

Retail Operations Installation Guide
Oracle FLEXCUBE Universal Banking
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1.1 Introduction

This guide helps you to install the Retail Operations services, User Interface, and Conductor Process flow on designated environments. It is assumed that all the prior setup is already done related with WebLogic 12c installation, WebLogic managed server creation and Oracle DB installation.

It is recommended to use dedicated managed server for each of the Plato infrastructure services, Retail Operation Services and Retail Operations User Interface.

1.2 Audience

This document is intended for WebLogic admin or ops-web team who are responsible for installing the OFSS banking products.

1.3 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/us/corporate/accessibility/index.html>

1.4 Organization

This installation user guide would allow you to install the below mentioned Retail Operation services, UI, process flow in same order

Retail Operations Services

1. obpy-party-maintenance-service
2. obpy-stage-services
3. obpy-party-services
4. obpy-party-kyc-services
5. obpy-businessprocess-services
6. obpy-party-handoff-services
7. obpy-party-publisher-services
8. obpy-party-adapter-services
9. obremo-srv-bcn-branchcommon-services
10. obremo-srv-adp-adapter-services
11. obremo-srv-cas-cash-services
12. obremo-srv-cmn-ml-processing
13. obremo-srv-cmn-transaction-services
14. obremo-srv-cus-customer-services
15. obremo-srv-pay-payment-services
16. obremo-srv-prj-projection-services
17. obremo-srv-tds-term-deposit-services
18. cmc-fc-ai-ml-services
19. obremo-rpm-maintenance-services
20. obremo-rpm-process-driver-services
21. obremo-rpm-businessprocess-services
22. obremo-rpm-businessproductdetails-services
23. obremo-rpm-cmn-applicantservices

24. obremo-rpm-cmn-hostservices
25. obremo-rpm-cmn-scorecardservices
26. obremo-rpm-lo-loanapplications
27. obremo-rpm-sav-account-service
28. obremo-rpm-term-deposit-service
29. obremo-srv-cmn-utils-service

User Interface

30. obremo-app-shell-14.4.0.0.0

Process Workflow.

31. OBPY-PARTY-ONBOARDING-PROCESSFLOW
32. OBPY-PARTY-AMENDMENT-PROCESSFLOW
33. CURRENTACCOUNT
34. EDUCATIONLOAN
35. HOMELOAN
36. INITIATION
37. PERSONALLOAN
38. SAVINGSACCOUNT
39. CASAHOSTORCH
40. VEHICLELOAN
41. HOSTORCHESTRATOR
42. TDACCOUNT
43. PAMD

1.5 Related documents

For more information, refer to the following documents:

- Getting Started
- Retail Operations Pre installation Guide
- ANNEXURE-1

2. Database Setup

2.1 Introduction

In this section you are going to setup database related configuration for Retail Operations Installation. It is recommended to create different schema for each application. Below setup is designed to work with separate schema for each application.

2.2 Pre-requisite

In this section, you are going to setup database related configuration for Retail Operations Installation. Before you proceed, ensure pre-installation setup is done. The pre-installation setup includes the configuration of database, setting up the setUserOverrides.sh. After creating the schema for each of the required micro services, DDLs and INCs of each micro-service to be compiled in the respective schemas. The DDLs and INCs ensure the creation of tables and availability of static data required for the execution of services. These are compiled automatically using flyway.

2.3 Database Setup

To setup DB for Retail Operations schema's to be created-

| Service Name | Schema Required |
|--------------------------------------|---------------------------------|
| obpy-stage-services | Yes (obpy-party-service schema) |
| obpy-party-services | Yes |
| obpy-party-kyc-services | Yes (obpy-party-service schema) |
| obpy-businessprocess-services | Yes |
| obpy-party-handoff-services | Yes (obpy-party-service schema) |
| obpy-party-publisher-services | Yes (obpy-party-service schema) |
| obpy-party-maintenance-service | Yes (obpy-party-service schema) |
| obpy-party-adapter-services | Yes (obpy-party-service schema) |
| obremo-srv-bcn-branchcommon-services | Yes |
| obremo-srv-adp-adapter-services | Yes |
| obremo-srv-cas-cash-services | Yes |
| obremo-srv-cmn-ml-processing | No |
| obremo-srv-cmn-transaction-services | Yes |
| obremo-srv-cus-customer-services | Yes |

| Service Name | Schema Required |
|--|---|
| obremo-srv-pay-payment-services | Yes |
| obremo-srv-prj-projection-services | Yes |
| obremo-srv-tds-term-deposit-services | Yes |
| cmc-fc-ai-ml-services | Yes |
| obremo-rpm-maintenance-services | Yes (obremo-rpm-maintenance-services schema) |
| obremo-rpm-process-driver-services | Yes (obremo-rpm-process-driver-services schema) |
| obremo-rpm-businessprocess-services | Yes (obremo-rpm-businessprocess-services schema) |
| obremo-rpm-businessproductdetails-services | Yes (obremo-rpm-businessproductdetails-services schema) |
| obremo-rpm-cmn-applicantservices | Yes (obremo-rpm-cmn-applicantservices schema) |
| obremo-rpm-cmn-hostservices | Yes (obremo-rpm-cmn-hostservices schema) |
| obremo-rpm-cmn-scorecardservices | Yes (obremo-rpm-cmn-scorecardservices schema) |
| obremo-rpm-lo-loanapplications | Yes (obremo-rpm-lo-loanapplications schema) |
| obremo-rpm-sav-account-service | Yes (obremo-rpm-sav-account-service schema) |
| obremo-rpm-term-deposit-service | Yes (obremo-rpm-term-deposit-service schema) |
| obremo-srv-cmn-utils-services | Yes (obremo-srv-bcn-branchcommon-services schema) |

2.4 Database Link Creation

Projection services from Retail Operations has to interface with Transaction and Payment service. To address above requirement, a database link has to be created in Transaction and Payment schema with the name PROJECTIONDBLINK pointing to Projection service's schema.

3. Retail Operations Services Domains Configuration

3.1 Prerequisites

1. Machine should have Java JDK1.8.0_241 has installed.
2. Oracle Fusion Middleware 12cR2 12.2.1.4.0 has to be installed on the machine.



Note the following:

Before proceeding with below steps complete Plato installation guided.

3. Steps for creating all OBREMO domains, properties like port numbers, names will be changing based on the domain. Screenshots provided for such deviations. Domain creation process remains the same.

3.2 Retail Operation Service Domain Creation

It is recommended to have separate domain for Retail Operation application. For Creating Domain and Configuration, refer to **How to create and Cluster Configuration** section in ANNEXURE-1.

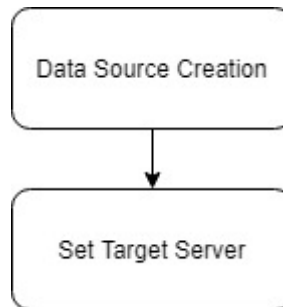
| Service Name | Domain Name |
|--------------------------------------|--------------------------|
| obpy-stage-services | Retail Operations Domain |
| obpy-party-services | Retail Operations Domain |
| obpy-party-kyc-services | Retail Operations Domain |
| obpy-businessprocess-services | Retail Operations Domain |
| obpy-party-handoff-services | Retail Operations Domain |
| obpy-party-publisher-services | Retail Operations Domain |
| obpy-party-maintenance-service | Retail Operations Domain |
| obpy-party-adapter-services | Retail Operations Domain |
| obremo-srv-bcn-branchcommon-services | Retail Operations Domain |
| obremo-srv-cas-cash-services | Retail Operations Domain |
| obremo-srv-cmn-transaction-services | Retail Operations Domain |
| obremo-srv-pay-payment-services | Retail Operations Domain |
| cmc-fc-ai-ml-services | Retail Operations Domain |
| obremo-srv-tds-term-deposit-services | Retail Operations Domain |
| obremo-srv-adp-adapter-services | Retail Operations Domain |
| obremo-srv-cmn-ml-processing | Retail Operations Domain |
| obremo-srv-cus-customer-services | Retail Operations Domain |
| obremo-srv-prj-projection-services | Retail Operations Domain |
| obremo-rpm-maintenance-services | Retail Operations Domain |
| obremo-rpm-process-driver-services | Retail Operations Domain |
| obremo-rpm-businessprocess-services | Retail Operations Domain |

| Service Name | Domain Name |
|--|--------------------------|
| obremo-rpm-businessproductdetails-services | Retail Operations Domain |
| obremo-rpm-cmn-applicantservices | Retail Operations Domain |
| obremo-rpm-cmn-hostservices | Retail Operations Domain |
| obremo-rpm-cmn-scorecardservices | Retail Operations Domain |
| obremo-rpm-lo-loanapplications | Retail Operations Domain |
| obremo-rpm-term-deposit-service | Retail Operations Domain |
| obremo-rpm-sav-account-service | Retail Operations Domain |
| obremo-srv-cmn-utils-services | Retail Operations Domain |

4. Data Sources Creation

4.1 Pre-requisite

Database setup for Retail operations has to be performed prior to deployment setup. The data sources for the respective micro-services must be created first before the application deployment. Each of the data source target to their corresponding servers on which the application will be deployed. The following sections explain the list of data sources required to be created for Retail Operations services and the steps to configure them in the server.



4.2 Data sources List

The table below lists the data sources to be created on each domain prior to deployment of applications onto managed servers.

| Service Name | Data source Name | Data source JNDI | Targets |
|--------------------------------------|------------------|----------------------|--------------------------|
| obpy-stage-services | PARTY | jdbc/PARTY | Party Managed Server |
| obpy-party-services | PARTY | jdbc/PARTY | Party Managed Server |
| obpy-party-kyc-services | PARTY | jdbc/PARTY | Party Managed Server |
| obpy-businessprocess-services | PARTY | jdbc/PARTY | Party Managed Server |
| obpy-party-handoff-services | PARTY | jdbc/PARTY | Party Managed Server |
| obpy-party-publisher-services | PARTY | jdbc/PARTY | Party Managed Server |
| obpy-party-maintenance-service | PARTY | jdbc/ PARTY | Party Managed Server |
| obpy-party-adapter-services | PARTY | jdbc/PARTY | Party Managed Server |
| obremo-srv-bcn-branchcommon-services | BRANCHCOMMON | jdbc/SRVBRANCHCOMMON | Servicing Managed Server |
| obremo-srv-cas-cash-services | CASH | jdbc/SRVCASH | Servicing Managed Server |
| obremo-srv-cmn-transaction-services | TRANSACTION | jdbc/SRVCMTXN | Servicing Managed Server |

| Service Name | Data source Name | Data source JNDI | Targets |
|--|----------------------|---------------------------|-------------------------------|
| obremo-srv-pay-payment-services | PAYMENT | jdbc/SRVPAYMENT | Servicing Managed Server |
| cmc-fc-ai-ml-services | CMNCORE | jdbc/CMNCORE | Common Core Server |
| obremo-srv-tds-term-deposit-services | TERMDEPOSIT | jdbc/SRVTERMDEPOSIT | Servicing Managed Server |
| obremo-srv-adp-adapter-services | ADAPTER | jdbc/SRVADAPTER | Servicing Managed Server |
| obremo-srv-cmn-ml-processing | BRANCHCOMMON | jdbc/SRVBRANCHCOMMON | Servicing Managed Server |
| obremo-srv-cus-customer-services | CUSTOMER | jdbc/SRVCUSTOMER | Servicing Managed Server |
| obremo-srv-prj-projection-services | PROJECTION | jdbc/SRVPROJECTION | Servicing Managed Server |
| obremo-rpm-maintenance-services | RPMMMAINTENANCE | jdbc/OBREMOMAINTE | Retail Process Managed Server |
| obremo-rpm-process-driver-services | RPMProcessDriver | jdbc/RPMPROCESSDRIVER | Retail Process Managed Server |
| obremo-rpm-businessprocess-services | RPMBusinessProcesses | jdbc/OBREMOPROCESS | Retail Process Managed Server |
| obremo-rpm-businessproductdetails-services | RPMBusinessProduct | jdbc/OBREMOPRODUCTDETAILS | Retail Process Managed Server |
| obremo-rpm-cmn-applicantservices | RPMCMNApplicant | jdbc/CMNAPPLICANT | Retail Process Managed Server |
| obremo-rpm-cmn-hostservices | RPMHostService | jdbc/RPMHOST | Retail Process Managed Server |
| obremo-rpm-cmn-scorecardservices | RPMscorecard | jdbc/CMNSCORECARD | Retail Process Managed Server |
| obremo-rpm-lo-loanapplications | RPMLoan | jdbc/LOANAPP | Retail Process Managed Server |
| obremo-rpm-term-deposit-service | RPMTD | Jdbc/TDACC | Retail Process Managed Server |
| obremo-rpm-sav-account-service | RPMSaving | jdbc/SAVACC | Retail Process Managed Server |
| obremo-srv-cmn-utils-services | BRANCHCOMMON | jdbc/SRVBRANCHCOMMON | Servicing Managed Server |

4.3 Steps to Create Datasource

For creating data source, refer to **How to create Data sources** section in ANNEXURE-1.

4.4 Additional Datasource Mapping

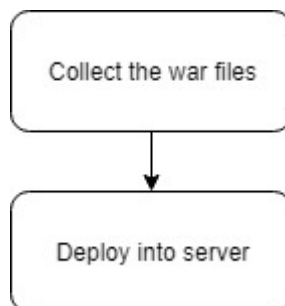
As part of OBREMO 14.4 Patch set, flyway jndi changes are incorporated. In order to deploy the services successfully, map the following data source to all the newly created managed servers for OBREMO.

| Data source Name | Data Source JNDI | Targets |
|-------------------------|-------------------------|---|
| PLATO | jdbc/PLATO | Servicing Managed Server,Retail Process Managed Server,Party Managed Server |
| PLATO_UI_CONFIG | jdbc/PLATO_UI_CONFIG | Servicing Managed Server,Retail Process Managed Server,Party Managed Server |
| SMS | jdbc/sms | Servicing Managed Server,Retail Process Managed Server,Party Managed Server |
| COMMON CORE | jdbc/CMNCORE | Servicing Managed Server,Retail Process Managed Server,Party Managed Server |

5. Deployments

5.1 Pre-requisite

The database setup and data sources creation have to be performed prior to the application deployment stage. Each of the services corresponds to a specific war file that needs to be deployed into the server. The following sections explain the list of war files of the Retail Operations application and the steps to deploy them into the server.



5.2 Deployments List

Below table give details of the deployments required on each domain for the Retail Operations application to run. Deploy one after other in the same given order.

| Application | Archive name | OSDC path | Targets |
|---------------------------------|--|--|----------------------|
| OBPY Party Maintenance Services | obpy-party-maintenance-service-5.0.0.war | { unzip the file } OBREMO_SERVICES\obpy-party-maintenance-service | Party Managed Server |
| OBPY Stage Services | obpy-stage-services-5.1.0.war | { unzip the file } OBREMO_SERVICES\stage-services | Party Managed Server |
| OBPY Party Services | obpy-party-services-5.1.0.war | { unzip the file } OBREMO_SERVICES\obpy-party-services | Party Managed Server |
| Party KYC Services | obpy-party-kyc-services-5.0.0.war | { unzip the file } OBREMO_SERVICES\obpy-party-kyc-services | Party Managed Server |
| OBPY Businessprocess Services | obpy-businessprocess-services-5.0.0.war | { unzip the file } OBREMO_SERVICES\obpy-businessprocess-services | Party Managed Server |
| OBPY Party Handoff Services | obpy-party-handoff-services-5.0.0.war | { unzip the file } OBREMO_SERVICES\obpy-party-handoff-services | Party Managed Server |
| OBPY Party Publisher Services | obpy-party-publisher-services-5.0.0.war | { unzip the file } OBREMO_SERVICES\obpy-party-publisher-services | Party Managed Server |
| OBPY Party Adapter Services | obpy-party-adapter-services-5.0.0.war | { unzip the file } OBREMO_SERVICES\obpy-party-adapter-services | Party Managed Server |

| Application | Archive name | OSDC path | Targets |
|------------------------------|--|---|-------------------------------|
| Branch Common Service | obremo-srv-bcn-branchcommon-services-5.0.0.war | { unzip the file }OBREMO_SERVICES\obremo-srv-bcn-branchcommon-services\APP | Servicing Managed Server |
| Adapter Service | obremo-srv-adp-adapter-services-5.0.0.war | { unzip the file }OBREMO_SERVICES\obremo-srv-adp-adapter-services\APP | Servicing Managed Server |
| Cash Services | obremo-srv-cas-cash-services-5.0.0.war | { unzip the file }OBREMO_SERVICES\obremo-srv-cas-cash-services\APP | Servicing Managed Server |
| Machine Learning Processing | obremo-srv-cmn-ml-processing-5.0.0.war | { unzip the file }OBREMO_SERVICES\obremo-srv-cmn-ml-processing\APP | Servicing Managed Server |
| Common Transaction Service | obremo-srv-cmn-transaction-services-5.0.0.war | { unzip the file }OBREMO_SERVICES\obremo-srv-cmn-transaction-services\APP | Servicing Managed Server |
| Customer Service | obremo-srv-cus-customer-services-5.0.0.war | { unzip the file }OBREMO_SERVICES\obremo-srv-cus-customer-services\APP | Servicing Managed Server |
| Payment Service | obremo-srv-pay-payment-services-5.0.0.war | { unzip the file }OBREMO_SERVICES\obremo-srv-pay-payment-services\APP | Servicing Managed Server |
| Projection Services | obremo-srv-prj-projection-services-5.0.0.war | { unzip the file }OBREMO_SERVICES\obremo-srv-prj-projection-services\APP | Servicing Managed Server |
| Term Deposit Service | obremo-srv-tds-term-deposit-services-5.0.0.war | { unzip the file }OBREMO_SERVICES\obremo-srv-tds-term-deposit-services\APP | Servicing Managed Server |
| Mail Poller Service | cmc-fc-ai-ml-services-5.0.0.war | { unzip the file }OBREMO_SERVICES\cmc-fc-ai-ml-services\APP | Common Core Server |
| RPM Maintenance Services | obremo-rpm-maintenance-services-5.2.0.war | { unzip the file }OBREMO_SERVICES\obremo-rpm-maintenance-services\APP | Retail Process Managed Server |
| RPM Process Driver | obremo-rpm-process-driver-services-5.3.0.war | { unzip the file }OBREMO_SERVICES\obremo-rpm-process-driver-services\APP | Retail Process Managed Server |
| RPM Business Process | obremo-rpm-businessprocess-services-5.3.0.war | { unzip the file }OBREMO_SERVICES\obremo-rpm-businessprocess-services\APP | Retail Process Managed Server |
| RPM Business Product details | obremo-rpm-businessproductdetails-services-5.3.0.war | { unzip the file }OBREMO_SERVICES\obremo-rpm-businessproductdetails-services\APP | Retail Process Managed Server |

| Application | Archive name | OSDC path | Targets |
|-----------------------------|--|---|-------------------------------|
| RPM Common Applicant | obremo-rpm-cmn-applicantservices-5.3.0.war | { unzip the file } OBREMO_SERVICES\obremo-rpm-cmn-applicantservices\APP | Retail Process Managed Server |
| RPM Host Services | obremo-rpm-cmn-hostservices-5.3.0.war | { unzip the file } OBREMO_SERVICES\obremo-rpm-cmn-hostservices\APP | Retail Process Managed Server |
| RPM ScoreCard | obremo-rpm-cmn-scorecardservices-5.3.0.war | { unzip the file } OBREMO_SERVICES\obremo-rpm-cmn-scorecardservices\APP | Retail Process Managed Server |
| RPM Loan Applicant Services | obremo-rpm-lo-loanapplications-5.3.0.war | { unzip the file } OBREMO_SERVICES\obremo-rpm-lo-loanapplications\APP | Retail Process Managed Server |
| RPM Savings (CASA) Services | obremo-rpm-sav-account-service-5.3.0.war | { unzip the file } OBREMO_SERVICES\obremo-rpm-sav-account-service\APP | Retail Process Managed Server |
| RPM TD Services | obremo-rpm-term-deposit-service-5.0.0.war | { unzip the file } OBREMO_SERVICES\obremo-rpm-term-deposit-service\APP | Retail Process Managed Server |
| SRV Common Utils Services | obremo-srv-cmn-utils-services-5.3.0.war | { unzip the file } OBREMO_SERVICES\obremo-srv-cmn-utils-services\APP | Servicing Managed Server |

5.3 Steps to Deploy as Application

To deploy application, refer to **How to deploy** section in ANNEXURE-1.

6. Restarts and Refresh

Once everything is deployed, restart all the managed servers. And for each application call path “/refresh” for refreshing the configuration properties.

6.1 Restarting Servers

To restart the server, refer to **How to restart** section in ANNEXURE-1.

7. Logging Area

7.1 Introduction

This part of the document will talk about the logs area where after deployment of Retail Operation Applications in WebLogic server.

7.1.1 Logging Area

Retail Operations Application writes logs in the below area of the server-

<WEBLOGIC_DOMAIN_CONFIG_AREA/servers/APP/logs/ APP.out

Let's assume a domain has been created **party_domain** with **managed_server** name called **PARTYAPP** in the following area of the server

~/middleware/user_projects/domains/**party_domain**". Logging area for Retail Operations applications would be

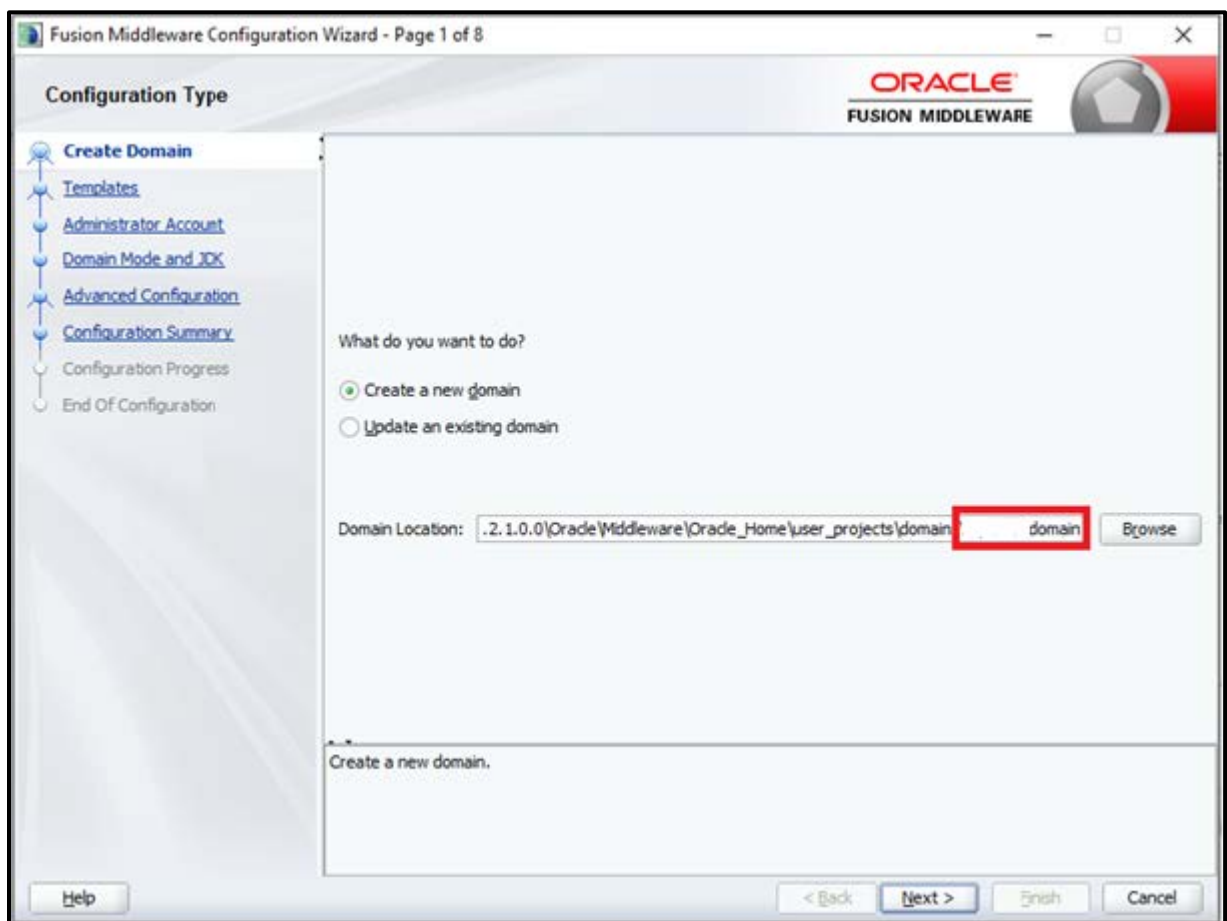
~/middleware/user_projects/domains/**party_domain**/servers/**PARTYAPP**/logs/ **PARTYAPP.out**.

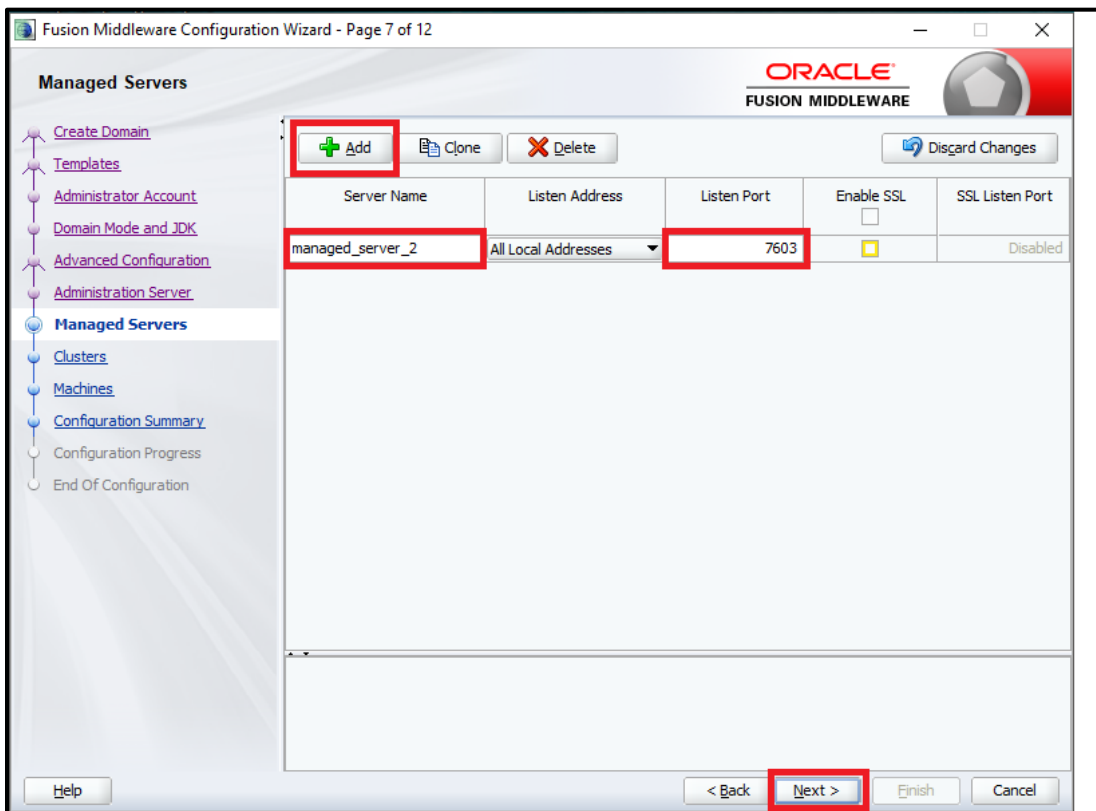
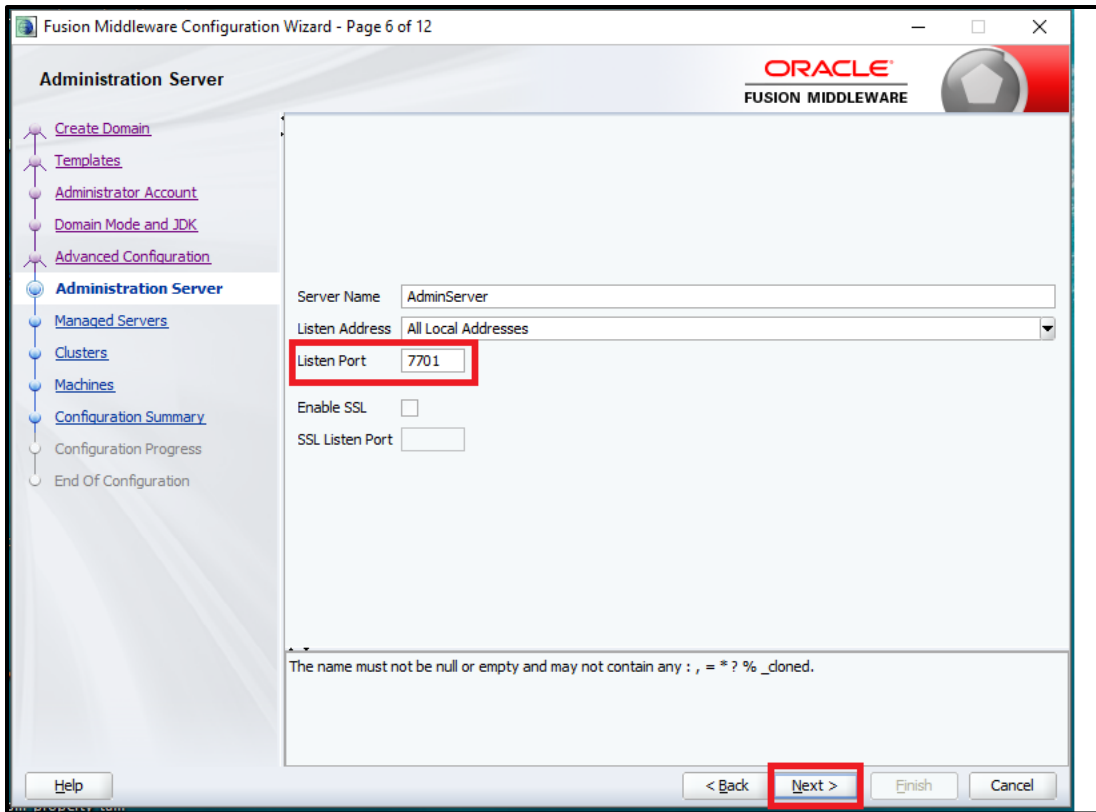
8. Retail Operations UI Domain and Cluster Configuration

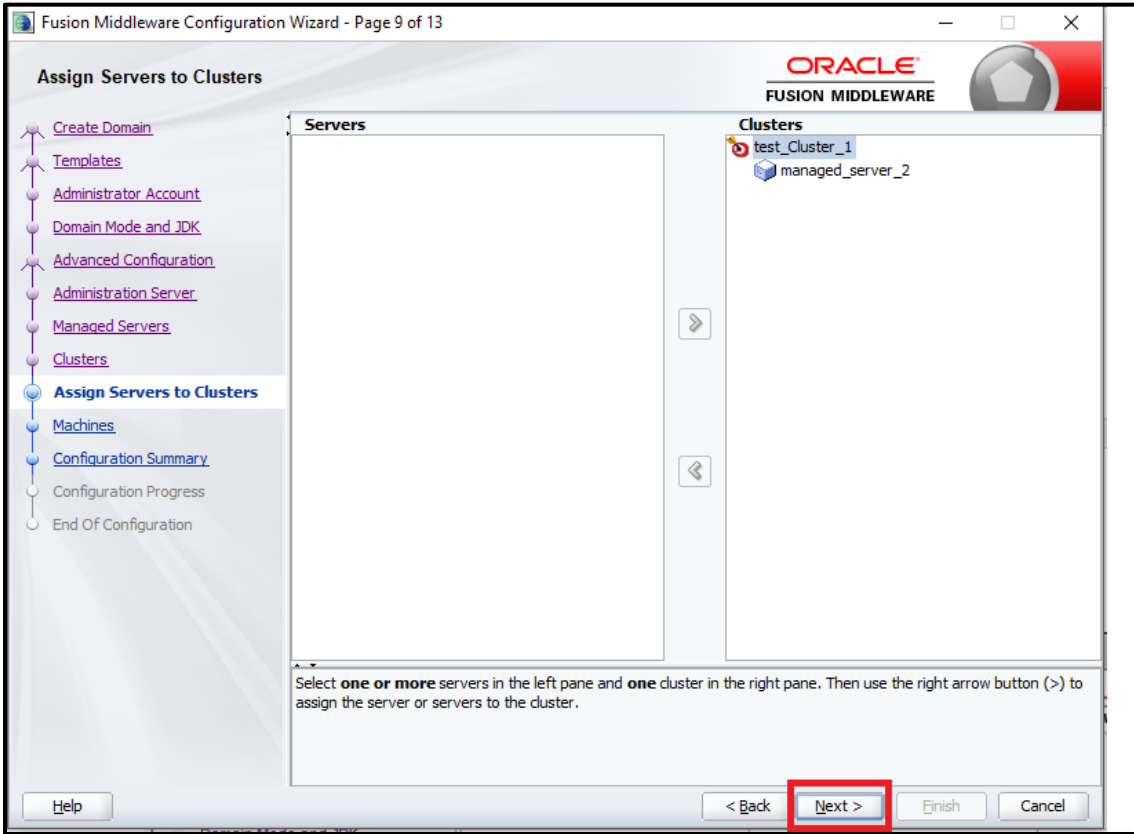
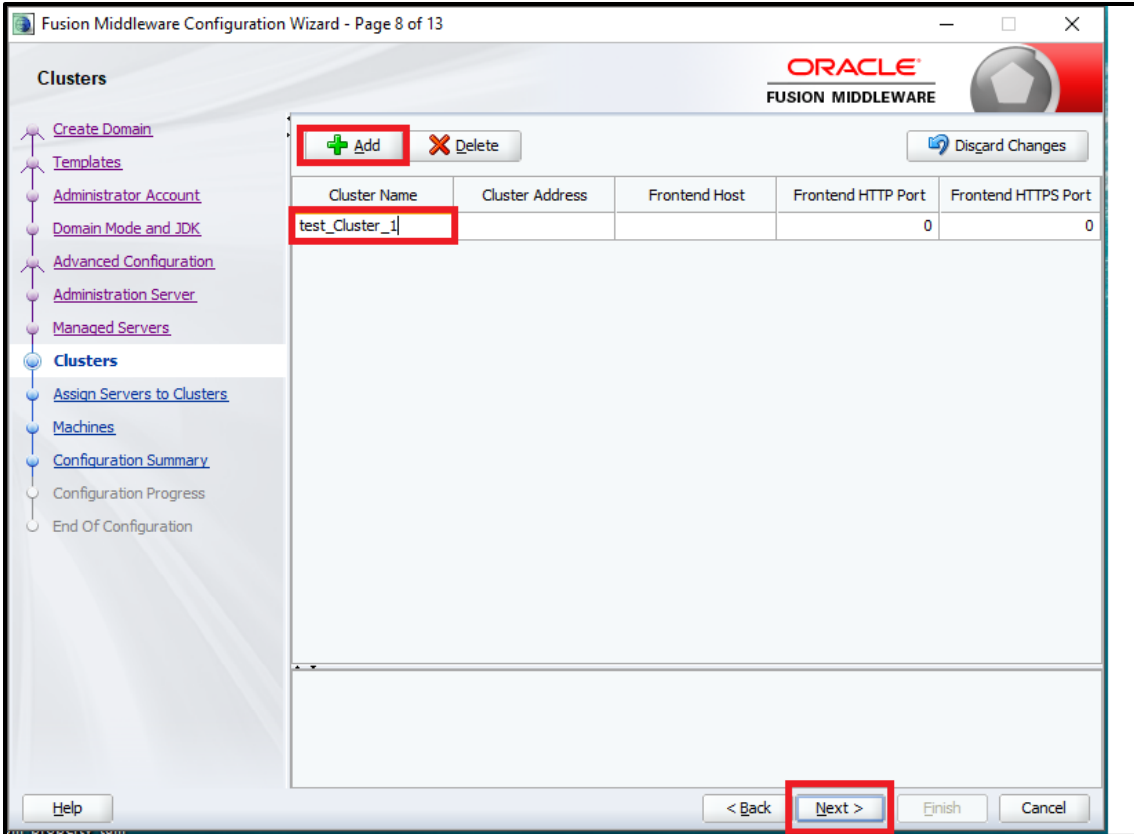
8.1 Prerequisites

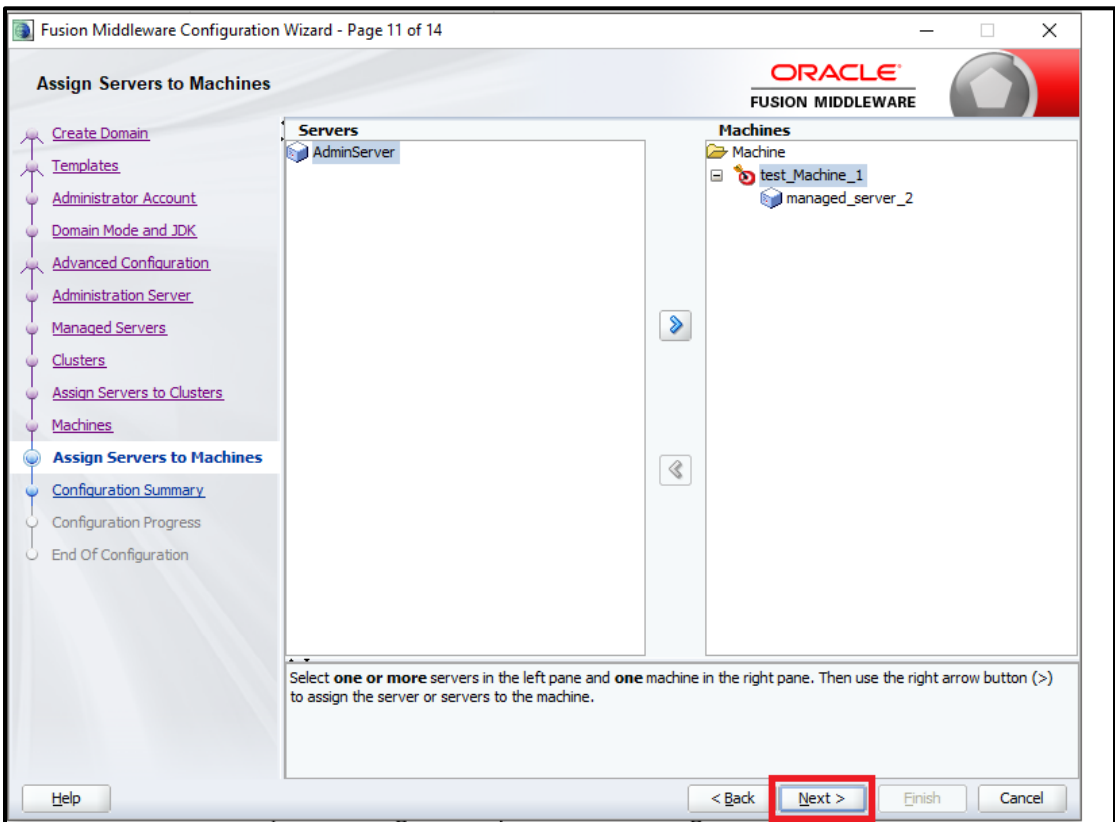
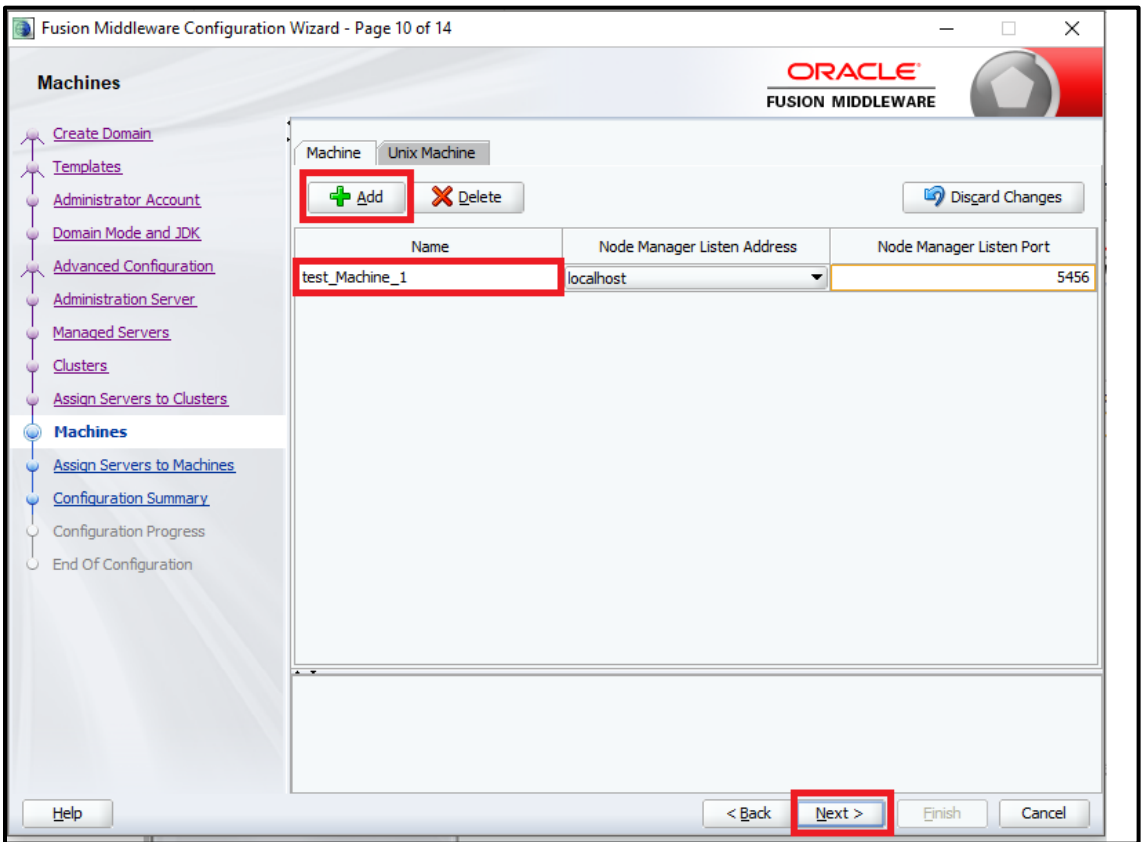
1. Machine should have Java JDK1.8.0_241 has installed.
2. Oracle Fusion Middleware 12cR2 12.2.1.4 has to be installed on the machine.

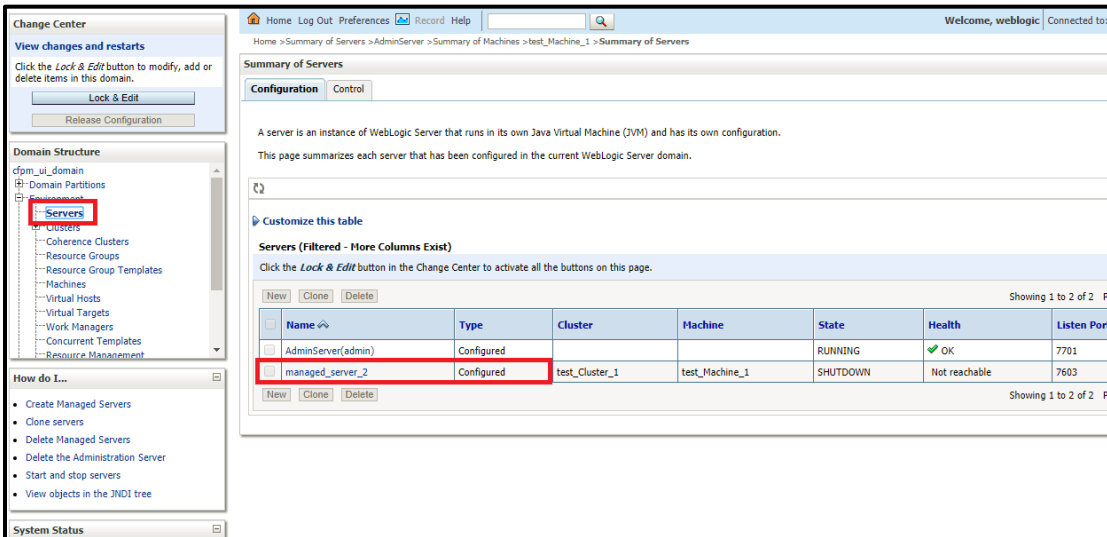
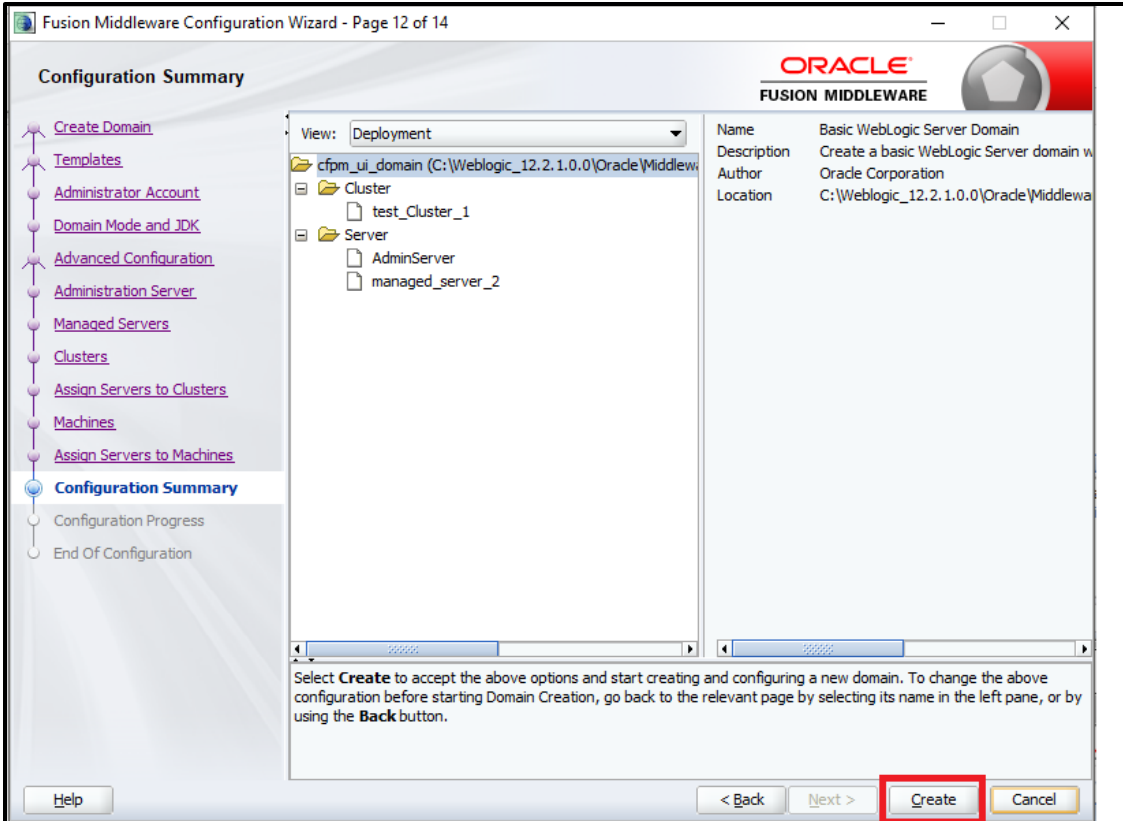
8.2 Retail Operations UI Domain (OBREMOUI)











Oracle WebLogic Server Administration Console 12c

Home > Summary of Servers > AdminServer > Summary of Machines > test_Machine_1 > 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.

| Name | Cluster Address | Cluster Messaging Mode | Migration Basis | Default Load Algorithm | Replication Type | Cluster Broadcast Channel | Servers |
|----------------|-----------------|------------------------|-----------------|------------------------|------------------|---------------------------|---------|
| test_cluster_1 | | Unicast | Database | Round Robin | (None) | | manag |

Showing 1 to 1 of 1

Oracle WebLogic Server Administration Console 12c

Home > Summary of Servers > AdminServer > Summary of Machines > test_Machine_1 > 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 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.

Customize this table

Machines

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

| Name | Type |
|----------------|---------|
| test_Machine_1 | Machine |

Showing 1 to 1 of 1

8.3 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. Create **boot.properties** file under **/user_projects/domains/XXXXdomainNameXXX/servers/AdminServer/security**.
2. Edit **boot.properties** and give username and password details.
3. Goto **/user_projects/domain/sms_domain/bin**.
4. Run **startWeblogic.cmd** (or **.sh** if operating system is linux).
5. Goto **/user_projects/domains/ sms _domain/bin**.
6. Run **setNMJavaHome.cmd** (**.sh**).
7. Goto **/user_projects/domains/ sms _domain/nodemanager**.
8. And edit **nodemanager.properties** as required (securelistner = false if ssl and keystore is not given) And in admin console also navigate to **Machines- > sms_Machine -> Node Manager -> Type -> Plain -> Save**.

9. Navigate to `/user_projects/domains/sms_domain/bin`.
10. Run `startNodeManager.cmd` (or `.sh` if operating system is linux).
11. Start all managed servers.

Login to console and verify servers and clusters.

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

Lock & Edit
Release Configuration

Domain Structure

- sms_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

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.

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 2 of 2 Previous Next

| Name | Type | Cluster | Machine | State | Health | Listen Port |
|--------------------|------------|-------------|-------------|----------|---------------|-------------|
| AdminServer(admin) | Configured | | | RUNNING | OK | 8010 |
| WLS_SMS | Configured | sms_Cluster | sms_Machine | SHUTDOWN | Not reachable | 8013 |

New Clone Delete Showing 1 to 2 of 2 Previous Next

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

Lock & Edit
Release Configuration

Domain Structure

- sms_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

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 1 of 1 Previous Next

| Name | Cluster Address | Cluster Messaging Mode | Migration Basis | Default Load Algorithm | Replication Type | Cluster Broadcast Channel | Servers |
|-------------|-----------------|------------------------|-----------------|------------------------|------------------|---------------------------|---------|
| sms_Cluster | | Unicast | Database | Round Robin | (None) | | WLS_SMS |

New Clone Delete Showing 1 to 1 of 1 Previous Next

View changes and restarts

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

Lock & Edit
Release Configuration

Domain Structure

- sms_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

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.

Customize this table

Machines

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

New Clone Delete Showing 1 to 1 of 1 Previous Next

| Name | Type |
|-------------|---------|
| sms_Machine | Machine |

New Clone Delete Showing 1 to 1 of 1 Previous Next

9. Retail Operation User Interface Deployments

9.1 Steps to deploy as application

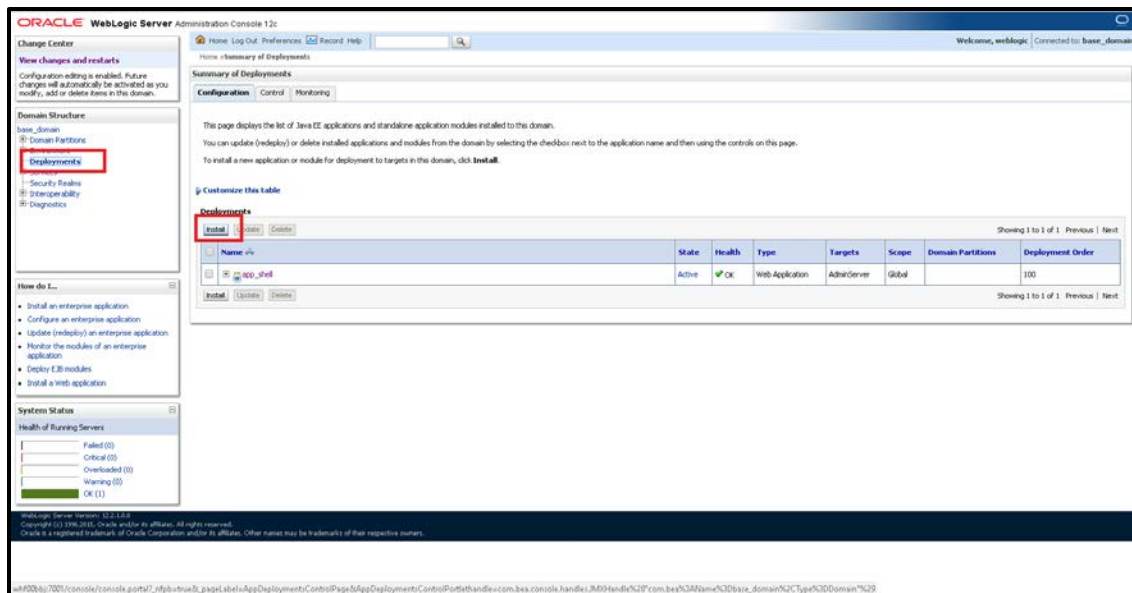


Note the following:

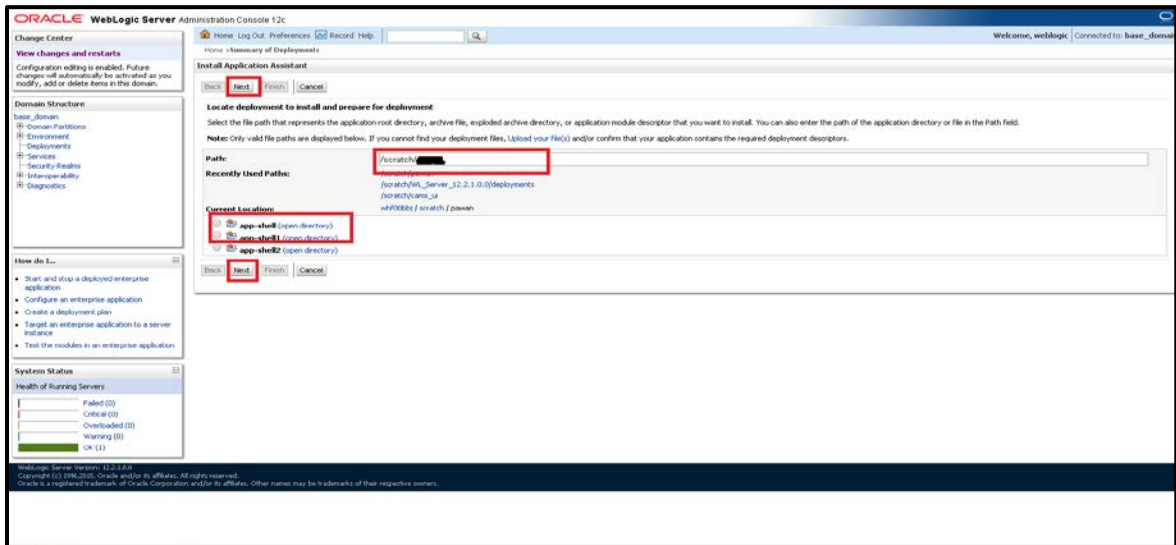
Server names, Domain names need not to be same as this doc provides.

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. Find the below screenshots to see how deployment of archive as application is done on weblogic.

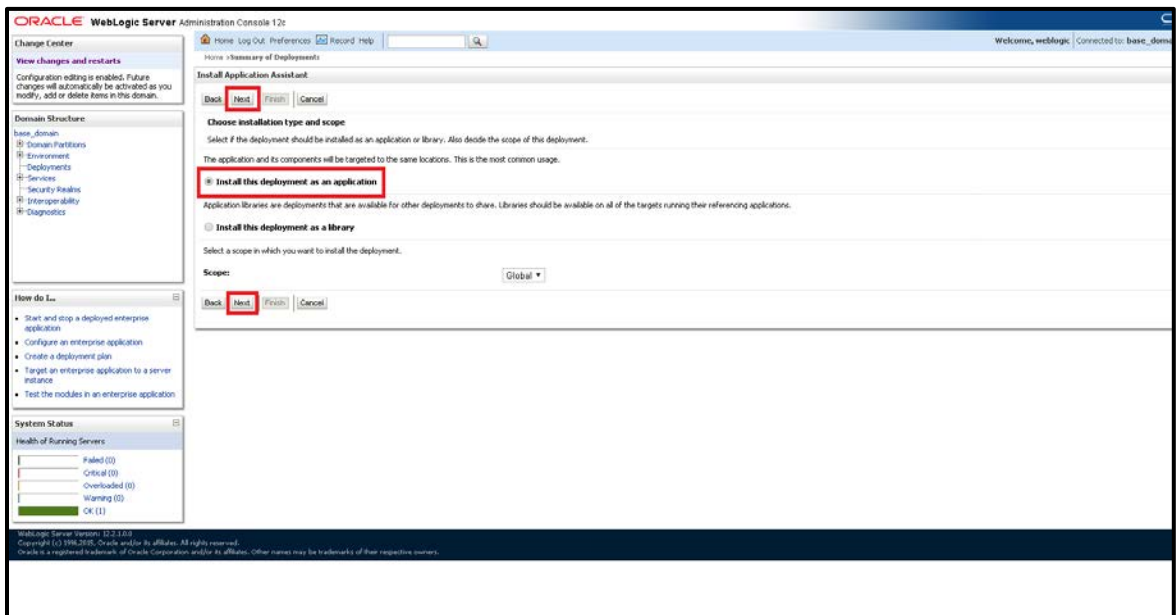
1. Extract the zip file under **UI** folder.
2. Open **app-shell\common\js\util\config\config.json** file change **apiGatewayURL** to point plato-api-gateway URL.
3. Copy app-shell folder and paste it to your server. E.g. scratch/deployment.
4. Open Weblogic console and navigate to the **Deployments**.



5. Click **Install**, paste folder location on path and press **Enter** key, select the app_shell directory.

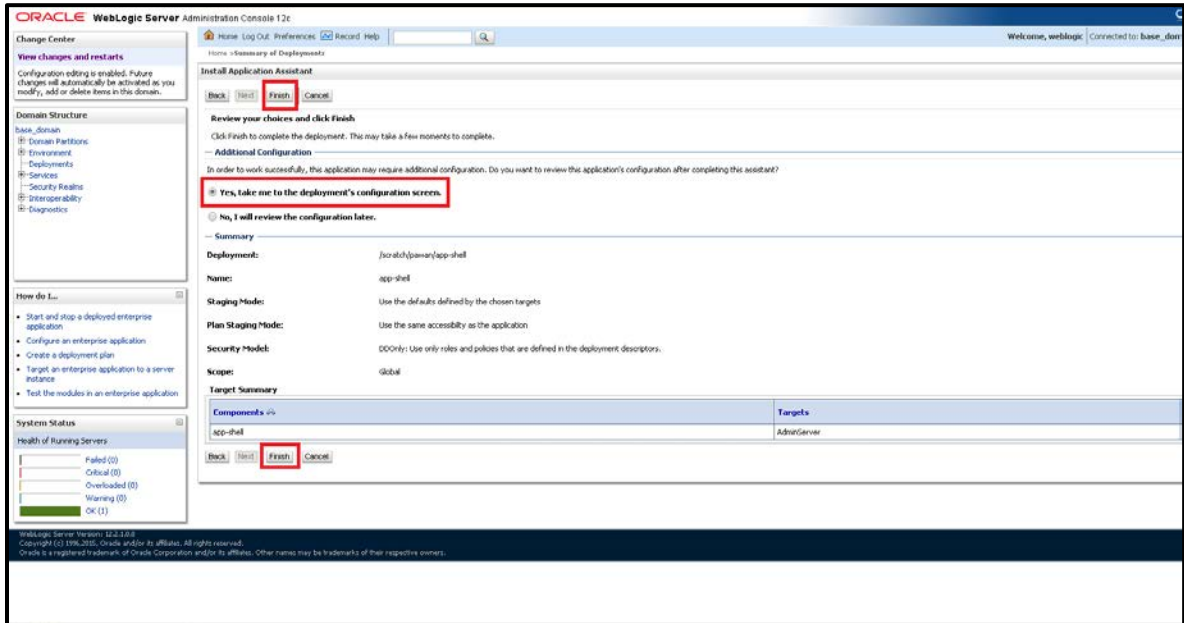


6. Check the option **install this deployment as an application option** and click **Next**.

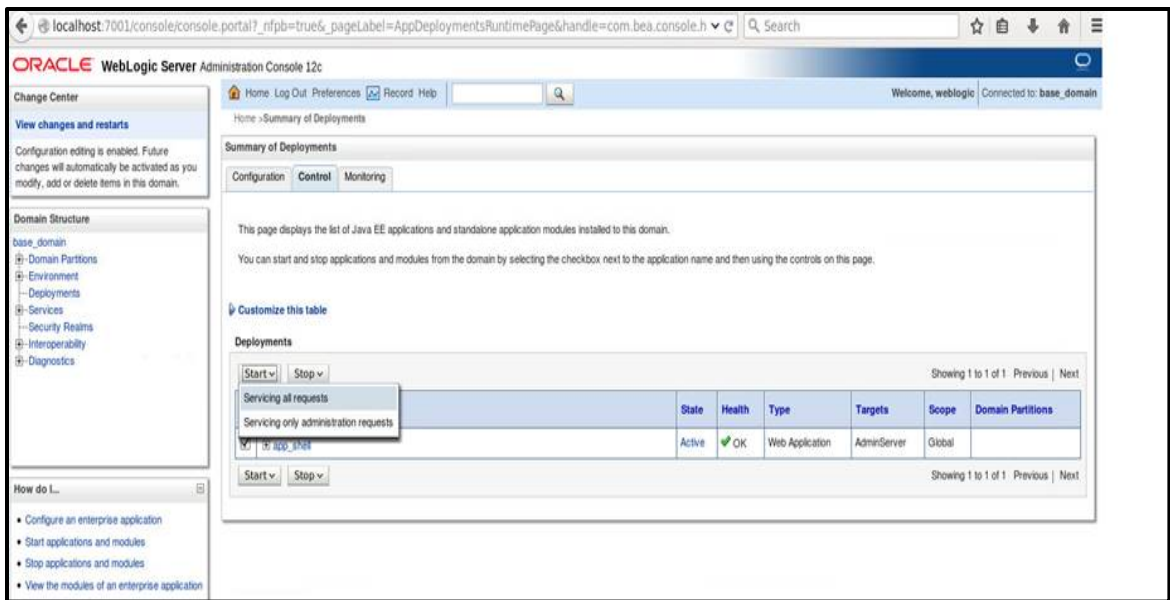


7. Name the deployment as **app_shell** and click **Next**.

- Check the option **Yes, take me to the deployment's configuration screen** and click **Finish**.



- Navigate to the **Control** tab and click **start**. Select the option **Servicing all requests** and Click **Yes**.



- Please verify state is Active. If yes please try to open the URL in this format:

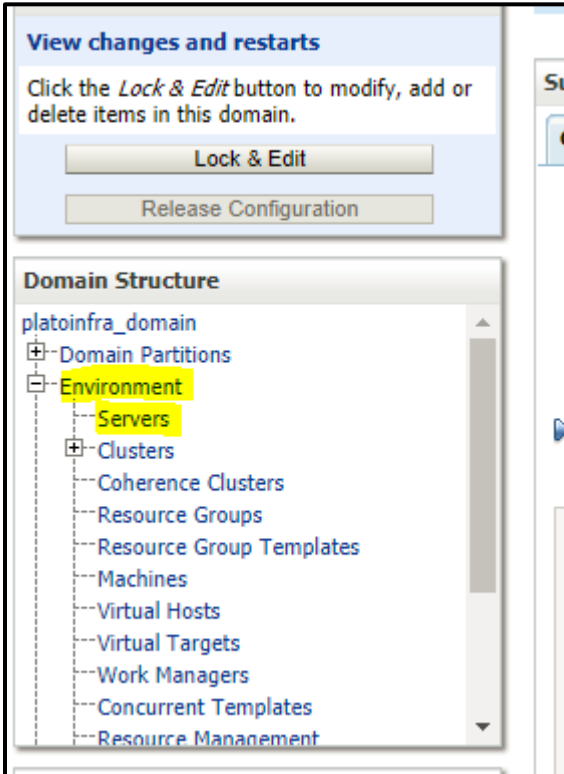
<http://HostName:PortNo/obremo-app-shell-14.4.0.0/>

10.Restarts and Refresh

Once everything is deployed, restart all the managed servers. And for each application call path **/refresh** for refreshing the configuration properties.

10.1 Restarting Servers

1. Navigate to **Environment** and then click **Servers**.



2. Click **Control** tab and select servers to shut down, and click **Yes** to confirm shutdown.

| Name | Type | Cluster | Machine | State | Health | Listen Port |
|--------------------|------------|-------------------|--------------------|---------|--------|-------------|
| AdminServer(admin) | Configured | | | RUNNING | OK | 7001 |
| WLS_CONFIG | Configured | config_cluster | platoinfra_machine | RUNNING | OK | 7004 |
| WLS_DISCOVERY | Configured | discovery_cluster | platoinfra_machine | RUNNING | OK | 7003 |
| WLS_GATEWAY | Configured | gateway_cluster | platoinfra_machine | RUNNING | OK | 7006 |
| WLS_ZIPKINUS | Configured | zipkinus_cluster | platoinfra_machine | RUNNING | OK | 7005 |

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...

- Start and stop servers
- Start Managed Servers from the Administration Console
- Restart SSL
- Start Managed Servers in Admin mode

Home > Summary of Deployments > plato-discovery-service-1.0.0 > Summary of Deployments > Summary of Servers

Summary of Servers

Configuration **Control**

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.

Customize this table

Servers (Filtered - More Columns Exist)

Start | Resume | Suspend | Shutdown | Restart SSL

| Server | Machine | State | Status of Last Action |
|--------------------|--------------------|---------|-----------------------|
| AdminServer(admin) | | RUNNING | None |
| WLS_CONFIG | platoinfra_Machine | RUNNING | TASK COMPLETED |
| WLS_DISCOVERY | platoinfra_Machine | RUNNING | None |
| WLS_GATEWAY | platoinfra_Machine | RUNNING | TASK COMPLETED |
| WLS_ZIPKINUI | platoinfra_Machine | RUNNING | TASK COMPLETED |

Showing 1 to 5 of 5 Previous | Next

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

How do I...

- Start and stop servers
- Start Managed Servers from the Administration Console
- Restart SSL
- Start Managed Servers in Admin mode

Home > Summary of Deployments > plato-discovery-service-1.0.0 > Summary of Deployments > Summary of Servers

Server Life Cycle Assistant

Yes | No

Forcibly Shutdown Servers

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

- WLS_DISCOVERY

Yes | No

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...

- Start and stop servers
- Start Managed Servers from the Administration Console
- Restart SSL
- Start Managed Servers in Admin mode

Home > Summary of Deployments > plato-discovery-service-1.0.0 > Summary of Deployments > Summary of Servers

Summary of Servers

Configuration **Control**

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.

Customize this table

Servers (Filtered - More Columns Exist)

Start | Resume | Suspend | Shutdown | Restart SSL

| Server | Machine | State | Status of Last Action |
|--------------------|--------------------|------------------|-----------------------|
| AdminServer(admin) | | RUNNING | None |
| WLS_CONFIG | platoinfra_Machine | RUNNING | TASK COMPLETED |
| WLS_DISCOVERY | platoinfra_Machine | FORCE_SUSPENDING | TASK IN PROGRESS |
| WLS_GATEWAY | platoinfra_Machine | RUNNING | TASK COMPLETED |
| WLS_ZIPKINUI | platoinfra_Machine | RUNNING | TASK COMPLETED |

Showing 1 to 5 of 5 Previous | Next

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...

- Create Managed Servers
- Clone servers
- Delete Managed Servers
- Delete the Administration Server
- Start and stop servers

Home > Summary of Deployments > plato-discovery-service-1.0.0 > Summary of Deployments > 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.

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

| Name | Type | Cluster | Machine | State | Health | Listen Port |
|--------------------|------------|-------------------|--------------------|----------|---------------|-------------|
| AdminServer(admin) | Configured | | | RUNNING | OK | 7001 |
| WLS_CONFIG | Configured | config_cluster | platoinfra_Machine | RUNNING | OK | 7004 |
| WLS_DISCOVERY | Configured | discovery_cluster | platoinfra_Machine | SHUTDOWN | Not reachable | 7003 |
| WLS_GATEWAY | Configured | gateway_cluster | platoinfra_Machine | RUNNING | OK | 7006 |
| WLS_ZIPKINUI | Configured | zipkinui_cluster | platoinfra_Machine | RUNNING | OK | 7005 |

New | Clone | Delete

Showing 1 to 5 of 5 Previous | Next

- Once shutdown is completed, navigate to **Control** and select the servers to start and confirm action.

Summary of Servers

Configuration Control

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.

Customize this table

Servers (Filtered - More Columns Exist)

Start Resume Suspend Shutdown Restart SSL

| Server % | Machine | State | Status of Last Action |
|---|--------------------|----------|-----------------------|
| <input type="checkbox"/> AdminServer(admin) | | RUNNING | None |
| <input type="checkbox"/> WLS_CONFIG | platoinfra_Machine | RUNNING | TASK COMPLETED |
| <input checked="" type="checkbox"/> WLS_DISCOVERY | platoinfra_Machine | SHUTDOWN | TASK COMPLETED |
| <input type="checkbox"/> WLS_GATEWAY | platoinfra_Machine | RUNNING | TASK COMPLETED |
| <input type="checkbox"/> WLS_ZIPKINUI | platoinfra_Machine | RUNNING | TASK COMPLETED |

Showing 1 to 5 of 5 Previous Next

Server Life Cycle Assistant

Yes No

Start Servers

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

- WLS_DISCOVERY

Yes No

Messages

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

Summary of Servers

Configuration Control

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.

Customize this table

Servers (Filtered - More Columns Exist)

Start Resume Suspend Shutdown Restart SSL

| Server % | Machine | State | Status of Last Action |
|---|--------------------|----------|-----------------------|
| <input type="checkbox"/> AdminServer(admin) | | RUNNING | None |
| <input type="checkbox"/> WLS_CONFIG | platoinfra_Machine | RUNNING | TASK COMPLETED |
| <input checked="" type="checkbox"/> WLS_DISCOVERY | platoinfra_Machine | STARTING | TASK IN PROGRESS |
| <input type="checkbox"/> WLS_GATEWAY | platoinfra_Machine | RUNNING | TASK COMPLETED |
| <input type="checkbox"/> WLS_ZIPKINUI | platoinfra_Machine | RUNNING | TASK COMPLETED |

Showing 1 to 5 of 5 Previous Next

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

Home > Summary of Deployments > plato-discovery-service-1.0.0 > Summary of Deployments > 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.

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 5 of 5 Previous | Next

| Name | Type | Cluster | Machine | State | Health | Listen Port |
|--------------------|------------|-------------------|--------------------|---------|--------|-------------|
| AdminServer(admin) | Configured | | | RUNNING | OK | 7001 |
| WLS_CONFIG | Configured | config_cluster | platoinfra_Machine | RUNNING | OK | 7004 |
| WLS_DISCOVERY | Configured | discovery_cluster | platoinfra_Machine | RUNNING | OK | 7003 |
| WLS_GATEWAY | Configured | gateway_cluster | platoinfra_Machine | RUNNING | OK | 7006 |
| WLS_ZIPKINUI | Configured | zipkinui_cluster | platoinfra_Machine | RUNNING | OK | 7005 |

New Clone Delete Showing 1 to 5 of 5 Previous | Next

Home > Summary of Deployments > plato-discovery-service-1.0.0 > Summary of Deployments > 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

| Name | State | Health | Type | Targets | Scope | Domain Partitions | Deployment Order |
|-------------------------------|--------|--------|-----------------|---------------|--------|-------------------|------------------|
| plato-discovery-service-1.0.0 | Active | OK | Web Application | WLS_DISCOVERY | Global | | 100 |

Install Update Delete Showing 1 to 1 of 1 Previous | Next

11. Deployments

11.1 Retail Operations Processes

Below are the list of Conductor based processes which have to be deployed for the Retail Operations.

| Serial Number | Process Name | Dependent process |
|---------------|-----------------------------------|-------------------|
| 1 | OBPY-PARTY-ONBOARDING-PROCESSFLOW | None |
| 2 | OBPY-PARTY-AMENDMENT-PROCESSFLOW | None |
| 3 | CURRENTACCOUNT | None |
| 4 | EDUCATIONLOAN | None |
| 5 | HOMELOAN | None |
| 6 | INITIATION | None |
| 7 | PERSONALLOAN | None |
| 8 | SAVINGSACCOUNT | None |
| 9 | VEHICLELOAN | None |

11.2 Updating the process

Before deploying the process the following section to be updated with the server ip/port for the end points used in the process.

For each process, open the process to find for "http_request" and modify the following in the uri.

```
"uri": "http://{{PROCESS_SERVER_HOST}}:{{PROCESS_SERVER_PORT}}/"
```

{{PROCESS_SERVER_HOST}} - IP of the Conductor server.

{{PROCESS_SERVER_PORT}} - Port of the Conductor server

11.3 Steps to Deploy Conductor Process

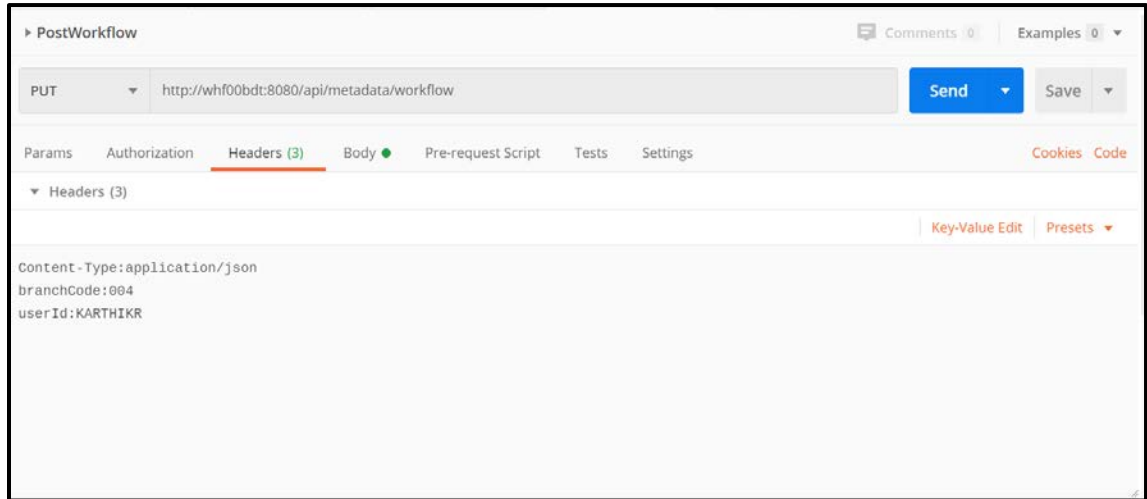


Note the following:

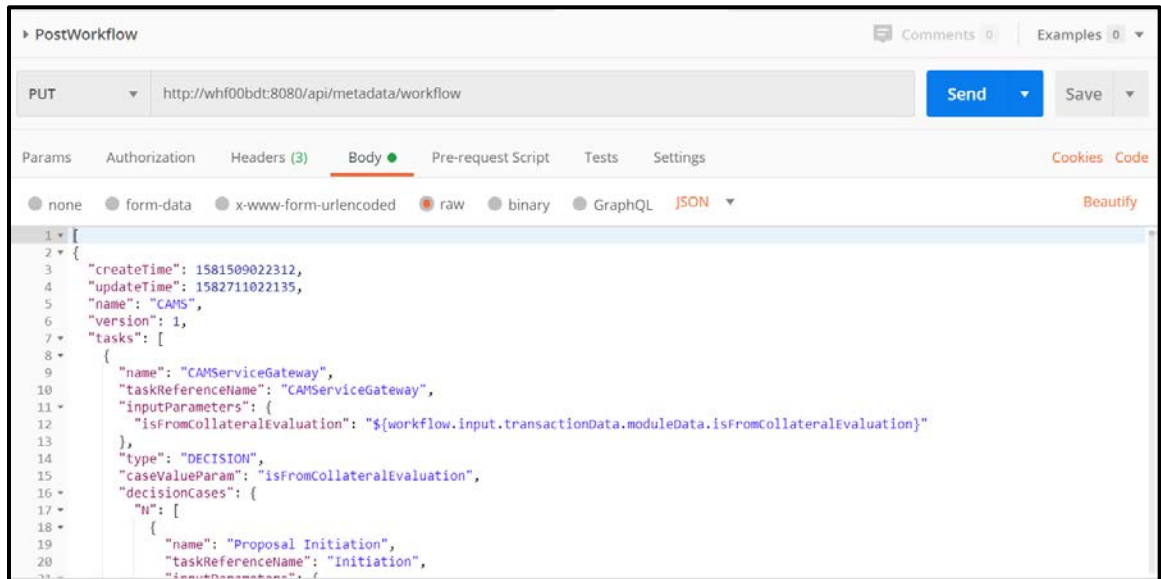
Server names, Domain names need not to be same as this doc provides.

Steps to Deploy a process remains the same for all the process files.

1. Launch Postman.
2. Create a new Request (if not done already) and select **POST** method. If the process flow is already deployed and if you want to update it, then the method should be "PUT".
3. Input the header params as shown below:



4. Paste the body of the message with the content from the process file.



5. Click **Send**. Response status **204** returned from server.

PUT http://whf00bdt:8080/api/metadata/workflow

```
1022 * "inputParameters": [  
1023   "partyId",  
1024   "applicationNumber",  
1025   "customerName"  
1026 ],  
1027 * "outputParameters": {  
1028   "rejectionRemarks": "${humantask_apprv_corp_loan.output.rejectionRemarks}",  
1029   "loanGrantStatus": "${humantask_apprv_corp_loan.output.loanGrantStatus}",  
1030   "emailStatus": "${CNFRM_CORP_LOAN.output.emailStatus}"  
1031 },  
1032 "schemaVersion": 2,  
1033 "restartable": true,  
1034 "workflowStatusListenerEnabled": false  
1035 ]]  
1036 ]
```

Body Cookies Headers (6) Test Results Status: 204 No Content Time: 309ms Size: 281 B Save Response

Pretty Raw Preview Visualize JSON

1

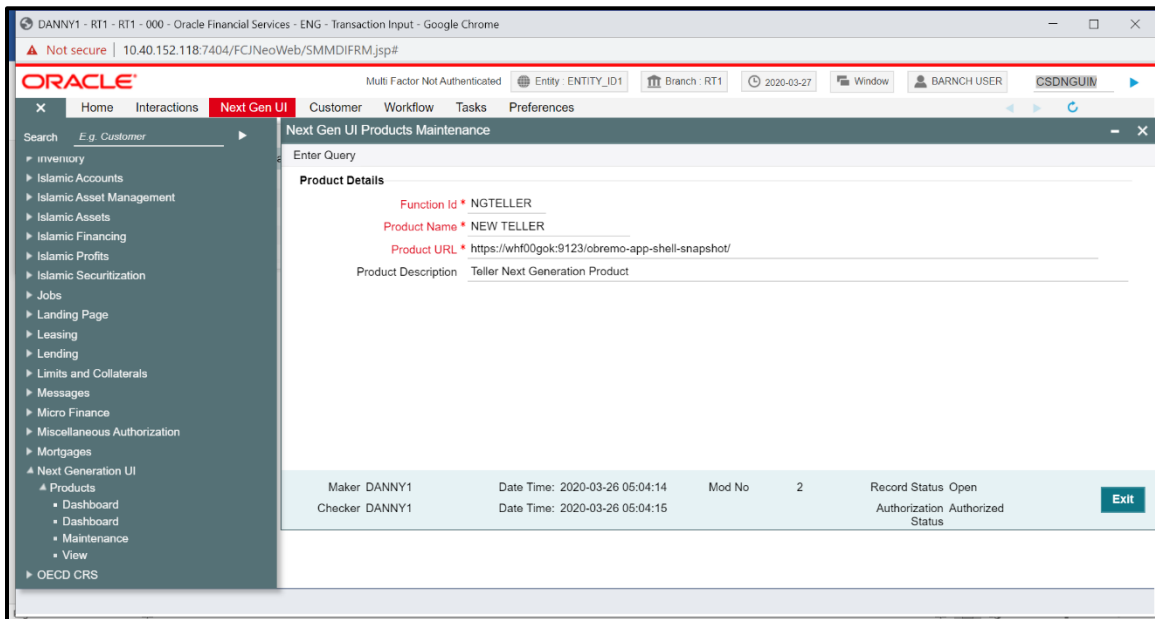
12.Launching Retail Operations from UBS

12.1 Introduction

In this section you are going to setup database related configuration for OBREMO Installation. It is recommended to create different schema for each application. Below setup is designed to work with separate schema for each application.

12.2 FCUBS Configurations

After Login to FCUBS environment click on **Next Generation UI** Menu and launch the maintenance screen **CSDNGUIM**. Ensure that user has roles for the screen. Update the Plato Product URL



A new Function id **NGTELLER** is released as Static Data and Ensure user roles has been maintained for the same. Once the roles are maintained Click **Next Gen UI** on tool bar. **Next Gen UI Dashboard** will be displayed with the list of products. Click **Retail** product, which will Launch **Plato Teller Dash Board**. Ensure the same user id is maintained in for the retail product and it has necessary roles.

12.3 PLATO Configurations

SECURITY_CONFIG table in **PLATO_SECURITY** schema should have the following entries.

| Key | Value |
|--------------------------|---|
| INTEGRATION_ENABLED | True |
| INTEGRATION_CALLBACK_URL | https://FCUBShostname:FCUBSport/FCJNeoWeb/ValidationService/FCNonceValidation/validate |

Please update the FCUBS hostname and port number in the above URL.

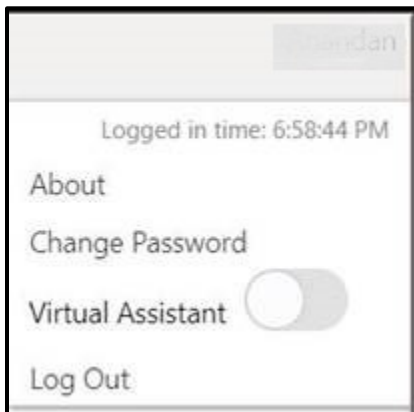
13.Oracle Digital Assistant Configuration

13.1 Introduction

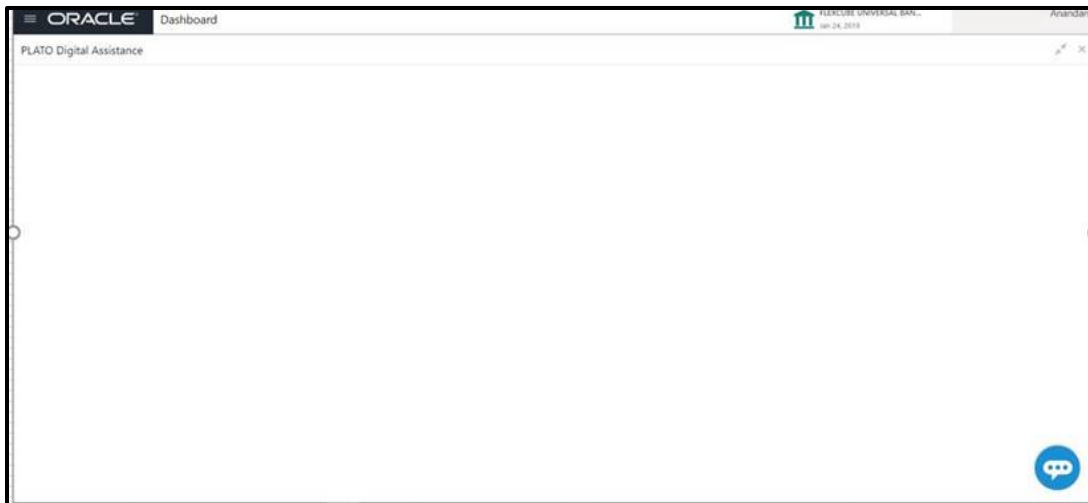
Retail Operations has to interface with Oracle Digital Assistance(ODA) for Chatbot use cases. To address above requirement, the Plato Digital Assistant wizard CCA is having configuration to connect to ODA. This wizard contain enabling of Oracle Digital Assistant's Client SDK for JavaScript to add live messaging to web application.

13.2 Plato Setup

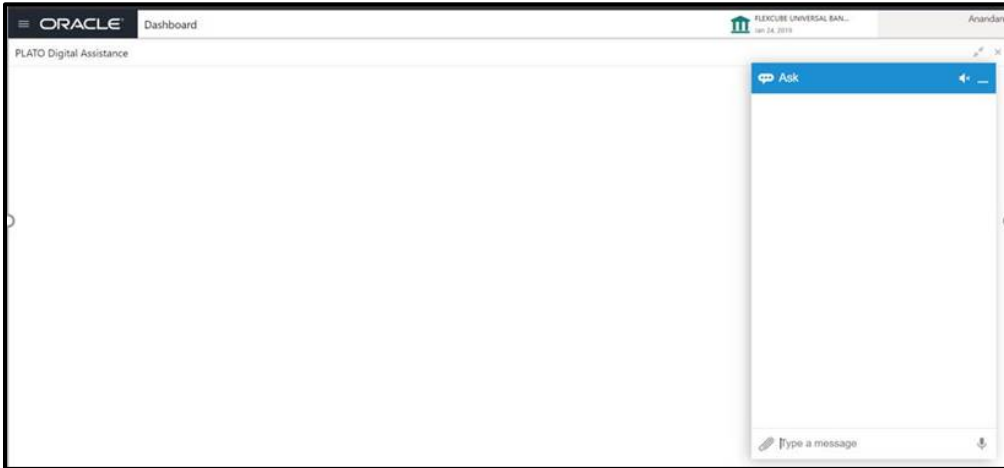
A switch is added in user info panel, to enable/disable Digital Assistance.



A new wizard will be launched with initialization of web-sdk.



Web-sdk will display chat bot icon, which can be used for communication with Oracle Digital Assistant's Server.



13.3 PLATO Configurations

PRODUCT_SERVICES_CTX_LEDGER table in PLATOUI schema should have the following entries.

| Key | Value |
|----------------------|---|
| Product Name | ODA |
| Service Name | odaservice |
| Service Context Path | /api-gateway/ |
| Header App Id | URI,ChannelId and SECRET values to be fetched from ODA server configured to communicate with ODA client i.e web-sdk. values to be fetched from ODA server configured to communicate with ODA client i.e web-sdk. isODA flag needs to be set to "Y" in order to enable chatbot wizard. |

PRODUCT_SERVICES_ENV_LEDGER table in PLATO schema should have the following entries.

| Key | Value |
|--------------|---|
| Product Name | ODA |
| URL | https://hostname:platodiscoveryport/ |

Please update the hostname and port number in the above URL.



Retail Operations Installation Guide

[August] [2020]

Version 14.4.0.1.0

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