

Oracle® Banking Microservices Architecture Configuration and Deployment Guide



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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.

Audience

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

Documentation 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>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Critical Patches

Oracle advises customers to get all their security vulnerability information from the Oracle Critical Patch Update Advisory, which is available at [Critical Patches](#), [Security Alerts and Bulletins](#). All critical patches should be applied in a timely manner to make sure effective security, as strongly recommended by [Oracle Software Security Assurance](#).

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Related Resources

For more information on any related features, refer to the following documents

- Product Installation Guide

Acronyms and Abbreviations

The list of the acronyms and abbreviations used in this guide are as follows:

Table 1 Acronyms and Abbreviations

Abbreviation	Description
LDAP	Lightweight Directory Access Protocol

1

Placeholder Update for Oracle Banking Microservices Architecture Services

This topic provides the information about the various methods to perform the placeholder update for Oracle Banking Microservices Architecture services.

- [Method 1 – Via setUserOverrides.sh file](#)
This topic provides the systematic instructions to run Oracle Banking Microservices Architecture services through setUserOverrides.sh file.
- [Method 2 – Via Passing the -D params in the Server Start Argument](#)
This topic provides the systematic instructions to run the Oracle Banking Microservices Architecture services by passing the -D params in the Server start argument.
- [Method 3 – Using env files and setUserOverrides.sh file](#)
This topic provides the systematic instructions to run Oracle Banking Microservices Architecture services by using env files and setUserOverrides.sh file.
- [Method 4 – Workflow Configuration](#)
This topic provides the systematic instructions to run Oracle Banking Microservices Architecture services through workflow configuration.

1.1 Method 1 – Via setUserOverrides.sh file

This topic provides the systematic instructions to run Oracle Banking Microservices Architecture services through setUserOverrides.sh file.

1. Create a file named **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 to run Oracle Banking Microservices Architecture Services properly.

Note:

Below is the list of **-D params** (ENV variables) that must be set for all 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.cloud.loadbalancer.ribbon.enabled=false
-Dspring.main.allow-bean-definition-overriding=true
-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>
-Dflyway.domain.placeholders.plato-api-gateway.loadCacheOnStartUp = true

//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
-Dflyway.domain.placeHolders.saml.userId.field = <SAML_USERID_FIELD>
```

//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=<EVENTHUB_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=<EVENTHUB_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 >
//Plato Transport Service
Dflyway.domain.placeholders.transport.config.db.jndi=${PLATOTRANSPORT_JNDI}
Dflyway.domain.placeholders.transport.config.schemas=${PLATOTRANSPORT_SCHEMA}
Dflyway.domain.placeholders.plato-transport-services.coherence.enabled=false
//Conductor
-Dplato.orchestrator.enableSLA = true (if required)
-Dplato.orchestrator.enableDynamicAllocation = true (if required)
-Dplato.orchestrator.enableSubWfDynamicAllocation = true (if required)
-Dplato.cmc.default.user = <Value> (Required if you are using above as true)
-Dplato.cmc.default.brn = <Value> (Required if you are using above as true)
-Dsms.uri = https://SMS-CORE-SERVICES/sms-core-service/ (Required only if we want to make it http as we have given default protocol as https)
-Dplato.transport.protocol = http (Set it explicitly if you have http env setup)
//Plato Regional Configurator Service
```

```
-Dflyway.domain.placeholders.plato-regional-configurator-  
services.server.port=<REGIONAL_CONFIGURATOR_SERVICE_PORT>  
-Dflyway.domain.placeholders.plato-regional-configurator-services.locations =  
- "db/migration/domain/obrc" (By default)  
- "db/migration/domain/obrc, db/migration/domain<YOUR DOMAINS>"  
-Dflyway.domain.placeholders.plato-regional-configurator-services.schemas = "OBRC"  
-Dflyway.domain.placeholders.plato-regional-configurator-services.db.jndi = "jdbc/OBRC"  
-Dflyway.domain.placeholders.plato-regional-configurator-  
services.username=<OBRC_SCHEMA_USERNAME>  
-Dflyway.domain.placeholders.plato-regional-configurator-  
services.password=<OBRC_SCHEMA_PASSWORD>
```

//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>
```

// Common Core Interest Rate Service

```
-Dflyway.domain.placeHolders.cmc-interest-rate-services.server.port=<8020>  
-Dflyway.domain.placeHolders.cmc-interest-rate-services.schemas=<CMNCORE>  
-Dflyway.domain.placeHolders.cmc-interest-rate-services.coherence.enabled=<false>
```

//config.properties

```
db=oracle  
workflow.namespace.prefix=conductor  
workflow.namespace.queue.prefix=conductor_queues  
queues.dynomite.threads=10  
workflow.elasticsearch.instanceType=EXTERNAL  
workflow.elasticsearch.index.name=conductor  
loadSample=false  
conductor.entity.list=DEFAULTENTITY~jdbc/PLATO-O  
flyway.enabled=false  
eureka.registration.enabled=true  
eureka.preferSameZone=true  
eureka.instance.hostname=plato-o  
eureka.instance.prefer-ip-address=true  
eureka.instance.status-page-url-path=/plato-orch/actuator/info  
eureka.instance.health-check-url-path=/plato-orch/api/health  
eureka.shouldUseDns=false  
eureka.serviceUrl.default=http://plato-discovery-service-0.plato-discovery-service-headless.SUBNAMESPACE.svc.occloud:8080/plato-discovery-service/eureka,http://plato-discovery-service-1.plato-discovery-service-headless.SUBNAMESPACE.svc.occloud:8080/plato-discovery-service/eureka,http://plato-discovery-service-2.plato-discovery-service-headless.SUBNAMESPACE.svc.occloud:8080/plato-discovery-service/eureka  
eureka.client.healthcheck.enabled=true  
eureka.lease.duration=90  
#to be reviewed if its modified or not  
eureka.registerWithEureka=true  
#to be reviewed if its modified or not  
eureka.fetchRegistry=true  
eureka.name=plato-o  
eureka.vipAddress=plato-o  
eureka.port=8080  
eureka.decoderName=JacksonJson  
isSSLEnabled=false  
multi.entity.enabled=false
```

```
decider.sweep.disable=false
#to be reviewed if its modified or not
workflow.system.task.worker.queue.size=500
workflow.system.task.worker.thread.count=20
workflow.system.task.worker.poll.count=20
workflow.system.task.worker.poll.interval=500
#new properties for above 4 keys
conductor.app.systemTaskWorkerQueueSize=500
conductor.app.systemTaskWorkerThreadCount=20
conductor.app.systemTaskWorkerPollCount=20
conductor.app.systemTaskWorkerPollInterval=500
kafka.broker=kafka-headless.SUBNAMESPACE.svc.occloud:9094
conductor.db.type=oracle
conductor.indexing.enabled=false
conductor.jndi.resources.prefix=true
spring.application.name=plato-o
server.servlet.context-path=/plato-orch
conductor.workflow-reconciler.enabled=false
```

 **Note:**

- a. If the loadSample property already exists in the config.properties file of Conductor and is set to true, update it to false.
- b. Set conductor.workflow-reconciler.enabled to false. If the property decider.sweep.disable exists, update it to conductor.workflow-reconciler.enabled and set it to false.

//Properties to be set for TOMCAT

```
-Dspring.config.location=<path_to_config.properties_file>
-Dconductor.oracle.flywayEnabled=false
-Dconductor.metrics-prometheus.enabled=true
-Dmanagement.endpoints.web.exposure.include=prometheus
-Dmanagement.endpoint.prometheus.enabled=true
```

 **Note:**

FOR WEBLOGIC - the Dparam (Dspring.config.location=<path_to_config.properties_file>) to map the config.properties file path must be only added for that **Particular Managed Server** where conductor will be deployed.

1.2 Method 2 – Via Passing the -D params in the Server Start Argument

This topic provides the systematic instructions to run the Oracle Banking Microservices Architecture services by passing the -D params in the Server start argument.

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

1. On **Domain Structure**, click **Environment**. Under **Environment**, click **Servers**.

The **Summary of Servers** screen displays.

Figure 1-1 Summary of Servers

Summary of Servers

Configuration Control

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.

New Clone Delete Showing 1 to 2 of 2 Previous Next

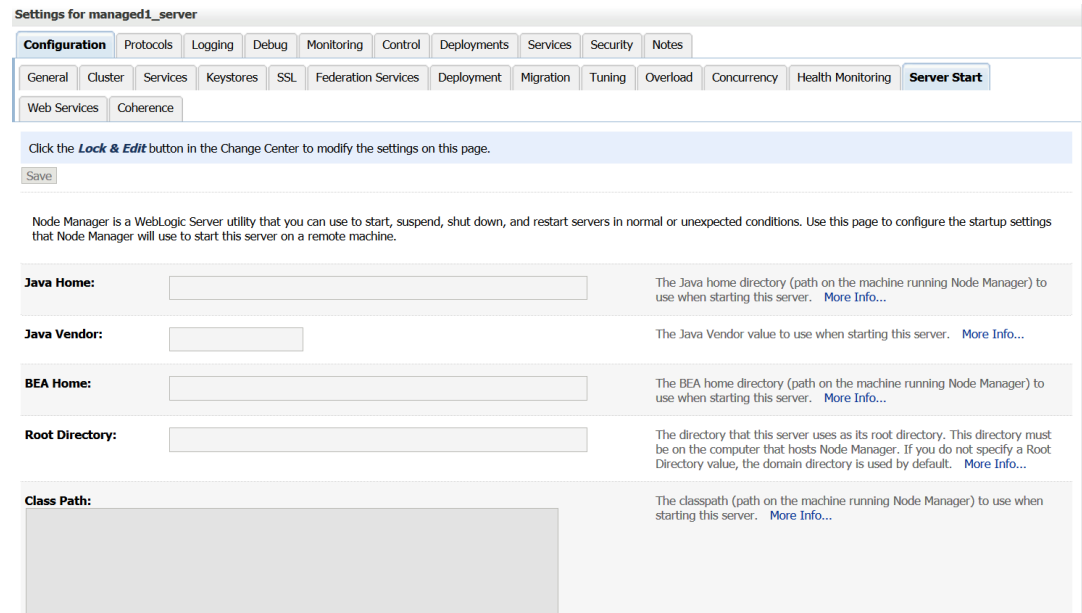
<input type="checkbox"/>	Name ↕	Type	Cluster	Machine	State	Health	Listen Port
<input type="checkbox"/>	AdminServer(admin)	Configured		whf00dkx	RUNNING	✔ OK	7001
<input type="checkbox"/>	managed1_server	Configured		whf00dkx	RUNNING	✔ OK	7003

New Clone Delete Showing 1 to 2 of 2 Previous Next

2. On the **Servers (Filtered - More Columns Exist)** table, click managed server to pass the values.

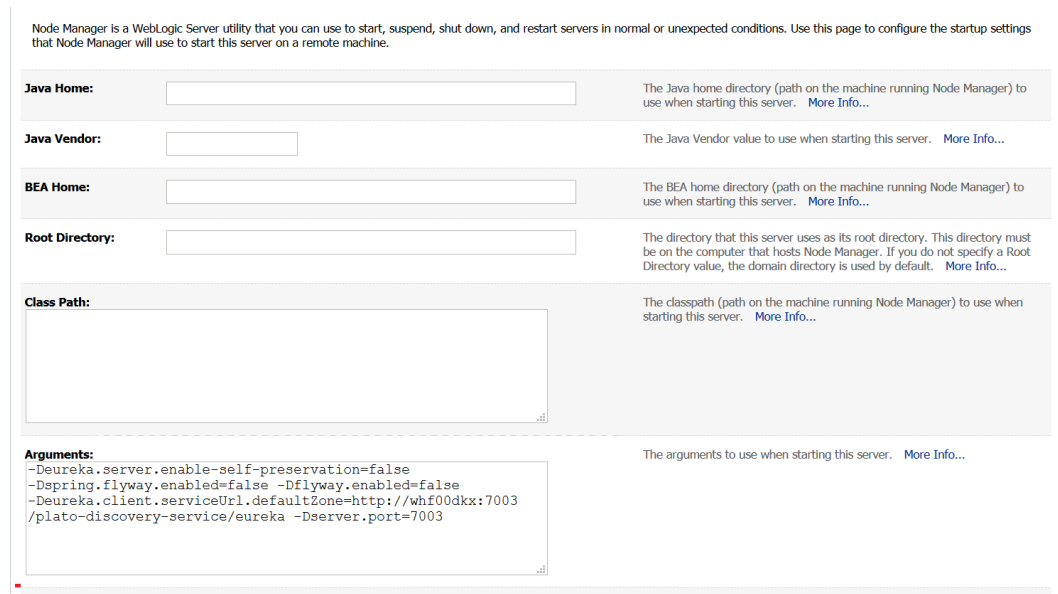
The **Settings for managed server** tab displays.

Figure 1-2 Settings for managed server



3. On **Settings for managed server** tab, select **Server Start** tab.
4. Edit the **Arguments** field and pass all the environment parameters required for the service to run.

Figure 1-3 Arguments



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

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

This topic provides the systematic instructions to run Oracle Banking Microservices Architecture services by using env files and setUserOverrides.sh file.

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"
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.

The `plato-config-deploy.env` file contains all the key value pairs specific only to the `plato-config-service` and need 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.

Sample file for **plato-config-deploy.env** is given below:

```
### 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.zookeeper.hosts=

#### Kafka Security for all services ####
flyway.domain.placeholders.plato.eventhub.broker.hosts=
flyway.domain.placeholders.plato.eventhub.zookeeper.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
spring.cloud.loadbalancer.ribbon.enabled=false
spring.main.allow-circular-references=true

### 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-0
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=

```

Sample file for **domain-config-deploy.env** is given below:

```

### 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=

```

1.4 Method 4 – Workflow Configuration

This topic provides the systematic instructions to run Oracle Banking Microservices Architecture services through workflow configuration.

1. Create Metadata of the workflow.

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": "${workflow.input.transactionModel}",
        "stage": "TESTING2",
        "priority":
        "$

```

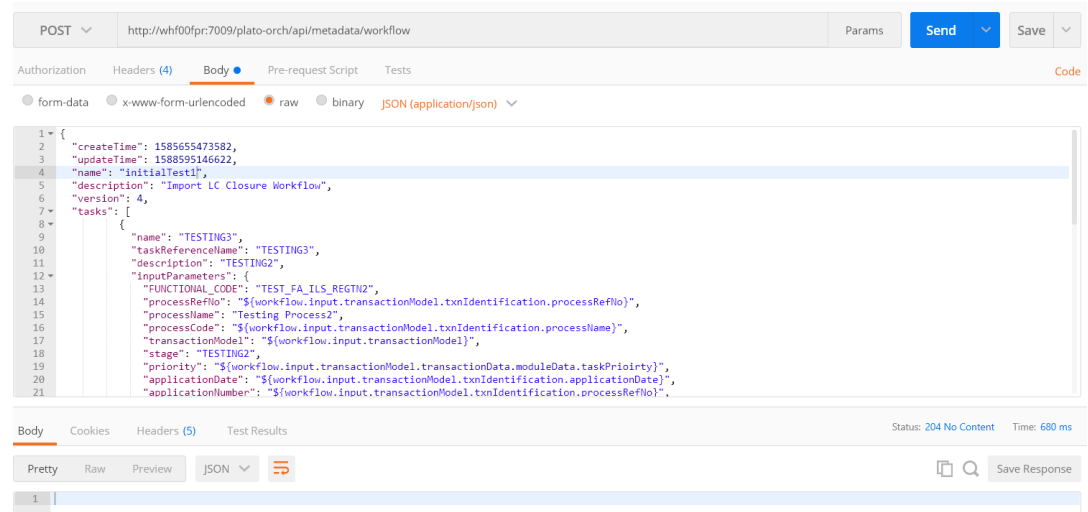
```

{workflow.input.transactionModel.transactionData.moduleData.taskPriority}",
  "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 below screen depicts the sample workflow

Figure 1-4 Body



- For workflow creation, call the API (/api/workflow) to create the workflow. This API provides the information to the workflow metadata which is created using previous call.

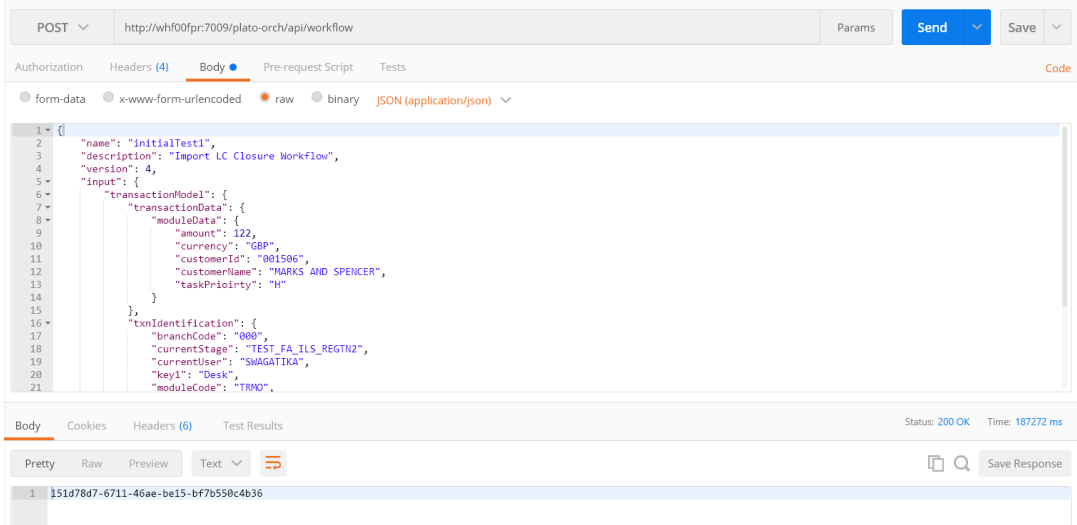
```

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

```

Pass the DSL in body. The below screen depicts the sample workflow:

Figure 1-5 Body



2

Domain Creation and Cluster Configuration

This topic provides the information about the domain creation instructions, cluster configuration, and post domain creation configurations.

- [Create Domain and Cluster Configuration](#)
This topic provides the systematic instructions to create domain and cluster configuration.
- [Post Domain Creation Configurations](#)
This topic provides the systematic instructions for the configurations to be performed once the domain is created.

2.1 Create Domain and Cluster Configuration

This topic provides the systematic instructions to create domain and cluster configuration.

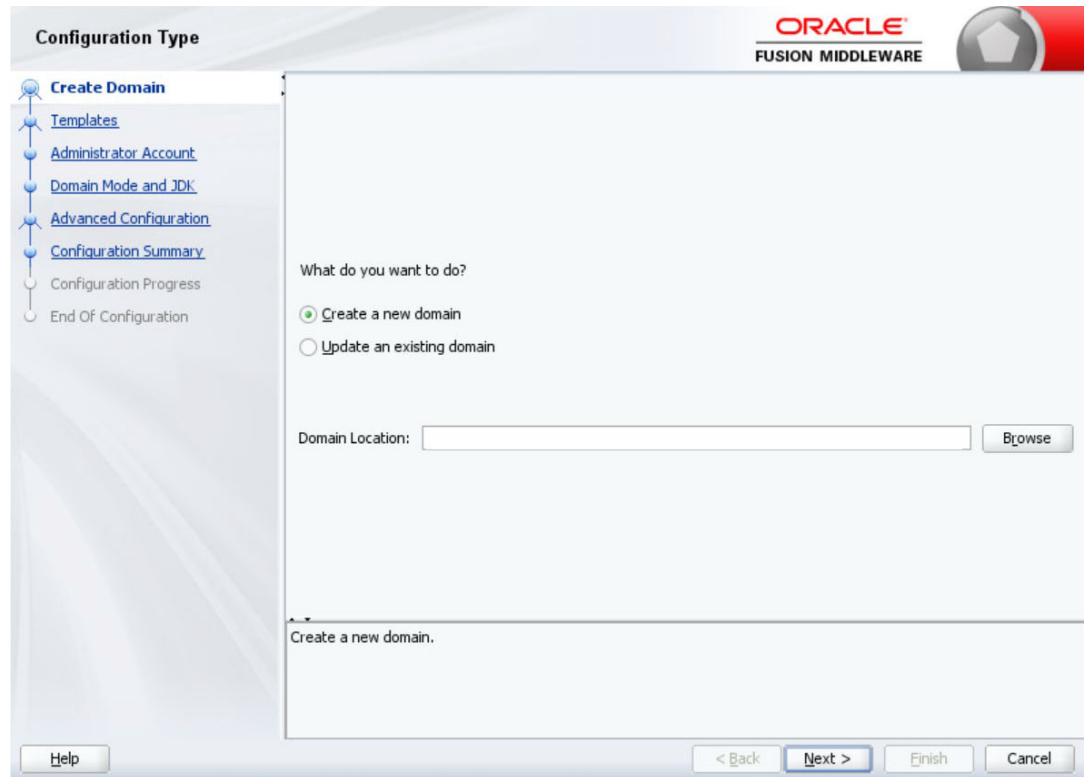
 **Note:**

Names need not to be same as provided in the screenshot.

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

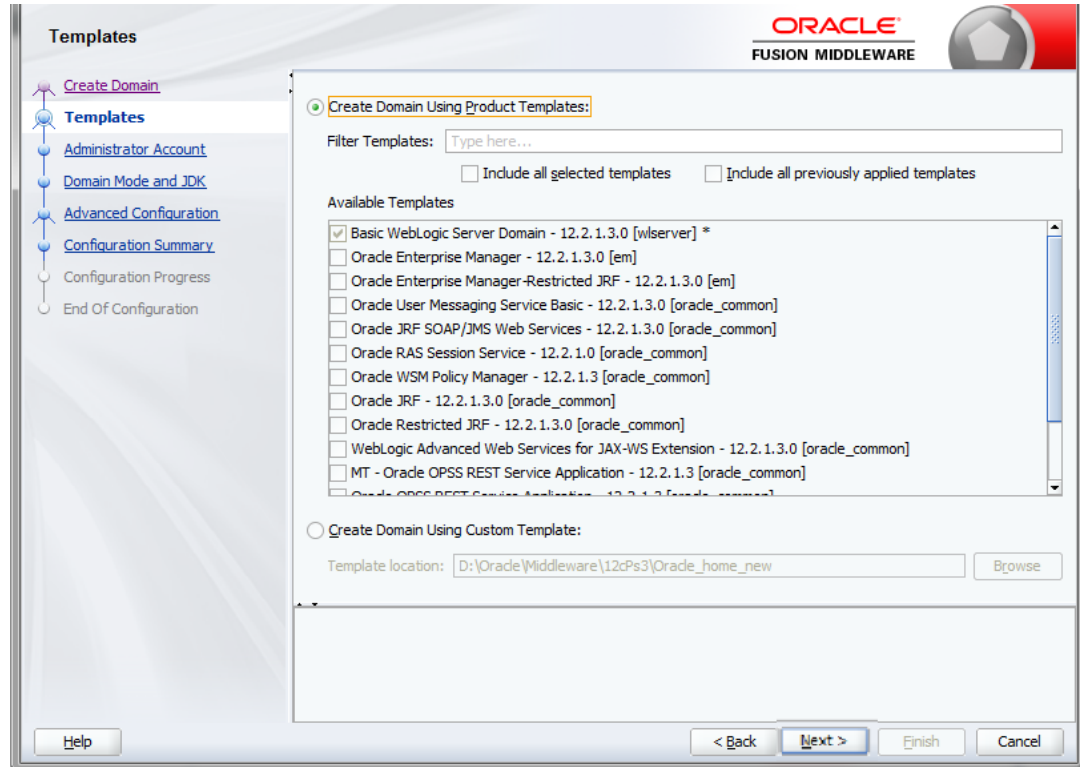
The **Create Domain** screen displays.

Figure 2-1 Create Domain



4. Click **Next**.
The **Templates** screen displays.

Figure 2-2 Templates



5. Click **Next** to create simple domain with default templates.
The **Administrator Account** screen displays.

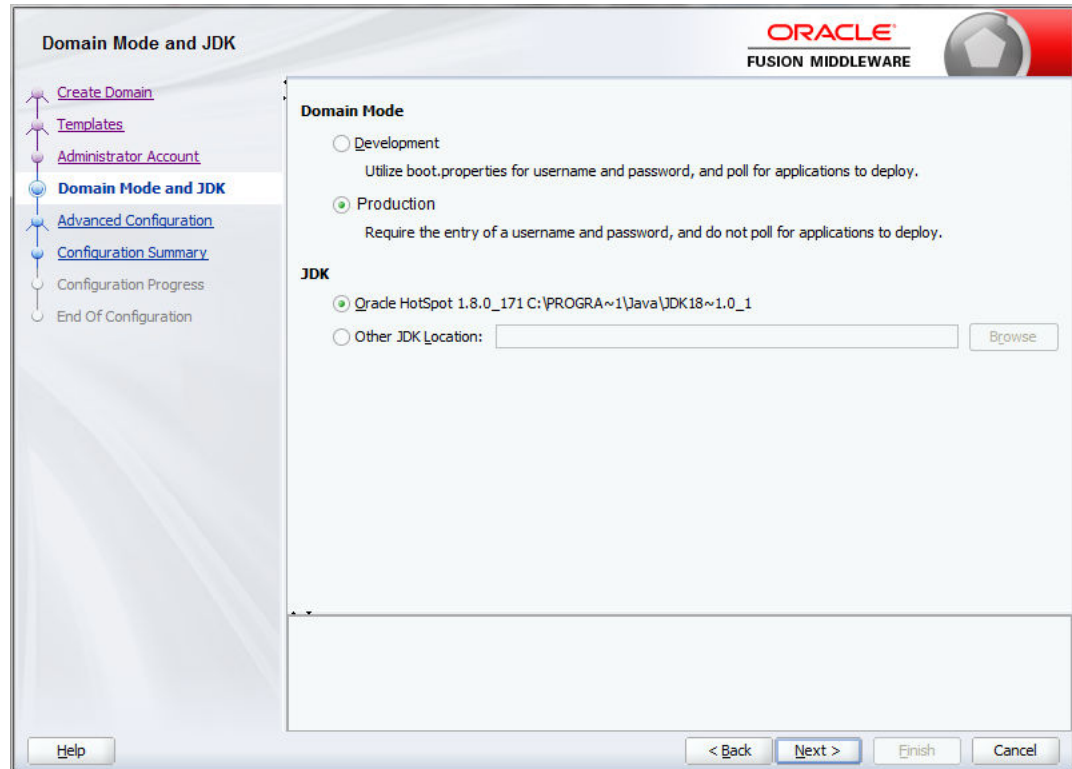
Figure 2-3 Administrator Account

The screenshot shows the 'Administrator Account' configuration window in Oracle Fusion Middleware. The window has a title bar with the Oracle logo and 'FUSION MIDDLEWARE'. On the left is a navigation pane with the following items: 'Create Domain', 'Templates', 'Administrator Account' (highlighted), 'Domain Mode and JDK', 'Advanced Configuration', 'Configuration Summary', 'Configuration Progress', and 'End Of Configuration'. The main content area contains three text input fields: 'Name' (containing 'weblogic'), 'Password', and 'Confirm Password'. Below these fields is a text box with the following text: 'Must be the same as the password. Password must contain at least 8 alphanumeric characters with at least one number or special character.' At the bottom of the window are four buttons: 'Help', '< Back', 'Next >', 'Finish', and 'Cancel'.

6. Fill the fields **Password** and **Confirm Password** to set the password, and click **Next** to proceed.

The **Domain Mode and JDK** screen displays.

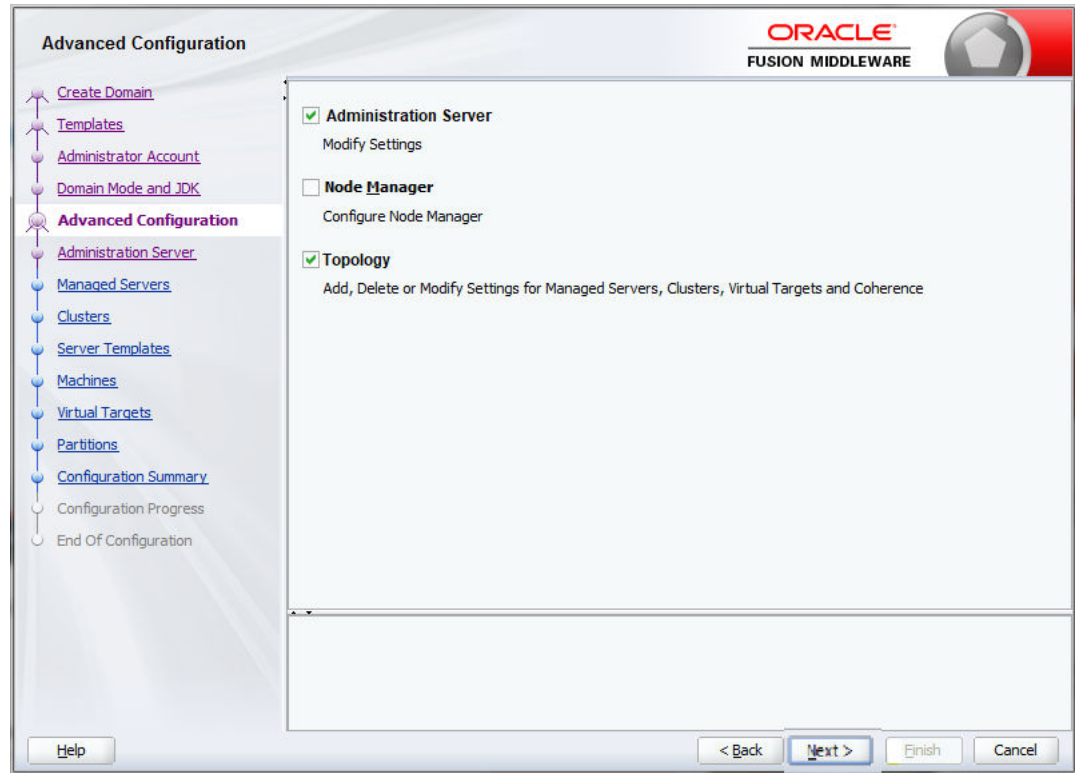
Figure 2-4 Domain Mode and JDK



7. Select **Domain Mode** as **Production**.
8. Select **JDK**, and click **Next**.

The **Advanced Configuration** screen displays.

Figure 2-5 Advanced Configuration



9. Select **Administration Server** and **Topology**, and click **Next**.
The **Administration Server** screen displays.

Figure 2-6 Administration Server

Administration Server

ORACLE
FUSION MIDDLEWARE

Create Domain
Templates
Administrator Account
Domain Mode and JDK
Advanced Configuration
Administration Server
Managed Servers
Clusters
Server Templates
Machines
Virtual Targets
Partitions
Configuration Summary
Configuration Progress
End Of Configuration

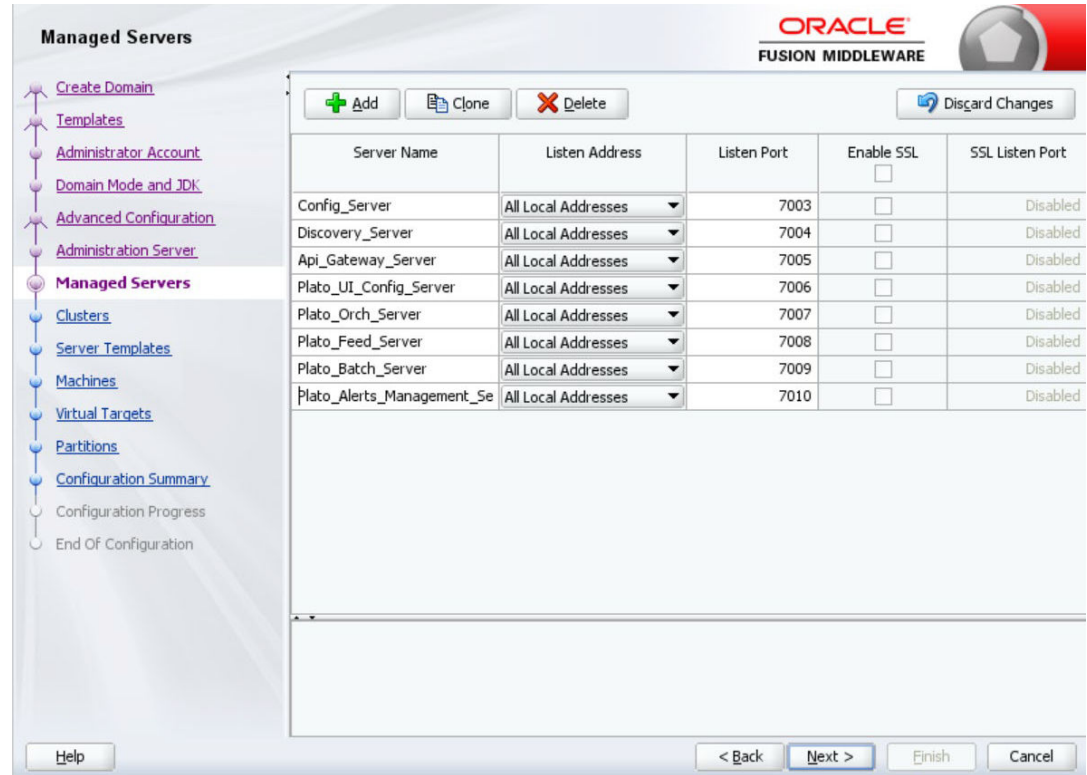
Server Name: AdminServer
Listen Address: All Local Addresses
Listen Port: 7001
Enable SSL:
SSL Listen Port:

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

Help < Back Next > Finish Cancel

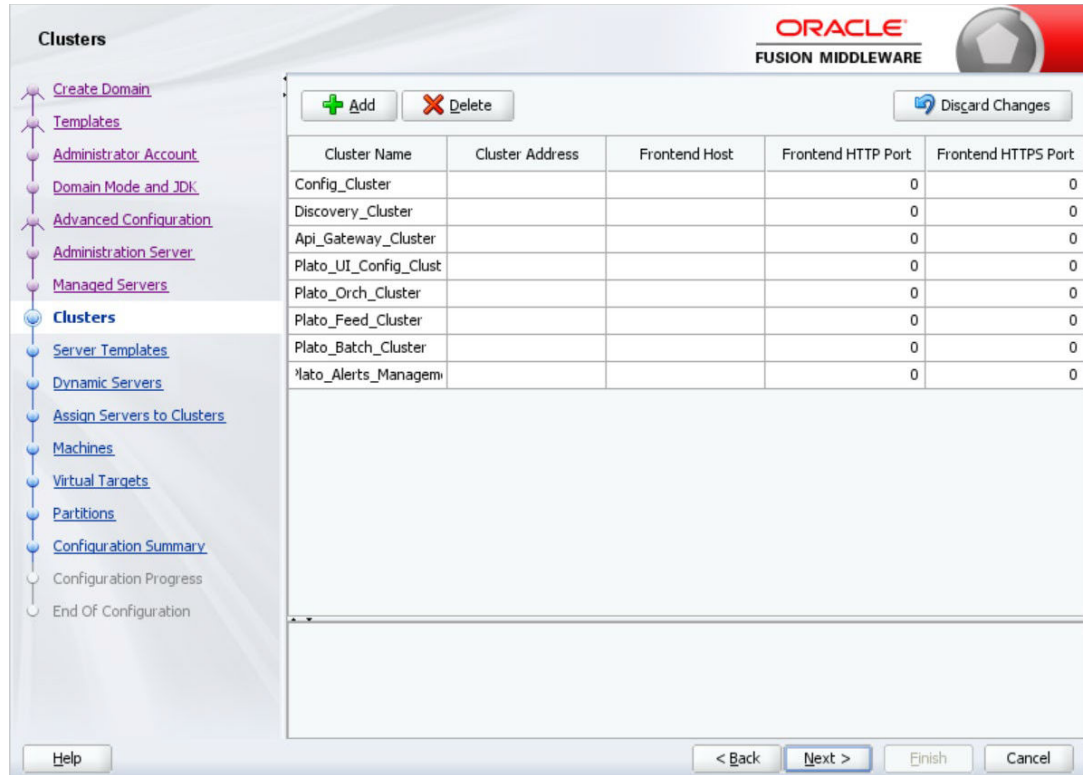
10. Edit the fields **Listen Port** and host configurations as required, and click **Next**.
The **Managed Servers** screen displays.

Figure 2-7 Managed Servers



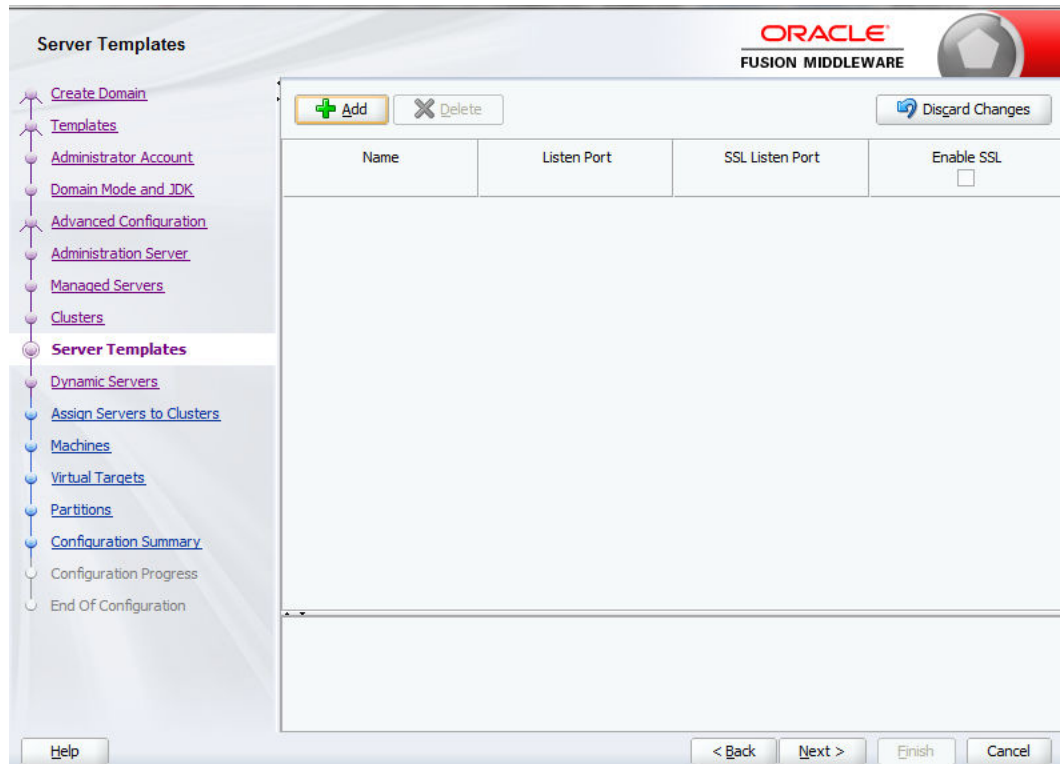
11. Click **Add** to add managed servers and edit the fields as required.
 - a. Specify the name in **Server Name** field.
 - b. Edit the address in **Listen Address** field.
 - c. Edit the port in **Listen Port** field.
12. Click **Next**.
The **Cluster** screen displays.

Figure 2-8 Cluster



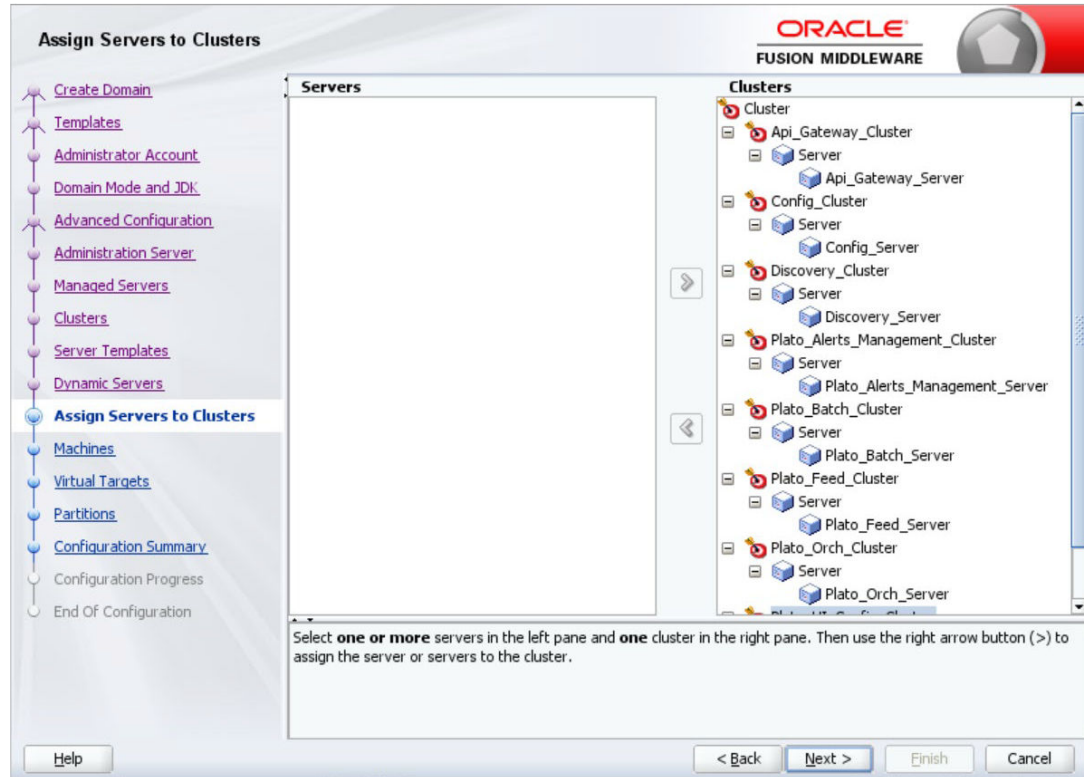
13. Click **Add** to add clusters one for each **Managed Servers**, and click **Next**.
The **Server Template** screen displays.

Figure 2-9 Server Template



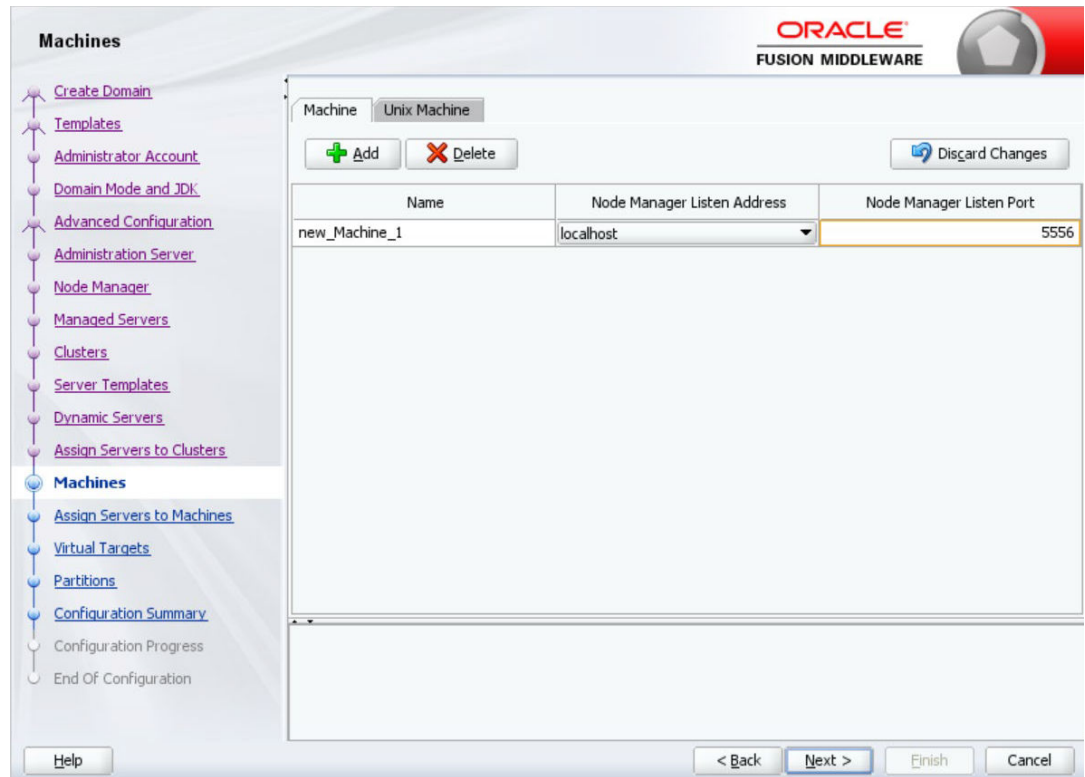
14. Skip the **Server Templates** and **Dynamic Servers**, and click **Next**.
The **Assign Servers to Clusters** screen displays.

Figure 2-10 Assign Servers to Clusters



15. Assign clusters with servers, and click **Next**.
The **Machines** screen displays.

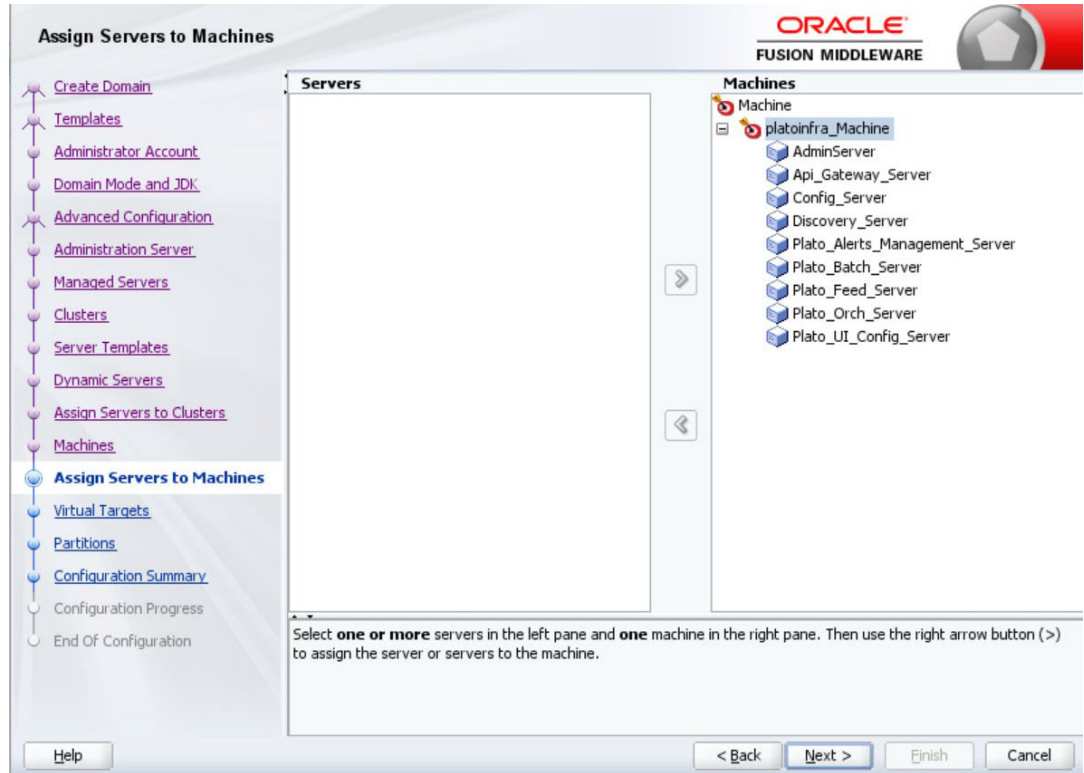
Figure 2-11 Machines



16. Click **Add** to add **Machine** or **Unix Machine** based on the operating system and configure **Name**, **Node Manager Listen Address**, and **Node Manager Listen Port** as required.
17. Click **Next**.

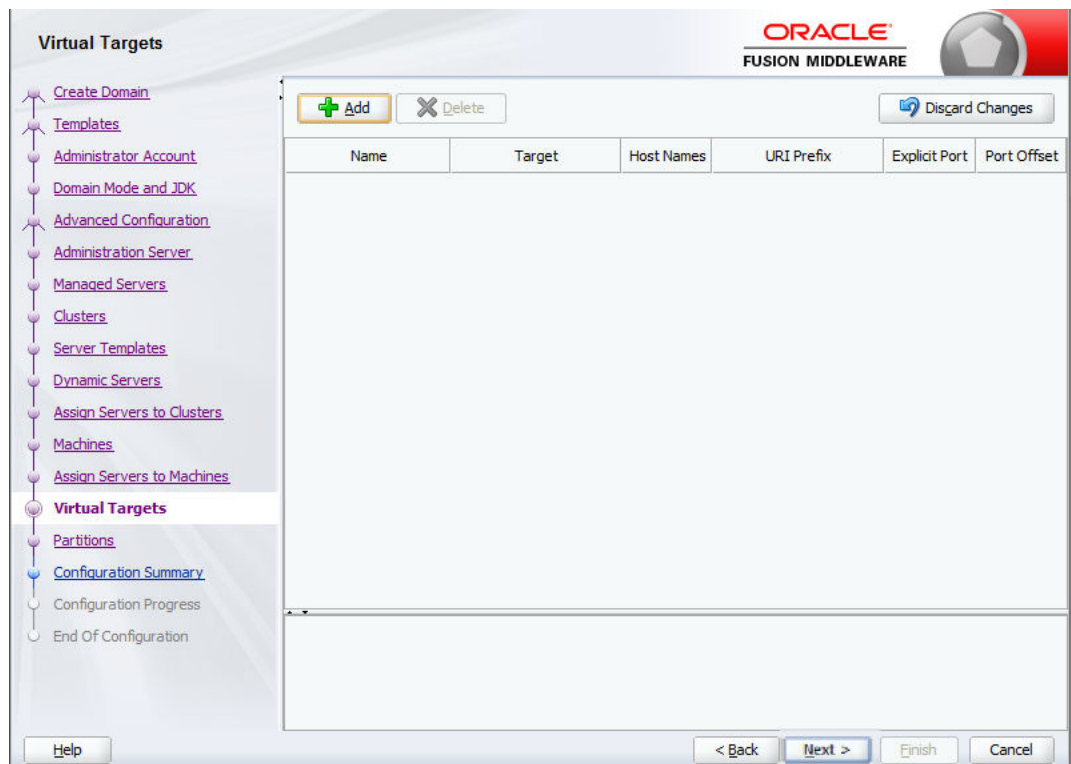
The **Assign Servers to Machines** screen displays.

Figure 2-12 Assign Servers to Machines



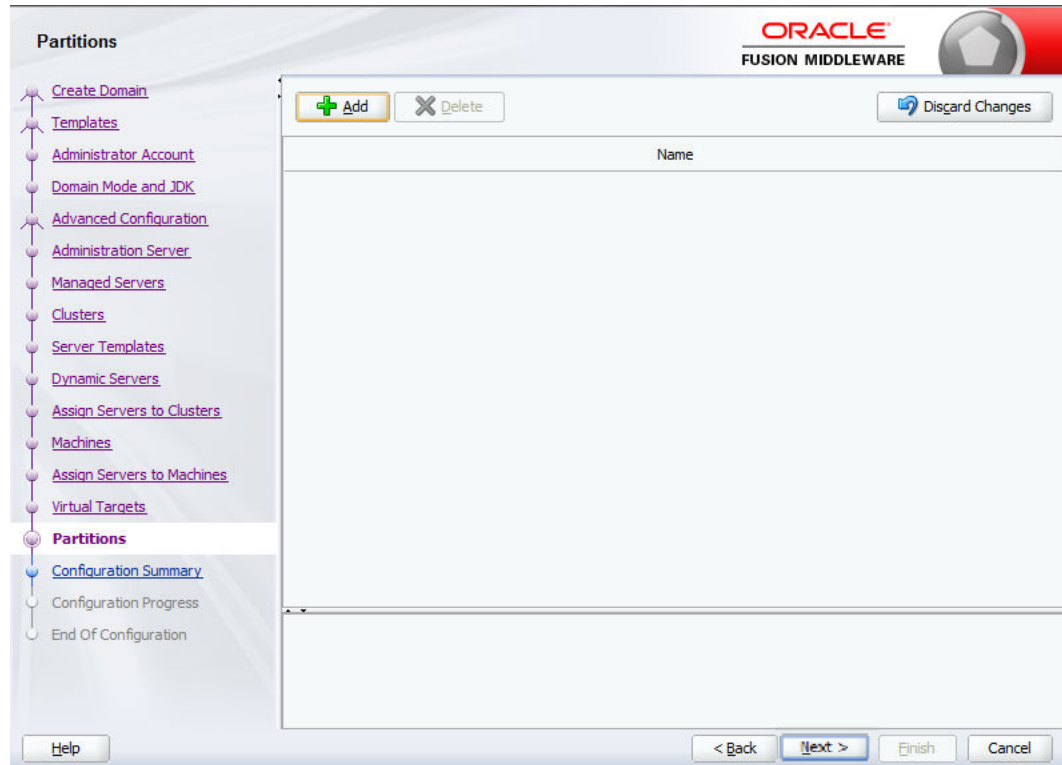
- Map all the managed servers under the machine created, and click **Next**.
The **Virtual Targets** screen displays.

Figure 2-13 Virtual Targets



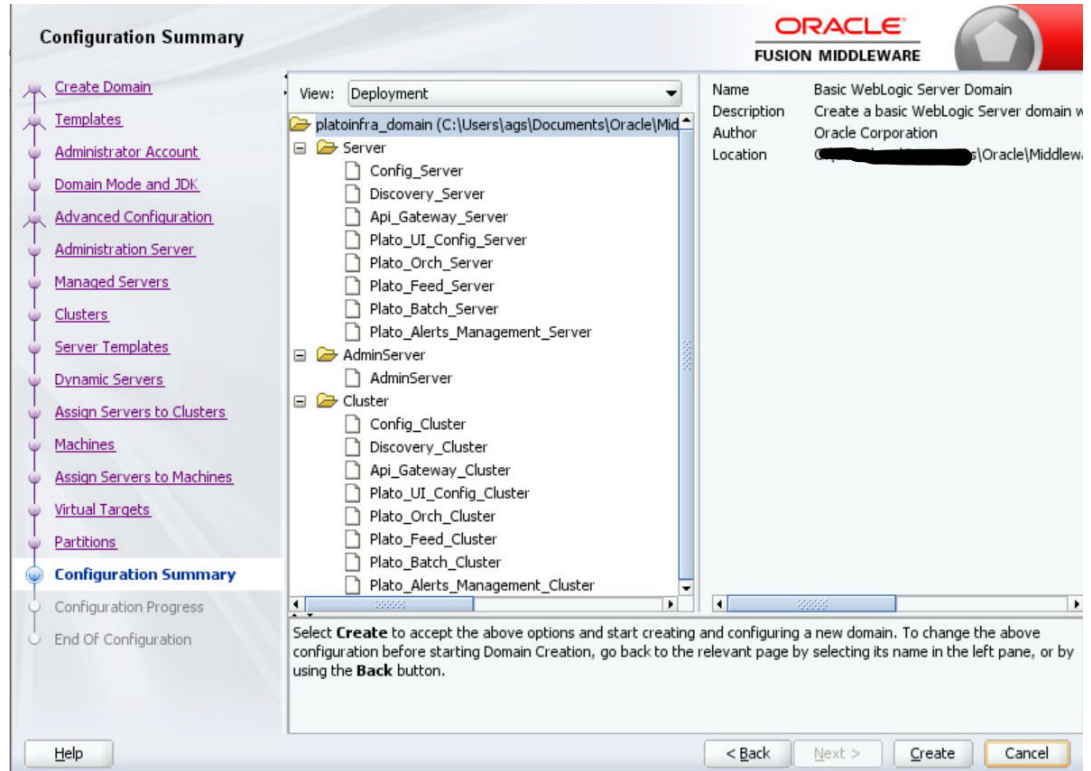
19. Skip or configure **Virtual Targets**, and click **Next**.
The **Partitions** screen displays.

Figure 2-14 Partitions



20. Skip or configure **Partitions**, and click **Next**.
The **Configuration Summary** screen displays.

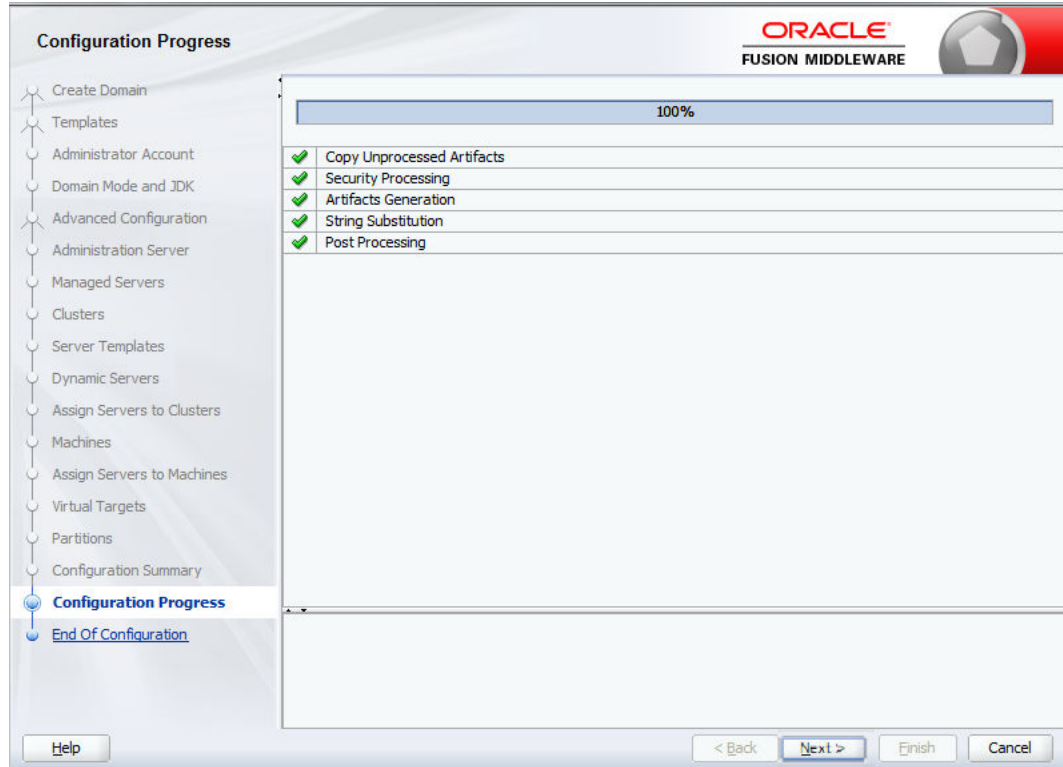
Figure 2-15 Configuration Summary



21. Check the **Configuration Summary** and confirm creating the domain.
22. Click **Next**.

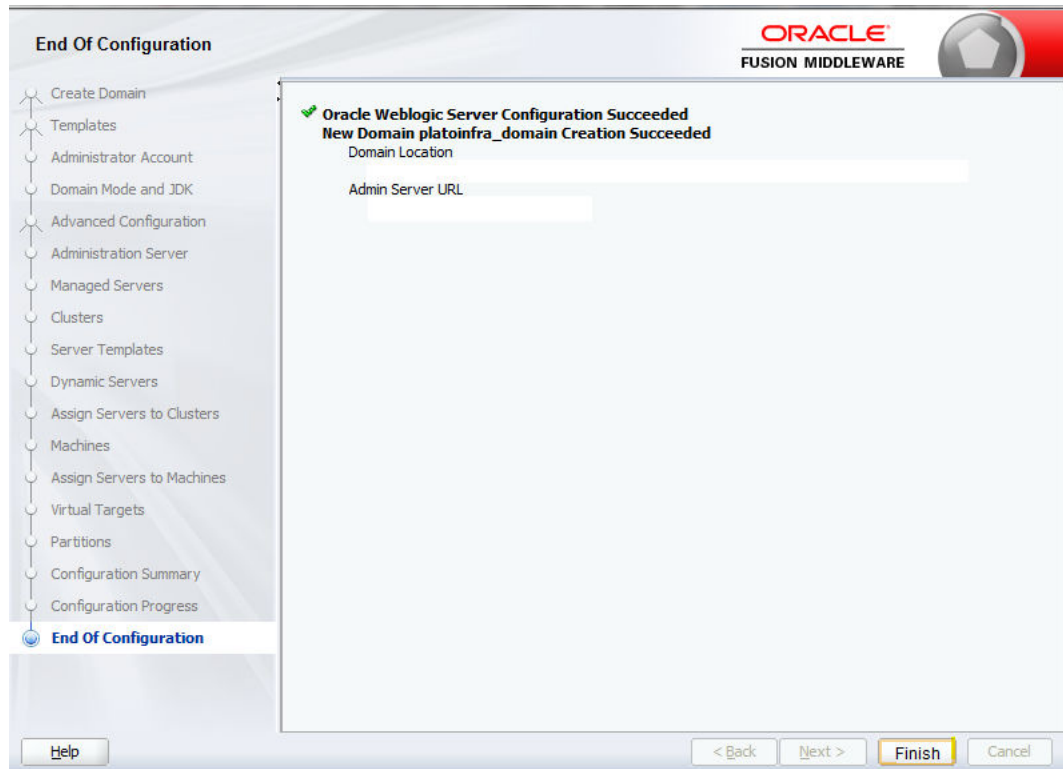
The **Configuration Progress** screen displays.

Figure 2-16 Configuration Progress



23. Check the **Configuration Progress** screen, and click **Next**.
The **End of Configuration** screen displays.

Figure 2-17 End of Configuration



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

The configuration is completed successfully.

2.2 Post Domain Creation Configurations

This topic provides the systematic instructions for the configurations to be performed once the domain is created.

Note:

Once domain creation and cluster configuration is done, refer to Oracle Fusion Middleware documents for more details on how to start an 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`. Run `.sh` if operating system is linux.
4. Open `/user_projects/domains/platoinfra_domain/bin`.
5. Run `setNMJavaHome.cmd`. Run `.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: Under **Machine**, select **platoinfra_Machine**.
 - a. **Machine**
 - b. **platoinfra_Machine**
 - c. **Node Manager**
 - d. **Type**
 - e. **Plain**
 - f. **Save**
9. Open `/user_projects/domains/platoinfra_domain/bin`.
10. Run `startNodeManager.cmd`. Run `.sh` if operating system is linux.
11. Start all managed servers.
12. Access the **Oracle WebLogic Administration Console**.
13. From **Domain Structure**, Click **Services** and verify the **Servers (Filtered - More Coloumns Exist)** table.

The **Summary of Services** screen displays.

Figure 2-18 Summary of Services

delete items in this domain.
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...
• Create Managed Servers
• Clone servers
• Delete Managed Servers
• Delete the Administration Server
• Start and stop servers
• View objects in the JNDI tree

System Status
Health of Running Servers as of 6:00 PM

Configuration Control

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.

Customize this table

Servers (Filtered - More Columns Exist)
Click the **Lock & Edit** button in the Change Center to activate all the buttons on this page.

New Clone Delete 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_UL_Config_Server	Configured	Plato_UL_Config_Cluster	platoinfra_Machine	SHUTDOWN	Not reachable	7006

New Clone Delete Showing 1 to 9 of 9 Previous Next

- Click **Clusters** and verify the **Clusters (Filtered - More Columns Exist)** table. The **Summary of Clusters** screen displays.

Figure 2-19 Summary of Clusters

Change Center
View changes and restarts
Click the **Lock & Edit** button to modify, add or delete items in this domain.
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...
• Configure clusters
• Assign server instances to clusters
• Configure server migration in a cluster
• Configure cross-cluster replication
• Create dynamic clusters

Home Log Out Preferences Record Help Welcome, weblogic 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.

Customize this table

Clusters (Filtered - More Columns Exist)
Click the **Lock & Edit** button in the Change Center to activate all the buttons on this page.

New Clone Delete 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_UL_Config_Cluster		Unicast	Database	Round Robin	(None)		P

New Clone Delete Showing 1 to 8 of 8 Previous Next

- Click **Machines** and verify the **Machines (Filtered - More Columns Exist)** table. The **Summary of Machines** screen displays.

Figure 2-20 Summary of Machines

The screenshot displays the Oracle WebLogic Administration Console interface. On the left is the 'Change Center' sidebar with options like 'View changes and restarts', 'Lock & Edit', and 'Release Configuration'. Below it is the 'Domain Structure' tree showing a hierarchy from 'platoinfra_domain' down to 'Machines'. The main content area shows the breadcrumb 'Home > Summary of Deployments > Summary of Servers > Summary of Clusters > Summary of Machines'. The 'Summary of Machines' section contains a definition of a machine and a table. The table has columns for 'Name' and 'Type', with one row for 'platoinfra_Machine' of type 'Machine'. Navigation buttons like 'New', 'Clone', and 'Delete' are present above and below the table.

3

Datasource Creation

This topic provides the systematic instruction to create datasource.

- [Create Datasource](#)

3.1 Create Datasource

Specify **User ID** and **Password** to login to **Oracle WebLogic Administration Console**.

Perform the following steps to create data source:

1. Start **AdminServer** and **Node Manager**.

Note:

Make sure that all the managed servers (targets) are in running mode.

2. On **Domain Structure**, click **Services**. Under **Services**, click **Data Sources**.
3. On the **Data Sources (Filtered - More Columns Exist)** table, click **New** and select **Generic Data Source** from drop-down list.

The **Summary of JDBC Data Sources** screen displays.

Figure 3-1 Summary of JDBC Data Source

The screenshot shows the Oracle WebLogic Administration Console interface. On the left, the 'Domain Structure' tree is expanded to 'Services' > 'Data Sources'. The main content area is titled 'Summary of JDBC Data Sources' and includes a 'Configuration' tab. Below the title, there is a description of a JDBC data source and a 'Customize this table' section. The table 'Data Sources (Filtered - More Columns Exist)' is currently empty, showing 'There are no items to display'. A 'New' button is visible above the table, and a dropdown menu is open, showing options like 'Generic Data Source', 'GridLink Data Source', 'Multi Data Source', 'Proxy Data Source', and 'UCP Data Source'.

4. Specify the **Name** and **JNDI Name** on **Create a New JDBC Data Source** and click **Next**.

The **Create a New JDBC Data Source** screen displays.

Figure 3-2 Create a New JDBC Data Source

The screenshot shows the 'Create a New JDBC Data Source' wizard at the 'JDBC Data Source Properties' step. The title bar reads 'Create a New JDBC Data Source'. At the top, there are navigation buttons: 'Back', 'Next', 'Finish', and 'Cancel'. Below this, the section is titled 'JDBC Data Source Properties' with a sub-header: 'The following properties will be used to identify your new JDBC data source.' and a note: '* Indicates required fields'. The first question is 'What would you like to name your new JDBC data source?'. The '* Name:' field contains 'PLATO'. The second question is 'What scope do you want to create your data source in?'. The 'Scope:' dropdown is set to 'Global'. The third question is 'What JNDI name would you like to assign to your new JDBC Data Source?'. The 'JNDI Name:' text area contains 'jdbc/PLATO'. The fourth question is 'What database type would you like to select?'. The 'Database Type:' dropdown is set to 'Oracle'. At the bottom, there are navigation buttons: 'Back', 'Next', 'Finish', and 'Cancel'.

5. On **Database Driver**, select **Thin for Service Connections (Instant)** from drop-down list and click **Next**.

The **Create a New JDBC Data Source - Database Driver** screen displays.

Figure 3-3 Create a New JDBC Data Source - Database Driver

The screenshot shows the 'Create a New JDBC Data Source' wizard at the 'Database Driver' step. The title bar reads 'Create a New JDBC Data Source'. At the top, there are navigation buttons: 'Back', 'Next', 'Finish', and 'Cancel'. Below this, the section is titled 'JDBC Data Source Properties' with a sub-header: 'The following properties will be used to identify your new JDBC data source.' and a note: '* Indicates that the driver is explicitly supported by Oracle WebLogic Server.' The 'Database Type:' is set to 'Oracle'. The question is 'What database driver would you like to use to create database connections?'. The 'Database Driver:' dropdown is set to '*Oracle's Driver (Thin) for Service connections; Versions:Any'. At the bottom, there are navigation buttons: 'Back', 'Next', 'Finish', and 'Cancel'.

6. Uncheck the **Supports Global Transactions** and click **Next**.

The **Create a New JDBC Data Source - Transaction Options** screen displays.

Figure 3-4 Create a New JDBC Data Source - Transaction Options

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

Create a New JDBC Data Source

Back Next Finish Cancel

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 option. 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 application 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. With this option, the application can participate in the global transaction.

One-Phase Commit

Back Next Finish Cancel

7. Specify the required fields on **Connection Properties**.

The **Create a New JDBC Data Source - Connection Properties** screen displays.

Figure 3-5 Create a New JDBC Data Source - Connection Properties

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

Create a New JDBC Data Source

Back Next Finish Cancel

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:

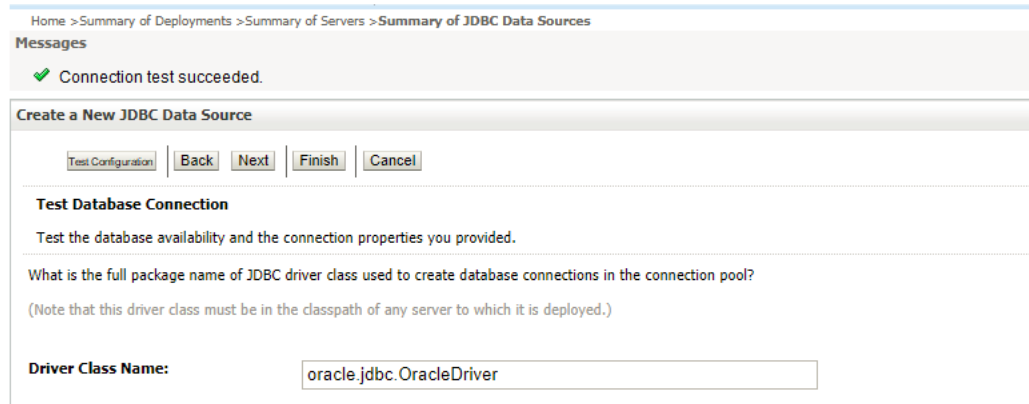
Additional Connection Properties:

oracle.jdbc.DRCPConnectionClass:

8. Click **Next** to test connection.

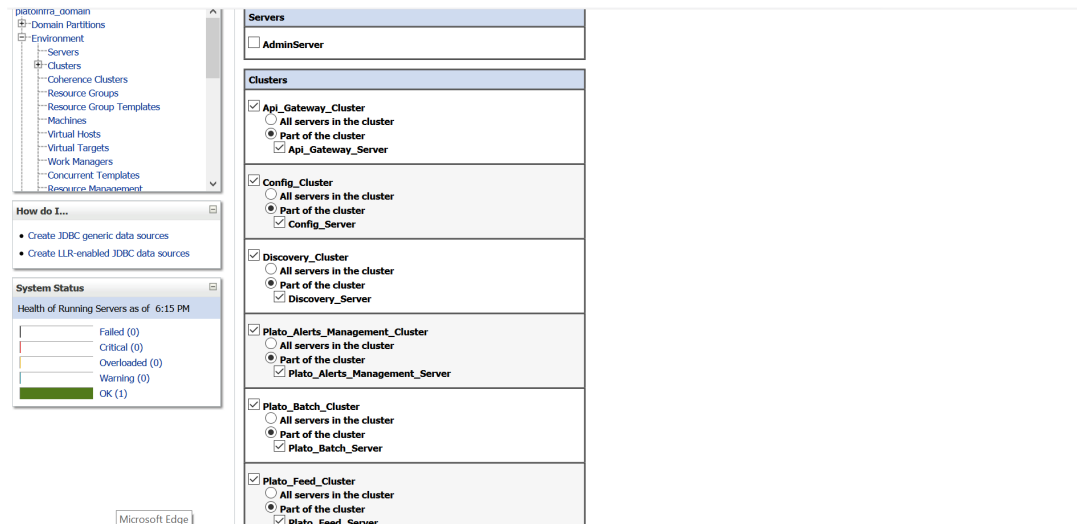
The **Connection test succeeded** message displays.

Figure 3-6 Connection test succeeded - Message



9. Select the target **Servers** and **Clusters** to deploy the data source and click **Next**.

Figure 3-7 Servers and Clusters



10. Go to **Summary of JDBC Data Sources**.
11. On the **Data Sources (Filtered - More Columns Exist)** table, verify the **JNDI Name** and **Targets**.

Figure 3-8 Summary of JDBC Data Source - Configuration

12. On the **Change Center**, click **Activate Changes** once the details are confirmed. All the changes are activated.

Figure 3-9 Change Center

Figure 3-10 Changes - Success Message

4

Deploy Application

This topic provides the systematic instructions to deploy the application.

- [Deploy Application](#)

4.1 Deploy Application

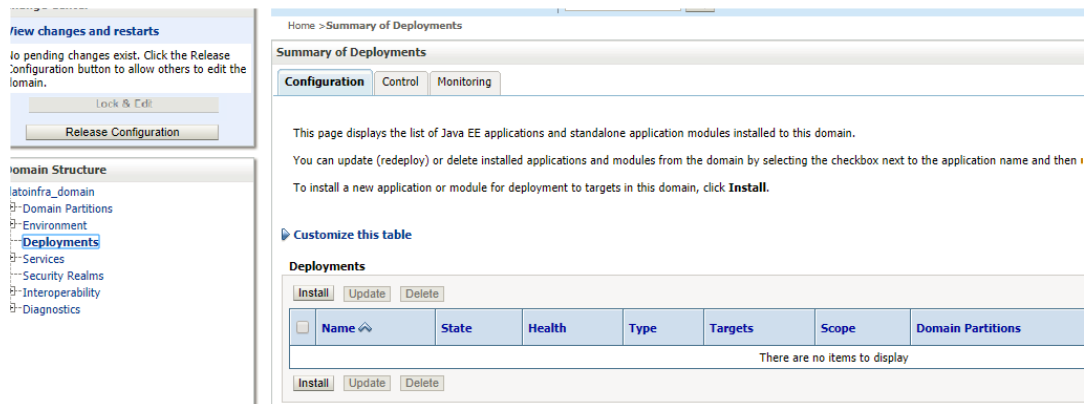
Specify **User ID** and **Password** to login to **Oracle WebLogic Administration Console**.

The steps for deploying archives as an application in WebLogic are the same for all of the above except the managed server and the domain, where we deploy differs.

1. Navigate to left menu and click **Domain Structure**.
2. On **Domain Structure**, click **Deployments**.

The **Summary of Deployments** screen displays.

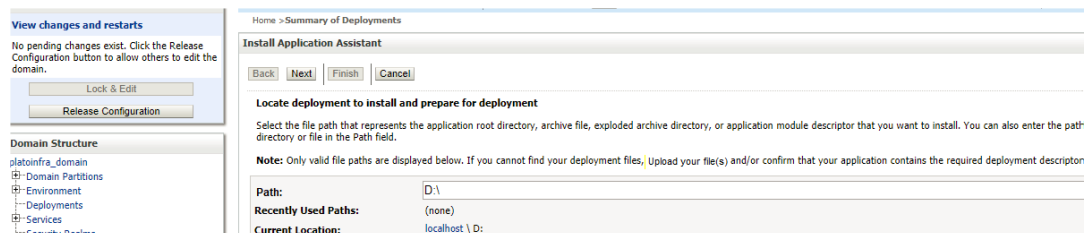
Figure 4-1 Summary of Deployments



3. On the **Change Center**, click **Lock and Edit**.
4. On the **Deployments** table, click **Install**.

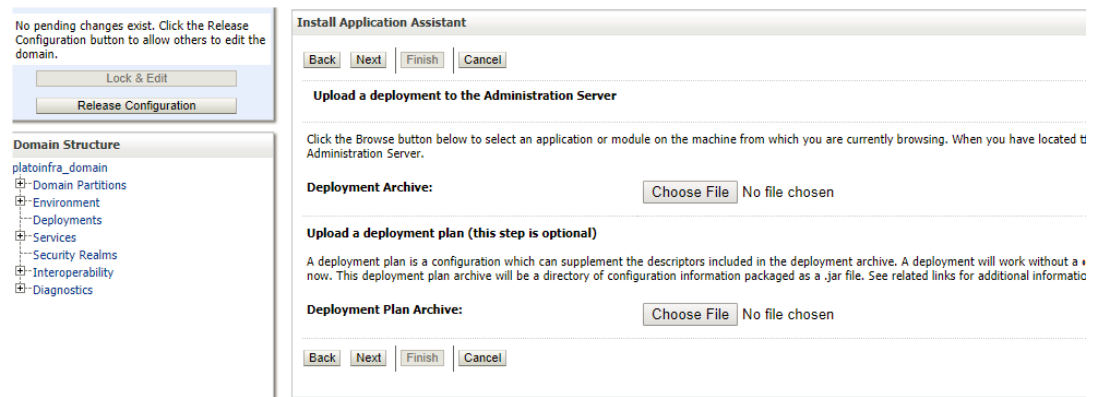
The **Install Application Assistant** screen displays.

Figure 4-2 Install Application Assistant



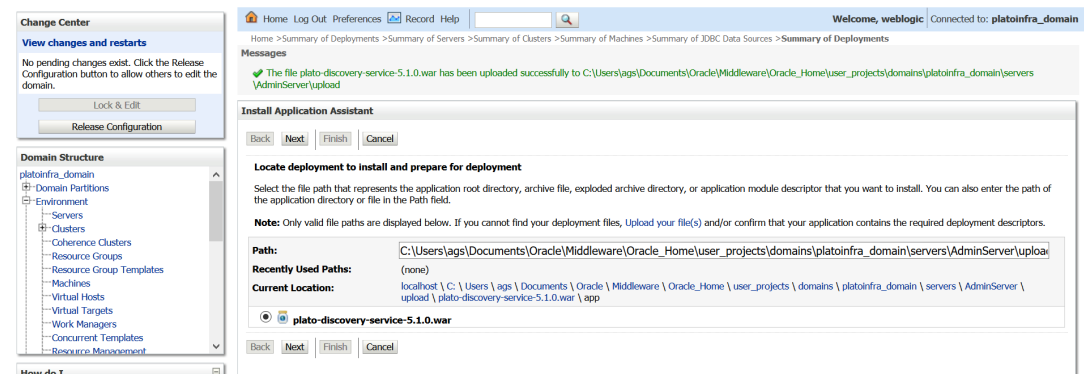
- Click **Upload your file(s)** to select archive. On **Deployment Archive**, select **Choose File**.

Figure 4-3 Install Application Assistant



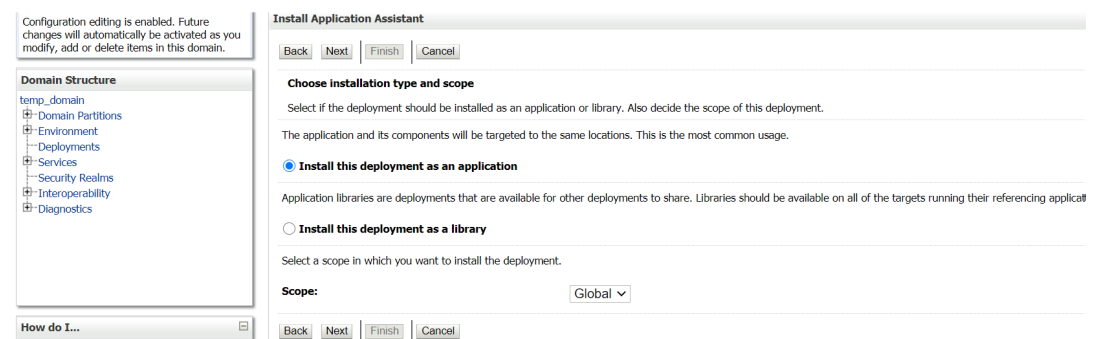
- Once the Archive is uploaded, click **Next**.
The file is uploaded successfully.

Figure 4-4 File Upload - Success Message



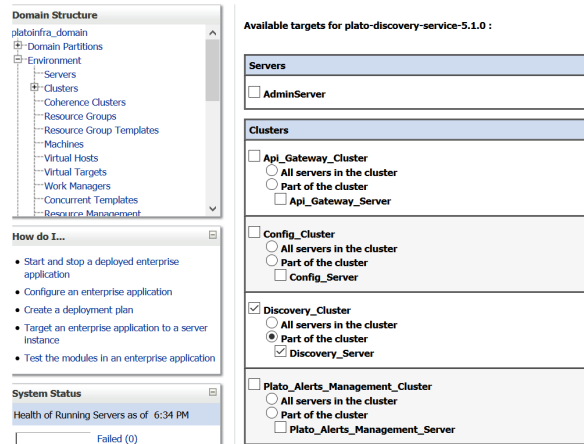
- Click **Next**.
- Select **Install this deployment as an application** and click **Next**.

Figure 4-5 Install Application Assistant



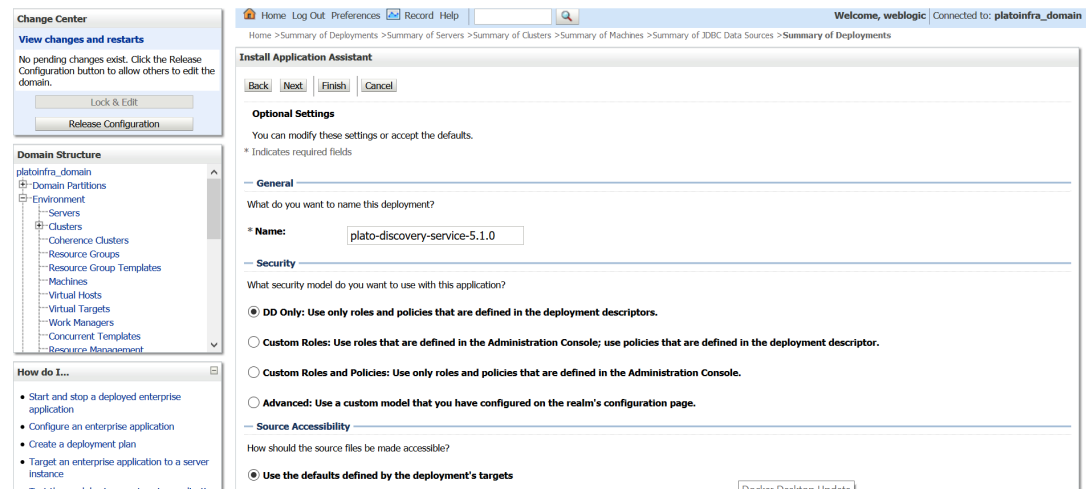
- Select the target **Servers** and **Clusters** to deploy.

Figure 4-6 Available targets



10. Click Next.

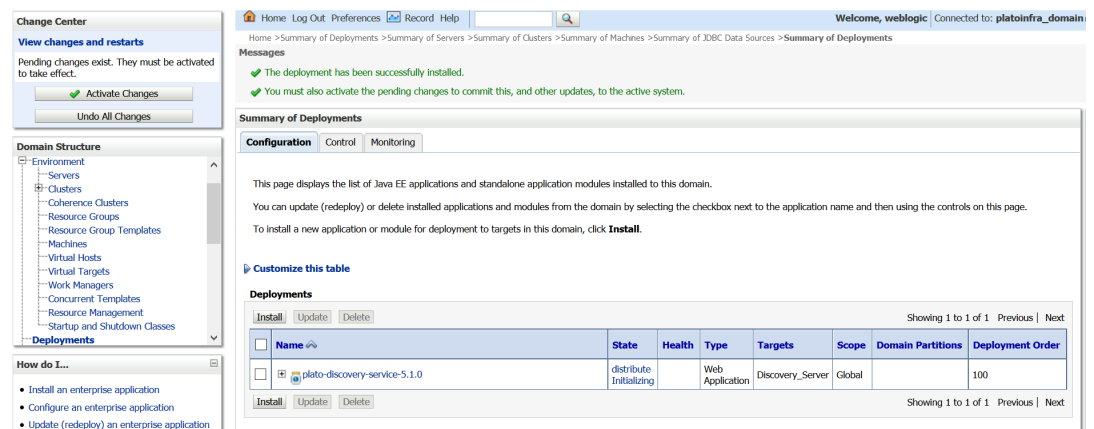
Figure 4-7 Install Application Assistant



11. Click Finish.

The deployment is successfully completed.

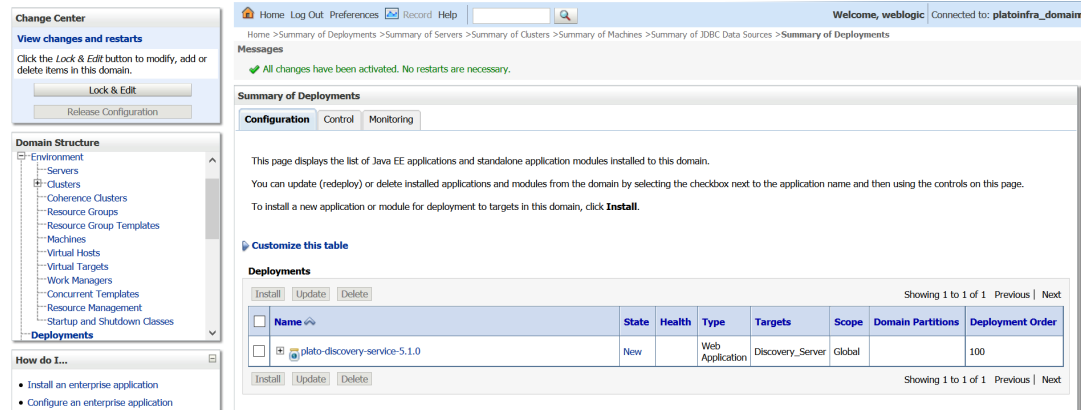
Figure 4-8 Deployment - Success Message



- On **Change Center**, click **Activate Changes**.

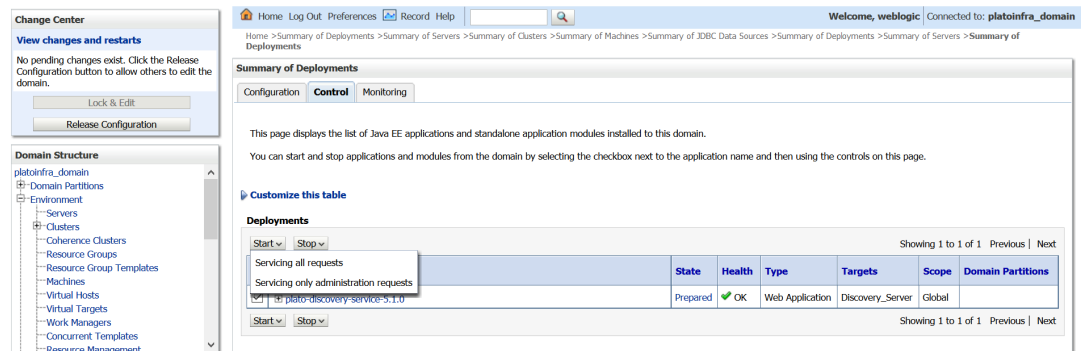
All the changes are activated.

Figure 4-9 Activate Changes - Success Message



- On the **Summary of Deployments**, click **Control** to change the status from prepared to active.

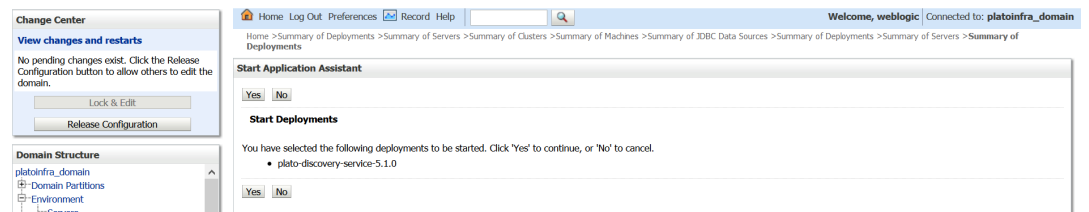
Figure 4-10 Summary of Deployments - Control



- On **Deployments** table, select the server. Click **Start** and select **Servicing all requests** from the drop-down list.

Start Application Assistant screen displays.

Figure 4-11 Start Application Assistant



- Click **Yes**.
- The status is displayed as **Active** in the state column.

Figure 4-12 Summary of Deployments - Configuration

Home Log Out Preferences Record Help Welcome, weblogic 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

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**.

Customize this table

Deployments

Install Update Delete Showing 1 to 1 of 1 Previous Next

<input type="checkbox"/>	Name ↕	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
<input type="checkbox"/>	plato-discovery-service-5.1.0	Active	OK	Web Application	Discovery_Server	Global		100

Install Update Delete Showing 1 to 1 of 1 Previous Next

How do I...

5

Undeploy Application

This topic provides the systematic instructions to undeploy the application.

- [Undeploy Application](#)

5.1 Undeploy Application

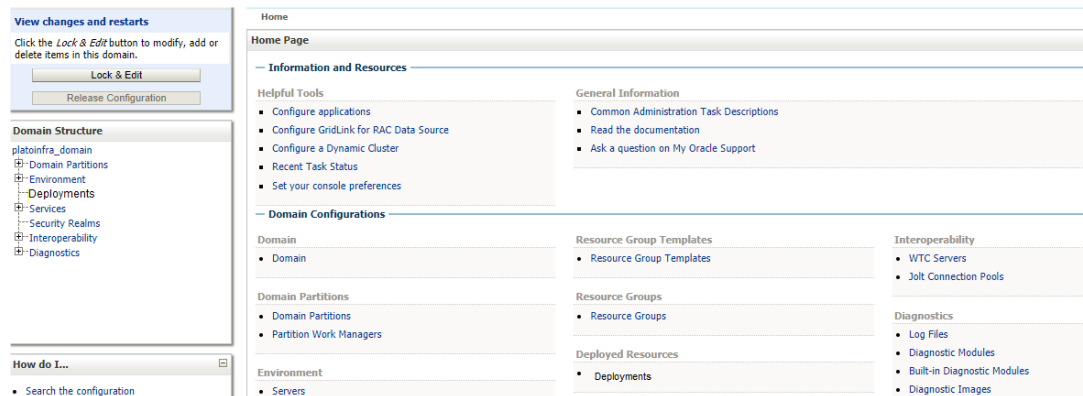
Specify **User ID** and **Password** to login to **Oracle WebLogic Administration Console**.

Perform the following steps to undeploy the application:

1. On **Domain Structure**, click **Deployments**.

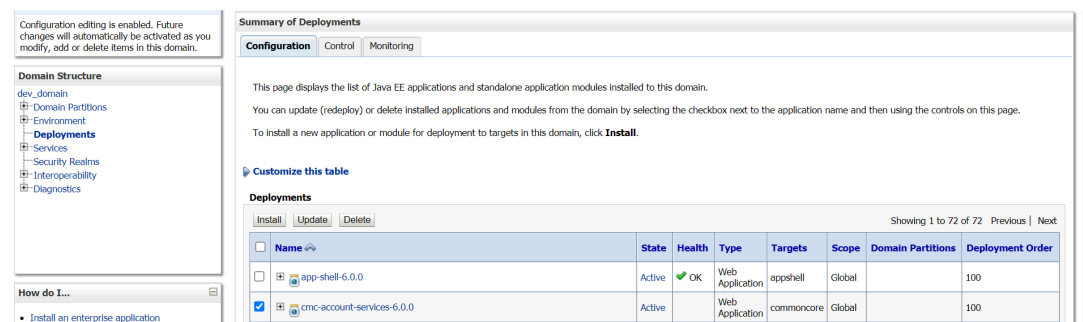
The **Summary of Deployments** screen displays.

Figure 5-1 Summary of Deployments



2. Click **Lock and Edit**.

Figure 5-2 Lock and Edit



3. On the **Deployments** table, select the service that needs to be undeployed in Deployments.
4. Go to **Control**. On the **Deployments** table, click **Stop** and select **Force stop now** from the drop-down list.

Figure 5-3 Summary of Deployments - Control

The screenshot shows the 'Summary of Deployments' page in Control mode. The left sidebar contains 'Domain Structure' and 'How do I...'. The main content area has tabs for 'Configuration', 'Control', and 'Monitoring'. Below the tabs, there is a table of deployments. The 'cmc-advice-services' application is selected with a checkbox.

Name	State	Health	Type	Targets	Scope	Domain Partitions
When work completes						
Force stop now						
Stop, but continue servicing administration requests	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	

- Once the status is changed to **Prepared** state, go to **Configuration**.

Figure 5-4 Summary of Deployments

The screenshot shows the 'Summary of Deployments' page in Configuration mode. The left sidebar contains 'Domain Structure' and 'How do I...'. The main content area has tabs for 'Configuration', 'Control', and 'Monitoring'. Below the tabs, there is a table of deployments. The 'cmc-advice-services' application is selected with a checkbox.

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

- Select the service again and click **Delete** to undeploy the service.

6

Restart Servers

This topic provides the systematic instruction to restart the server.

- [Restart Servers](#)

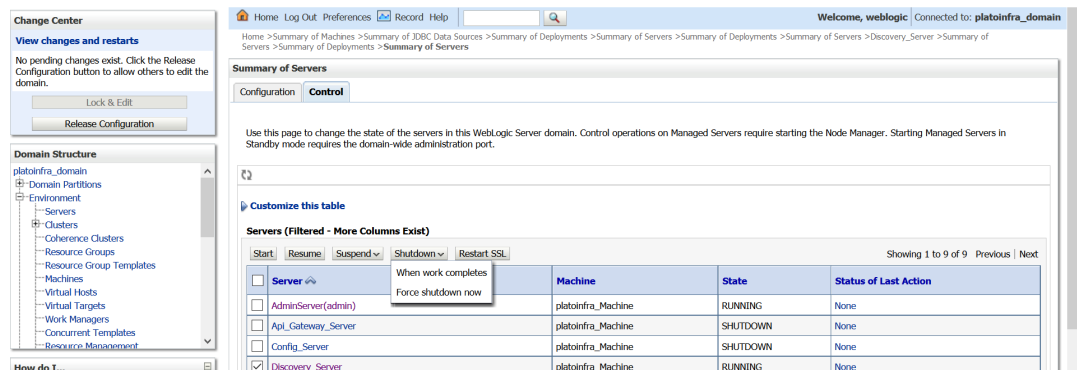
6.1 Restart Servers

Specify **User ID** and **Password** to login to **Oracle WebLogic Administration Console**.

Perform the following steps to restart the server:

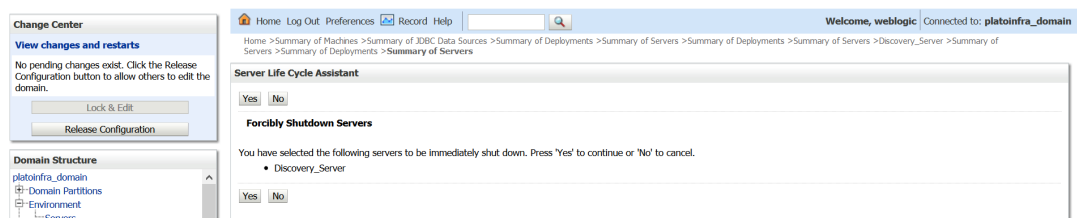
1. On Domain Structure, click **Environment**. Under **Environment**, click **Servers**.
The **Summary of Servers** screen displays.
2. On the **Summary of Servers** screen, click **Control**.
The **Summary of Servers - Control** screen displays.

Figure 6-1 Summary of Servers - Control



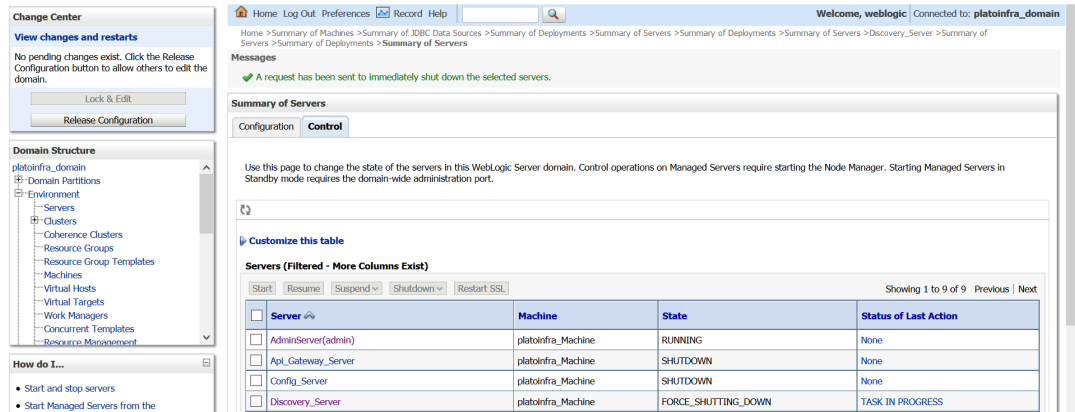
3. On the **Servers (Filtered - More Columns Exist)** table, select the server. Click **Shutdown** and select the required option from the drop-down list.
The **Server Life Cycle Assistant** screen displays.

Figure 6-2 Server Life Cycle Assistant



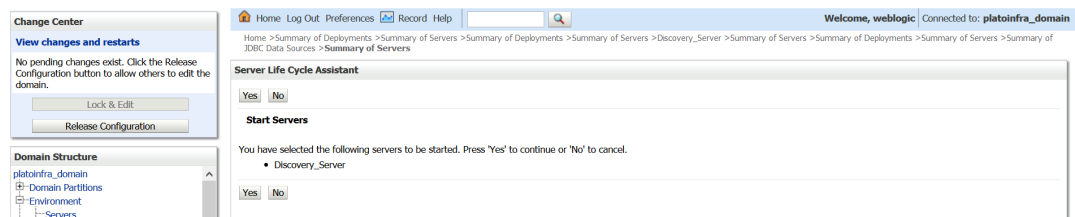
4. Click **Yes** to confirm shutdown.
A request is sent to immediately shut down the selected server.

Figure 6-3 Request Sent - Success Message



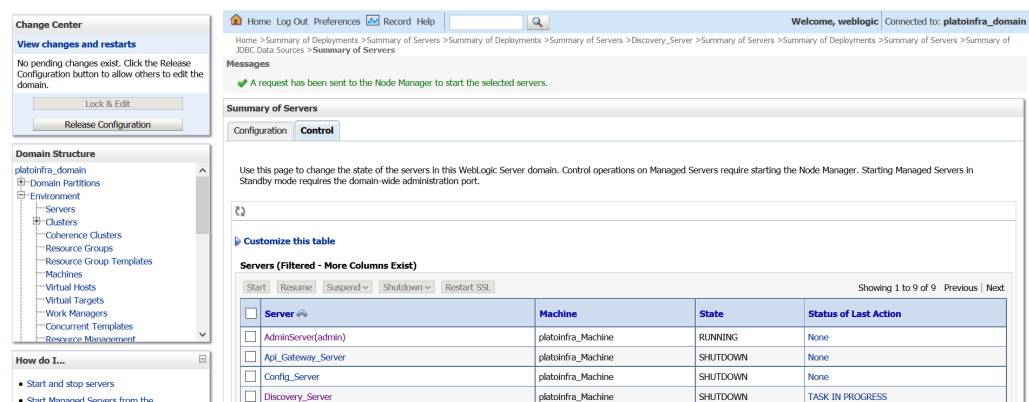
- On the **Servers (Filtered - More Columns Exist)** table, select the server and click **Start**. The **Server Life Cycle Assistant** screen displays.

Figure 6-4 Server Life Cycle Assistant



- Click **Yes** to confirm the action.
 - A request is sent to the node manager to start the selected servers.

Figure 6-5 Request Sent - Success Message



- All the requested servers are running in the state column.

Figure 6-6 Summary of Servers - Control

The screenshot shows the 'Summary of Servers - Control' page in the Oracle WebLogic Server console. The left sidebar contains the 'Change Center' and 'Domain Structure' tree. The main content area has tabs for 'Configuration' and 'Control'. Below the tabs, there is a table titled 'Servers (Filtered - More Columns Exist)'. The table has columns for 'Server', 'Machine', 'State', and 'Status of Last Action'. The servers listed are AdminServer(admin) (RUNNING), Apl_Gateway_Server (SHUTDOWN), Config_Server (SHUTDOWN), and Discovery_Server (RUNNING).

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

7. When all requested servers are running, go to **Summary of Deployments** and check if deployments status is active.

Figure 6-7 Summary of Deployments

The screenshot shows the 'Summary of Deployments' page in the Oracle WebLogic Server console. The left sidebar contains the 'Change Center' and 'Domain Structure' tree. The main content area has tabs for 'Configuration', 'Control', and 'Monitoring'. Below the tabs, there is a table titled 'Deployments'. The table has columns for 'Name', 'State', 'Health', 'Type', 'Targets', 'Scope', 'Domain Partitions', and 'Deployment Order'. The deployment listed is 'plato-discovery-service-5.1.0' with an 'Active' state and 'OK' health.

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

7

Check Port Number

This topic describes the systematic instructions to check the port number.

Specify **User ID** and **Password** to login to **Oracle WebLogic Administration Console**.

1. On **Domain Structure**, click **Environment**. Under **Environment**, click **Servers**.

The **Summary of Servers** screen displays.

Figure 7-1 Summary of Servers

<input type="checkbox"/>	Name ↕	Type	Cluster	Machine	State	Health	Listen Port
<input type="checkbox"/>	AdminServer(admin)	Configured			RUNNING	✔ OK	7020
<input type="checkbox"/>	managed_server1	Configured		Machine1	RUNNING	✔ OK	7023

2. On the **Servers (Filtered - More Columns Exist)** table, check all the listed servers.

8

WebLogic Embedded LDAP Setup

This topic provides the information to configure the Weblogic Embedded LDAP server for Oracle Banking Microservices Architecture

- [Configure WebLogic LDAP](#)
This topic provides systematic instructions to configure WebLogic LDAP Setup.
- [Create Users](#)
This topic provides systematic instructions to create users.
- [Oracle Banking Microservices Architecture Security Config Table Entries](#)
This topic describes about Oracle Banking Microservices Architecture Security Config Table Entries.

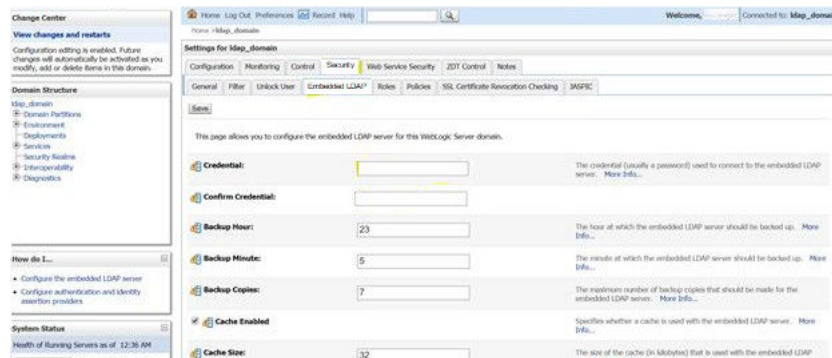
8.1 Configure WebLogic LDAP

This topic provides systematic instructions to configure WebLogic LDAP Setup.

Specify **User ID** and **Password** to login to **Oracle WebLogic Administration Console**.

1. Navigate to left panel and click domain name.
2. Under **Settings for Idap_domain**, click **Security** and **Embedded LDAP**.

Figure 8-1 Settings for Idap_domain



3. Set the **Credential** for WebLogic Embedded LDAP store.

Note:

This is needed in the Security Config table.

8.2 Create Users

This topic provides systematic instructions to create users.

Specify **User ID** and **Password** to login to **Oracle WebLogic Administration Console**.

1. On **Domain Structure**, click **Security Realms**.

The **Summary of Security Realms** screen displays.

Figure 8-2 Summary of Security Realms

The screenshot shows the 'Summary of Security Realms' page. On the left is a 'Domain Structure' tree with 'Security Realms' selected. The main content area contains a description of security realms and a table of configured realms. The table has columns for 'Name' and 'Default Realm'. The 'myrealm' entry is highlighted.

Name	Default Realm
myrealm	true

2. On the **Realms (Filtered - More Columns Exist)** table, click **myrealm**.

The **Setting of myrealm** screen displays.

Figure 8-3 Settings for myrealm

The screenshot shows the 'Settings for myrealm' page. The 'Users and Groups' tab is selected. The 'Groups' sub-tab is active, displaying a table of configured groups. The table has columns for 'Name' and 'Description'. The 'AdminChannelUsers' group is highlighted.

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.

3. Under **Settings for myrealm**, click **Users and Groups**

4. Click **Groups**. On the **Groups** table, Click **New**.

The **Create a New User** screen displays.

Figure 8-4 Create a New User

5. Specify all the required details and click **OK**.
The new group is created.
6. Go to **Settings for myrealm**, click **Users**.

Figure 8-5 Settings for myrealm

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.

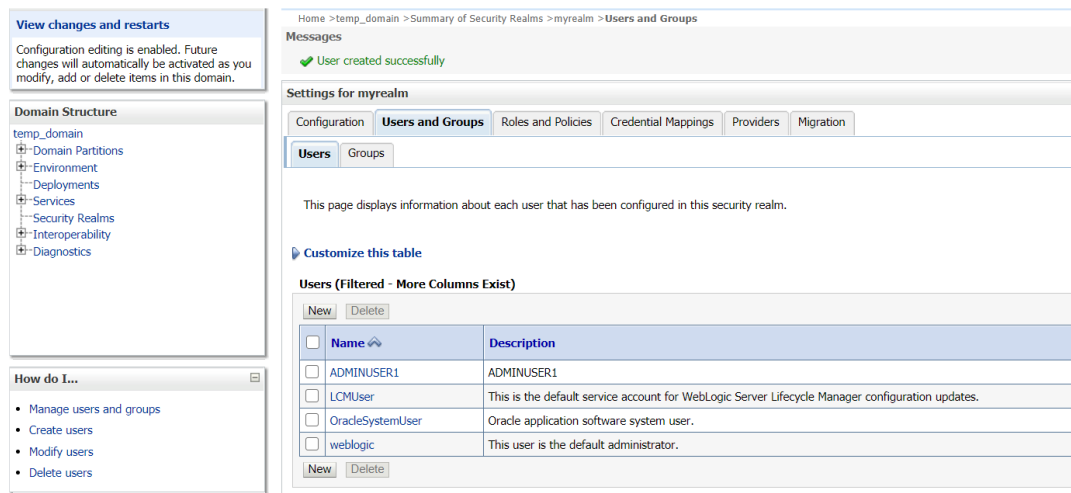
7. On the **Users** table, Click **New**.
The **Create a New User** screen displays.

Figure 8-6 Create a New User

- Specify all the required details and click **OK**.

The new user is created.

Figure 8-7 User Creation- Success Message

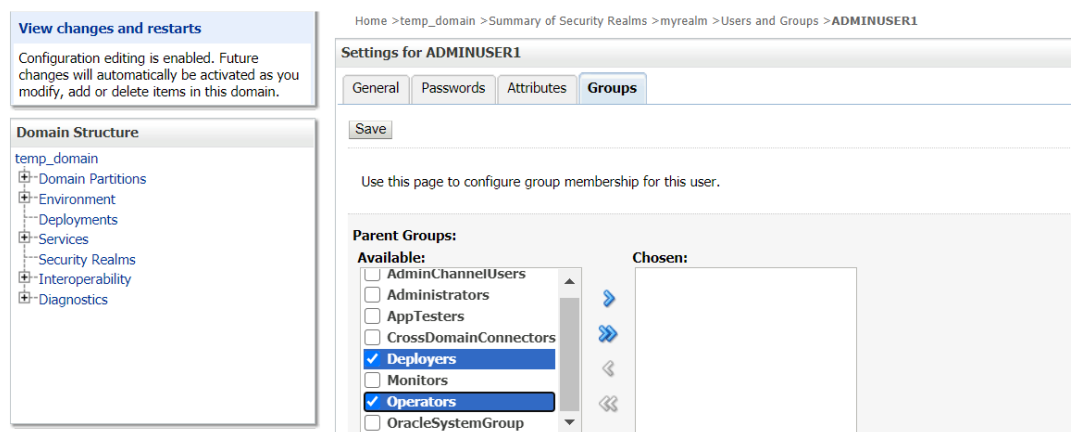


- On the **Users (Filtered - More Columns Exist)** table, click on the newly created user to assign to some group.

The **Setting for ADMINUSER1** screen displays.

- On **Setting for ADMINUSER1** (or whatever your user name is) window, click **Groups** and select the required groups to assign to the user and click single right button as shown below.

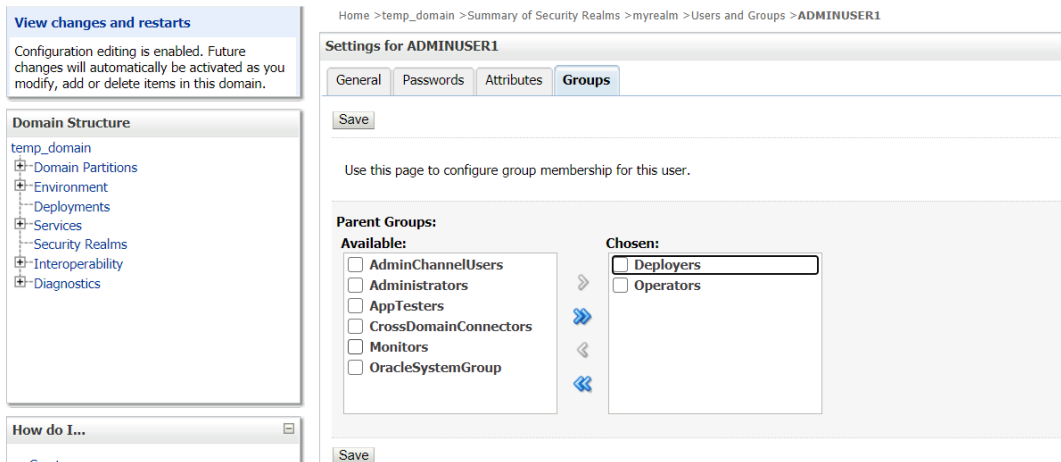
Figure 8-8 Setting for ADMINUSER1



- Click **Save**.

The selected groups displays on **Chosen**.

Figure 8-9 Setting for ADMINUSER1



8.3 Oracle Banking Microservices Architecture Security Config Table Entries

This topic describes about 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:

Table 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	ylksiMFfjVbfcP A7Qheh8Q==	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

Table 8-1 (Cont.) Security Config Table Entries:

ID	VALUE	Description
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.

9

Oracle Analytic Server Setup

This topic provides the information to configure the Oracle Analytic Server for Oracle Banking Microservices Architecture.

- [Prerequisites](#)
This topic describes about prerequisites for Oracle analytic server setup.
- [Start BI Server](#)
This topic provides systematic instructions to start BI server.
- [Upload BI Reports](#)
This topic provides systematic instructions to upload BI reports.
- [Test BI Reports](#)
This topic provides systematic instructions to test BI reports.

9.1 Prerequisites

This topic describes about prerequisites for Oracle analytic server setup.

- Make sure that the machine is installed with Java JDK.



Note:

For the exact version to be installed, refer to **Software Prerequisites** section in **Release Notes**.

- Oracle Analytics Server 5.5.0

9.2 Start BI Server

This topic provides systematic instructions to start BI server.

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

9.3 Upload BI Reports

This topic provides systematic instructions 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:

Table 9-1 Upload BI Reports

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

3. Upload the catalog object to Analytics Server.

9.4 Test BI Reports

This topic provides systematic instructions to test 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 is generated.

10

How to deploy Plato-Apigateway Router

This topic provides the systematic instructions to deploy the plato-apigateway router.

Router deployment steps

The following 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

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

3. Deploy plato-api-gateway

- a. 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.

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

Encrypted Password: m4Q1rbtegwse2s7D2jKfw==

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

Enter pass phrase: Test123

Enter Salt: 0.9412345671234567

Encryption of salt:

To encrypt --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:

VmtjMWQxTnJOVlpPV0VaWFZrVndUMWxYTVU1bFJsSlpZMFZLYTFaVVZrWldWbWgzVkrG
S1JsWnFVDA9

PEM file from keystore

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

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
```

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