

Oracle Utilities Customer Self Service

Whitepaper:
Installing a Managed Server
for Custom Portals

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Whitepaper: Installing a Custom Portal Managed Server

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Overview

This whitepaper describes the steps required to create a new domain and Managed Servers to deploy OUCSS Portal applications in a WebLogic 11g environment.

Additional Resources

For additional details on functionality and procedures described in this document, see the *Oracle Utilities Customer Self Service Installation Guide* and the *Oracle Utilities Customer Self Service Implementation Guide*. Both documents are available on the Oracle Technology Network (OTN) in the Oracle Utilities Documentation section (<http://www.oracle.com/technetwork/documentation/utilities-155272.html>), expand **Oracle Utilities Customer Self Service**, then choose **View Library** or **Download** part number E36170-01).

Abbreviations

CCB - Oracle Utilities Customer Care and Billing

MDM - Oracle Utilities Meter Data Management

DDL – Data Definition Language

MDS – Metadata Services

OUCSS – Oracle Utilities Customer Self Service

NMS – Network Management System

Preparation and Procedures

Software Requirements

Please refer to the Oracle® Utilities Customer Self Service Installation Guide for product-specific versions and the current patch level.

Pre-Installation Tasks and Requirements

The following tasks should be completed or requirements confirmed before applying the procedures in this document.

- Install WebLogic 10.3.6 and WebCenter PS5 (11.1.1.6.0) components.
- Use the Oracle Fusion Middleware Repository Creation Utility 11g (11.1.1.6.0) for Linux/Windows to create the WebCenter portal schemas (MDS, ACTIVITIES, and WEBCENTER) which will be used to create the domain for the OUCSS Portal. (For information on how to create WebCenter Portal schemas, refer to RCU documentation on the Oracle Technology Network at http://docs.oracle.com/cd/E12839_01/doc.1111/e14259/overview.htm).

Assumptions

- The Portal is built using the “WebCenter Portal Application” template.
- A new domain is created to Install the Portal.
- WebCenter Portal schemas (MDS, ACTIVITIES, and WEBCENTER) are created using RCU.

Configure the Portal Domain

The following steps describe how to create a domain using the WebCenter Portal Framework template.

Creating the Domain

To configure and create a new domain for an OUCSS Portal:

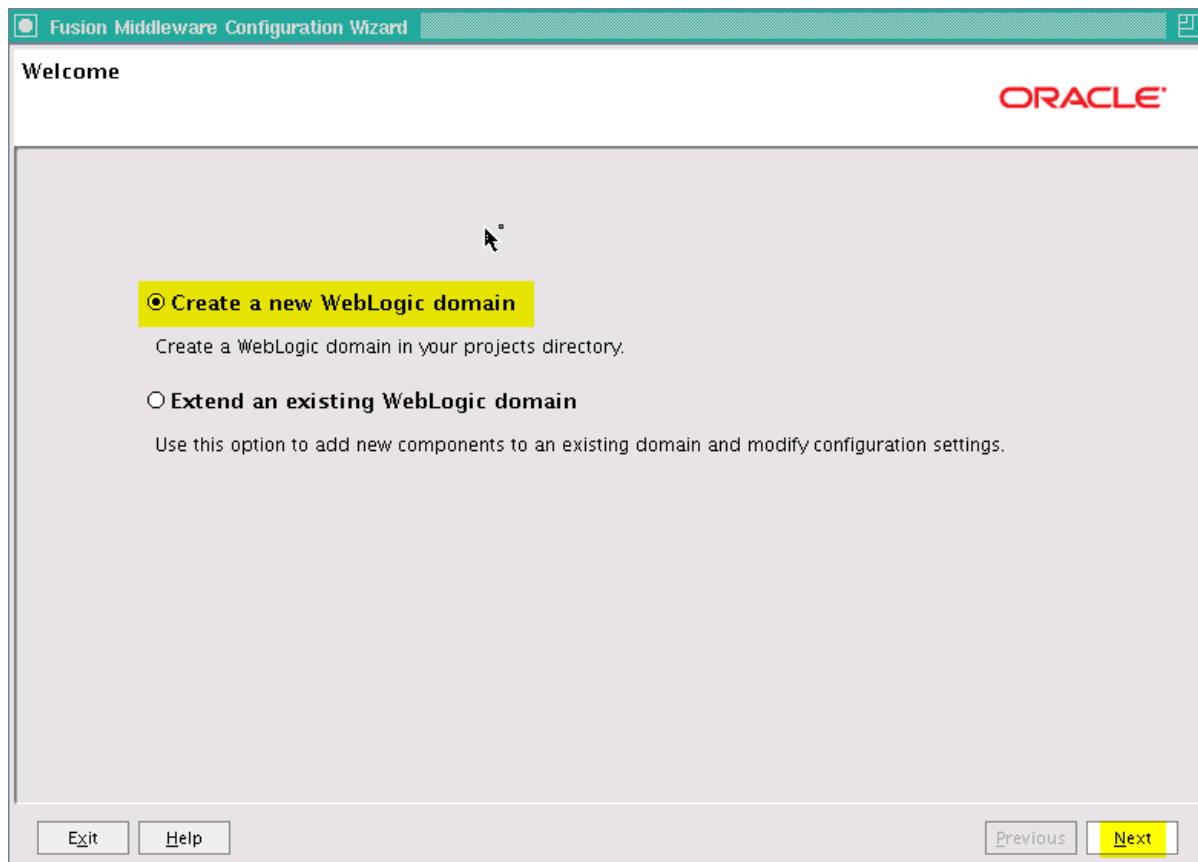
- 1 Set the environment variable MW_HOME to Middleware home:

```
export MW_HOME=/OUCSS/WebcenterPortal (Linux)
set MW_HOME=C:\OUCSS\WebcenterPortal (Windows)
```
- 2 Navigate to MW_HOME:

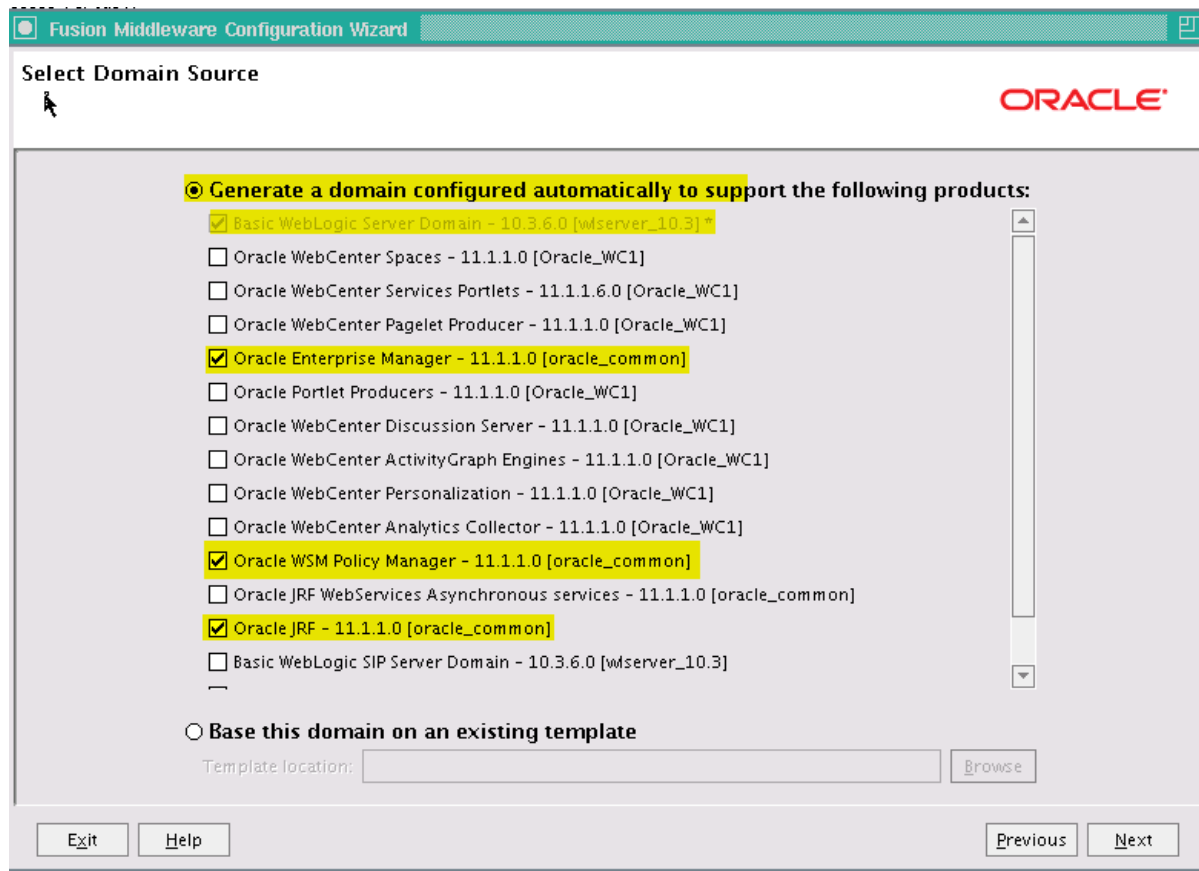
```
cd $MW_HOME/wlserver_10.3/common/bin (Linux)
cd %MW_HOME%\wlserver_10.3\common\bin (Windows)
```

Where MW_HOME is WebCenter Portal installed Location
- 3 Run WebLogic configuration wizard:

```
./config.sh (Linux)
./config.cmd (Windows)
```
- 4 In the configuration wizard, choose “Create a new WebLogic domain”. You can also extend an existing domain by choosing the “Extend an existing Weblogic domain” option. After making your selection, click **Next**.



- 5 Choose “Generate a domain configured automatically to support following products:” option to create a base WebLogic domain and then choose the required components as shown. Click **Next** to continue.

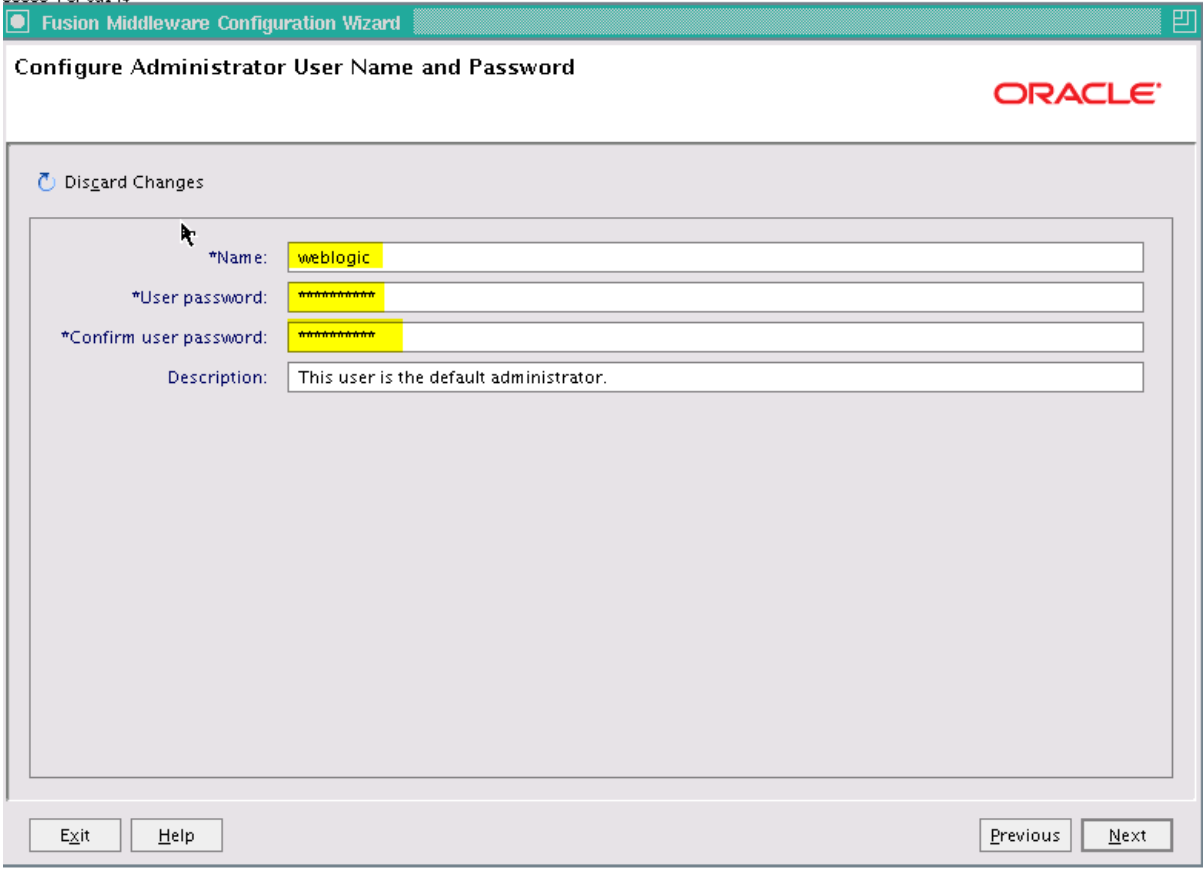


6 Specify a domain name and location.

The screenshot shows the 'Specify Domain Name and Location' window of the Fusion Middleware Configuration Wizard. The window has a title bar with 'Fusion Middleware Configuration Wizard' and a close button. The main area contains the Oracle logo in the top right and the instruction 'Enter the name and location for the domain and its applications:'. Below this, there are three input fields: 'Domain name:' with the text 'portal_domain', 'Domain location:' with the text '/spl/OUCSS/WebcenterPortal/user_projects/domains', and 'Application location:' with the text '/spl/OUCSS/WebcenterPortal/user_projects/applications'. Each location field has a 'Browse' button to its right. At the bottom of the window, there are four buttons: 'Exit', 'Help', 'Previous', and 'Next'.

Note: The Configuration Wizard will show the default Domain and Application locations in Windows/Linux when the Domain name is provided.

7 Configure the Administrator credentials.



The screenshot shows a window titled "Fusion Middleware Configuration Wizard" with a sub-header "Configure Administrator User Name and Password" and the Oracle logo. A "Discard Changes" link is visible. The form contains four input fields: "*Name:" with the value "weblogic", "*User password:" with masked characters, "*Confirm user password:" with masked characters, and "Description:" with the text "This user is the default administrator." At the bottom are buttons for "Exit", "Help", "Previous", and "Next".

Fusion Middleware Configuration Wizard

Configure Administrator User Name and Password

ORACLE

Discard Changes

*Name: weblogic

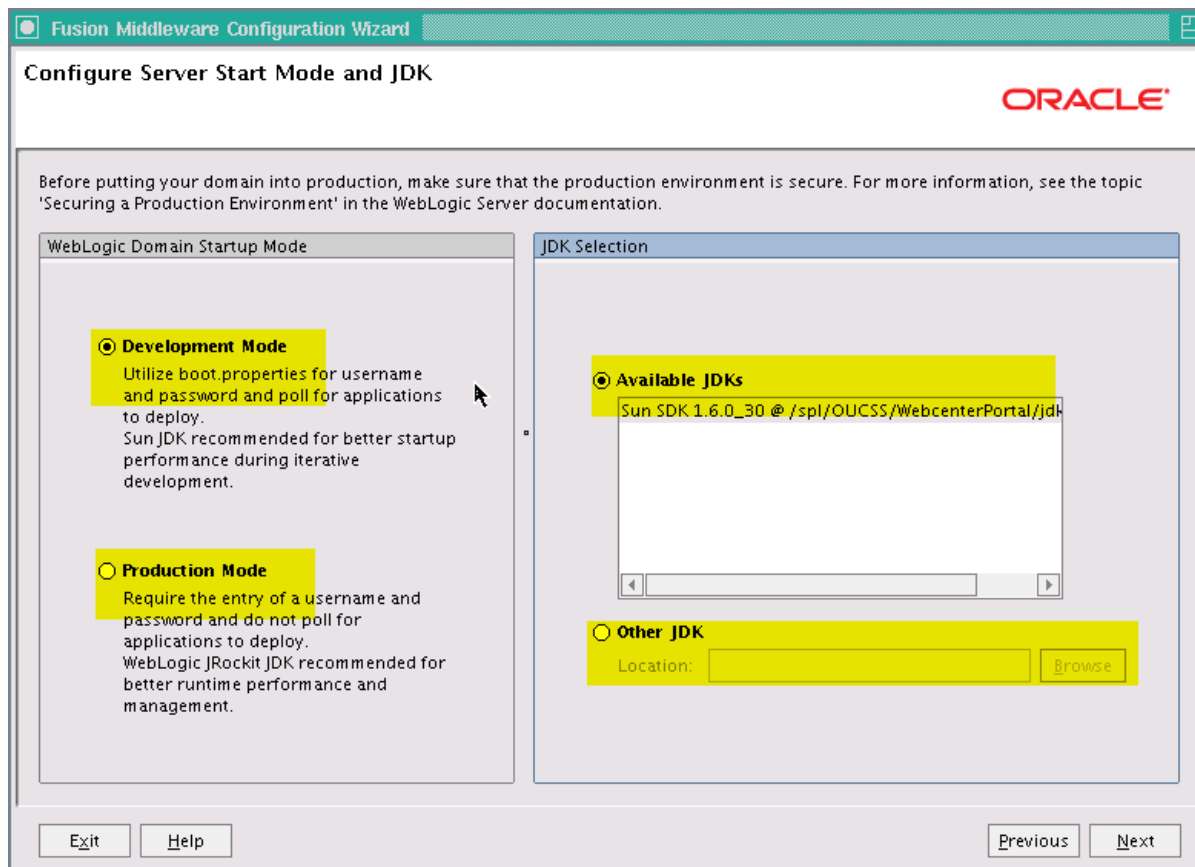
*User password: *****

*Confirm user password: *****

Description: This user is the default administrator.

Exit Help Previous Next

- 8 Configure the Server Start Mode and JDK to be applied to the domain. For production environment, choose “Production Mode”.



- 9 Configure the JDBC schema. This step is used to configure the MDS Schema that was created by running the Repository Creation Utility (RCU) as part of the Pre-Installation Tasks.

Fusion Middleware Configuration Wizard

Configure JDBC Component Schema

ORACLE

Note: Change only the input fields below that you wish to modify and values will be applied to all selected rows.

Vendor: DBMS/Service:

Driver: Host Name:

Schema Owner: Port:

Schema Password:

RAC configuration for component schemas:

☐ Convert to GridLink ☐ Convert to RAC multi data source ☐ Don't convert

	Component Schema	DBMS/Service	Host Name	Port	Schema Owner	Schema Password
☒	OWSM MDS Schema			1521	QAPS5PORTAL_MDS	*****

Fusion Middleware Configuration Wizard

Test JDBC Component Schema

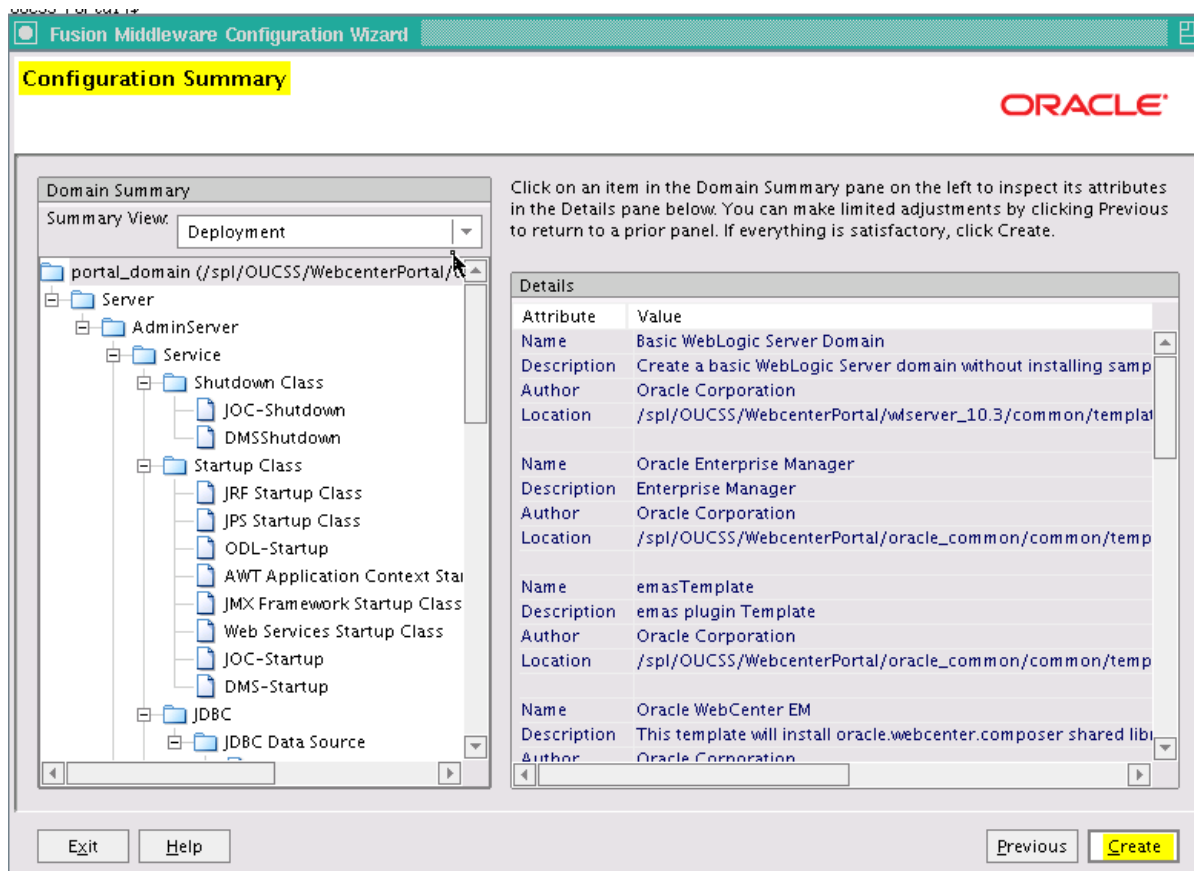
ORACLE

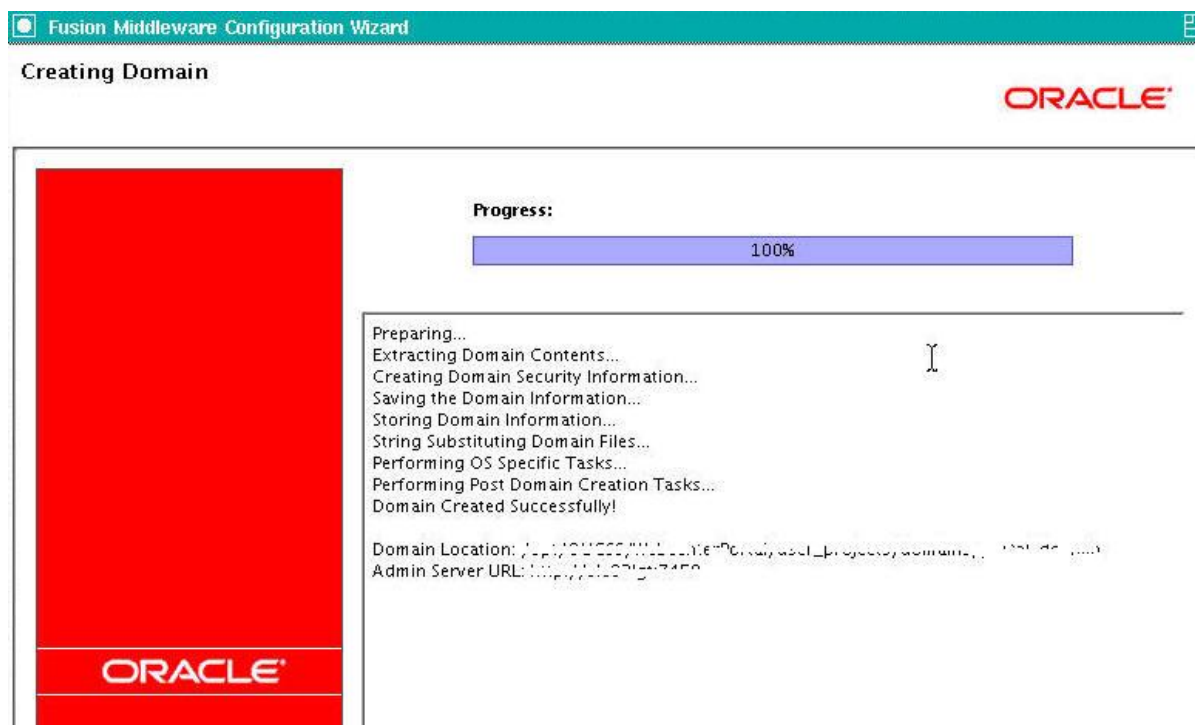
Status	Component Schema	JDBC Connection URL
☒	OWSM MDS Schema	jdbc:oracle:thin:@s:1521:s.oracle.com:1521/QAPS5PORTAL_MDS

Connection Result Log

Note: After completing this step, perform the optional Configuration and configure the administration server, depending upon your environment setup.

10 Confirm the configuration details, and then click **Create** to create the domain.

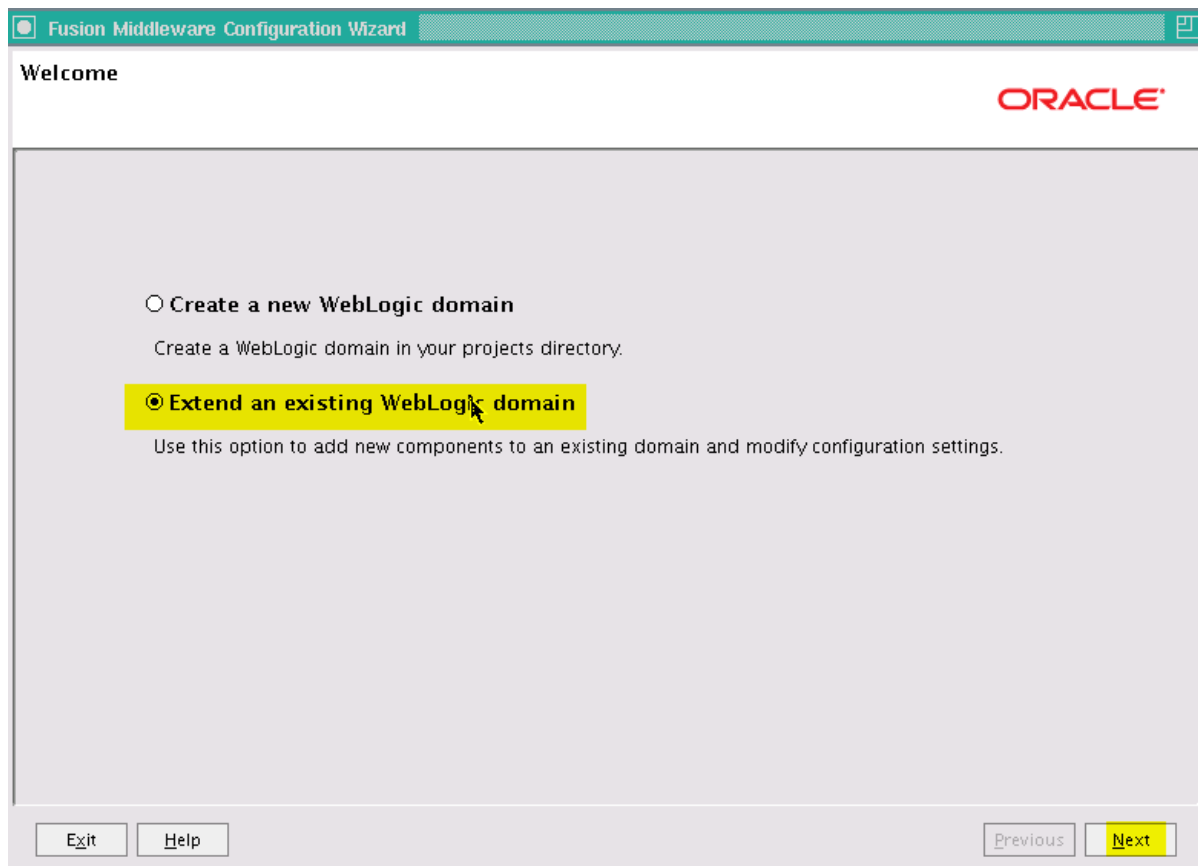




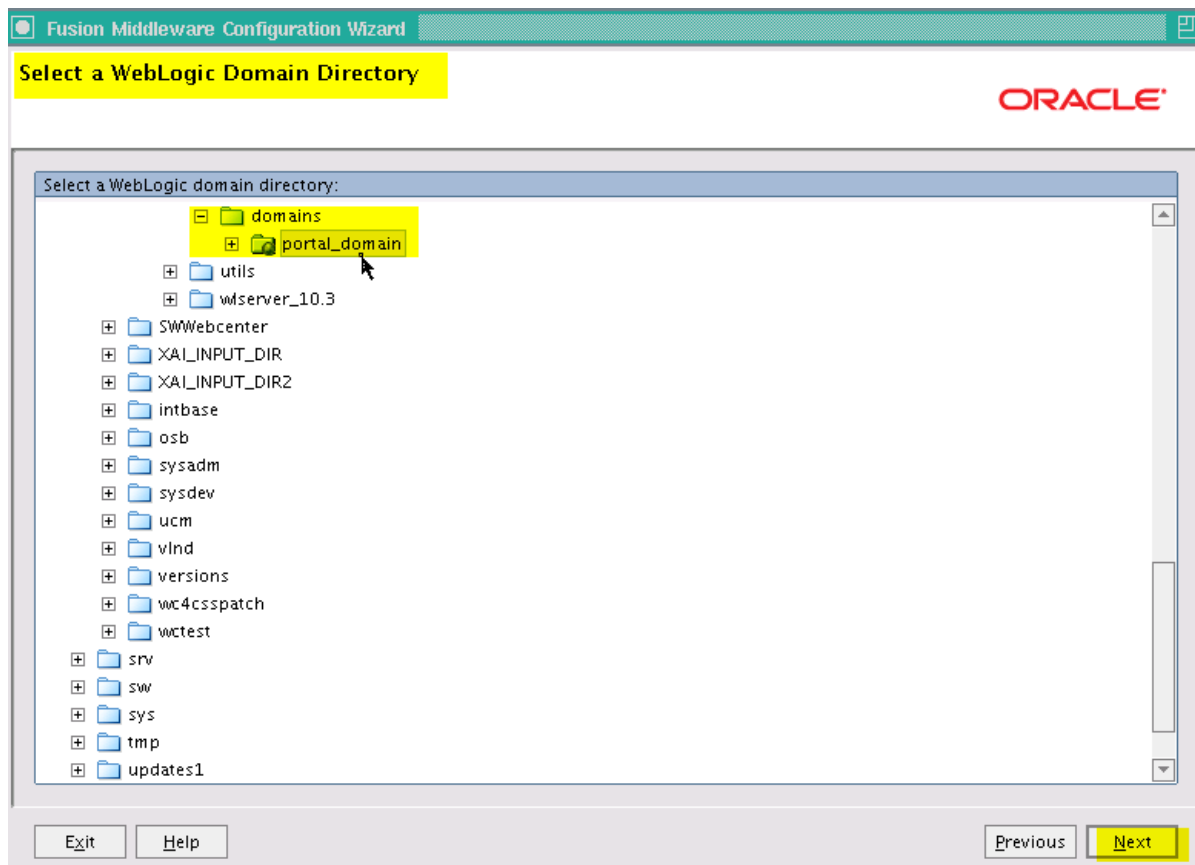
Progress bar indicating that the domain is successfully created.

Extend the Domain Using the Portal Template

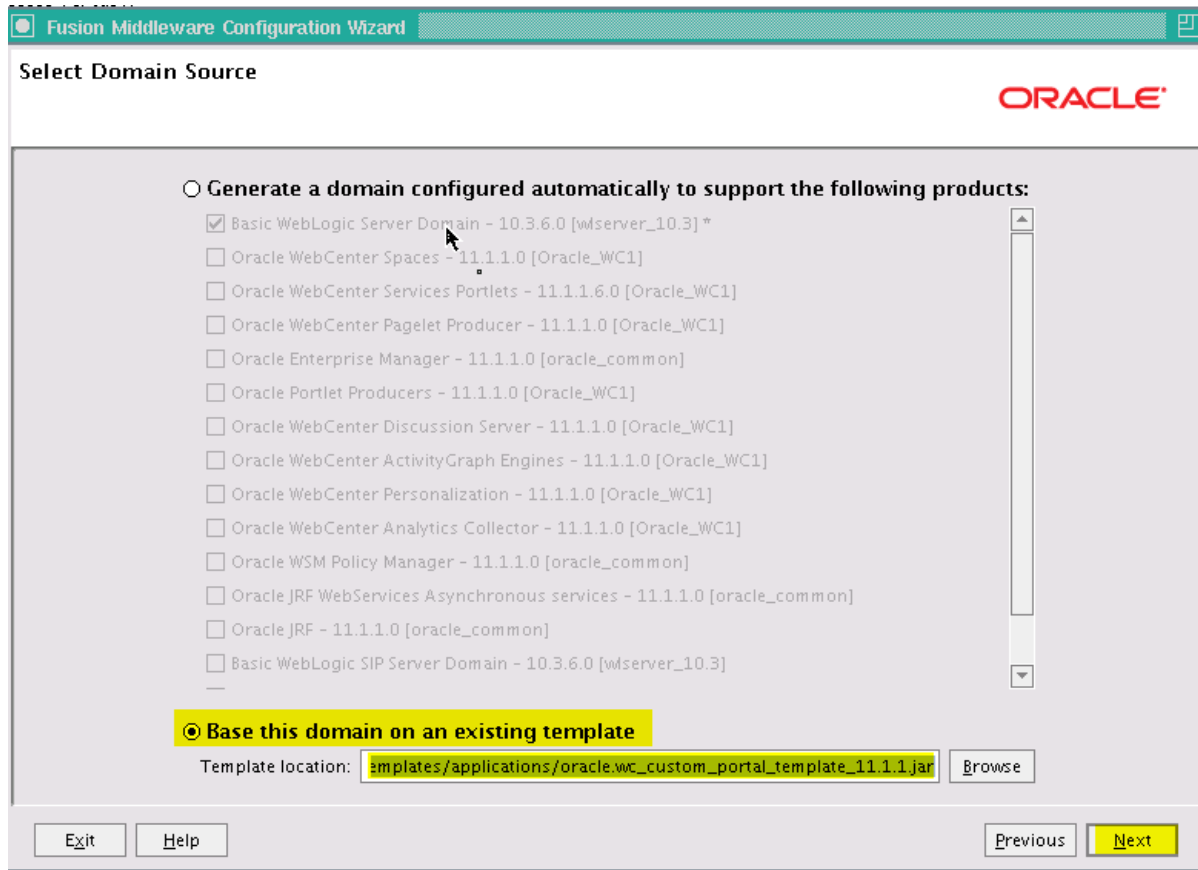
- 1 Run the WebLogic Configuration again to extend the domain and create a managed server for your custom portal.
- 2 Choose the “Extend an existing WebLogic domain” option on the **Welcome** screen, and then click **Next**.



- 3 Locate and select domain name (for e.g. **portal_domain**) from the domain directory tree, then click **Next**.



- 4 Choose “Base this domain on an existing template” option on the **Select Domain Source** screen, then browse for and select
\$MW_HOME/Oracle_WC1/common/templates/applications/oracle.wc_custom_portal_template_11.1.1.jar.



- 5 Configure the JDBC Component Schema with values relating to WebCenter, then click **Next**. This step is used to configure Webcenter schemas that were created using the Repository Creation Utility (RCU) as part of the Pre-Installation Tasks.

Fusion Middleware Configuration Wizard

Configure JDBC Component Schema

ORACLE

Note: Change only the input fields below that you wish to modify and values will be applied to all selected rows.

Vendor: DBMS/Service:

Driver: Host Name:

Schema Owner: Port:

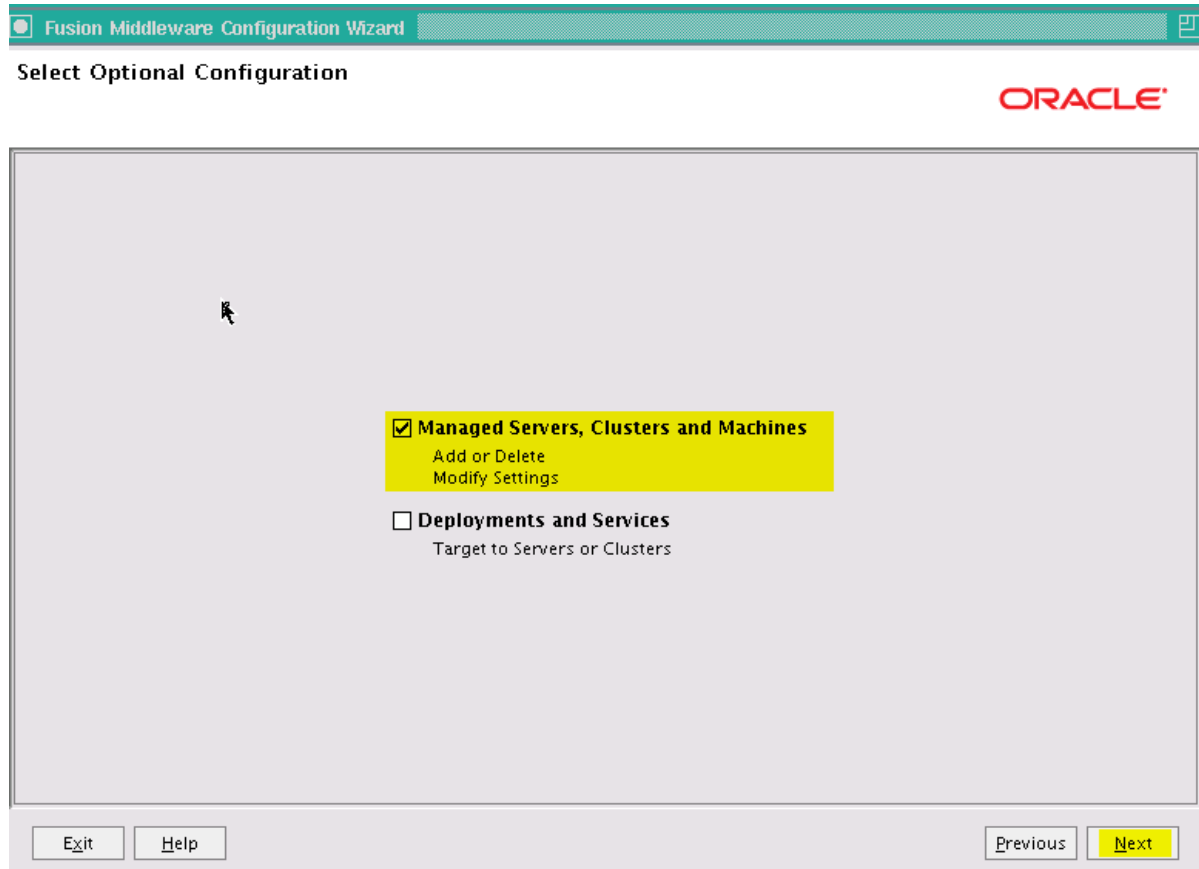
Schema Password:

RAC configuration for component schemas:

☐ Convert to GridLink ☐ Convert to RAC multi data source ☐ Don't convert

	Component Schema	DBMS/Service	Host Name	Port	Schema Owner	Schema Password
☐	Custom Portal Activities Schem		us.oracle.	1521	QAPSSPORTAL_ACT	*****
☐	Custom Portal WebCenter Sche		us.oracle.	1521	QAPSSPORTAL_WEB	*****
☒	Custom Portal MDS Schema		us.oracle.	1521	QAPSSPORTAL_MDS	*****
☐	OWSM MDS Schema		us.oracle.	1521	QAPSSPORTAL_MDS	*****

- 6 Choose “Managed Servers, Clusters, and Machines” to configure the managed server, and then click **Next**.



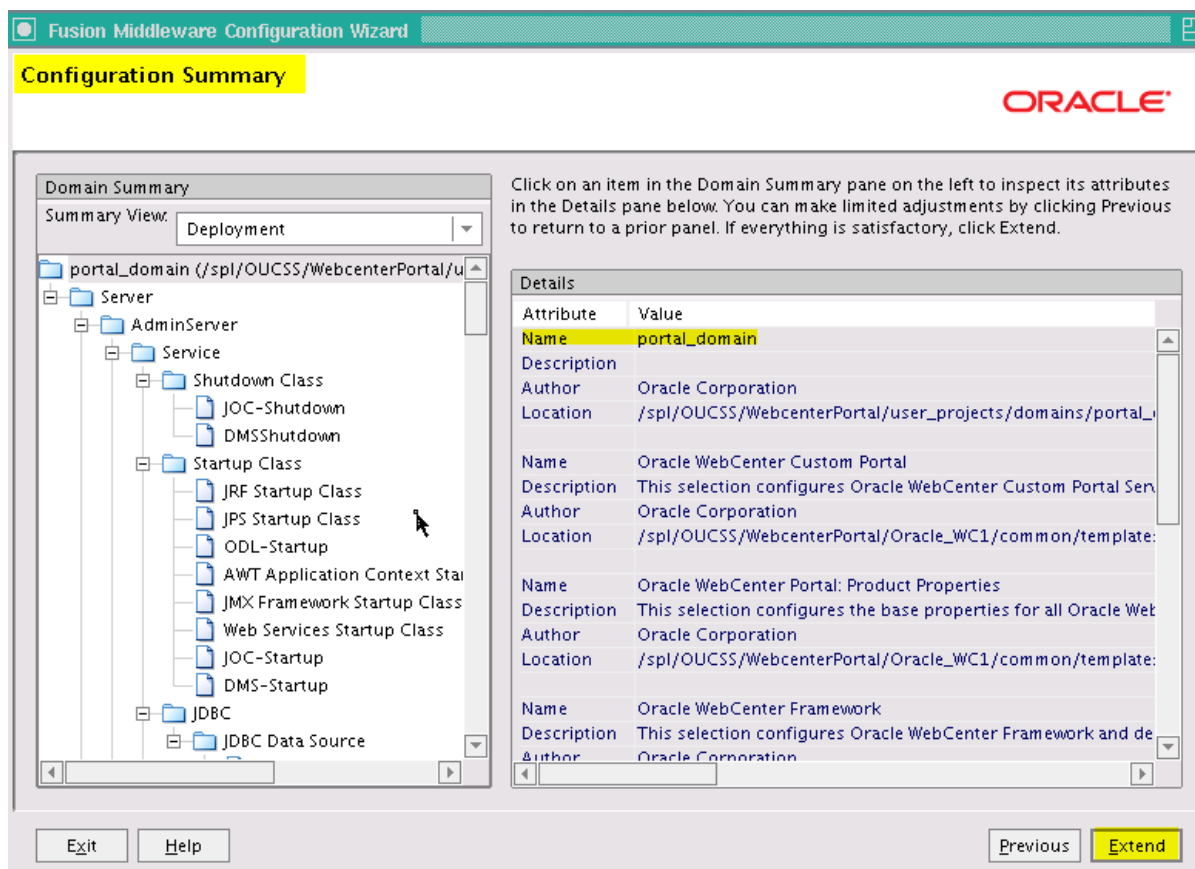
7 Configure the Managed server.

The screenshot shows the 'Configure Managed Servers' window of the Fusion Middleware Configuration Wizard. The window has a title bar 'Fusion Middleware Configuration Wizard' and an Oracle logo in the top right. Below the title bar is a yellow header 'Configure Managed Servers'. The main area contains a toolbar with 'Add', 'Delete', and 'Discard Changes' buttons, and a 'Switch Display' button. Below the toolbar is a table with the following columns: 'Name*', 'Listen address*', 'Listen port', 'SSL listen port', and 'SSL enabled'. The table has one row with the following values: '1 WC_CustomPortal', 'All Local Addresses', '9000', 'N/A', and an unchecked checkbox. At the bottom of the window are 'Exit', 'Help', 'Previous', and 'Next' buttons.

Name*	Listen address*	Listen port	SSL listen port	SSL enabled
1 WC_CustomPortal	All Local Addresses	9000	N/A	☐

Note: After this step is completed, Configure Machines/clusters and assign servers, depending on your environment.

8 Confirm the configuration details and click **Extend** to extend the domain.



- 9 Confirm that the managed server is created and start the servers to verify that the managed server is running fine, as shown in the following image.

The screenshot shows the Oracle WebLogic Server Administration Console. The left sidebar contains the 'Change Center' and 'Domain Structure' panels. The 'Domain Structure' panel shows a tree view with 'portal_domain' expanded, showing sub-nodes like Environment, Deployments, Services, Security Realms, Interoperability, and Diagnostics. The 'How do I...' panel lists tasks such as 'Create Managed Servers', 'Clone Servers', 'Delete Managed Servers', 'Delete the Administration Server', and 'Start and stop servers'.

The main content area is titled 'Summary of Servers' and includes a 'Configuration' tab. Below the tab, there is a description of a server and a table of servers. The table is titled 'Servers (Filtered - More Columns Exist)' and shows two servers: 'AdminServer(admin)' and 'WC_CustomPortal'. The 'WC_CustomPortal' server is highlighted with a red border, indicating it is running. The table columns are Name, Cluster, Machine, State, Health, and Listen Port.

	Name	Cluster	Machine	State	Health	Listen Port
☐	AdminServer(admin)		...	RUNNING	OK	...
☐	WC_CustomPortal		...	RUNNING	OK	...