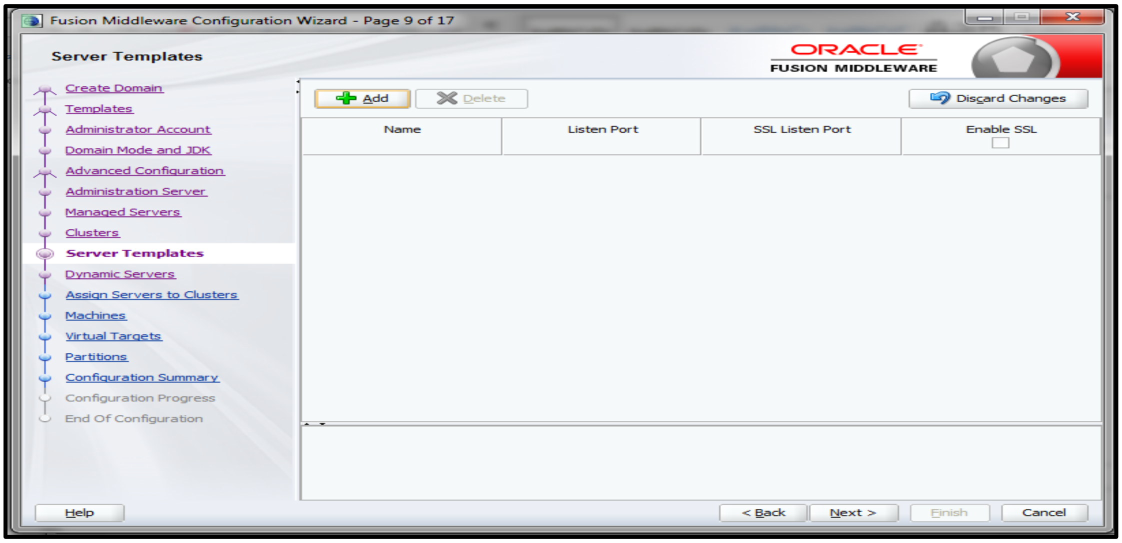
Server Name	Listen Address	Listen Port	Enable SSL ☐	SSL Listen Port
Config_Server	All Local Addresses	7003	☐	Disabled
Discovery_Server	All Local Addresses	7004	☐	Disabled
Api_Gateway_Server	All Local Addresses	7005	☐	Disabled
Plato_UI_Config_Server	All Local Addresses	7006	☐	Disabled
Plato_Orch_Server	All Local Addresses	7007	☐	Disabled
Plato_Feed_Server	All Local Addresses	7008	☐	Disabled
Plato_Batch_Server	All Local Addresses	7009	☐	Disabled
Plato_Alerts_Management_Se	All Local Addresses	7010	☐	Disabled

9. Add clusters one for each **managed servers**.

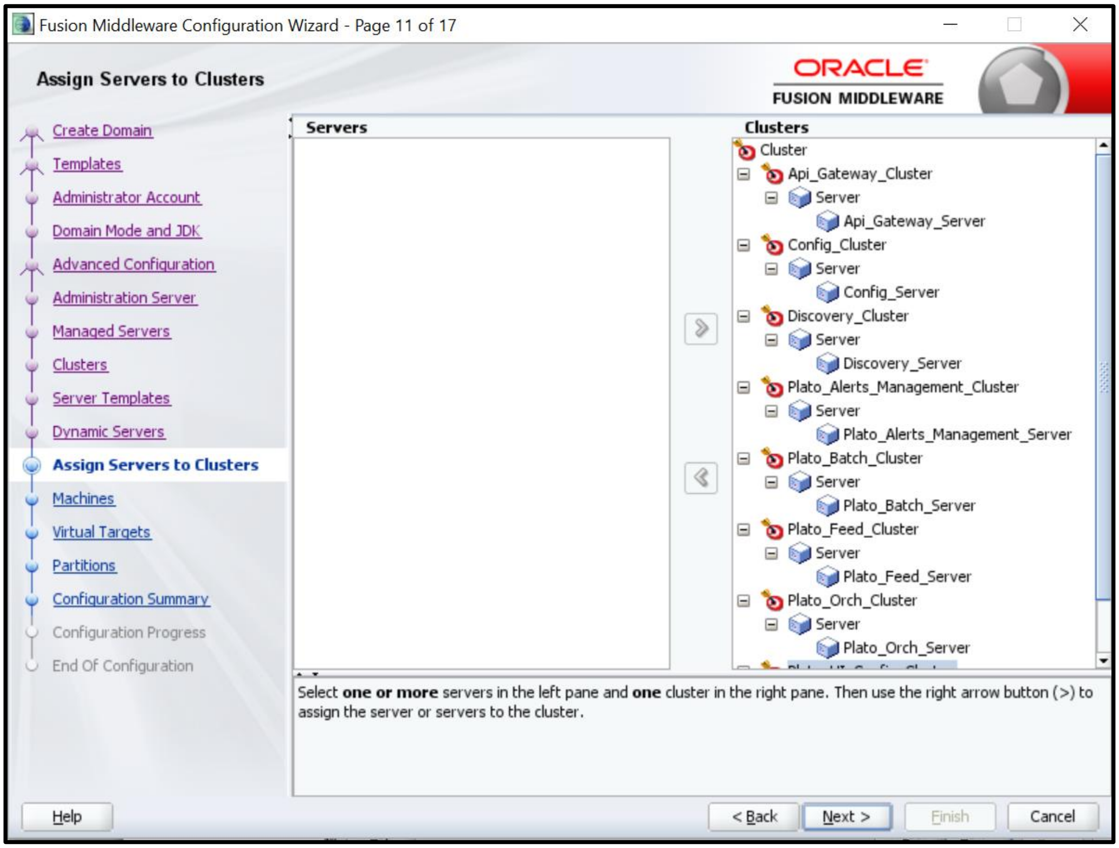


Cluster Name	Cluster Address	Frontend Host	Frontend HTTP Port	Frontend HTTPS Port
Config_Cluster			0	0
Discovery_Cluster			0	0
Api_Gateway_Cluster			0	0
Plato_UI_Config_Clust			0	0
Plato_Orch_Cluster			0	0
Plato_Feed_Cluster			0	0
Plato_Batch_Cluster			0	0
lato_Alerts_Managem			0	0

10. Skip **Server Templates** and **Dynamic Servers**.

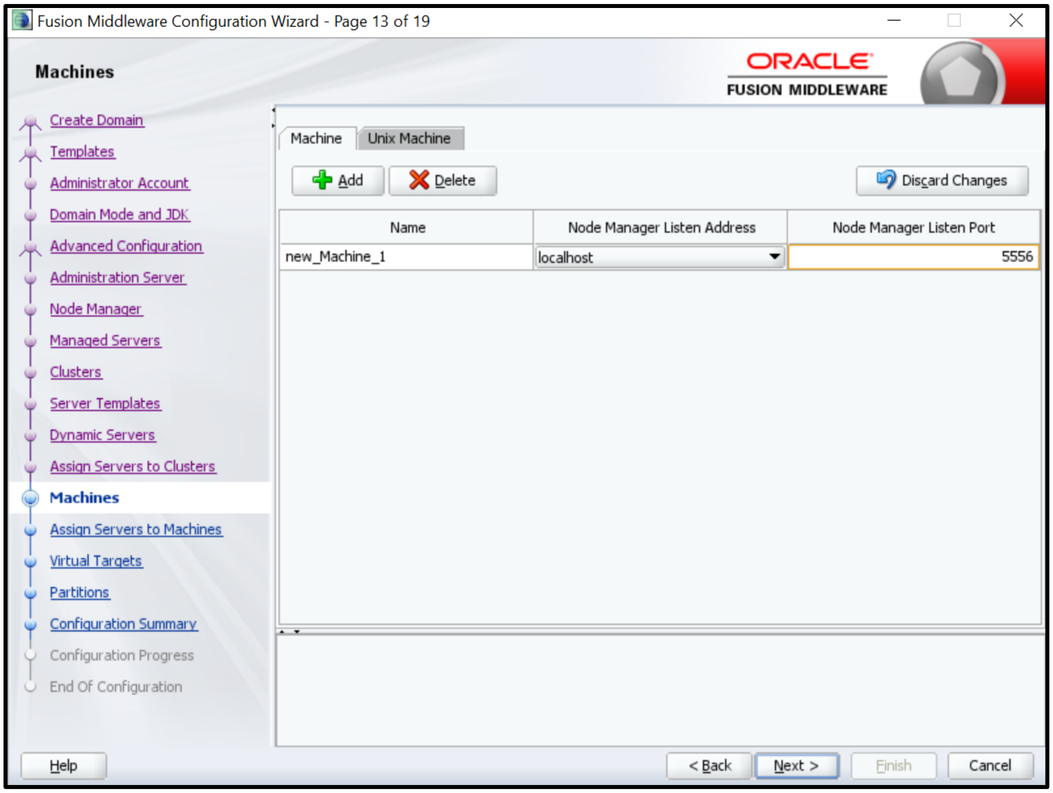


11. Assign clusters with servers.



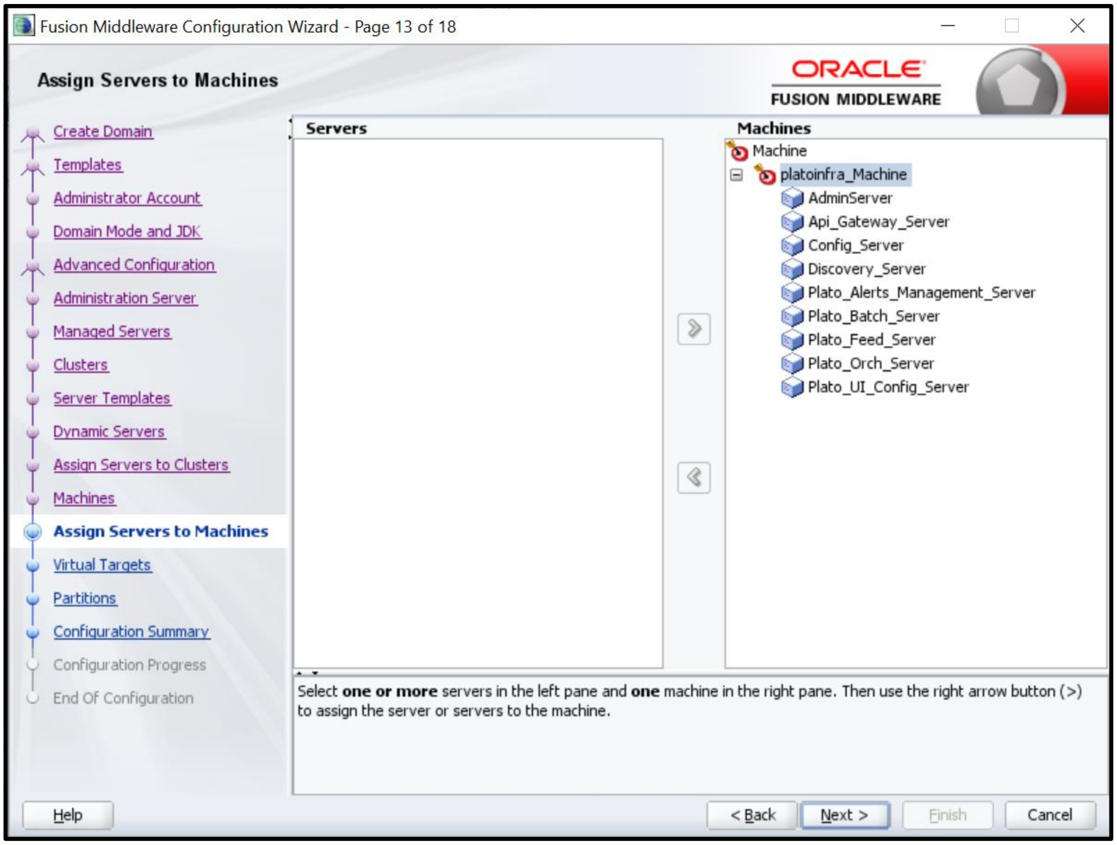
Select **one or more** servers in the left pane and **one** cluster in the right pane. Then use the right arrow button (>) to assign the server or servers to the cluster.

12. Add **Machine/Unix Machine** based on operating system and configure **Name**, **Node Manager Listen Address** and **Node Manager Listen Port** as required.



Name	Node Manager Listen Address	Node Manager Listen Port
new_Machine_1	localhost	5556

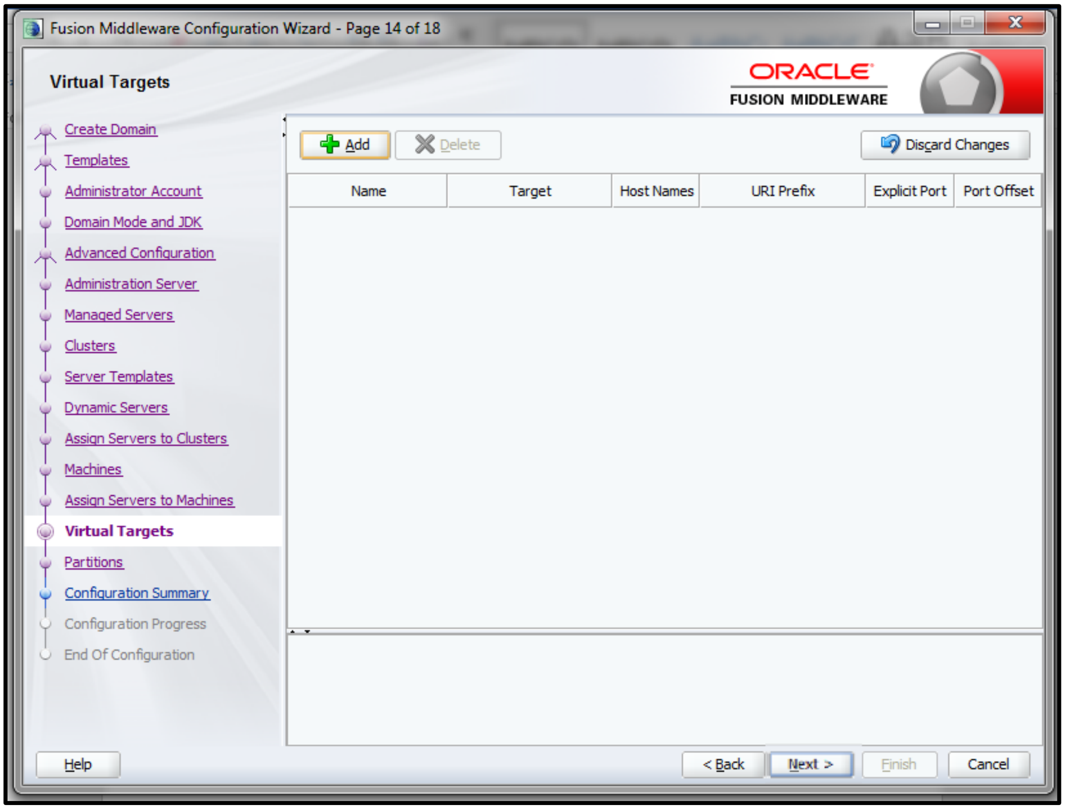
13. Map all managed servers under the machine created.

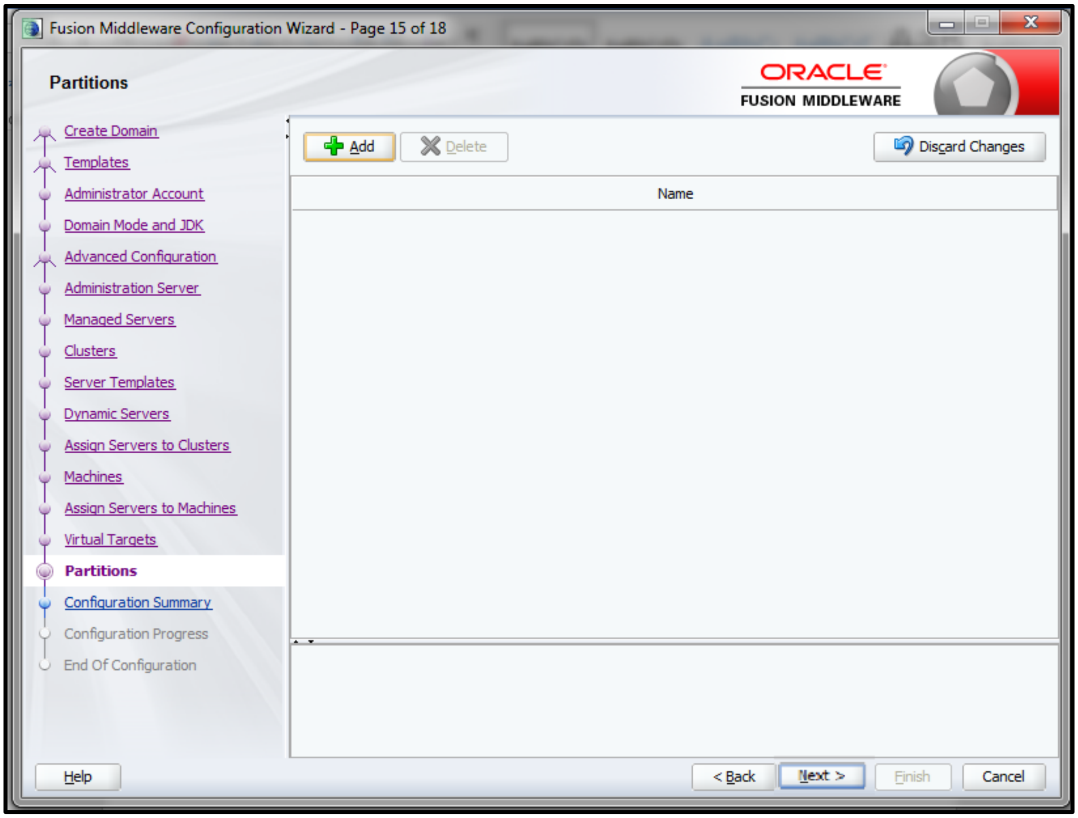


Machine
- platoinfra_Machine
  - AdminServer
  - Api_Gateway_Server
  - Config_Server
  - Discovery_Server
  - Plato_Alerts_Management_Server
  - Plato_Batch_Server
  - Plato_Feed_Server
  - Plato_Orch_Server
  - Plato_UI_Config_Server

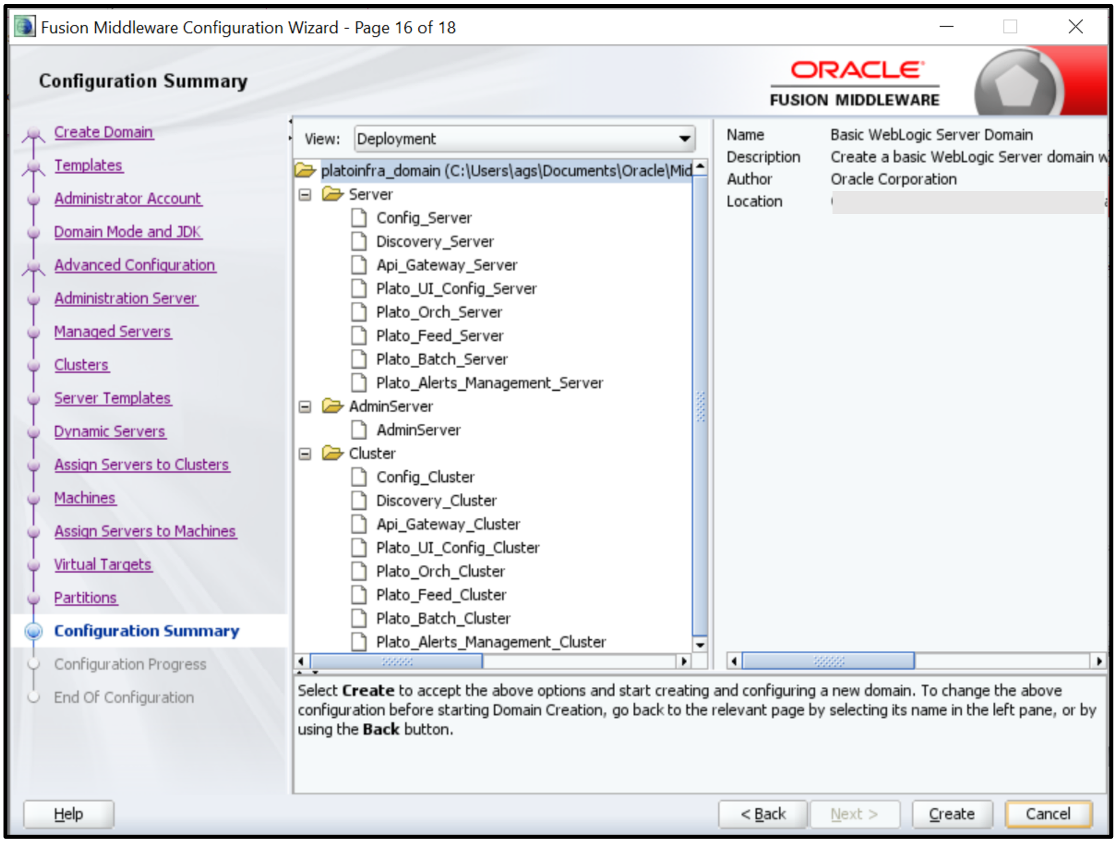
Select **one or more** servers in the left pane and **one** machine in the right pane. Then use the right arrow button (>) to assign the server or servers to the machine.

14. Skip or configure **Virtual Targets** and **Partitions** as required.



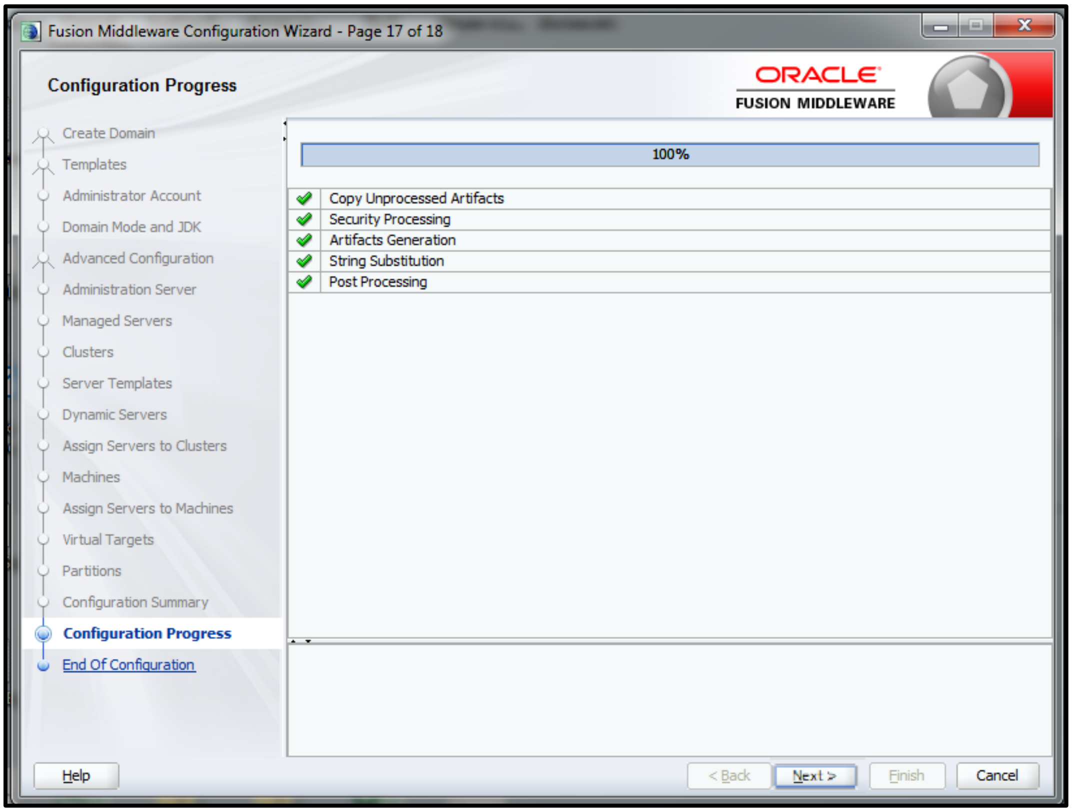


15. Check the **Configuration Summary** and confirm creating domain.



Name	Basic WebLogic Server Domain
Description	Create a basic WebLogic Server domain w
Author	Oracle Corporation
Location	

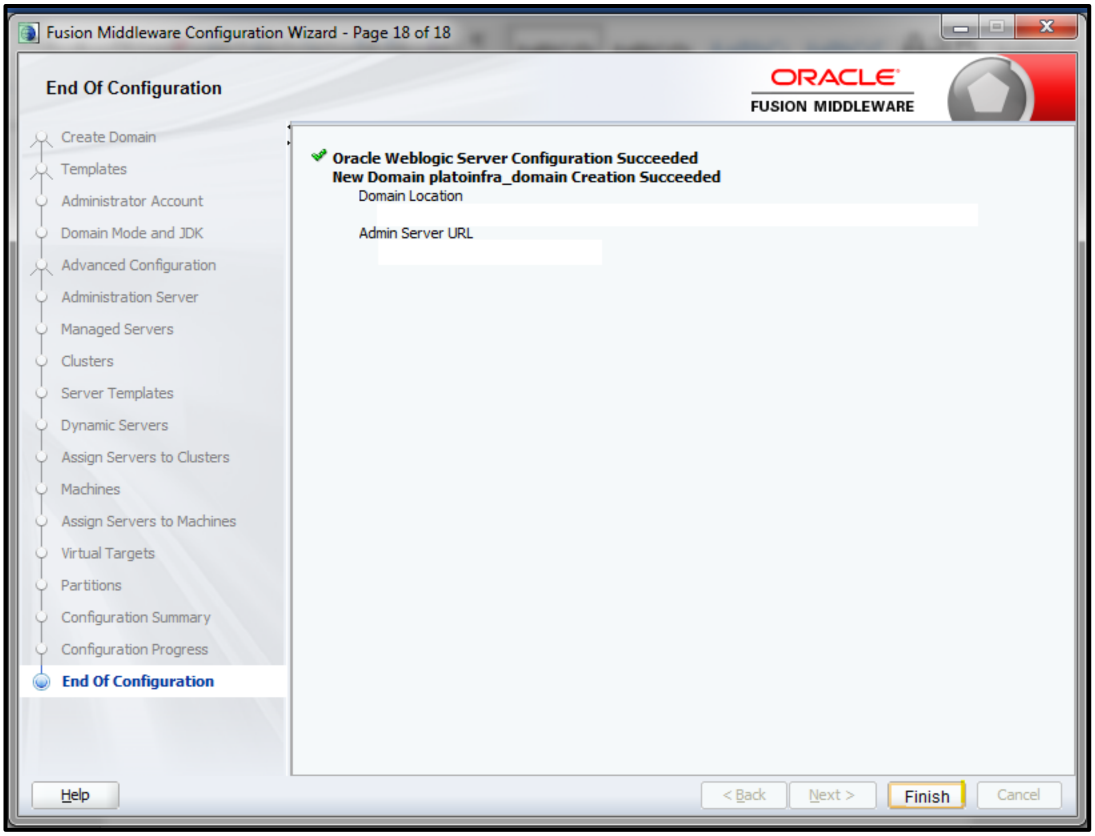
Select **Create** to accept the above options and start creating and configuring a new domain. To change the above configuration before starting Domain Creation, go back to the relevant page by selecting its name in the left pane, or by using the **Back** button.



100%

- ✓ Copy Unprocessed Artifacts
- ✓ Security Processing
- ✓ Artifacts Generation
- ✓ String Substitution
- ✓ Post Processing

16. Click **Finish** to complete the procedure.



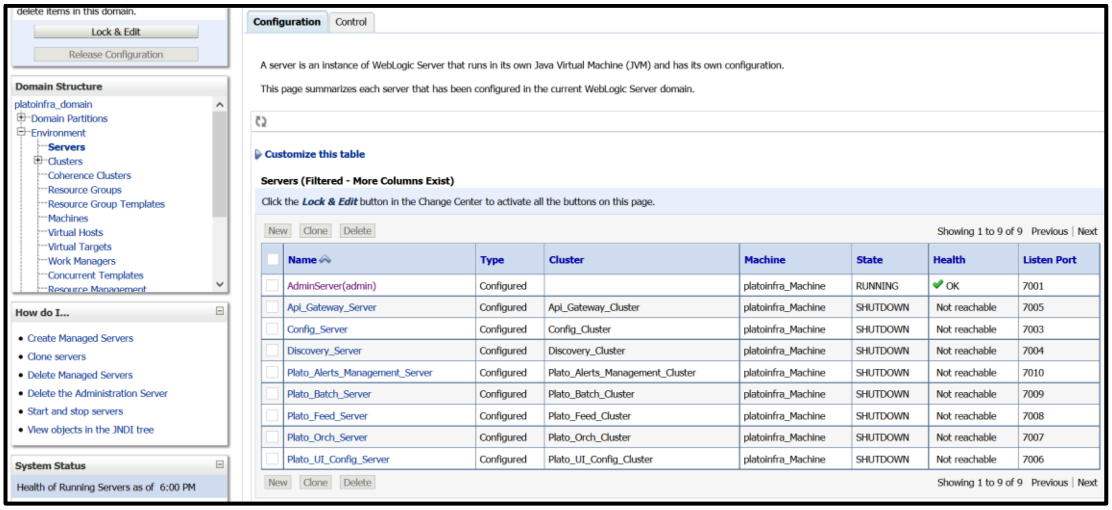
✓ **Oracle Weblogic Server Configuration Succeeded**
New Domain platoinfra_domain Creation Succeeded
Domain Location
Admin Server URL

2.3.2 Post Domain Creation Configurations

Once finished, refer oracle fusion middleware documents for more details on how to start admin server, node manager and managed servers.

1. Open **/user_projects/domain/platoinfra_domain/bin**
2. Perform all the Environment Setup steps such as setting -D parameters, Embedded Weblogic Setup and changes required for OAuth.
3. Run **startWeblogic.cmd** (or **.sh** if operating system is linux).
4. Open **/user_projects/domains/platoinfra_domain/bin**.
5. Run **setNMJavaHome.cmd** (or **.sh** if operating system is linux).
6. Open **/user_projects/domains/platoinfra_domain/nodemanager**.
7. Edit **nodemanager.properties** as required (securelistner = false if ssl and keystore is not given).
8. In admin console, select the following options in sequential order:
    a. **Machines**
    b. **platoinfra_Machine**
    c. **Node Manager**
    d. **Type**
    e. **Plain**
    f. **Save**
9. Open **/user_projects/domains/platoinfra_domain/bin**.
10. Run **startNodeManager.cmd** (or **.sh** if operating system is linux)

11. Start all managed servers.
12. Login to console and verify servers and clusters. Refer to the screenshots below:



delete items in this domain.

Health of Running Servers as of 6:00 PM

A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (JVM) and has its own configuration.

This page summarizes each server that has been configured in the current WebLogic Server domain.

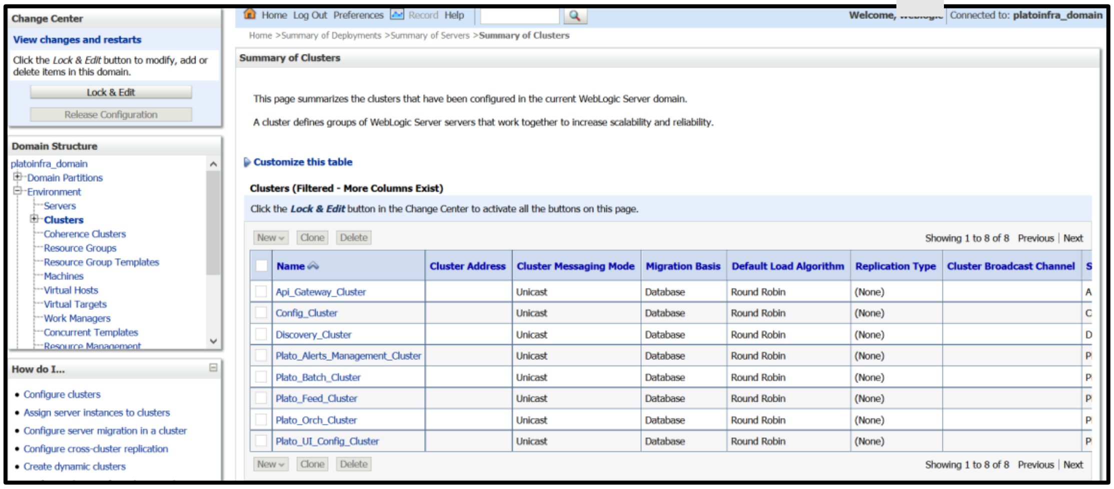
Servers (Filtered - More Columns Exist)

Click the ***Lock & Edit*** button in the Change Center to activate all the buttons on this page.

Showing 1 to 9 of 9 Previous | Next

☐	Name	Type	Cluster	Machine	State	Health	Listen Port
☐	AdminServer(admin)	Configured		platoinfra_Machine	RUNNING	✓ OK	7001
☐	Api_Gateway_Server	Configured	Api_Gateway_Cluster	platoinfra_Machine	SHUTDOWN	Not reachable	7005
☐	Config_Server	Configured	Config_Cluster	platoinfra_Machine	SHUTDOWN	Not reachable	7003
☐	Discovery_Server	Configured	Discovery_Cluster	platoinfra_Machine	SHUTDOWN	Not reachable	7004
☐	Plato_Alerts_Management_Server	Configured	Plato_Alerts_Management_Cluster	platoinfra_Machine	SHUTDOWN	Not reachable	7010
☐	Plato_Batch_Server	Configured	Plato_Batch_Cluster	platoinfra_Machine	SHUTDOWN	Not reachable	7009
☐	Plato_Feed_Server	Configured	Plato_Feed_Cluster	platoinfra_Machine	SHUTDOWN	Not reachable	7008
☐	Plato_Orch_Server	Configured	Plato_Orch_Cluster	platoinfra_Machine	SHUTDOWN	Not reachable	7007
☐	Plato_UI_Config_Server	Configured	Plato_UI_Config_Cluster	platoinfra_Machine	SHUTDOWN	Not reachable	7006

Showing 1 to 9 of 9 Previous | Next



Click the *Lock & Edit* button to modify, add or delete items in this domain.

Welcome, [redacted] Connected to: **platoinfra_domain**

Home >Summary of Deployments >Summary of Servers >**Summary of Clusters**

Summary of Clusters

This page summarizes the clusters that have been configured in the current WebLogic Server domain.

A cluster defines groups of WebLogic Server servers that work together to increase scalability and reliability.

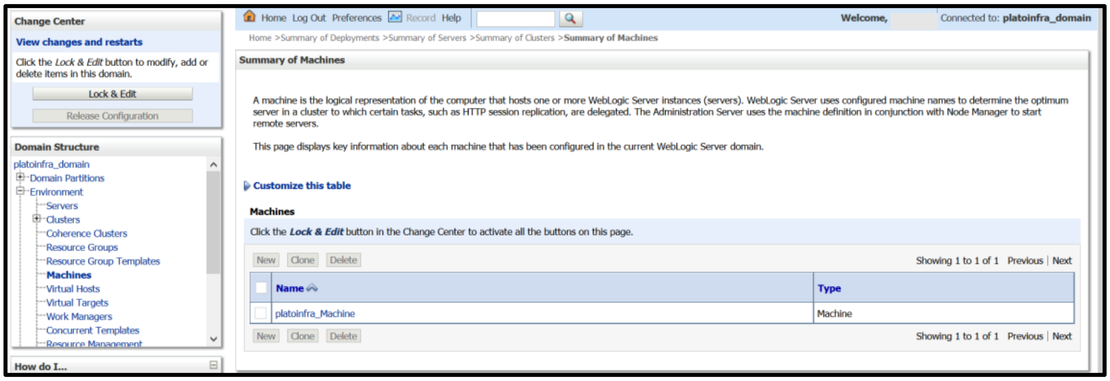
Clusters (Filtered - More Columns Exist)

Click the ***Lock & Edit*** button in the Change Center to activate all the buttons on this page.

Showing 1 to 8 of 8 Previous | Next

☐	Name	Cluster Address	Cluster Messaging Mode	Migration Basis	Default Load Algorithm	Replication Type	Cluster Broadcast Channel	S
☐	Api_Gateway_Cluster		Unicast	Database	Round Robin	(None)		A
☐	Config_Cluster		Unicast	Database	Round Robin	(None)		C
☐	Discovery_Cluster		Unicast	Database	Round Robin	(None)		D
☐	Plato_Alerts_Management_Cluster		Unicast	Database	Round Robin	(None)		P
☐	Plato_Batch_Cluster		Unicast	Database	Round Robin	(None)		P
☐	Plato_Feed_Cluster		Unicast	Database	Round Robin	(None)		P
☐	Plato_Orch_Cluster		Unicast	Database	Round Robin	(None)		P
☐	Plato_UI_Config_Cluster		Unicast	Database	Round Robin	(None)		P

Showing 1 to 8 of 8 Previous | Next



Click the *Lock & Edit* button to modify, add or delete items in this domain.

Welcome, [redacted] Connected to: **platoinfra_domain**

Home >Summary of Deployments >Summary of Servers >Summary of Clusters >**Summary of Machines**

Summary of Machines

A machine is the logical representation of the computer that hosts one or more WebLogic Server instances (servers). WebLogic Server uses configured machine names to determine the optimum server in a cluster to which certain tasks, such as HTTP session replication, are delegated. The Administration Server uses the machine definition in conjunction with Node Manager to start remote servers.

This page displays key information about each machine that has been configured in the current WebLogic Server domain.

Machines

Click the ***Lock & Edit*** button in the Change Center to activate all the buttons on this page.

Showing 1 to 1 of 1 Previous | Next

☐	Name	Type
☐	platoinfra_Machine	Machine

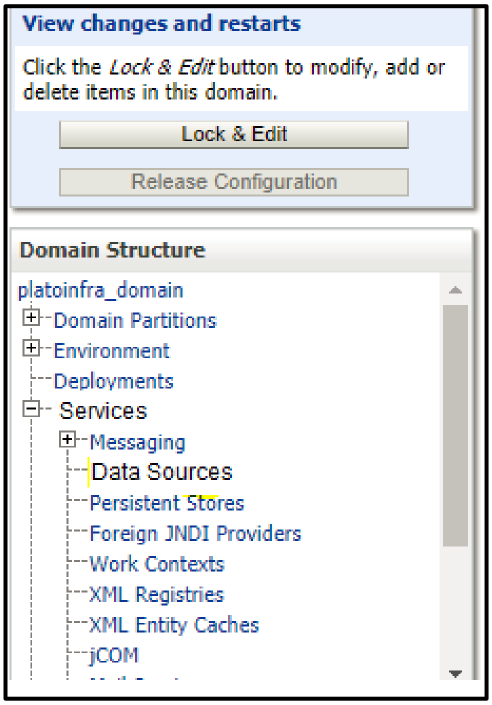
Showing 1 to 1 of 1 Previous | Next

2.4 How to Create Datasource

Perform the following steps to create data source:

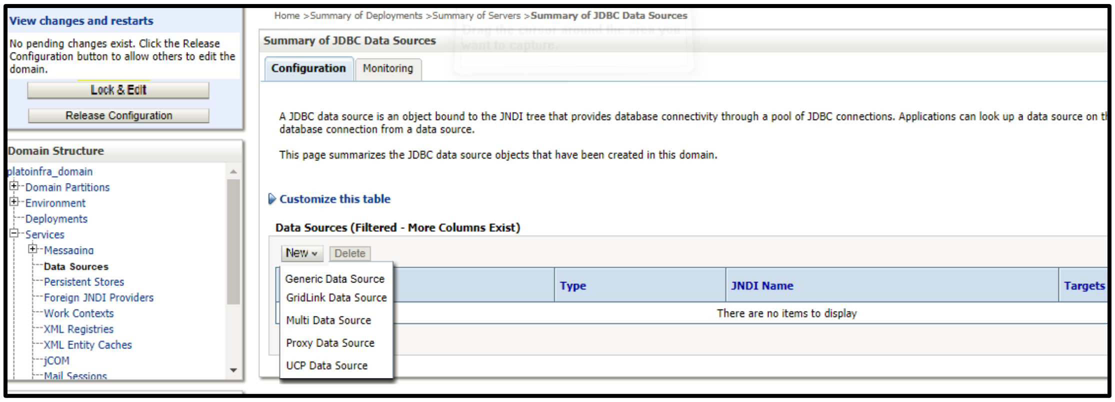
1. Start **AdminServer**, **Node Manager** and make sure all the **managed servers** (targets) are in running mode.

2. Select the following options in sequential order:
    a. **Services**
    b. **Datasources**
    c. **New**
    d. **Generic Datasource**



View changes and restarts

Click the *Lock & Edit* button to modify, add or delete items in this domain.



View changes and restarts

No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Home >Summary of Deployments >Summary of Servers >Summary of JDBC Data Sources

Summary of JDBC Data Sources

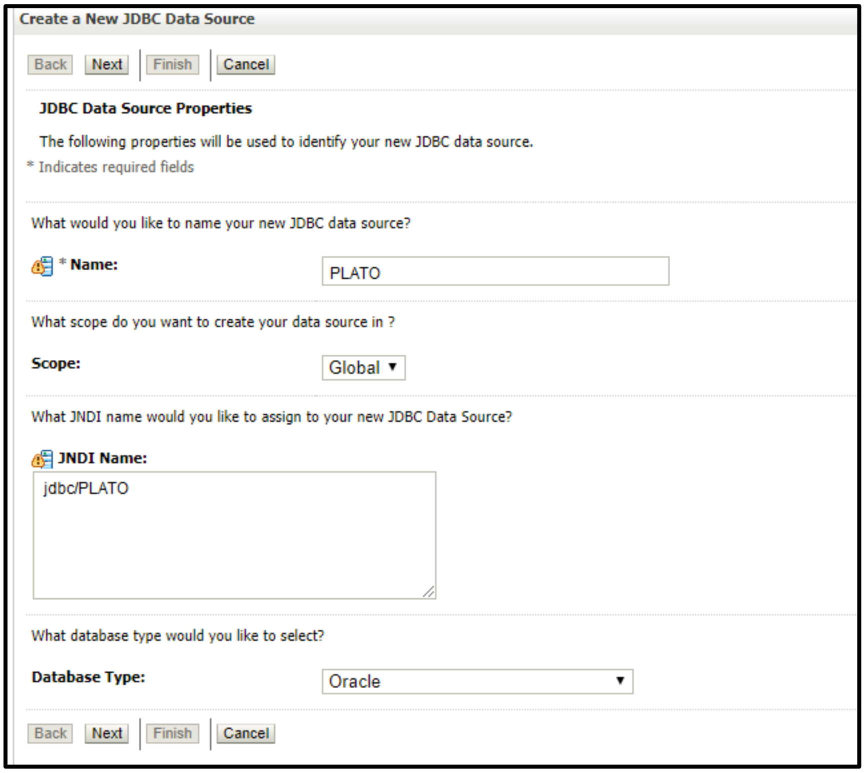
A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on th
database connection from a data source.

This page summarizes the JDBC data source objects that have been created in this domain.

Data Sources (Filtered - More Columns Exist)

	Type	JNDI Name	Targets
There are no items to display			

3. Give datasource **Name** and **JNDI Name**, and click **Next**.



JDBC Data Source Properties

The following properties will be used to identify your new JDBC data source.

* Indicates required fields

What would you like to name your new JDBC data source?

* **Name:** PLATO

What scope do you want to create your data source in ?

Scope: Global

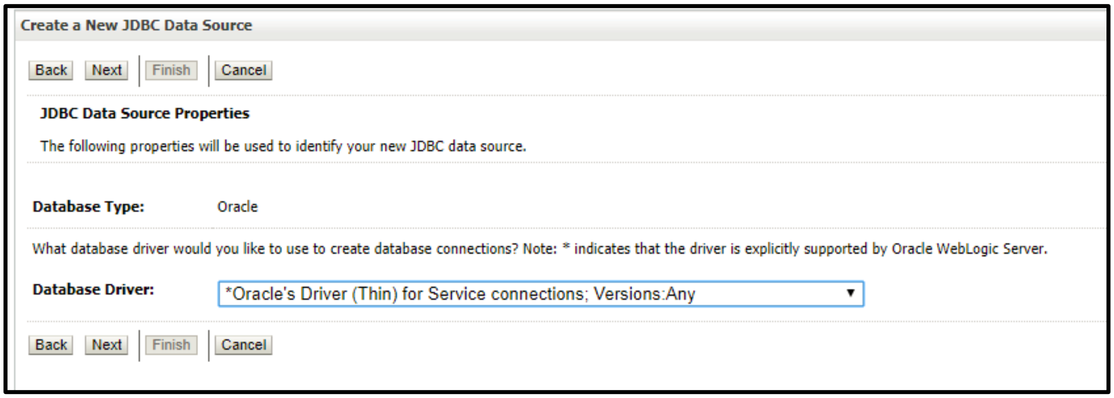
What JNDI name would you like to assign to your new JDBC Data Source?

JNDI Name: jdbc/PLATO

What database type would you like to select?

Database Type: Oracle

4. Select **Thin for Service Connections** (Instant) and click N**ext**.



JDBC Data Source Properties

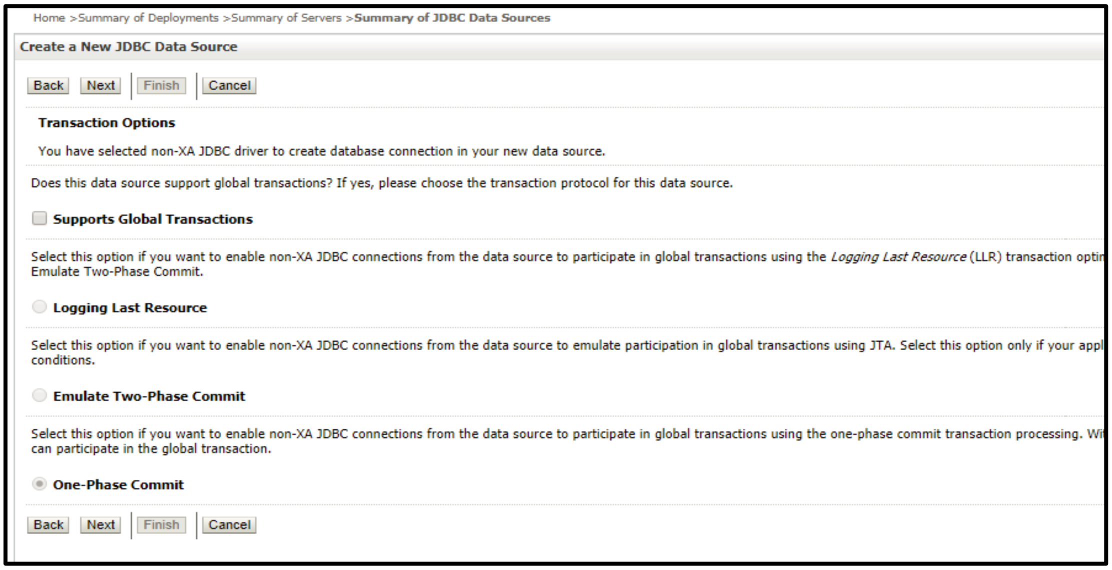
The following properties will be used to identify your new JDBC data source.

Database Type: Oracle

What database driver would you like to use to create database connections? Note: * indicates that the driver is explicitly supported by Oracle WebLogic Server.

Database Driver: *Oracle's Driver (Thin) for Service connections; Versions:Any

5. Uncheck support for Global Transactions.



Home >Summary of Deployments >Summary of Servers >**Summary of JDBC Data Sources**

Create a New JDBC Data Source

Transaction Options

You have selected non-XA JDBC driver to create database connection in your new data source.

Does this data source support global transactions? If yes, please choose the transaction protocol for this data source.

☐ **Supports Global Transactions**

Select this option if you want to enable non-XA JDBC connections from the data source to participate in global transactions using the *Logging Last Resource* (LLR) transaction opti
Emulate Two-Phase Commit.

○ **Logging Last Resource**

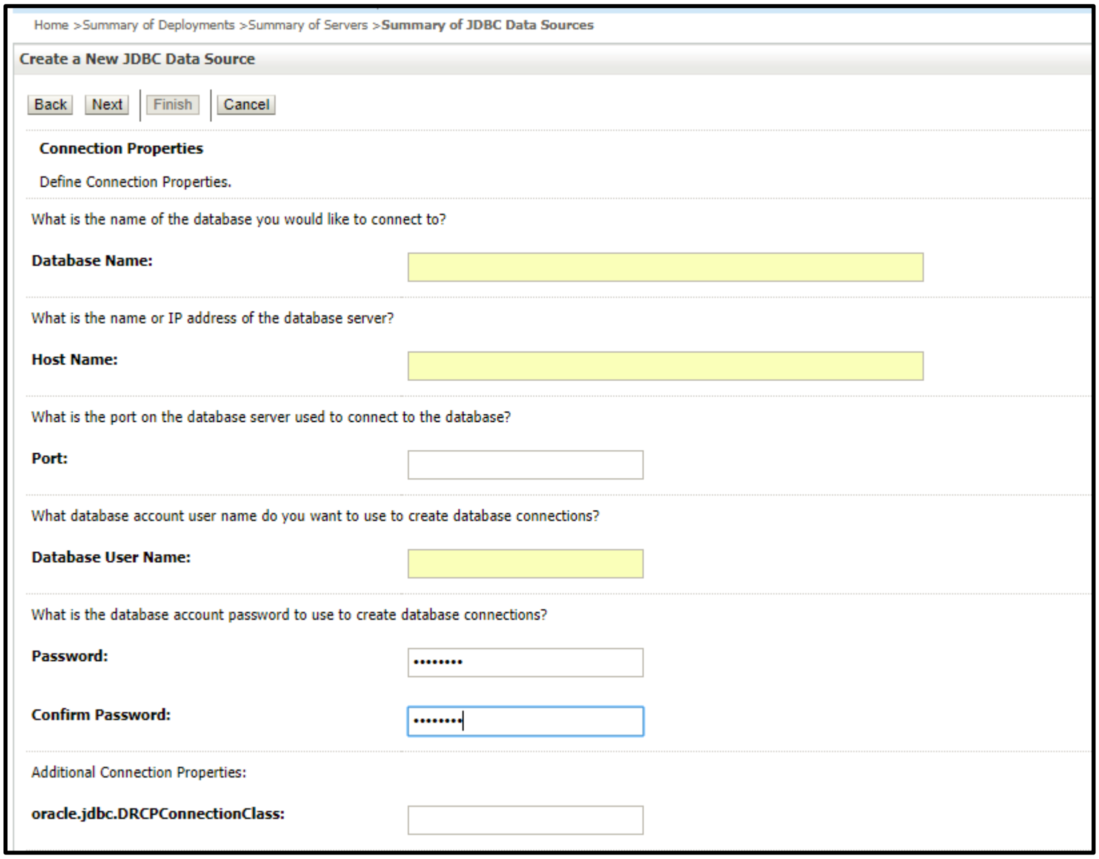
Select this option if you want to enable non-XA JDBC connections from the data source to emulate participation in global transactions using JTA. Select this option only if your appl
conditions.

○ **Emulate Two-Phase Commit**

Select this option if you want to enable non-XA JDBC connections from the data source to participate in global transactions using the one-phase commit transaction processing. Wi
can participate in the global transaction.

● **One-Phase Commit**

6. Give database connection details and click **Next** to test connection.



Home >Summary of Deployments >Summary of Servers >**Summary of JDBC Data Sources**

Create a New JDBC Data Source

Connection Properties

Define Connection Properties.

What is the name of the database you would like to connect to?

Database Name:

What is the name or IP address of the database server?

Host Name:

What is the port on the database server used to connect to the database?

Port:

What database account user name do you want to use to create database connections?

Database User Name:

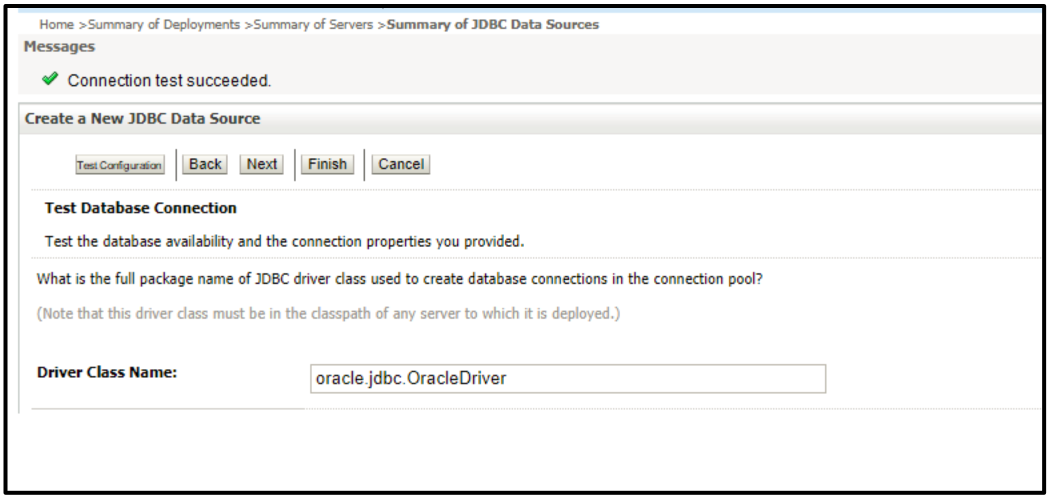
What is the database account password to use to create database connections?

Password: ••••••••

Confirm Password: ••••••••

Additional Connection Properties:

oracle.jdbc.DRCPConnectionClass:


Home >Summary of Deployments >Summary of Servers >Summary of JDBC Data Sources
Messages
Test Configuration
Back
Next
Finish
Cancel

✓ Connection test succeeded.

Create a New JDBC Data Source

Test Database Connection

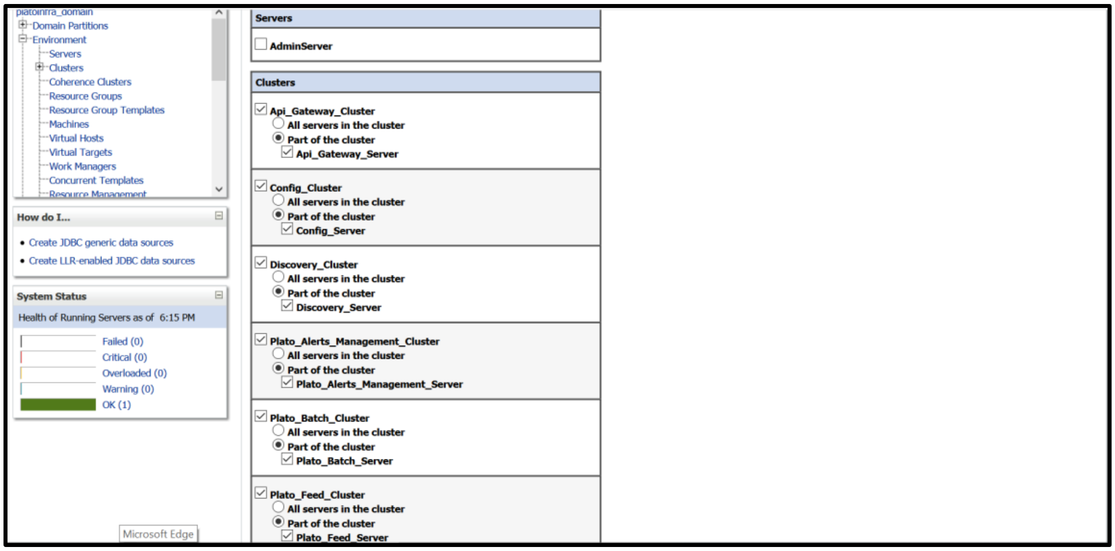
Test the database availability and the connection properties you provided.

What is the full package name of JDBC driver class used to create database connections in the connection pool?

(Note that this driver class must be in the classpath of any server to which it is deployed.)

Driver Class Name: oracle.jdbc.OracleDriver

7. Select targets to deploy data source.



Servers

☐ **AdminServer**

Clusters

☑ **Api_Gateway_Cluster**
  ○ **All servers in the cluster**
  ● **Part of the cluster**
    ☑ **Api_Gateway_Server**

☑ **Config_Cluster**
  ○ **All servers in the cluster**
  ● **Part of the cluster**
    ☑ **Config_Server**

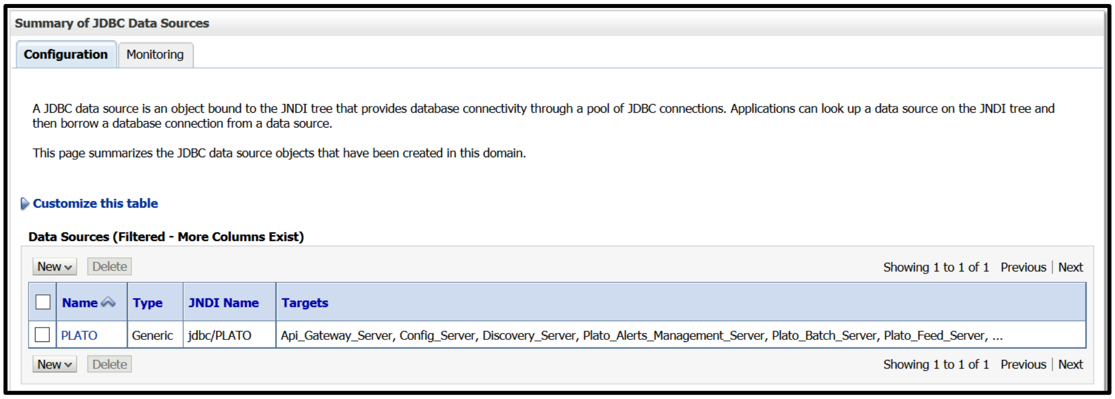
☑ **Discovery_Cluster**
  ○ **All servers in the cluster**
  ● **Part of the cluster**
    ☑ **Discovery_Server**

☑ **Plato_Alerts_Management_Cluster**
  ○ **All servers in the cluster**
  ● **Part of the cluster**
    ☑ **Plato_Alerts_Management_Server**

☑ **Plato_Batch_Cluster**
  ○ **All servers in the cluster**
  ● **Part of the cluster**
    ☑ **Plato_Batch_Server**

☑ **Plato_Feed_Cluster**
  ○ **All servers in the cluster**
  ● **Part of the cluster**
    ☑ **Plato_Feed_Server**

8. View created **Data Sources,** verify **JNDI Name** and **Targets**.



Summary of JDBC Data Sources

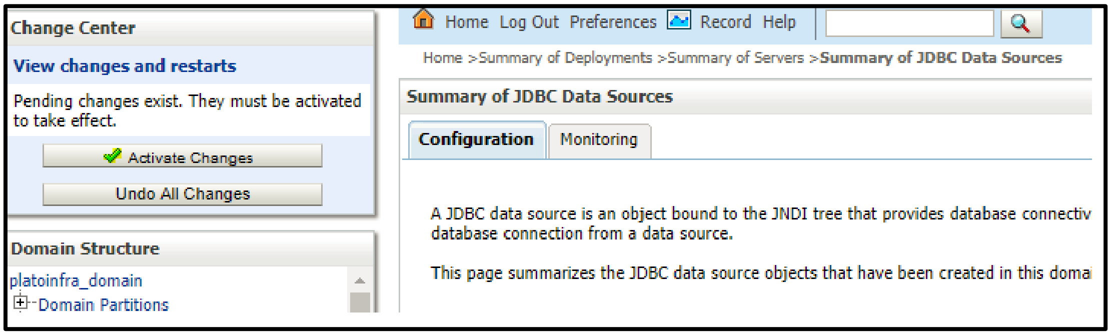
A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connection from a data source.

This page summarizes the JDBC data source objects that have been created in this domain.

Data Sources (Filtered - More Columns Exist)

☐	Name	Type	JNDI Name	Targets
☐	PLATO	Generic	jdbc/PLATO	Api_Gateway_Server, Config_Server, Discovery_Server, Plato_Alerts_Management_Server, Plato_Batch_Server, Plato_Feed_Server, ...

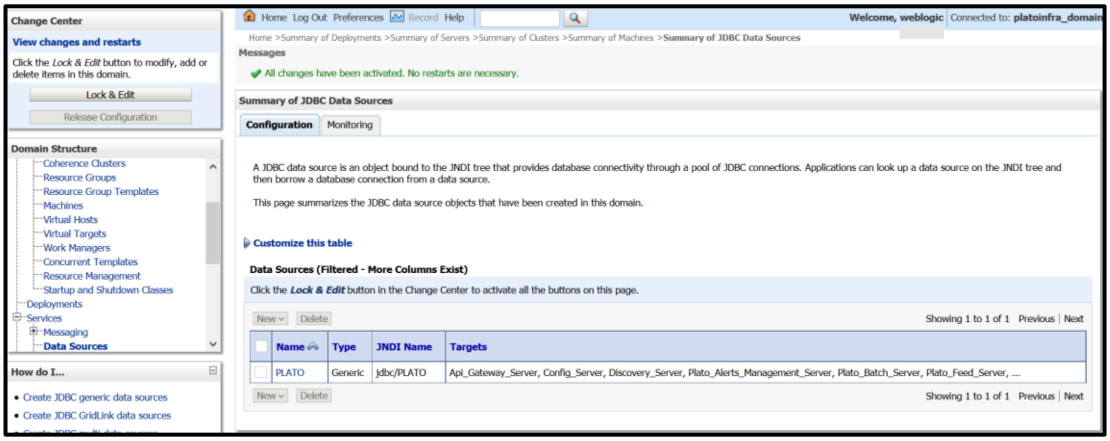
9. Click **Activate Changes** after confirming details.


Change Center
View changes and restarts
Activate Changes
Undo All Changes
Domain Structure
platoinfra_domain
Domain Partitions
Home Log Out Preferences Record Help
Home >Summary of Deployments >Summary of Servers >Summary of JDBC Data Sources
Summary of JDBC Data Sources
Configuration
Monitoring

Pending changes exist. They must be activated to take effect.

A JDBC data source is an object bound to the JNDI tree that provides database connectiv database connection from a data source.

This page summarizes the JDBC data source objects that have been created in this domai


Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
Coherence Clusters
Resource Groups
Resource Group Templates
Machines
Virtual Hosts
Virtual Targets
Work Managers
Concurrent Templates
Resource Management
Startup and Shutdown Classes
Deployments
Services
Messaging
Data Sources
How do I...
Create JDBC generic data sources
Create JDBC GridLink data sources
Home Log Out Preferences Record Help
Welcome, weblogic
Connected to: platoinfra_domain
Home >Summary of Deployments >Summary of Servers >Summary of Clusters >Summary of Machines >Summary of JDBC Data Sources
Messages
Summary of JDBC Data Sources
Configuration
Monitoring
Customize this table
New
Delete
Showing 1 to 1 of 1 Previous | Next

Click the *Lock & Edit* button to modify, add or delete items in this domain.

✓ All changes have been activated. No restarts are necessary.

A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connection from a data source.

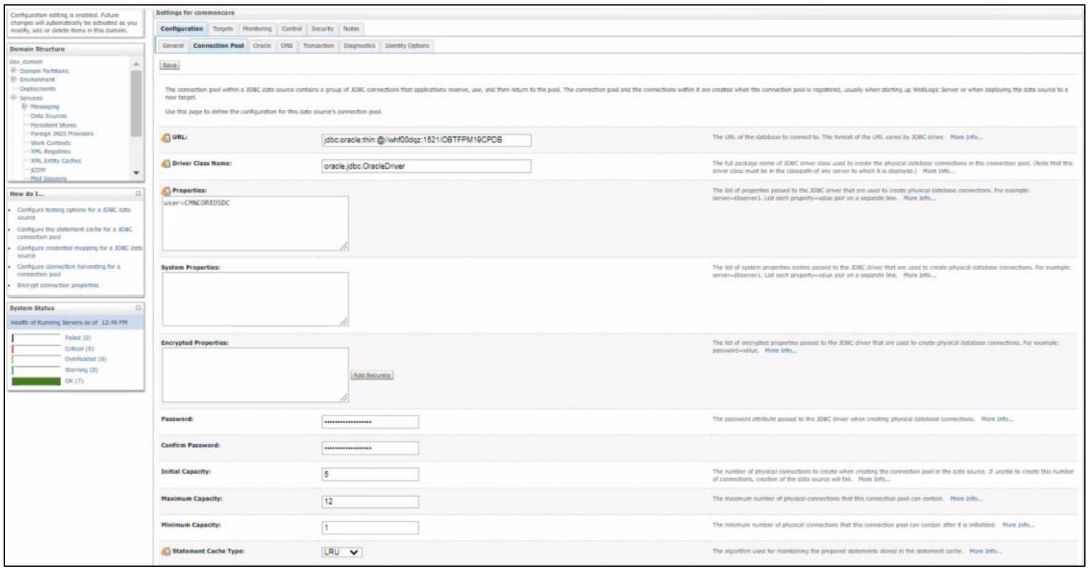
This page summarizes the JDBC data source objects that have been created in this domain.

Data Sources (Filtered - More Columns Exist)

Click the ***Lock & Edit*** button in the Change Center to activate all the buttons on this page.

☐	Name	Type	JNDI Name	Targets
☐	PLATO	Generic	jdbc/PLATO	Api_Gateway_Server, Config_Server, Discovery_Server, Plato_Alerts_Management_Server, Plato_Batch_Server, Plato_Feed_Server, ...

10. Post creating Data Source, click **Data source** under **Services** menu.
11. Select the specific Data sources one by one.
12. Navigate to **Connection Pool** tab under **Configuration** section and update the initial capacity, Minimum capacity and Max capacity as explained in the below screenshot

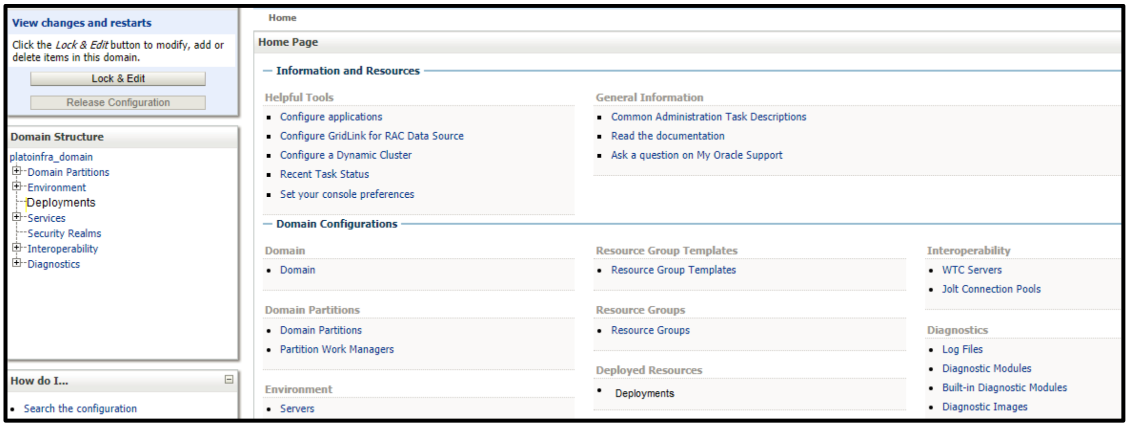


URL: jdbc:oracle:thin:@//whf00dqz:1521/OBTFPM19CPDB
Driver Class Name: oracle.jdbc.OracleDriver
Properties: user=CMNCOREOSDC
System Properties:
Encrypted Properties:
Password: ••••••••••••••••••
Confirm Password: ••••••••••••••••••
Initial Capacity: 5
Maximum Capacity: 12
Minimum Capacity: 1
Statement Cache Type: LRU

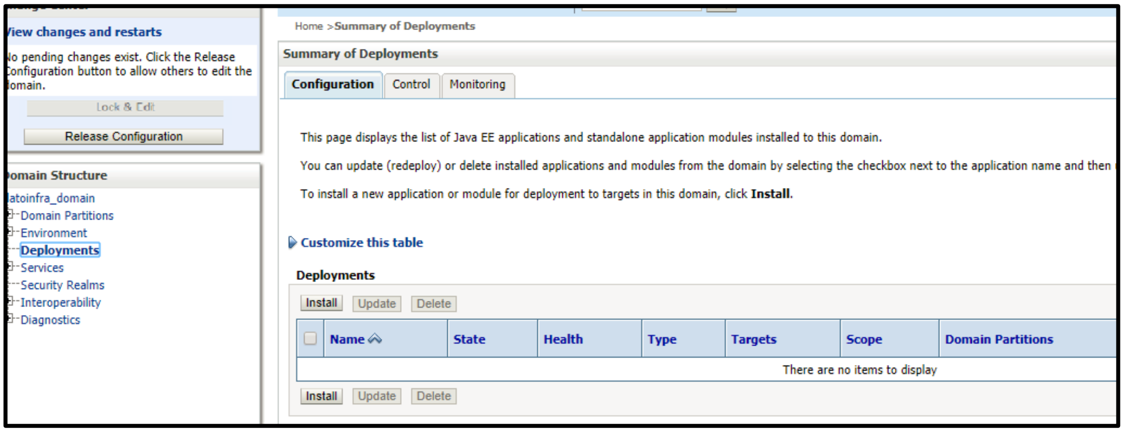
2.5 How to Deploy Application

Steps to Deploy archives as application on weblogic is same for all the above except for managed server and domain, where we deploy will differ. Perform the following steps to see how deployment of archive as application is done on weblogic:

1. Navigate to left menu and select **Deployments**.



2. Click on **Lock and Edit** and then click **Install**.



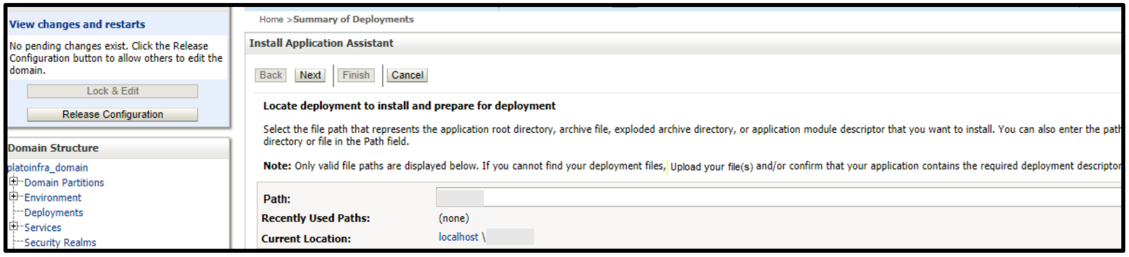
o pending changes exist. Click the Release onfiguration button to allow others to edit the omain.

This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then

To install a new application or module for deployment to targets in this domain, click **Install**.

There are no items to display



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Locate deployment to install and prepare for deployment

Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install. You can also enter the path directory or file in the Path field.

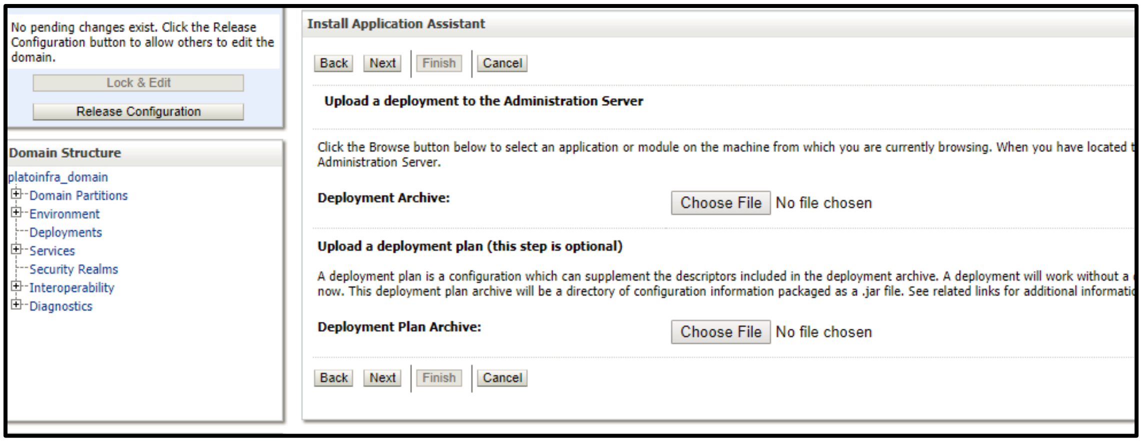
Note: Only valid file paths are displayed below. If you cannot find your deployment files, Upload your file(s) and/or confirm that your application contains the required deployment descriptor

Path:

Recently Used Paths: (none)

Current Location: localhost \

3. Click **Upload your file(s)** to select archive, **Choose File** and click **Next**.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Upload a deployment to the Administration Server

Click the Browse button below to select an application or module on the machine from which you are currently browsing. When you have located t Administration Server.

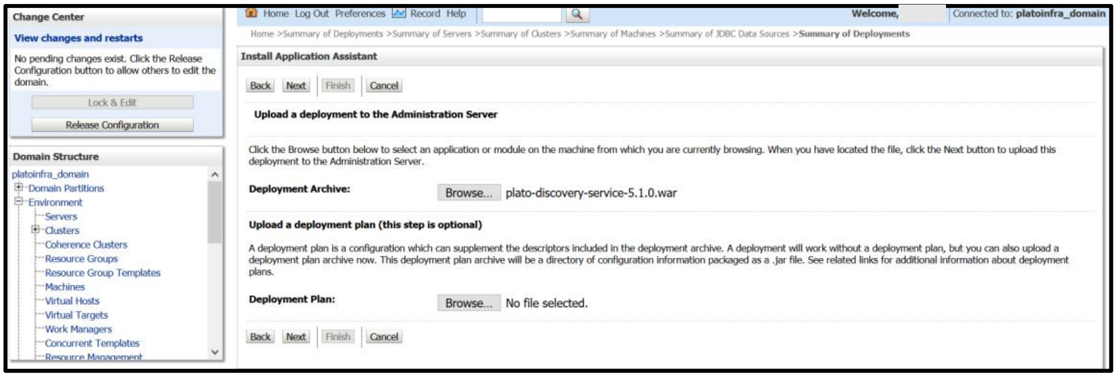
Deployment Archive: Choose File No file chosen

Upload a deployment plan (this step is optional)

A deployment plan is a configuration which can supplement the descriptors included in the deployment archive. A deployment will work without a now. This deployment plan archive will be a directory of configuration information packaged as a .jar file. See related links for additional informati

Deployment Plan Archive: Choose File No file chosen

4. After archive is uploaded, click **Next**.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Upload a deployment to the Administration Server

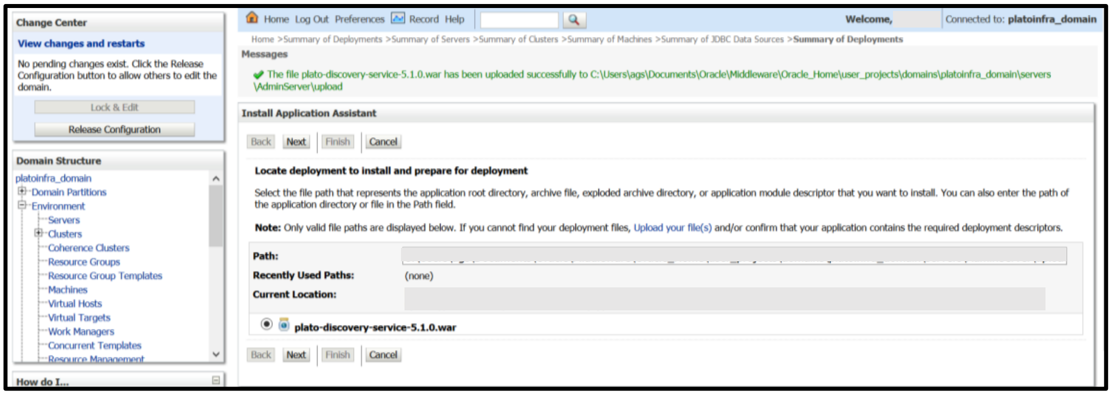
Click the Browse button below to select an application or module on the machine from which you are currently browsing. When you have located the file, click the Next button to upload this deployment to the Administration Server.

Deployment Archive: Browse... plato-discovery-service-5.1.0.war

Upload a deployment plan (this step is optional)

A deployment plan is a configuration which can supplement the descriptors included in the deployment archive. A deployment will work without a deployment plan, but you can also upload a deployment plan archive now. This deployment plan archive will be a directory of configuration information packaged as a .jar file. See related links for additional information about deployment plans.

Deployment Plan: Browse... No file selected.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

✓ The file plato-discovery-service-5.1.0.war has been uploaded successfully to C:\Users\ags\Documents\Oracle\Middleware\Oracle_Home\user_projects\domains\platoinfra_domain\servers\AdminServer\upload

Locate deployment to install and prepare for deployment

Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install. You can also enter the path of the application directory or file in the Path field.

Note: Only valid file paths are displayed below. If you cannot find your deployment files, Upload your file(s) and/or confirm that your application contains the required deployment descriptors.

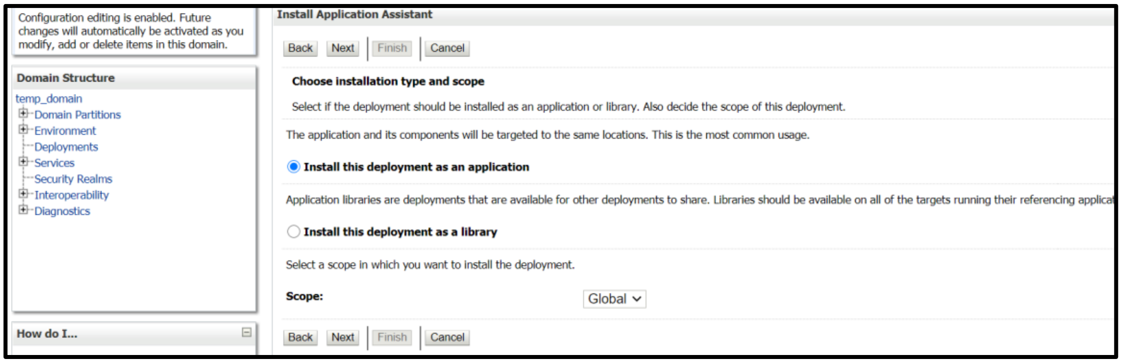
Path:

Recently Used Paths: (none)

Current Location:

● plato-discovery-service-5.1.0.war

5. Select option **Install this deployment as an application** and click **Next**.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Choose installation type and scope

Select if the deployment should be installed as an application or library. Also decide the scope of this deployment.

The application and its components will be targeted to the same locations. This is the most common usage.

● **Install this deployment as an application**

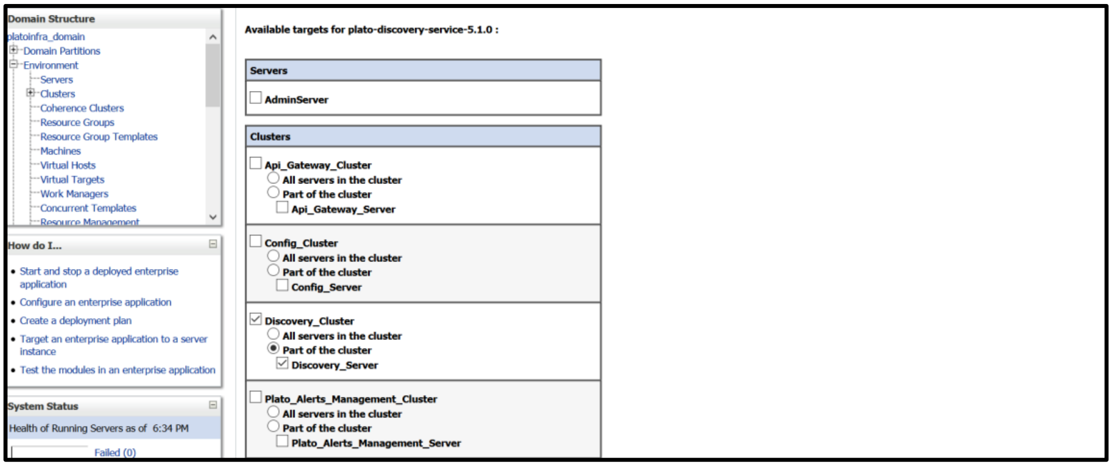
Application libraries are deployments that are available for other deployments to share. Libraries should be available on all of the targets running their referencing applicat

○ **Install this deployment as a library**

Select a scope in which you want to install the deployment.

Scope: Global

6. Select target servers/clusters on which application has to be deployed and the **Next**.



Health of Running Servers as of 6:34 PM

Available targets for plato-discovery-service-5.1.0 :

Servers

☐ **AdminServer**

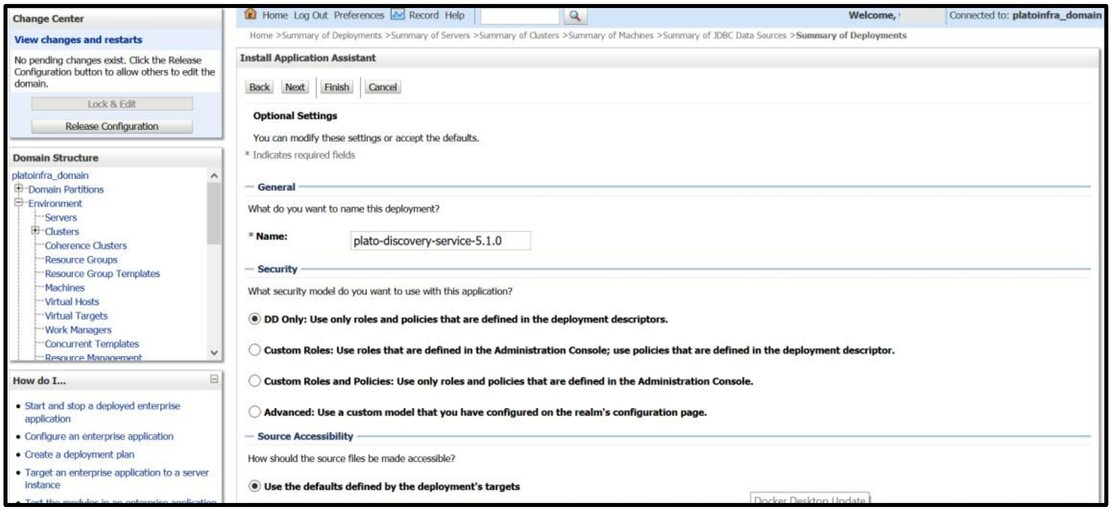
Clusters

☐ **Api_Gateway_Cluster**
  ○ **All servers in the cluster**
  ○ **Part of the cluster**
    ☐ **Api_Gateway_Server**

☐ **Config_Cluster**
  ○ **All servers in the cluster**
  ○ **Part of the cluster**
    ☐ **Config_Server**

☑ **Discovery_Cluster**
  ○ **All servers in the cluster**
  ● **Part of the cluster**
    ☑ **Discovery_Server**

☐ **Plato_Alerts_Management_Cluster**
  ○ **All servers in the cluster**
  ○ **Part of the cluster**
    ☐ **Plato_Alerts_Management_Server**


Home Log Out Preferences Record Help
Welcome,
Connected to: platoinfra_domain
Home >Summary of Deployments >Summary of Servers >Summary of Clusters >Summary of Machines >Summary of JDBC Data Sources >Summary of Deployments
Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
platoinfra_domain
Domain Partitions
Environment
Servers
Clusters
Coherence Clusters
Resource Groups
Resource Group Templates
Machines
Virtual Hosts
Virtual Targets
Work Managers
Concurrent Templates
Resource Management
How do I...
Start and stop a deployed enterprise application
Configure an enterprise application
Create a deployment plan
Target an enterprise application to a server instance
Back
Next
Finish
Cancel
Docker Desktop Update

No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Install Application Assistant

Optional Settings

You can modify these settings or accept the defaults.

* Indicates required fields

General

What do you want to name this deployment?

* **Name:** plato-discovery-service-5.1.0

Security

What security model do you want to use with this application?

● **DD Only: Use only roles and policies that are defined in the deployment descriptors.**

○ **Custom Roles: Use roles that are defined in the Administration Console; use policies that are defined in the deployment descriptor.**

○ **Custom Roles and Policies: Use only roles and policies that are defined in the Administration Console.**

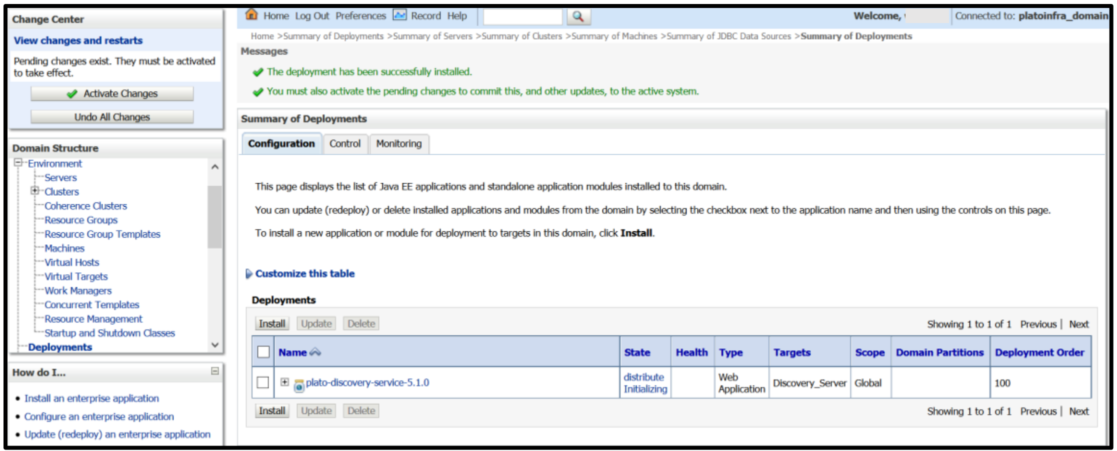
○ **Advanced: Use a custom model that you have configured on the realm's configuration page.**

Source Accessibility

How should the source files be made accessible?

● **Use the defaults defined by the deployment's targets**

7. Click **Finish** and then click **Save and Activate Changes**.


Home Log Out Preferences Record Help
Welcome,
Connected to: platoinfra_domain
Home >Summary of Deployments >Summary of Servers >Summary of Clusters >Summary of Machines >Summary of JDBC Data Sources >Summary of Deployments
Change Center
View changes and restarts
Activate Changes
Undo All Changes
Domain Structure
Environment
Servers
Clusters
Coherence Clusters
Resource Groups
Resource Group Templates
Machines
Virtual Hosts
Virtual Targets
Work Managers
Concurrent Templates
Resource Management
Startup and Shutdown Classes
Deployments
How do I...
Install an enterprise application
Configure an enterprise application
Update (redeploy) an enterprise application
Configuration
Control
Monitoring
Customize this table
Install
Update
Delete
Showing 1 to 1 of 1 Previous | Next

Pending changes exist. They must be activated to take effect.

Messages

✓ The deployment has been successfully installed.

✓ You must also activate the pending changes to commit this, and other updates, to the active system.

Summary of Deployments

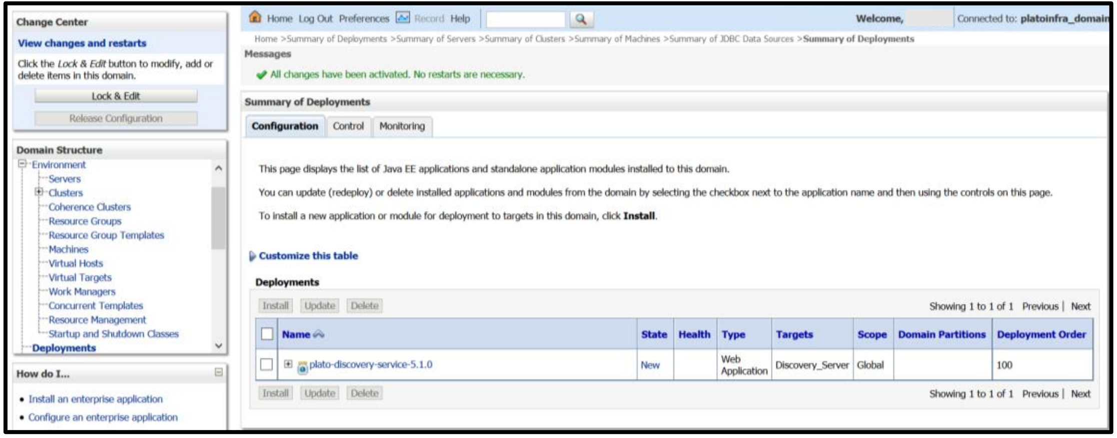
This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

To install a new application or module for deployment to targets in this domain, click **Install**.

Deployments

☐	Name	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
☐	plato-discovery-service-5.1.0	distribute Initializing		Web Application	Discovery_Server	Global		100


Home Log Out Preferences Record Help
Welcome,
Connected to: platoinfra_domain
Home >Summary of Deployments >Summary of Servers >Summary of Clusters >Summary of Machines >Summary of JDBC Data Sources >Summary of Deployments
Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
Environment
Servers
Clusters
Coherence Clusters
Resource Groups
Resource Group Templates
Machines
Virtual Hosts
Virtual Targets
Work Managers
Concurrent Templates
Resource Management
Startup and Shutdown Classes
Deployments
How do I...
Install an enterprise application
Configure an enterprise application
Configuration
Control
Monitoring
Customize this table
Install
Update
Delete
Showing 1 to 1 of 1 Previous | Next

Click the *Lock & Edit* button to modify, add or delete items in this domain.

Messages

✓ All changes have been activated. No restarts are necessary.

Summary of Deployments

This page displays the list of Java EE applications and standalone application modules installed to this domain.

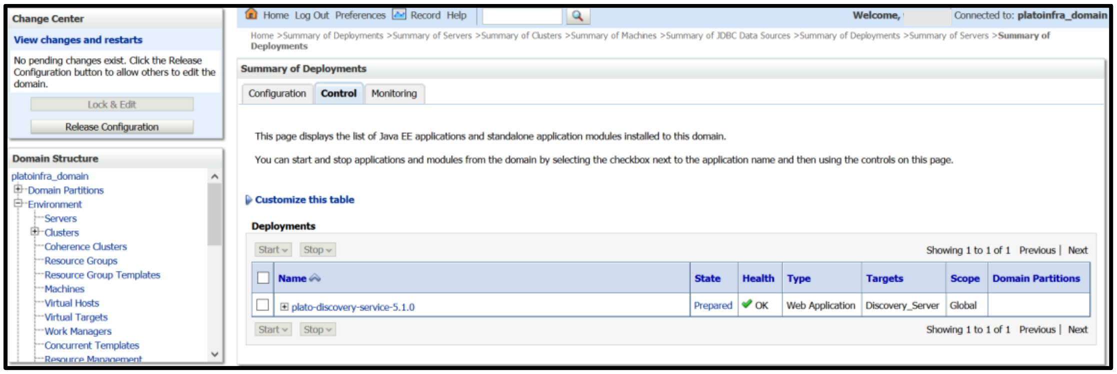
You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

To install a new application or module for deployment to targets in this domain, click **Install**.

Deployments

☐	Name	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
☐	plato-discovery-service-5.1.0	New		Web Application	Discovery_Server	Global		100

8. Click **Deployments** and then **Control** to changes the state of application from prepared to active status.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

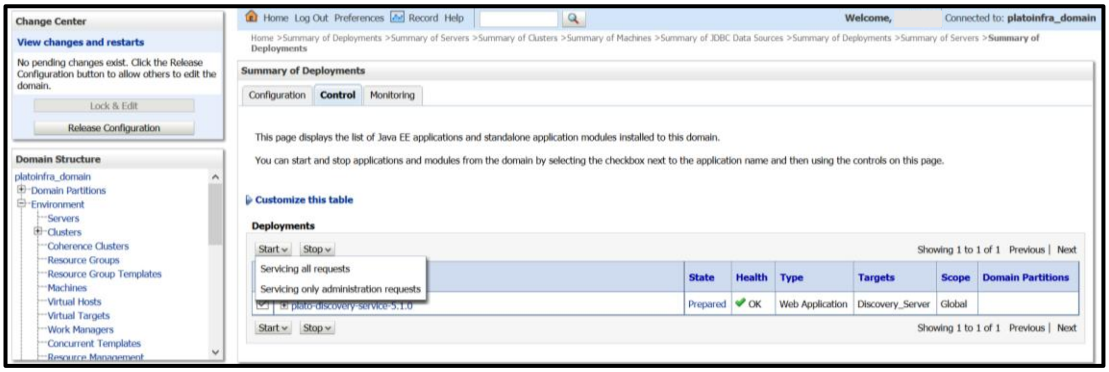
This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can start and stop applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

Deployments

☐	Name	State	Health	Type	Targets	Scope	Domain Partitions
☐	plato-discovery-service-5.1.0	Prepared	✓ OK	Web Application	Discovery_Server	Global	

9. Under **Deployment**, click **Start** dropdown and select **Start all requests**.



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

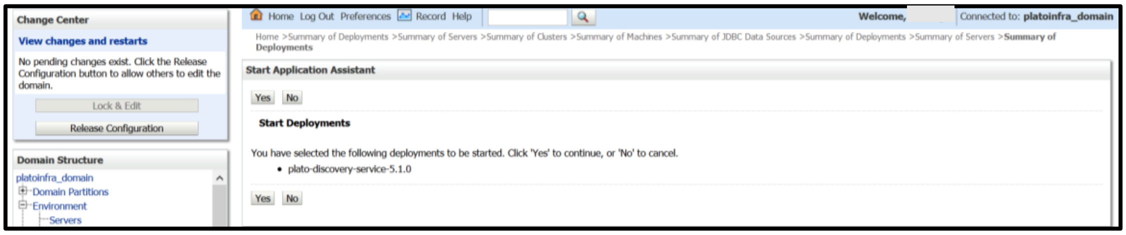
This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can start and stop applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

Deployments

☑	Name	State	Health	Type	Targets	Scope	Domain Partitions
☑	plato-discovery-service-5.1.0	Prepared	✓ OK	Web Application	Discovery_Server	Global	

10. Click **Yes.**


Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
platoinfra_domain
Domain Partitions
Environment
Servers
Home Log Out Preferences Record Help
Welcome,
Connected to: platoinfra_domain
Home >Summary of Deployments >Summary of Servers >Summary of Clusters >Summary of Machines >Summary of JDBC Data Sources >Summary of Deployments >Summary of Servers >Summary of Deployments
Start Application Assistant
Yes
No

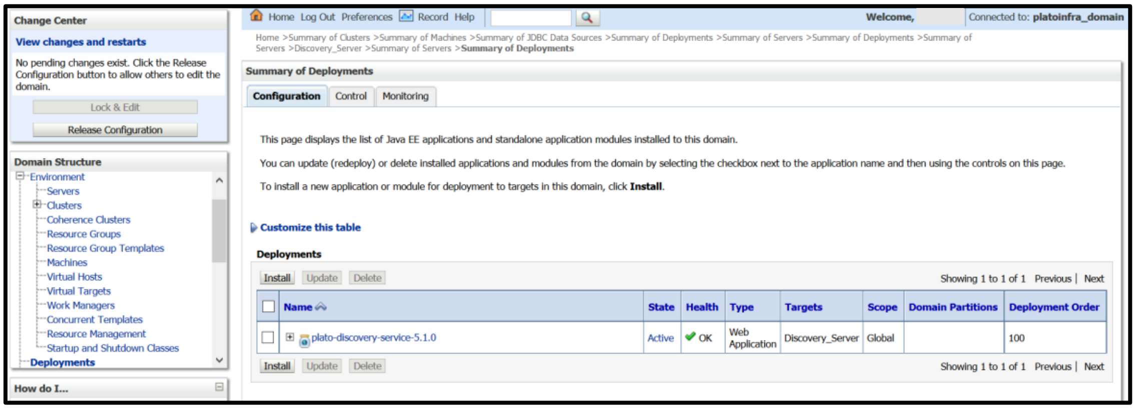
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Start Deployments

You have selected the following deployments to be started. Click 'Yes' to continue, or 'No' to cancel.

- plato-discovery-service-5.1.0

11. The status is displayed as **Active in the state column.**


Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
Environment
Servers
Clusters
Coherence Clusters
Resource Groups
Resource Group Templates
Machines
Virtual Hosts
Virtual Targets
Work Managers
Concurrent Templates
Resource Management
Startup and Shutdown Classes
Deployments
How do I...
Home Log Out Preferences Record Help
Welcome,
Connected to: platoinfra_domain
Home >Summary of Clusters >Summary of Machines >Summary of JDBC Data Sources >Summary of Deployments >Summary of Servers >Summary of Deployments >Summary of Servers >Discovery_Server >Summary of Servers >Summary of Deployments
Summary of Deployments
Configuration
Control
Monitoring
Customize this table
Install
Update
Delete
Showing 1 to 1 of 1 Previous | Next

No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

To install a new application or module for deployment to targets in this domain, click **Install**.

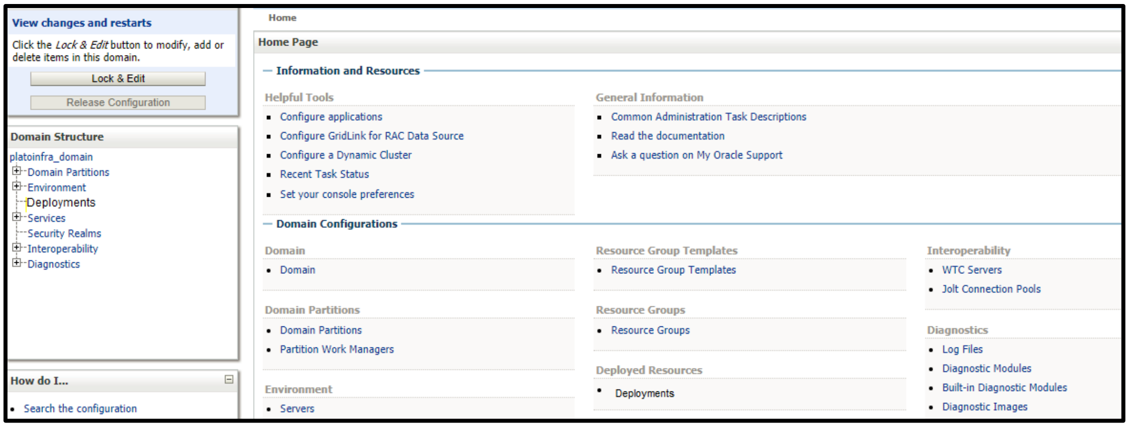
Deployments

☐	Name	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
☐	plato-discovery-service-5.1.0	Active	✓ OK	Web Application	Discovery_Server	Global		100

2.6 How to Undeploy Application

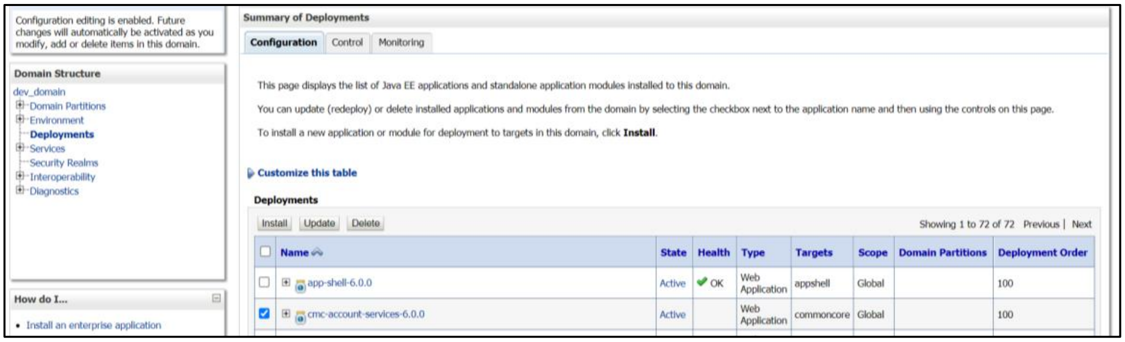
Login into weblogic server with the proper credentials.

1. Navigate to left menu and select **Deployments**.



Click the *Lock & Edit* button to modify, add or delete items in this domain.

2. Click **Lock and Edit** and then select the service that needs to be undeployed in Deployments.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

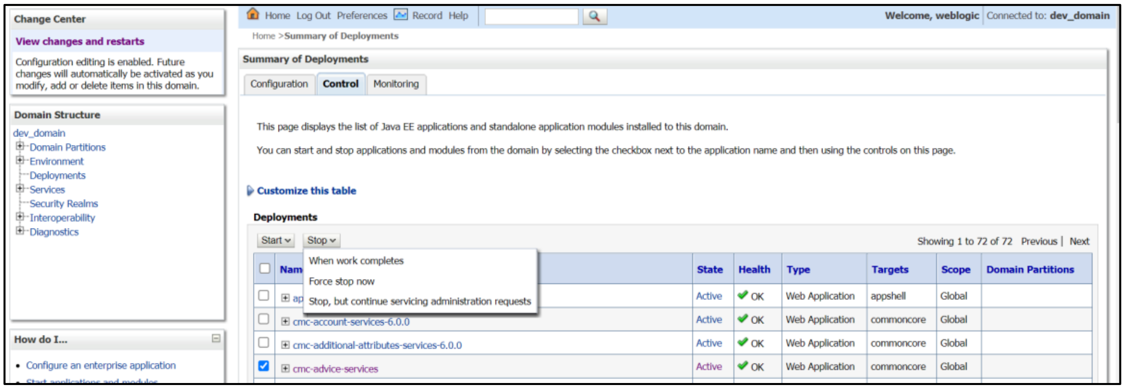
This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

To install a new application or module for deployment to targets in this domain, click **Install**.

☐	Name	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
☐	app-shell-6.0.0	Active	✓ OK	Web Application	appshell	Global		100
☑	cmc-account-services-6.0.0	Active		Web Application	commoncore	Global		100

3. On **Control** tab, click **Stop**, and select **Force stop now** from the dropdown list.


Change Center
View changes and restarts
Domain Structure
dev_domain
Domain Partitions
Environment
Deployments
Services
Security Realms
Interoperability
Diagnostics
How do I...
Configure an enterprise application
Start applications and modules
Home Log Out Preferences Record Help
Welcome, weblogic Connected to: dev_domain
Home >Summary of Deployments
Summary of Deployments
Configuration
Control
Monitoring
Customize this table
Deployments
Start
Stop
When work completes
Force stop now
Stop, but continue servicing administration requests
Showing 1 to 72 of 72 Previous | Next

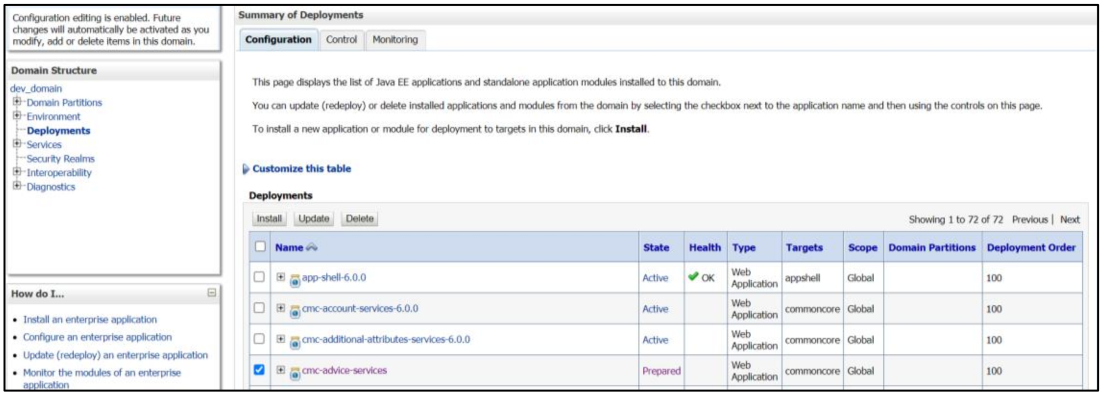
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can start and stop applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

☐	Name	State	Health	Type	Targets	Scope	Domain Partitions
☐	ap	Active	✓ OK	Web Application	appshell	Global	
☐	cmc-account-services-6.0.0	Active	✓ OK	Web Application	commoncore	Global	
☐	cmc-additional-attributes-services-6.0.0	Active	✓ OK	Web Application	commoncore	Global	
☑	cmc-advice-services	Active	✓ OK	Web Application	commoncore	Global	

4. Once it changes to prepared state, click **Configuration** tab.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

To install a new application or module for deployment to targets in this domain, click **Install**.

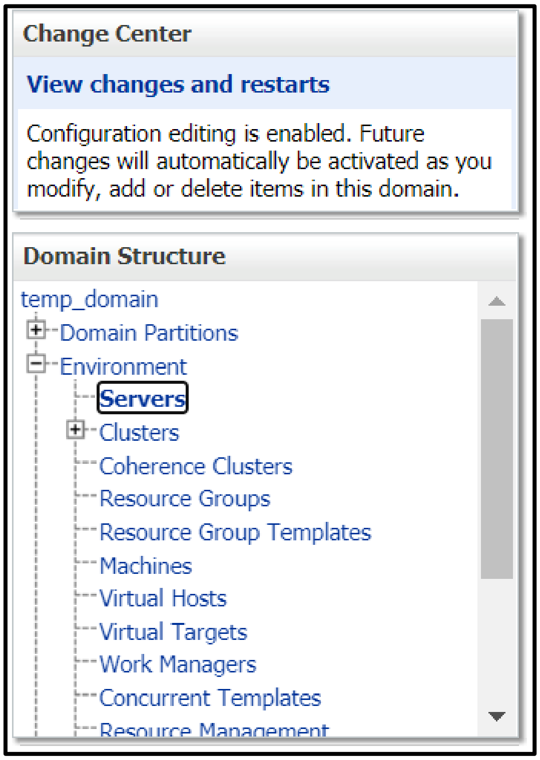
☐	Name	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
☐	app-shell-6.0.0	Active	✓ OK	Web Application	appshell	Global		100
☐	cmc-account-services-6.0.0	Active		Web Application	commoncore	Global		100
☐	cmc-additional-attributes-services-6.0.0	Active		Web Application	commoncore	Global		100
☑	cmc-advice-services	Prepared		Web Application	commoncore	Global		100

5. Select the service again and click on Delete to undeploy the service.

2.7 How to Restart Servers

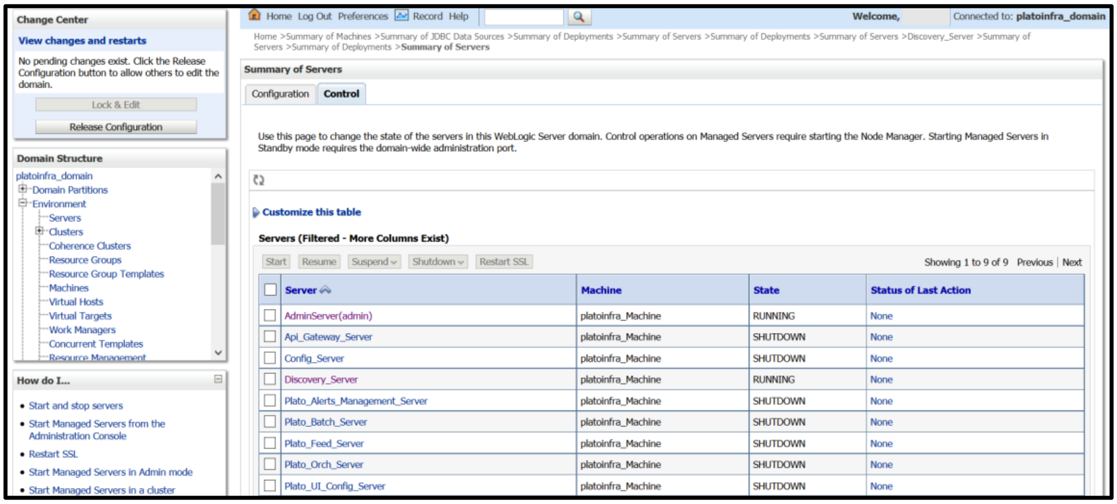
Perform the following steps to restart servers:

1. Navigate to left menu and select **Environment**, and then click **Servers**.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

2. Click **Control** tab.


Home Log Out Preferences Record Help
Welcome, [redacted] Connected to: platoinfra_domain
Home >Summary of Machines >Summary of JDBC Data Sources >Summary of Deployments >Summary of Servers >Summary of Deployments >Summary of Servers >Discovery_Server >Summary of Servers >Summary of Deployments >Summary of Servers
Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
platoinfra_domain
Domain Partitions
Environment
Servers
Clusters
Coherence Clusters
Resource Groups
Resource Group Templates
Machines
Virtual Hosts
Virtual Targets
Work Managers
Concurrent Templates
Resource Management
How do I...
Start and stop servers
Start Managed Servers from the Administration Console
Restart SSL
Start Managed Servers in Admin mode
Start Managed Servers in a cluster
Summary of Servers
Configuration
Control
Customize this table
Start
Resume
Suspend
Shutdown
Restart SSL
Showing 1 to 9 of 9 Previous | Next

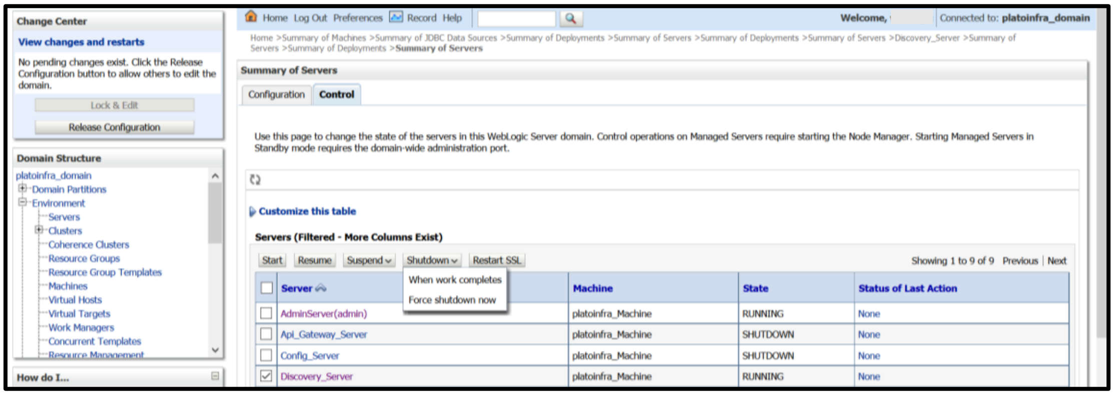
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Use this page to change the state of the servers in this WebLogic Server domain. Control operations on Managed Servers require starting the Node Manager. Starting Managed Servers in Standby mode requires the domain-wide administration port.

Servers (Filtered - More Columns Exist)

☐	Server	Machine	State	Status of Last Action
☐	AdminServer(admin)	platoinfra_Machine	RUNNING	None
☐	Api_Gateway_Server	platoinfra_Machine	SHUTDOWN	None
☐	Config_Server	platoinfra_Machine	SHUTDOWN	None
☐	Discovery_Server	platoinfra_Machine	RUNNING	None
☐	Plato_Alerts_Management_Server	platoinfra_Machine	SHUTDOWN	None
☐	Plato_Batch_Server	platoinfra_Machine	SHUTDOWN	None
☐	Plato_Feed_Server	platoinfra_Machine	SHUTDOWN	None
☐	Plato_Orch_Server	platoinfra_Machine	SHUTDOWN	None
☐	Plato_UI_Config_Server	platoinfra_Machine	SHUTDOWN	None

3. Select servers to **Shutdown**



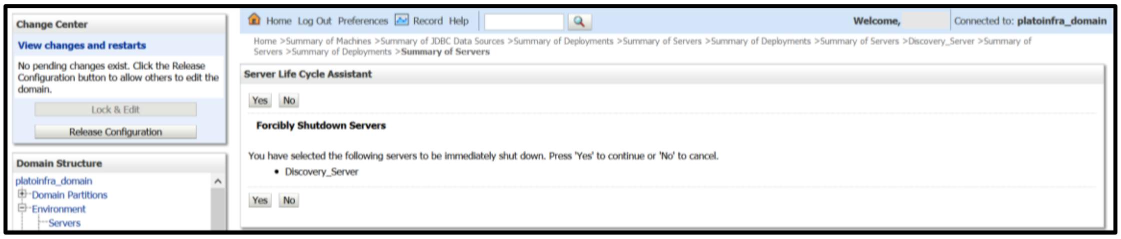
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Use this page to change the state of the servers in this WebLogic Server domain. Control operations on Managed Servers require starting the Node Manager. Starting Managed Servers in Standby mode requires the domain-wide administration port.

Servers (Filtered - More Columns Exist)

☐	Server	Machine	State	Status of Last Action
☐	AdminServer(admin)	platoinfra_Machine	RUNNING	None
☐	Api_Gateway_Server	platoinfra_Machine	SHUTDOWN	None
☐	Config_Server	platoinfra_Machine	SHUTDOWN	None
☑	Discovery_Server	platoinfra_Machine	RUNNING	None

4. Click **Yes** to confirm shutdown.


Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
platoinfra_domain
Domain Partitions
Environment
Servers
Home Log Out Preferences Record Help
Welcome, [redacted]
Connected to: platoinfra_domain
Home >Summary of Machines >Summary of JDBC Data Sources >Summary of Deployments >Summary of Servers >Summary of Deployments >Summary of Servers >Discovery_Server >Summary of Servers >Summary of Deployments >Summary of Servers
Server Life Cycle Assistant
Yes
No
Yes
No

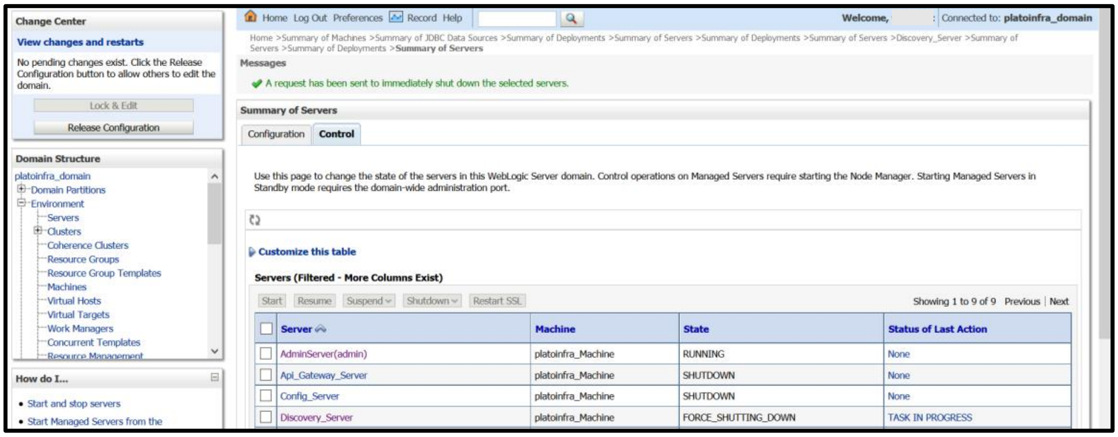
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Forcibly Shutdown Servers

You have selected the following servers to be immediately shut down. Press 'Yes' to continue or 'No' to cancel.

- Discovery_Server

5. The status displayed as shown below:



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

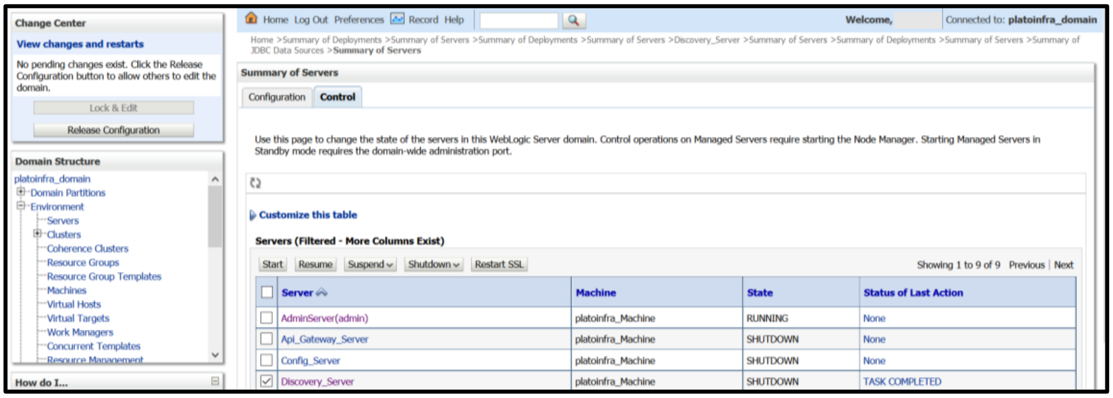
✓ A request has been sent to immediately shut down the selected servers.

Use this page to change the state of the servers in this WebLogic Server domain. Control operations on Managed Servers require starting the Node Manager. Starting Managed Servers in Standby mode requires the domain-wide administration port.

Servers (Filtered - More Columns Exist)

☐	Server	Machine	State	Status of Last Action
☐	AdminServer(admin)	platoinfra_Machine	RUNNING	None
☐	Api_Gateway_Server	platoinfra_Machine	SHUTDOWN	None
☐	Config_Server	platoinfra_Machine	SHUTDOWN	None
☐	Discovery_Server	platoinfra_Machine	FORCE_SHUTTING_DOWN	TASK IN PROGRESS

6. Once shutdown is completed, navigate to **Control**, select the servers to **Start**, and click **Yes** to confirm action.

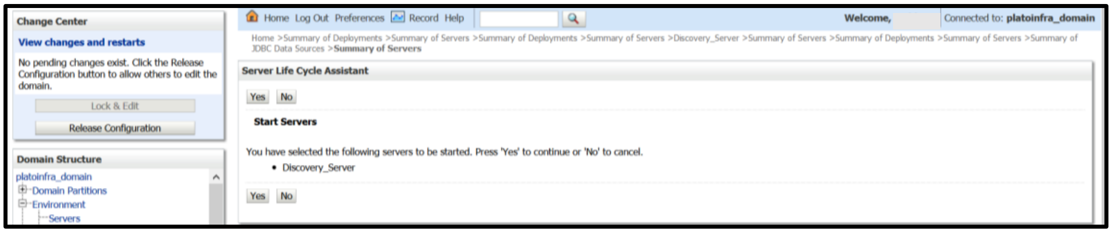


No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Use this page to change the state of the servers in this WebLogic Server domain. Control operations on Managed Servers require starting the Node Manager. Starting Managed Servers in Standby mode requires the domain-wide administration port.

Servers (Filtered - More Columns Exist)

☐	Server	Machine	State	Status of Last Action
☐	AdminServer(admin)	platoinfra_Machine	RUNNING	None
☐	Api_Gateway_Server	platoinfra_Machine	SHUTDOWN	None
☐	Config_Server	platoinfra_Machine	SHUTDOWN	None
☑	Discovery_Server	platoinfra_Machine	SHUTDOWN	TASK COMPLETED


Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
platoinfra_domain
Domain Partitions
Environment
Servers
Home Log Out Preferences Record Help
Welcome,
Connected to: platoinfra_domain
Home >Summary of Deployments >Summary of Servers >Summary of Deployments >Summary of Servers >Discovery_Server >Summary of Servers >Summary of Deployments >Summary of Servers >Summary of JDBC Data Sources >Summary of Servers
Yes
No

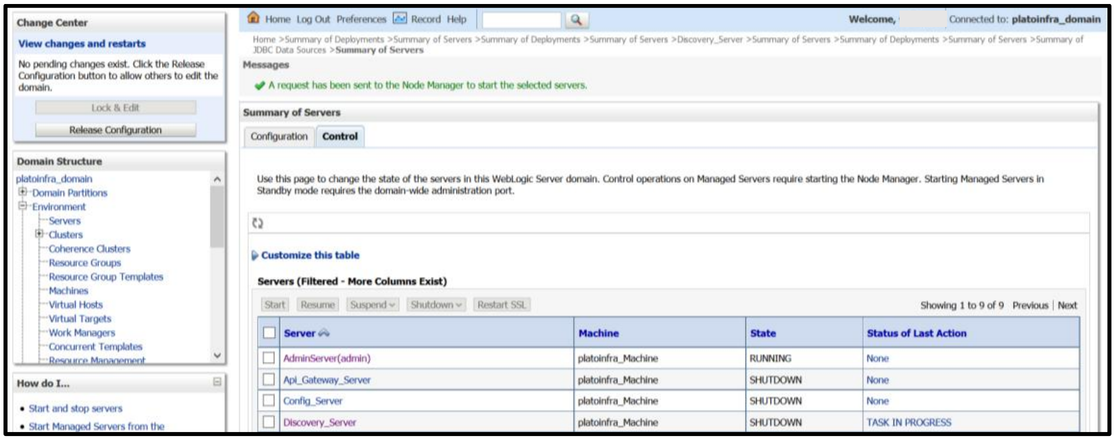
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Server Life Cycle Assistant

Start Servers

You have selected the following servers to be started. Press 'Yes' to continue or 'No' to cancel.

- Discovery_Server



No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

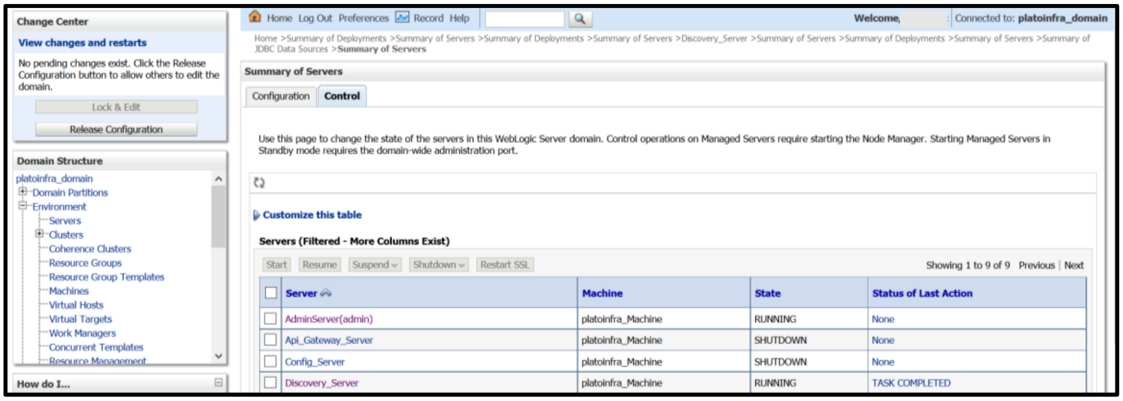
✓ A request has been sent to the Node Manager to start the selected servers.

Use this page to change the state of the servers in this WebLogic Server domain. Control operations on Managed Servers require starting the Node Manager. Starting Managed Servers in Standby mode requires the domain-wide administration port.

Servers (Filtered - More Columns Exist)

☐	Server	Machine	State	Status of Last Action
☐	AdminServer(admin)	platoinfra_Machine	RUNNING	None
☐	Api_Gateway_Server	platoinfra_Machine	SHUTDOWN	None
☐	Config_Server	platoinfra_Machine	SHUTDOWN	None
☐	Discovery_Server	platoinfra_Machine	SHUTDOWN	TASK IN PROGRESS

7. When all requested servers are running, navigate to **Summary of Deployments,** and check if deployments are in active state.

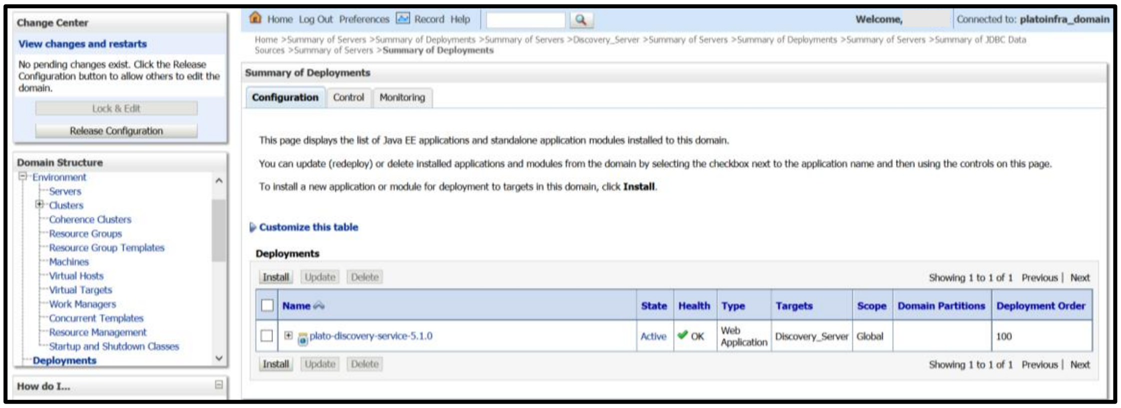


No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Use this page to change the state of the servers in this WebLogic Server domain. Control operations on Managed Servers require starting the Node Manager. Starting Managed Servers in Standby mode requires the domain-wide administration port.

Servers (Filtered - More Columns Exist)

☐	Server	Machine	State	Status of Last Action
☐	AdminServer(admin)	platoinfra_Machine	RUNNING	None
☐	Api_Gateway_Server	platoinfra_Machine	SHUTDOWN	None
☐	Config_Server	platoinfra_Machine	SHUTDOWN	None
☐	Discovery_Server	platoinfra_Machine	RUNNING	TASK COMPLETED


Change Center
View changes and restarts
Lock & Edit
Release Configuration
Domain Structure
Environment
Servers
Clusters
Coherence Clusters
Resource Groups
Resource Group Templates
Machines
Virtual Hosts
Virtual Targets
Work Managers
Concurrent Templates
Resource Management
Startup and Shutdown Classes
Deployments
How do I...
Home Log Out Preferences Record Help
Welcome,
Connected to: platoinfra_domain
Home >Summary of Servers >Summary of Servers >Discovery_Server >Summary of Servers >Summary of Deployments >Summary of Servers >Summary of JDBC Data Sources >Summary of Servers >Summary of Deployments
Summary of Deployments
Configuration
Control
Monitoring
Customize this table
Install
Update
Delete
Showing 1 to 1 of 1 Previous | Next

No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

To install a new application or module for deployment to targets in this domain, click **Install.**

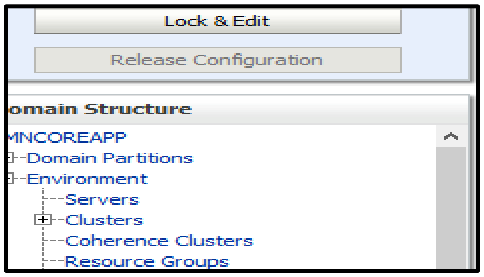
Deployments

☐	Name	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
☐	plato-discovery-service-5.1.0	Active	✓ OK	Web Application	Discovery_Server	Global		100

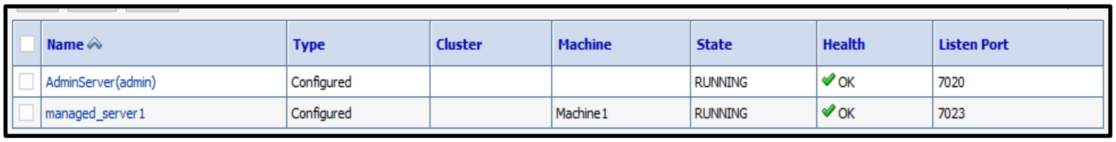
2.8 How to Check Port Number

Perform the following steps to check port numbers:

1. Specify the **User id** and **Password**, and login to **WebLogic console**.
2. Click **Environment** and then click **Server**.



3. Under Servers (Filtered - More Columns Exist) section, you will be able to see all the server listed.



☐	Name	Type	Cluster	Machine	State	Health	Listen Port
☐	AdminServer(admin)	Configured			RUNNING	✓ OK	7020
☐	managed_server1	Configured		Machine1	RUNNING	✓ OK	7023

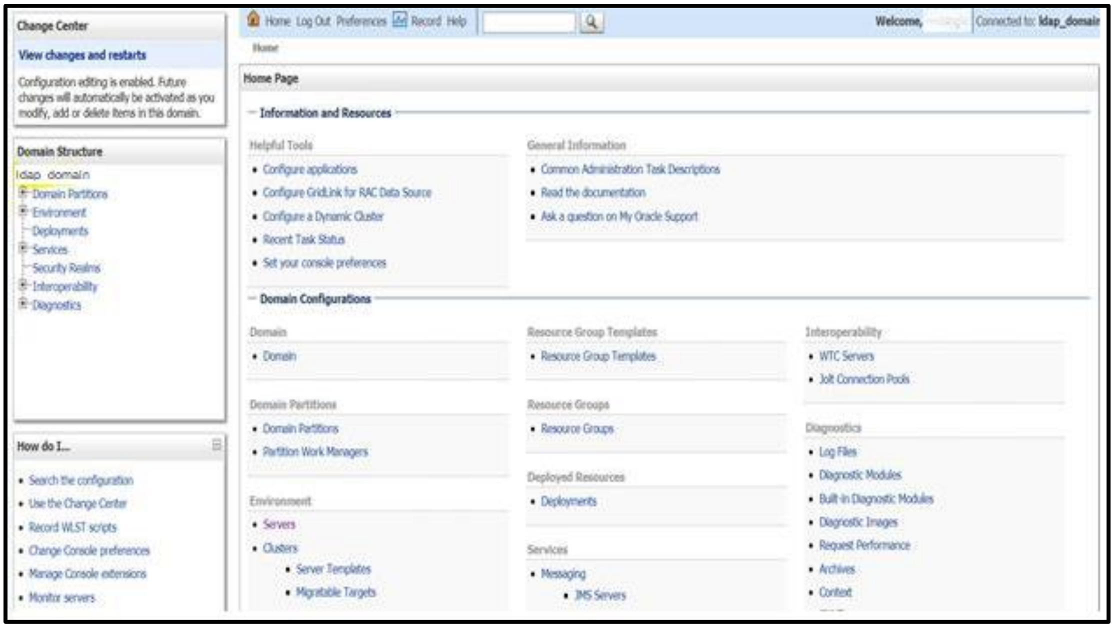
2.9 Weblogic Embedded LDAP Setup

The following changes are to be made for configuring the Weblogic-Embedded LDAP server for Oracle Banking Microservices Architecture:

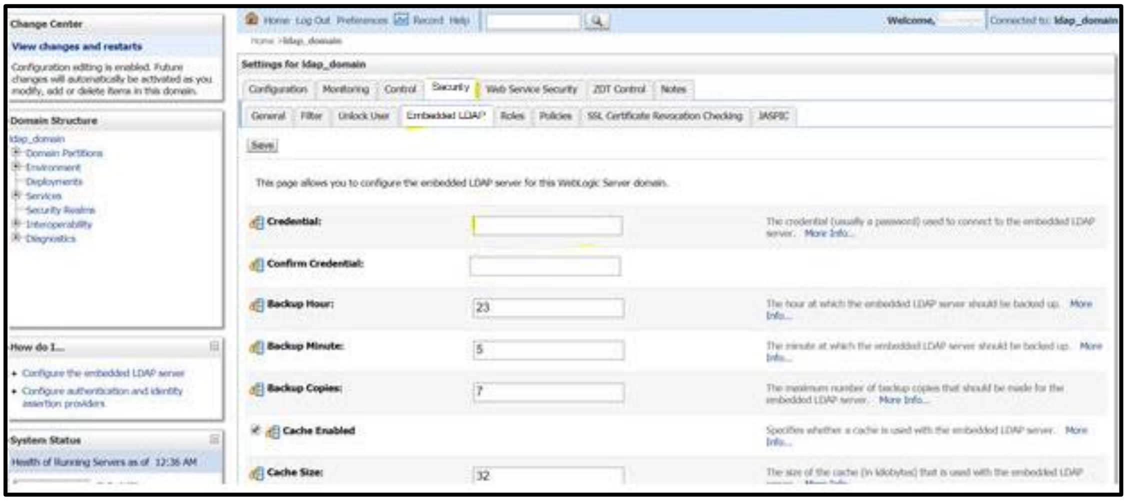
- Configuration of Weblogic LDAP
- Creation of Users
- Plato Security Config Table Entries

2.9.1 Configuration of Weblogic LDAP

1. Open the **Administration Console** for the **Weblogic**, and click domain name in left panel.



2. Under Settings for ldap_domain, click **Security** tab, and then click **Embedded LDAP** tab.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Settings for ldap_domain

This page allows you to configure the embedded LDAP server for this WebLogic Server domain.

Credential:

Confirm Credential:

Backup Hour: 23

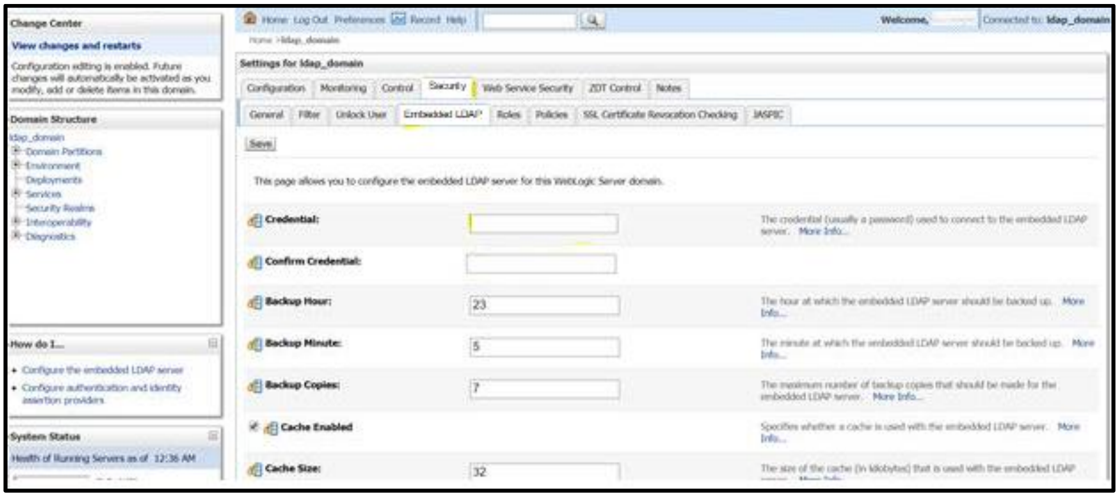
Backup Minute: 5

Backup Copies: 7

☑ Cache Enabled

Cache Size: 32

3. Set the **Credential** for Weblogic Embedded LDAP store. This is needed in the **Security Config** table.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Settings for ldap_domain

This page allows you to configure the embedded LDAP server for this WebLogic Server domain.

Credential:

Confirm Credential:

Backup Hour: 23

Backup Minute: 5

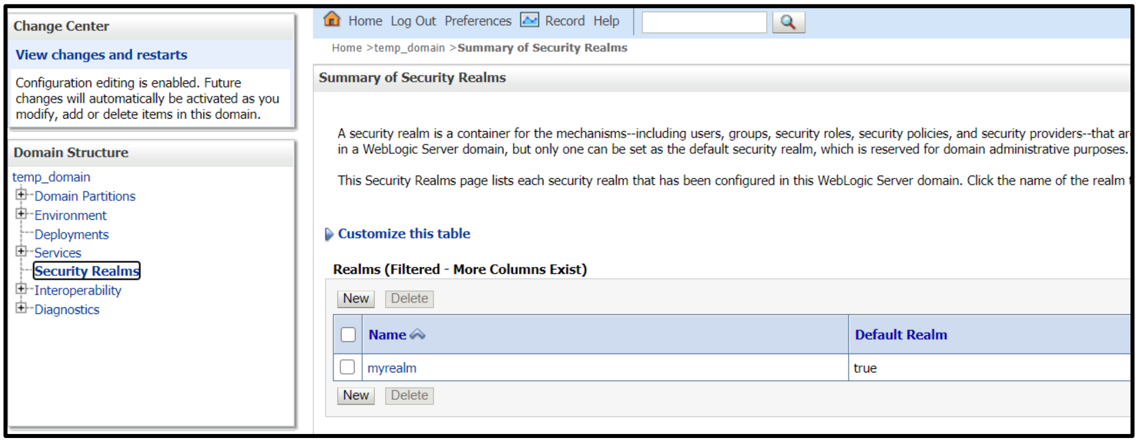
Backup Copies: 7

☑ Cache Enabled

Cache Size: 32

2.9.2 Creation of Users

1. Navigate to left menu, and click **Security Realms**.
2. In the **Summary of Security Realms** window, click **myrealm**.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Summary of Security Realms

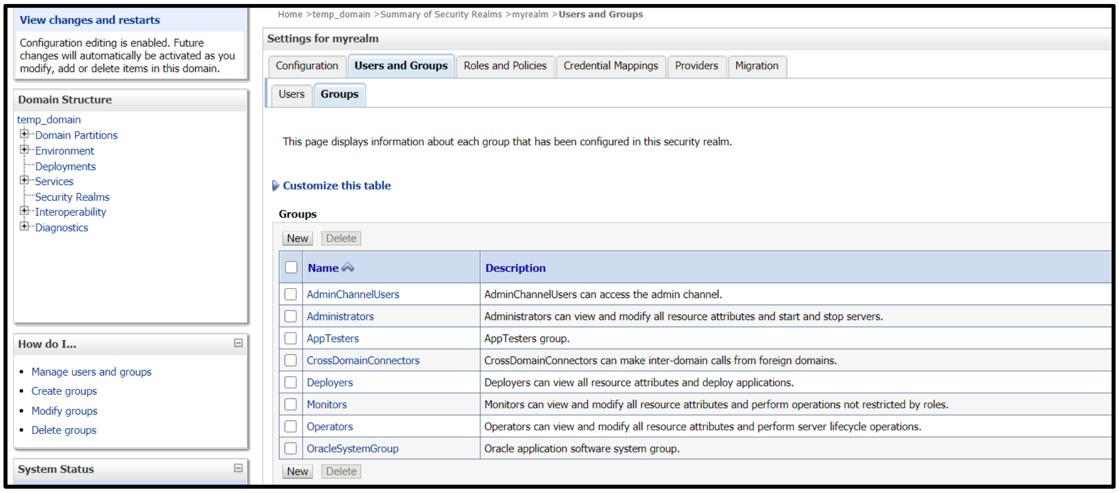
A security realm is a container for the mechanisms--including users, groups, security roles, security policies, and security providers--that ar in a WebLogic Server domain, but only one can be set as the default security realm, which is reserved for domain administrative purposes.

This Security Realms page lists each security realm that has been configured in this WebLogic Server domain. Click the name of the realm

Realms (Filtered - More Columns Exist)

☐	Name	Default Realm
☐	myrealm	true

3. Under **Settings for myrealm**, click **Users and Groups**.
4. Click **Groups** tab. Click **New** to make a new group.



View changes and restarts

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure

temp_domain
- Domain Partitions
- Environment
- Deployments
- Services
- Security Realms
- Interoperability
- Diagnostics

How do I...

- Manage users and groups
- Create groups
- Modify groups
- Delete groups

System Status

Home >temp_domain >Summary of Security Realms >myrealm >**Users and Groups**

Settings for myrealm

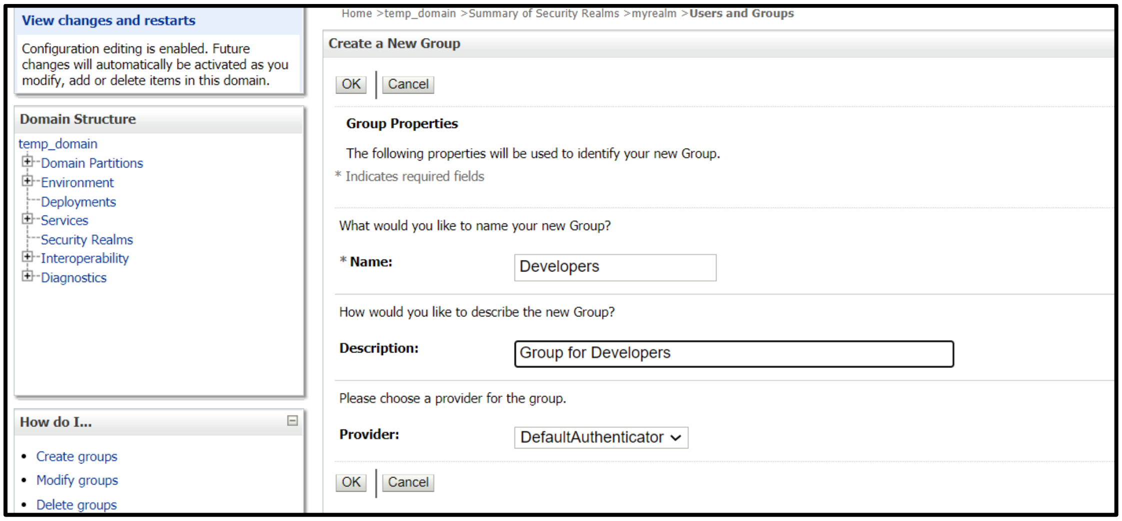
This page displays information about each group that has been configured in this security realm.

Customize this table

Groups

☐	Name	Description
☐	AdminChannelUsers	AdminChannelUsers can access the admin channel.
☐	Administrators	Administrators can view and modify all resource attributes and start and stop servers.
☐	AppTesters	AppTesters group.
☐	CrossDomainConnectors	CrossDomainConnectors can make inter-domain calls from foreign domains.
☐	Deployers	Deployers can view all resource attributes and deploy applications.
☐	Monitors	Monitors can view and modify all resource attributes and perform operations not restricted by roles.
☐	Operators	Operators can view and modify all resource attributes and perform server lifecycle operations.
☐	OracleSystemGroup	Oracle application software system group.

5. Add the relevant details and click **OK**. The new group will be created.



View changes and restarts

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure

temp_domain
- Domain Partitions
- Environment
- Deployments
- Services
- Security Realms
- Interoperability
- Diagnostics

How do I...

- Create groups
- Modify groups
- Delete groups

Home >temp_domain >Summary of Security Realms >myrealm >**Users and Groups**

Create a New Group

Group Properties

The following properties will be used to identify your new Group.

* Indicates required fields

What would you like to name your new Group?

* **Name:** Developers

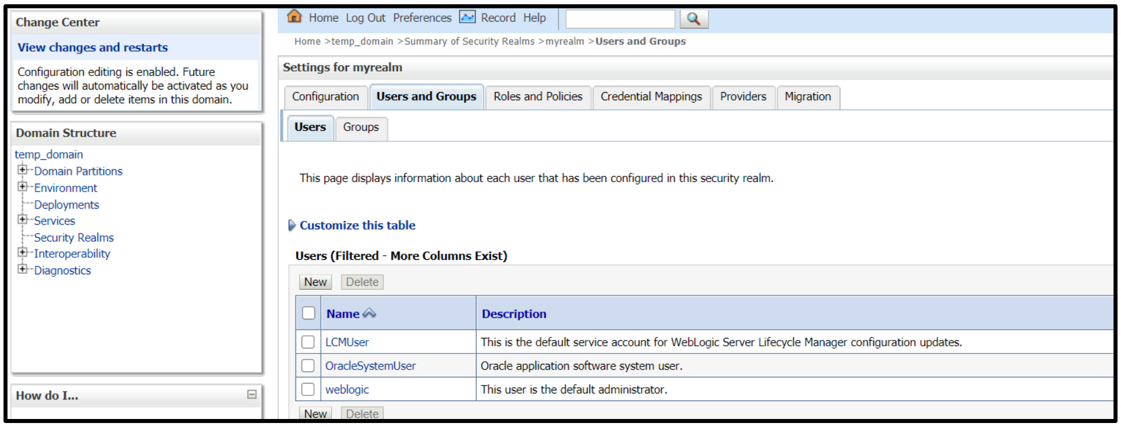
How would you like to describe the new Group?

Description: Group for Developers

Please choose a provider for the group.

Provider: DefaultAuthenticator

6. Click **Users** tab, and click **New** to create user.



Change Center

View changes and restarts

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Domain Structure

temp_domain
- Domain Partitions
- Environment
- Deployments
- Services
- Security Realms
- Interoperability
- Diagnostics

How do I...

Home >temp_domain >Summary of Security Realms >myrealm >**Users and Groups**

Settings for myrealm

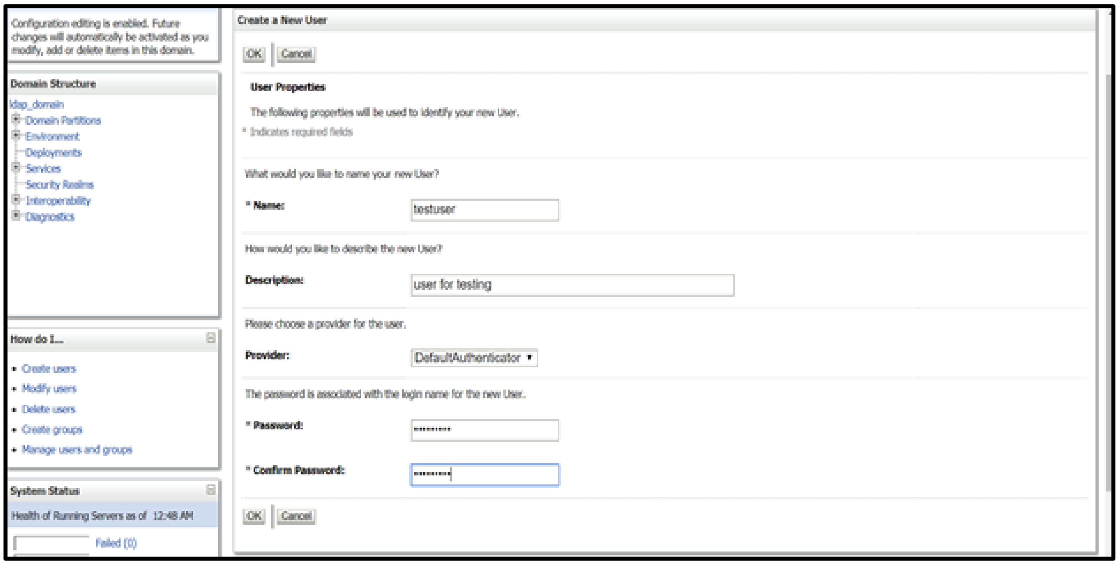
This page displays information about each user that has been configured in this security realm.

Customize this table

Users (Filtered - More Columns Exist)

☐	Name	Description
☐	LCMUser	This is the default service account for WebLogic Server Lifecycle Manager configuration updates.
☐	OracleSystemUser	Oracle application software system user.
☐	weblogic	This user is the default administrator.

7. Enter the required details for the user. After completing click **OK**. The user will be created.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Create a New User

User Properties

The following properties will be used to identify your new User.

* Indicates required fields

What would you like to name your new User?

* Name: testuser

How would you like to describe the new User?

Description: user for testing

Please choose a provider for the user.

Provider: DefaultAuthenticator

The password is associated with the login name for the new User.

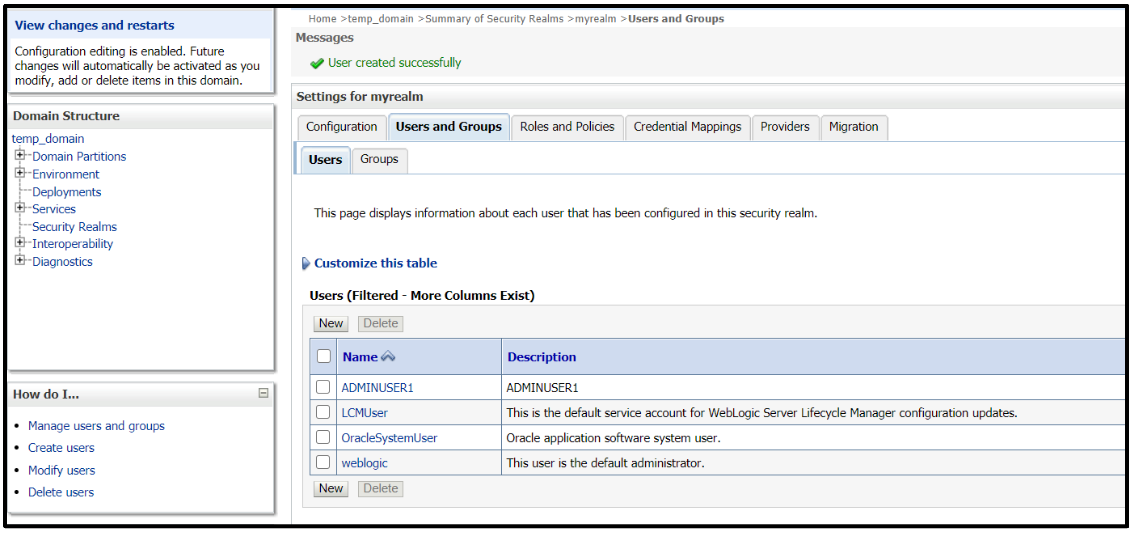
* Password: ••••••••••

* Confirm Password: ••••••••••

Health of Running Servers as of 12:48 AM

Failed (0)

8. Click on the newly created user to assign the newly created user to some group.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Home >temp_domain >Summary of Security Realms >myrealm >**Users and Groups**

Messages

✓ User created successfully

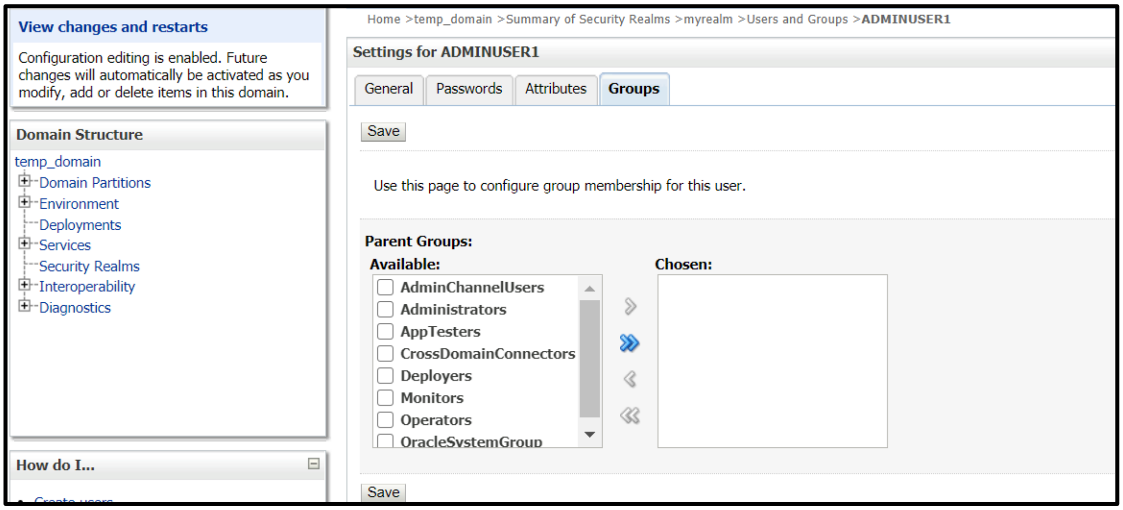
Settings for myrealm

This page displays information about each user that has been configured in this security realm.

Users (Filtered - More Columns Exist)

☐	Name	Description
☐	ADMINUSER1	ADMINUSER1
☐	LCMUser	This is the default service account for WebLogic Server Lifecycle Manager configuration updates.
☐	OracleSystemUser	Oracle application software system user.
☐	weblogic	This user is the default administrator.

9. Under **Setting for ADMINUSER1** (or whatever your user's name is) window, click **Groups** tab.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Home >temp_domain >Summary of Security Realms >myrealm >Users and Groups >**ADMINUSER1**

Settings for ADMINUSER1

Use this page to configure group membership for this user.

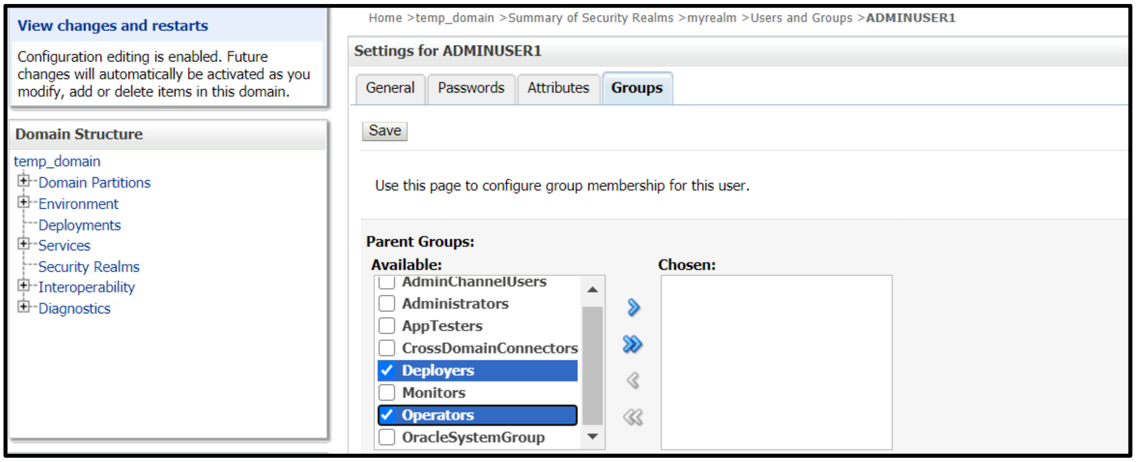
Parent Groups:

Available:

☐ AdminChannelUsers
☐ Administrators
☐ AppTesters
☐ CrossDomainConnectors
☐ Deployers
☐ Monitors
☐ Operators
☐ OracleSystemGroup

Chosen:

10. Select the groups you want to assign to the user and click single right button as shown below.

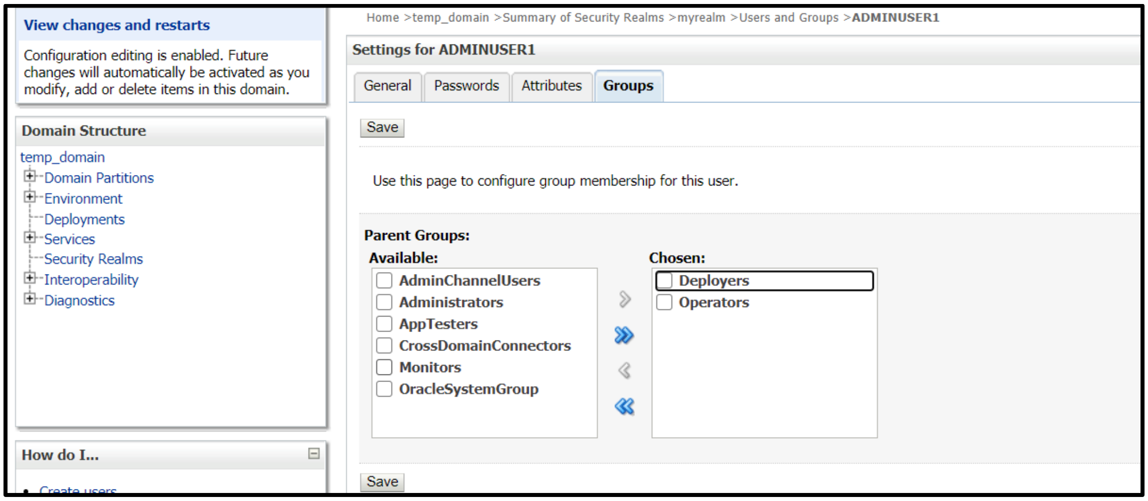


Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Use this page to configure group membership for this user.

Available:
- ☐ AdminChannelUsers
- ☐ Administrators
- ☐ AppTesters
- ☐ CrossDomainConnectors
- ☑ Deployers
- ☐ Monitors
- ☑ Operators
- ☐ OracleSystemGroup

11. Click **Save**.



Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

Use this page to configure group membership for this user.

Available:
- ☐ AdminChannelUsers
- ☐ Administrators
- ☐ AppTesters
- ☐ CrossDomainConnectors
- ☐ Monitors
- ☐ OracleSystemGroup

Chosen:
- ☐ Deployers
- ☐ Operators

2.9.3 Oracle Banking Microservices Architecture Security Config Table Entries

Connection details for the embedded LDAP of weblogic (assuming the admin server is running on 10.99.99.10:7001) are given below:

Connection Details:

URL: ldap:// 10.99.99.10:7001

Server Base: dc={DOMAIN_NAME} (in our case it would be dc=ldap_domain)

User Search Base: ou=people,ou=myrealm

Server User: cn=admin

Server Credentials: As setup in step Point 3 under 1.8.1

Security Config Table Entries:

ID	VALUE	Description
LDAP_URL	ldap:// 10.99.99.10:7001	Valid LDAP Server address with port.
LDAP_SERVER_USER	cn=admin	LDAP server login username
LDAP_SERVER_BASE	dc=ldap_domain	LDAP Server Base
LDAP_SERVER_CREDENTIAL	yIksiMFfjVbfcpA7Qheh8Q==	LDAP server credentials in encrypted form(For Encryption steps, refer to Encrypted Utility section below)
LDAP_USER_SEARCH_BASE	ou=people,ou=myrealm	LDAP User Search Base
LDAP_PROVIDER	EMBEDDED_WEBLOGIC	Which LDAP Provider to be used. Also, if this row is not present in this table, then In-House Spring Plato LDAP will be used.

2.10 Oracle Analytic Server Setup

This section contains the following sub-sections:

- Prerequisite
- Start BI Server
- Upload BI Reports
- Test BI Reports

2.10.1 Prerequisite

Perform the following steps:

- Machine should have Java JDK1.8.0_271 has installed
- Oracle Analytics Server 5.5.0

2.10.2 Start BI Server

Perform the following steps to start BI server:

1. Start the weblogic server and analytics server.
2. Check the weblogic console whether analytics server is running.

2.10.3 Upload BI Reports

Perform the following steps to upload BI reports:

1. Login to the Analytics server console.

2. Open the OSDC and check for the report Catalog object **\{unzip folder}\REP\{reportfilename}.xdrz** or any other Catalog objects listed below:

Catalog Object	Extensions Supported
Data Model	.xdmz
Folder	.xdrz
Report	.xdoz
Style Template	.xssz
Subtemplate	.xsbz

3. Upload the catalog object to Analytics Server.

2.10.4 Test BI Reports

Perform the following steps to generate BI reports:

1. Open the application, and go the **Reports** section of the application.
2. Choose the report generation criteria. For example, **Start Date** or **End Date**.
3. Choose the format of the report.
4. Generate the report.

NOTE: If the format of the report selected is PDF, a PDF report will be generated.

2.11 How to deploy Plato-Apigateway Router

2.11.1 Router deployment steps

Follow services must be deployment in below order to setup router service:

1. **Deploy plato-config-service**

   a. Set placeholder -Dflyway.domain.placeholders.plato-apigateway-router.server.port=<new server port for plato-apigateway-router>

2. **Deploy plato-ui-config-service**

   b. set -Dflyway.domain.placeholders.apigateway.port=<new server port for plato-apigateway-router>
   c. set -Dflyway.domain.placeholders.apigateway.host=<server host for plato-apigateway-router>

3. **Deploy plato-api-gateway**

   d. Migrate existing OAuth users:

   API for migration - /api-gateway/migrateOauthUsers

   Example: http://hostname:8080/api-gateway/migrateOauthUsers

   Authorization - jwtToken

   Headers:

   appId,userId,entityId

   Body (Json): ["client1", "client2"] - Migrate selected list of clients

   or

   Body (Json): ["ALL"] -Migrate all clients.

4. Deploy plato-apigateway-router

```
java -jar  plato-apigateway-router.jar   --plato.services.config.uri=http://hostname:8001 --plato.service.logging.path=/logfilePath
```

--plato.services.config.uri - Config server URI which is referred by all other services.

--plato.service.logging.path - Path where log file(plato-apigateway-router.log) must be created. Specify the same path as that of other services.

We can enable SSL for plato-apigateway-router by providing:

```
--server.ssl.enabled=true

--server.ssl.key-store=C:/Users/KEYS/keytool/keystore.jks

--key-store-password=xxxx

--server.ssl.trust-store=C:/Users/KEYS/keytool/truststore.jks

--trust-store-password=xxxxx

--salt=xxxxx
```

Note: Passwords and salt must be encrypted value generated using respective toolkits.

Provide ssl certs of plato-api-gateway required for validation call when plato-api-gateway is deployed in different server.:

```
--apigateway.useServerSSLKeys=false

--apigateway.ssl.key-store=C:/Users/KEYS/keytool/keystore.jks

--apigateway.ssl.key-store-password=xxxx

--apigateway.ssl.trust-store=C:/Users/KEYS/keytool/truststore.jks

--apigateway.ssl.trust-store-password=xxxxx
```

Note: Above certificates can be different than that of plato-apigateway-route

we must also provide trust certificates as

```
--spring.cloud.gateway.httpclient.ssl.trusted-x509-certificates=C:/Users/KEYS/keytool/keystore1.pem, C:/Users/KEYS/keytool/keystore2.pem
```

Note: Run this service with nohup command to that process will run on background

App-shell must point to plato-apigateway-router service. Update 'apigateway.url' by correcting it to "http://hostname:8080" - here 8080 is the port is configured for plato-apigateway-router.

2.11.2 Generation pem file and encryption of secrets:

Use plato-security-toolkit to encrypt secrets ---key-store-password, --trust-store-password, --apigateway.ssl.key-store-password, --apigateway.ssl.trust-store-password and these encrypted values must be passed to router service.

Encryption of secrets

To encrypt the passwords as per Oracle Standards, we recommend toolkit - plato-security-toolkit

Usage: java -jar plato-security-toolkit-9.1.0.jar

Enter pass phrase: Test123

Enter Salt: 0.9412345671234567

Encrypted Password: m4Q1rbtegkWse2s7D2jKfw==

Encryption of salt: to encrpt –salt value used while generating encrypted secret. This encrypt salt must be passed to router service.

To encrypt the salt as per Oracle Standards, we recommend toolkit - plato-security-salt-encryption-toolkit

Usage: java -jar plato-security-salt-encryption-toolkit-9.1.0.jar

Enter Salt: 0.9412345671234567

Encrypted Password: VmtjMWQxTnJOVlpPV0VaWFZrVndUMWxYTVU1bFJsSlpZMFZLYTFaVVZrWldWbWgzVkRGS1JsWnFVVDA9

PEM file from keystore

```
keytool -exportcert -alias localhost -keystore keystore.jks -rfc -file keystore.pem
```

2.11.3 Timeout parameters

```
# These parameters are similar to earlier ribbon timeout params

spring.cloud.gateway.httpclient.connect-timeout= 3000 //seconds

spring.cloud.gateway.httpclient.response-timeout= 360s

spring.cloud.gateway.httpclient.pool.acquire-timeout=6000 //milliseconds

spring.cloud.gateway.httpclient.pool.max-connections=10000

#Properties used webclient call is made to plato-api-gateway for validation

webclient.http.max.connections=1000

webclient.http.acquire.timeout.millisec=5000

webclient.http.connection.timeout.millisec=20000

webclient.http.read.timeout.seconds=20000

webclient.http.write.timeout.seconds=20000
```

Configuration and Deployment Guide

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