

Oracle Utilities Customer Self Service

Whitepaper: Installing a Managed Server for Custom Portals

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Chapter 1

Overview

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

Additional Resources

This document and related documentation is subject to revision and updating. For the most recent versions of documentation relating to this produce, as well as information on functionality and known issues for other Oracle products that may be required for installation and proper functionality of this product, check the Oracle Utilities Customer Self Service section of the [Oracle Utilities Documentation](http://www.oracle.com/technetwork/apps-tech/utilities/documentation/index.html) area on the Oracle Technology Network (OTN) web site (<http://www.oracle.com/technetwork/apps-tech/utilities/documentation/index.html>).

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

MW_HOME – Middleware home.

Chapter 2

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 into MW_HOME.

Install WebCenter PS6 (11.1.1.8.0) components into MW_HOME. To know more about Installing WebCenter Components refer to documentation on OTN http://docs.oracle.com/cd/E29542_01/install.1111/e12001/install.htm#CHDHCJEC.

Use the Oracle Fusion Middleware Repository Creation Utility 11g (11.1.1.8.0) for Linux/Windows to create the WebCenter portal schemas that will be used to create the domain for the OUCSS Portal and OUCSS Portlets Producer. (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).

Configure the Domain OUCSS Portal

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

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.

Creating the Domain

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

- 1 Set the environment variable MW_HOME to Middleware home (where WebLogic and WebCenter Components are installed).

Example:

```
export MW_HOME=/OUCSS/Oracle/Middleware/PS6 (Linux)
set MW_HOME=C:\OUCSS\Oracle\Middleware\PS6 (Windows)
```

- 2 Navigate to MW_HOME:

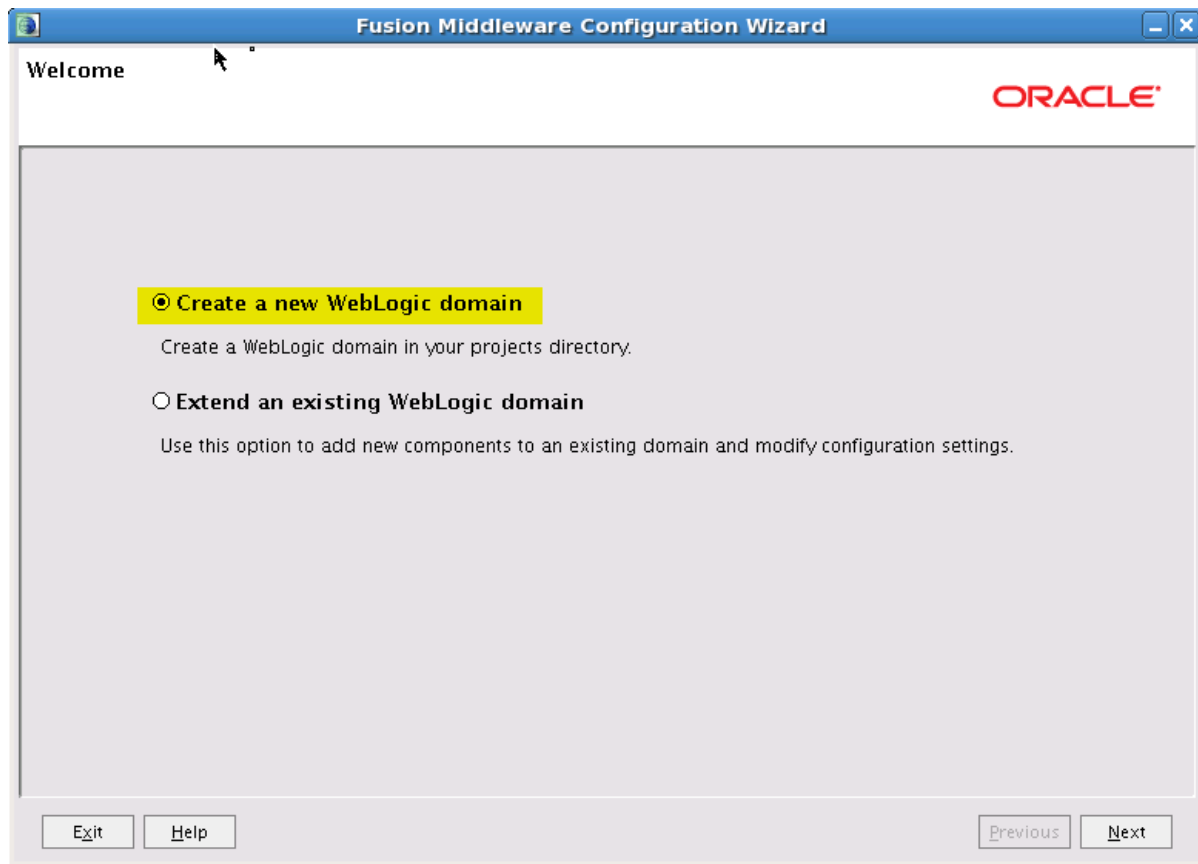
Example:

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

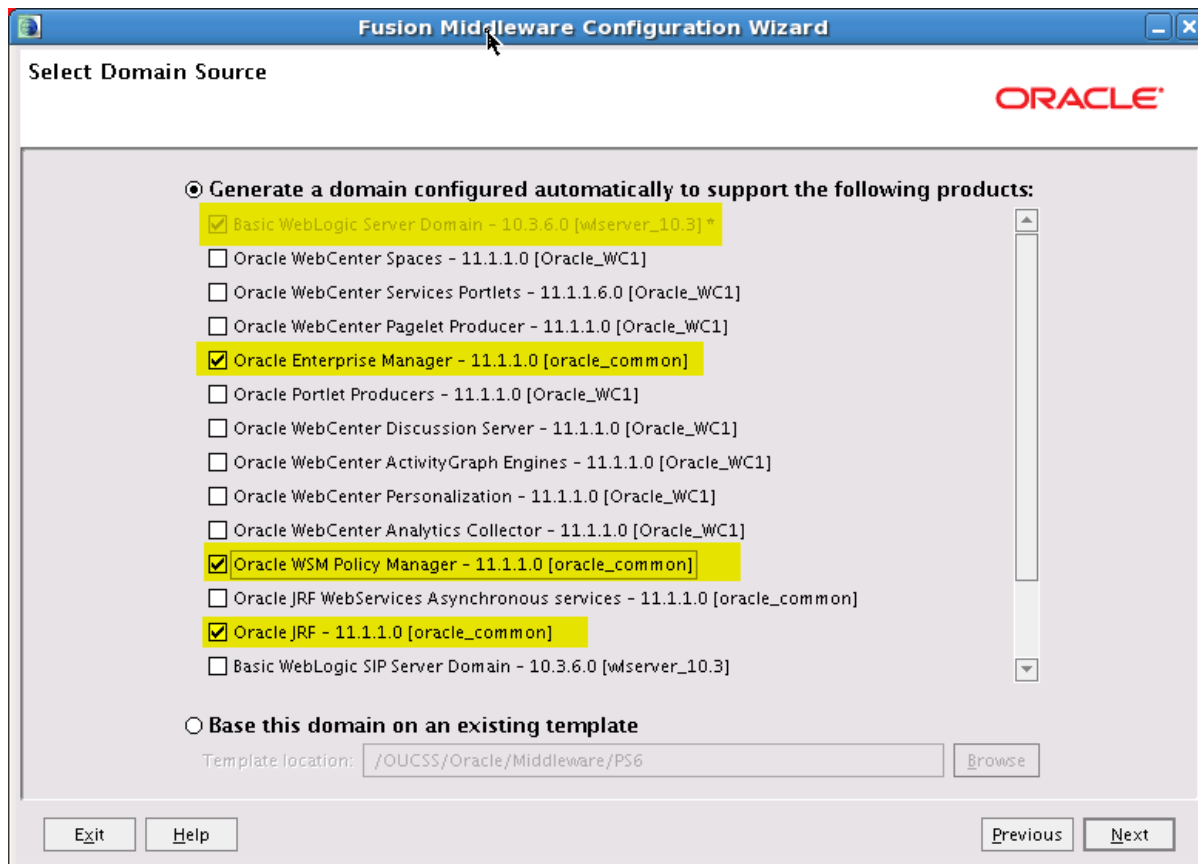
- 3 Run the WebLogic configuration wizard:

```
./config.sh (Linux)
./config.cmd (Windows)
```

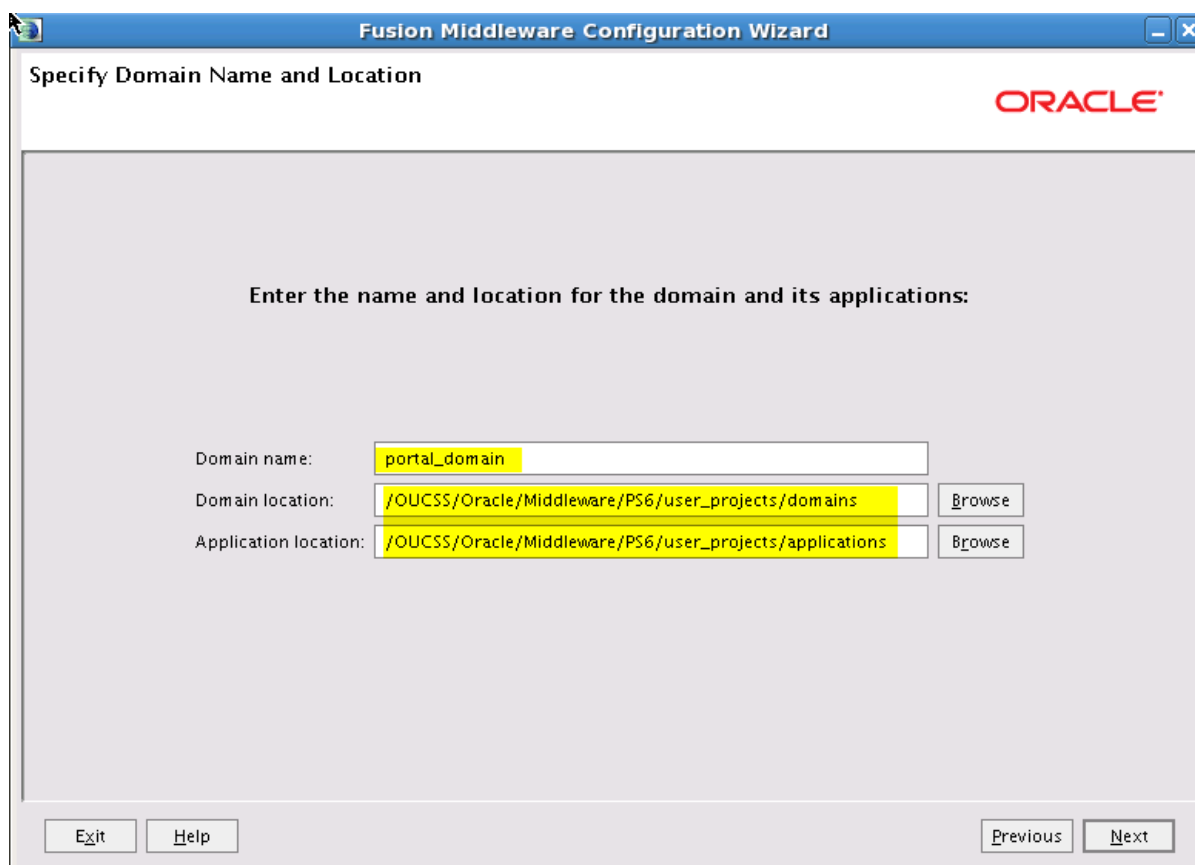
- 4 In the configuration wizard, choose “Create a new WebLogic domain”. You can also extend an existing domain by choosing the “Extend an existing Weblogic domain” option. After making your selection, click **Next**.



- 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.



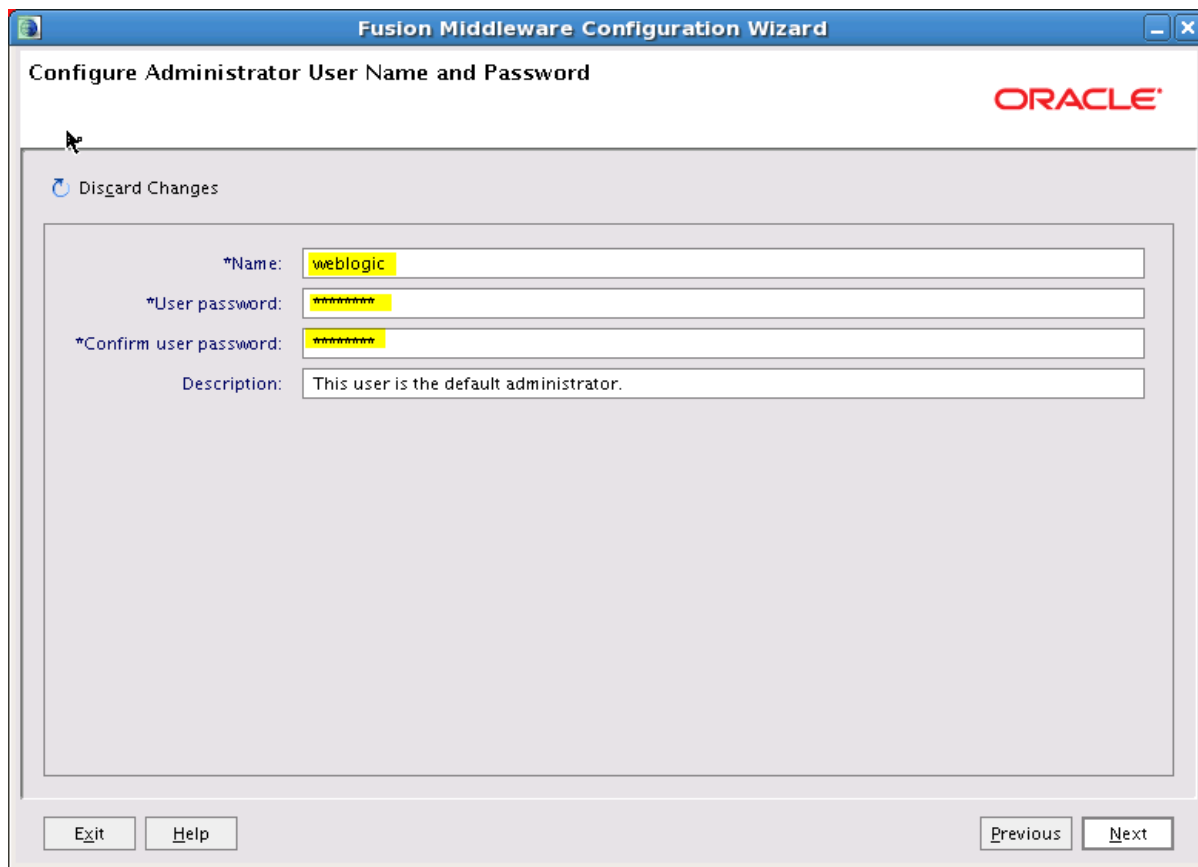
6 Specify a domain name and location.



The screenshot shows a window titled "Fusion Middleware Configuration Wizard" with the Oracle logo in the top right corner. The main heading is "Specify Domain Name and Location". Below this, a text prompt reads: "Enter the name and location for the domain and its applications:". There are three input fields: "Domain name:" with the text "portal_domain", "Domain location:" with the path "/OUCSS/Oracle/Middleware/PS6/user_projects/domains", and "Application location:" with the path "/OUCSS/Oracle/Middleware/PS6/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 the Oracle logo in the top right corner. The main heading is "Configure Administrator User Name and Password". Below this, there is a "Disard Changes" link with a circular arrow icon. 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, there are buttons for "Exit", "Help", "Previous", and "Next".

Fusion Middleware Configuration Wizard

Configure Administrator User Name and Password

[Disard Changes](#)

*Name:

*User password:

*Confirm user password:

Description:

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

Fusion Middleware Configuration Wizard

Configure Server Start Mode and JDK

ORACLE

Before putting your domain into production, make sure that the production environment is secure. For more information, see the topic 'Securing a Production Environment' in the WebLogic Server documentation.

WebLogic Domain Startup Mode

☐ **Development Mode**
Utilize boot.properties for username and password and poll for applications to deploy.
Sun JDK recommended for better startup performance during iterative development.

☒ **Production Mode**
Require the entry of a username and password and do not poll for applications to deploy.
WebLogic JRockit JDK recommended for better runtime performance and management.

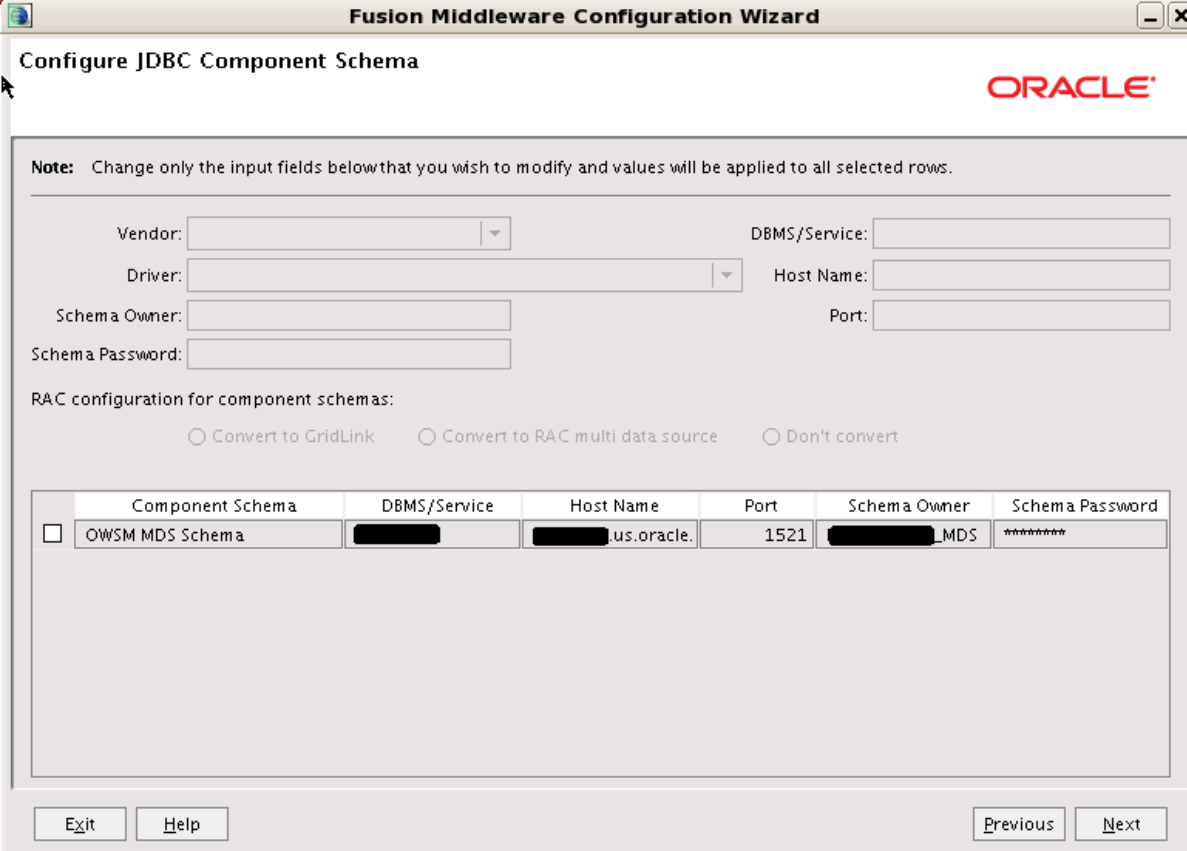
JDK Selection

☒ **Available JDKs**

Sun SDK 1.6.0_45 @ /OUCSS/jdk/jdk1.6.0_45

☐ **Other JDK**
Location:

- 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.



The screenshot shows the 'Fusion Middleware Configuration Wizard' window with the title 'Configure JDBC Component Schema'. The Oracle logo is in the top right. A note states: 'Note: Change only the input fields below that you wish to modify and values will be applied to all selected rows.' Below the note are input fields for 'Vendor', 'DBMS/Service', 'Driver', 'Host Name', 'Schema Owner', and 'Port'. Underneath these is a section for 'RAC configuration for component schemas' with three radio buttons: 'Convert to GridLink', 'Convert to RAC multi data source', and 'Don't convert'. At the bottom is a table with columns: 'Component Schema', 'DBMS/Service', 'Host Name', 'Port', 'Schema Owner', and 'Schema Password'. The table contains one row for 'OWSM MDS Schema' with values: '[REDACTED]', '.us.oracle.', '1521', '[REDACTED]_MDS', and '*****'. At the bottom of the window are buttons for 'Exit', 'Help', 'Previous', and 'Next'.

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.

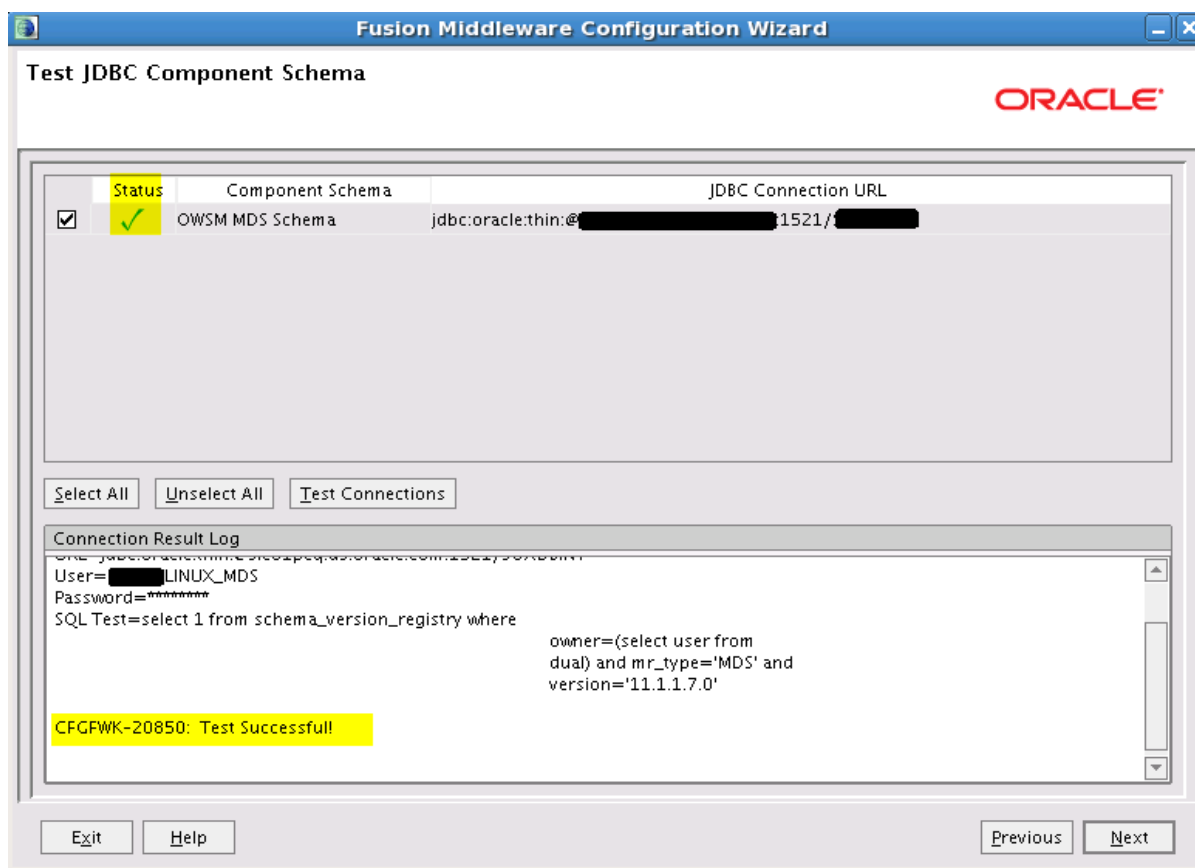
Vendor: DBMS/Service:
Driver: Host Name:
Schema Owner: Port:
Schema Password:

RAC configuration for component schemas:

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

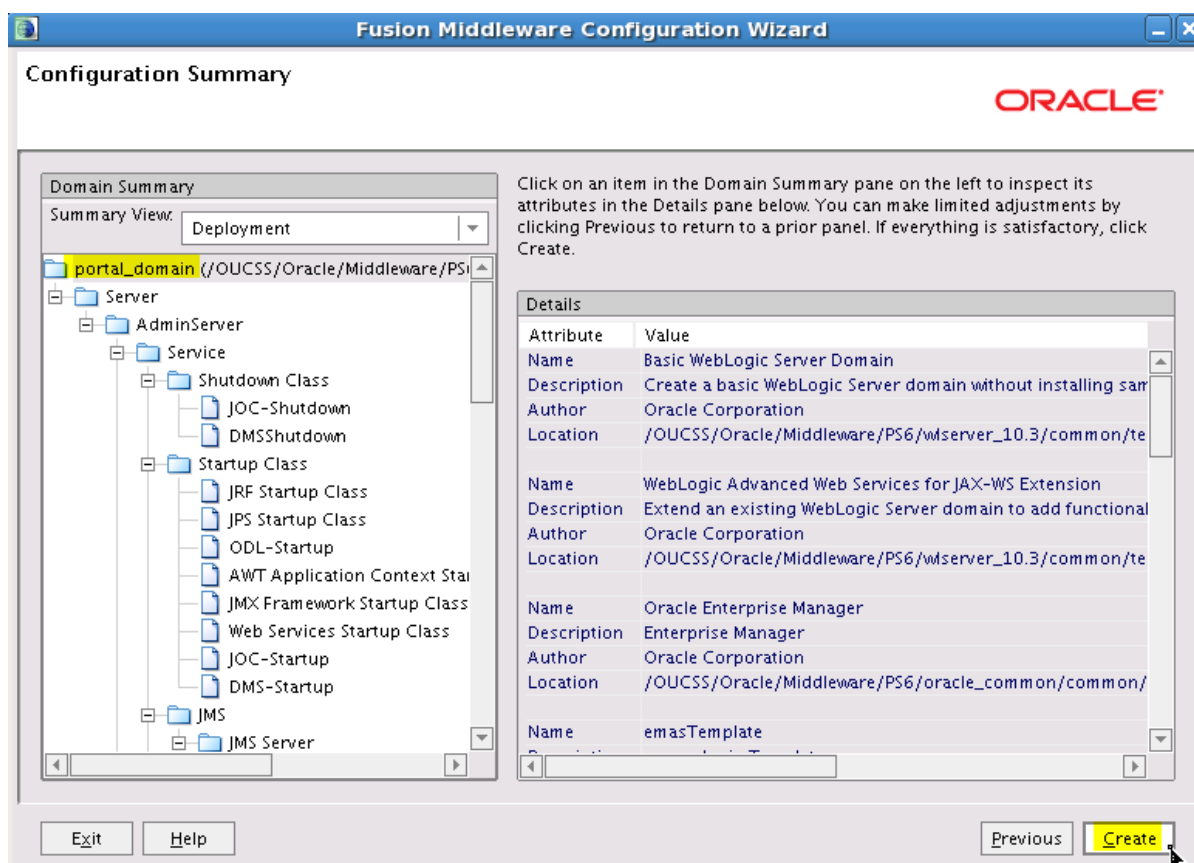
	Component Schema	DBMS/Service	Host Name	Port	Schema Owner	Schema Password
<input type="checkbox"/>	OWSM MDS Schema	[REDACTED]	[REDACTED].us.oracle.	1521	[REDACTED]_MDS	*****

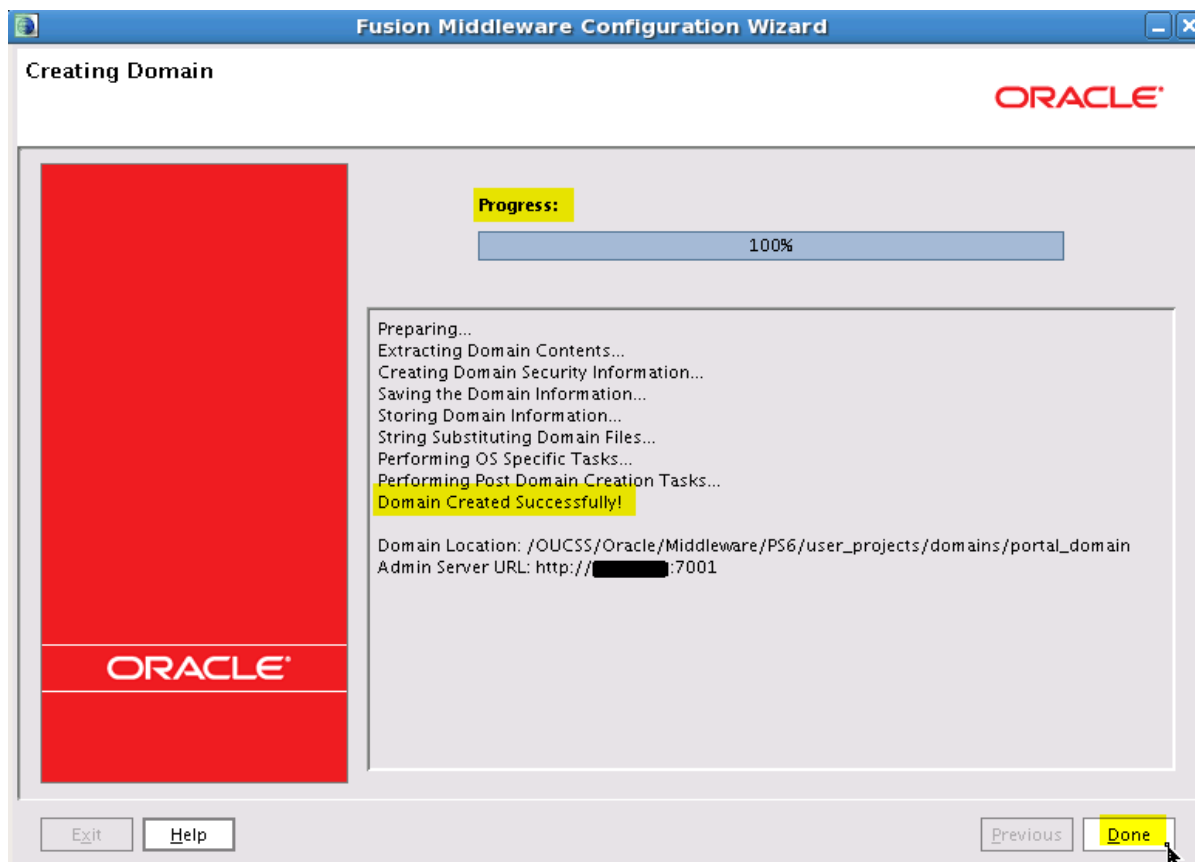
Exit Help Previous Next



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.



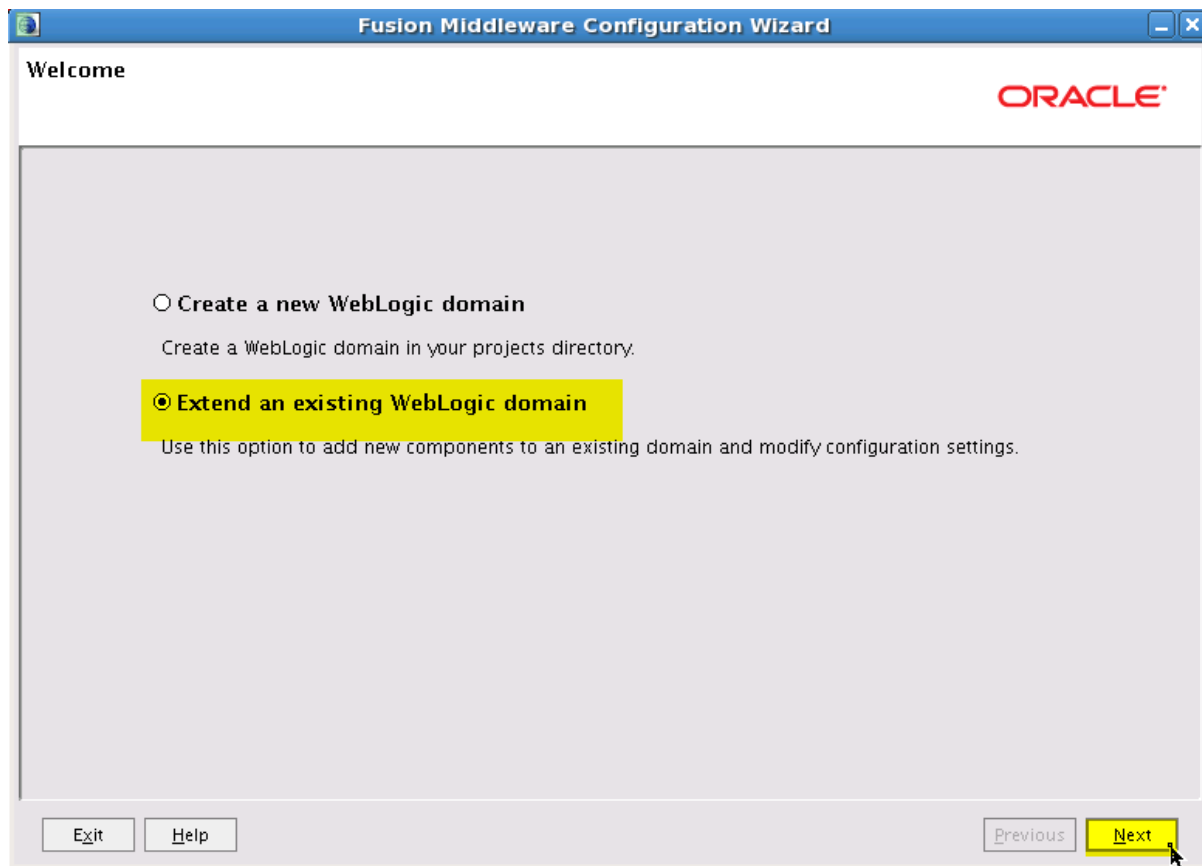


Progress bar indicating that the domain is successfully created.

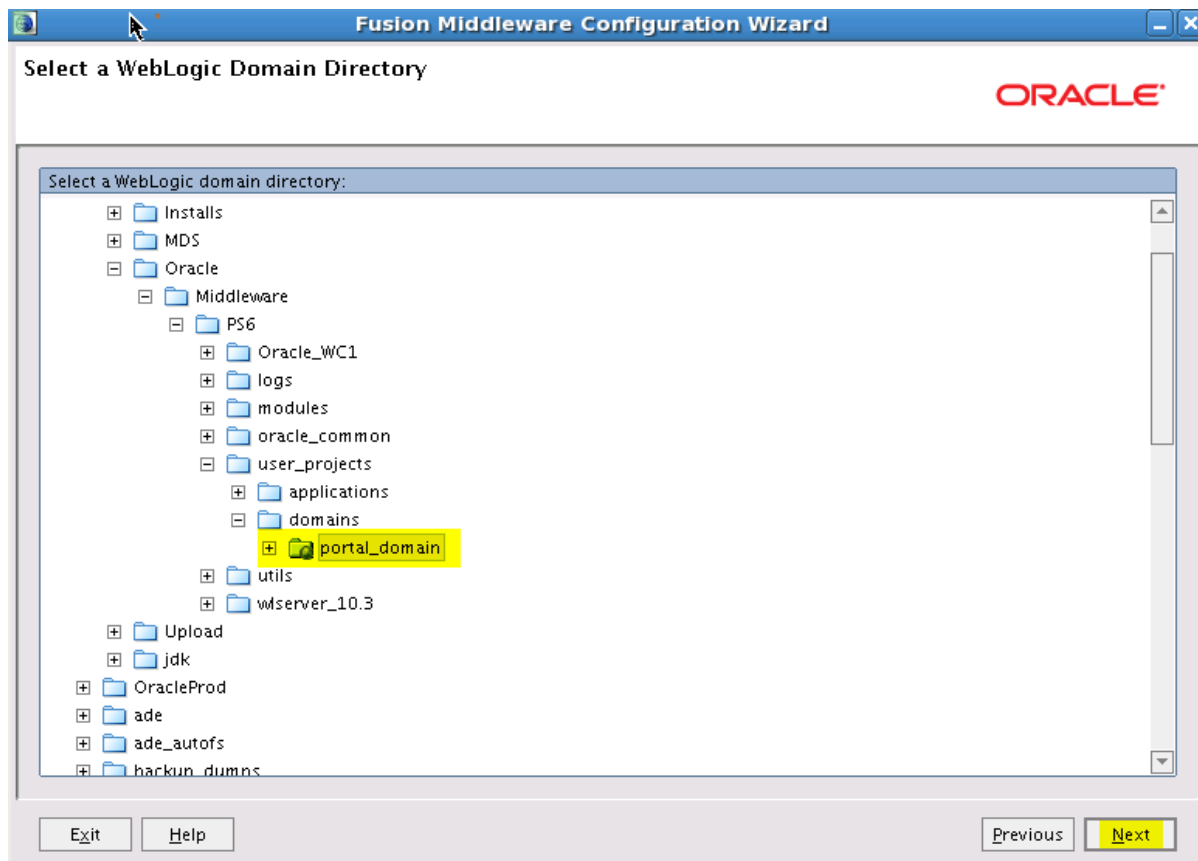
Extend the Domain Using the WebCenter Portal Template

OUCSS Portal application can be deployed only on managed server created using WebCenter Portal template. To extend the domain to create the managed server,

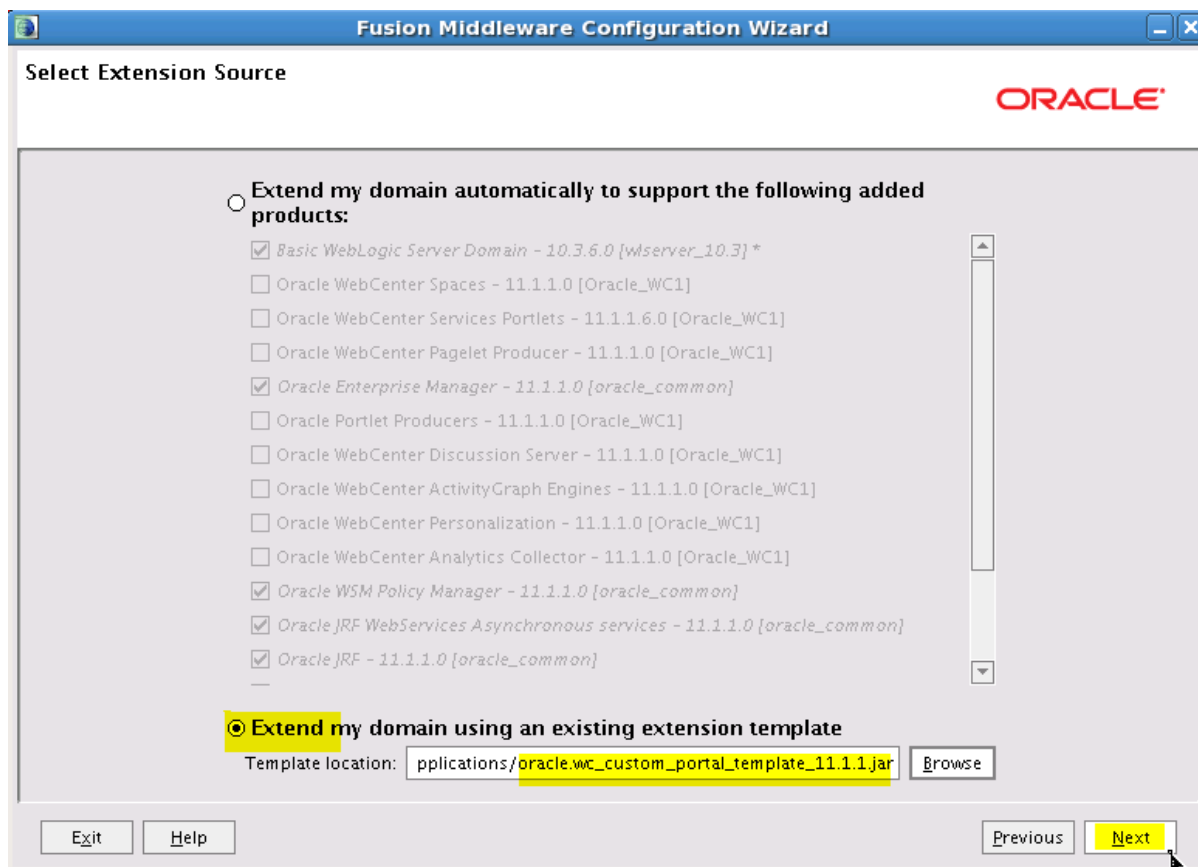
- 1 Run the WebLogic Configuration again to extend the domain and create a managed server for your custom portal.
- 2 Choose the “Extend an existing WebLogic domain” option on the **Welcome** screen, and then click **Next**.



- 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:

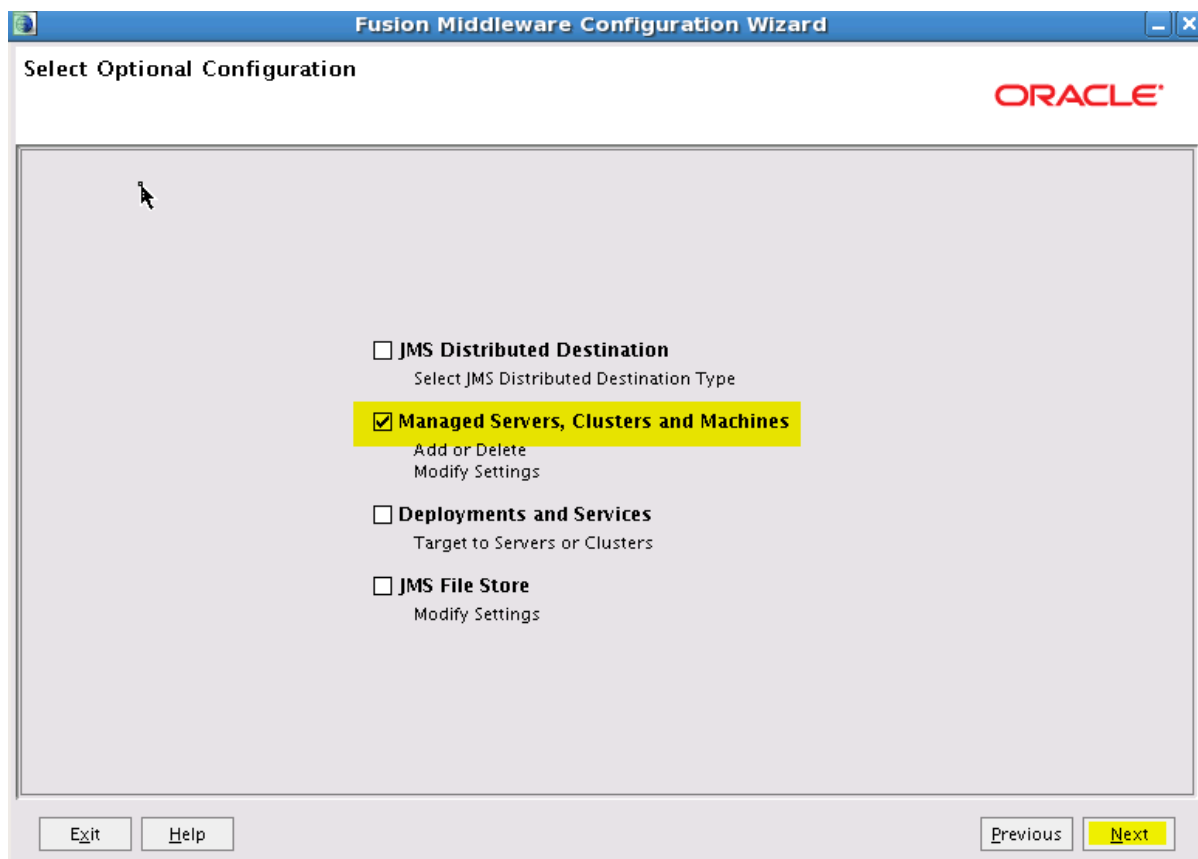
Schema Password:

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
<input type="checkbox"/>	Custom Portal Activities Schem	orcl	dbhost.example.coi	1521	PROD_ACTIVITIES	
<input type="checkbox"/>	Custom Portal WebCenter Sche	orcl	dbhost.example.coi	1521	PROD_WEBCENTER	
<input type="checkbox"/>	Custom Portal MDS Schema	orcl	dbhost.example.coi	1521	PROD_MDS	
<input type="checkbox"/>	OWSM MDS Schema	orcl	dbhost.example.coi	1521	PROD_MDS	*****

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



- 7 Configure the Managed server to use the desired name and port.

Fusion Middleware Configuration Wizard

Configure Managed Servers

ORACLE

+ Add ✕ Delete ↺ Discard Changes Switch Display

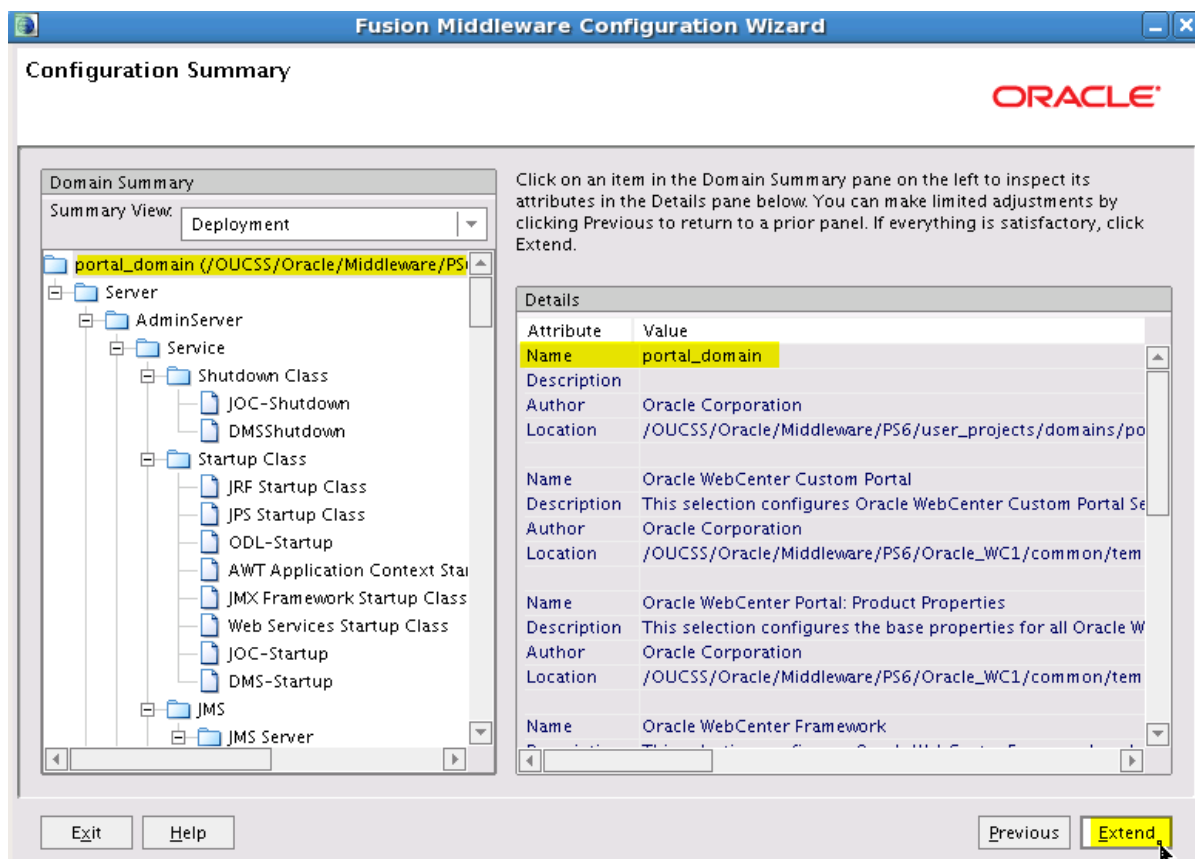
	Name*	Listen address*	Listen port	SSL listen port	SSL enabled
→ 1	WC_CustomPortal	All Local Addresses	9101	N/A	<input type="checkbox"/>

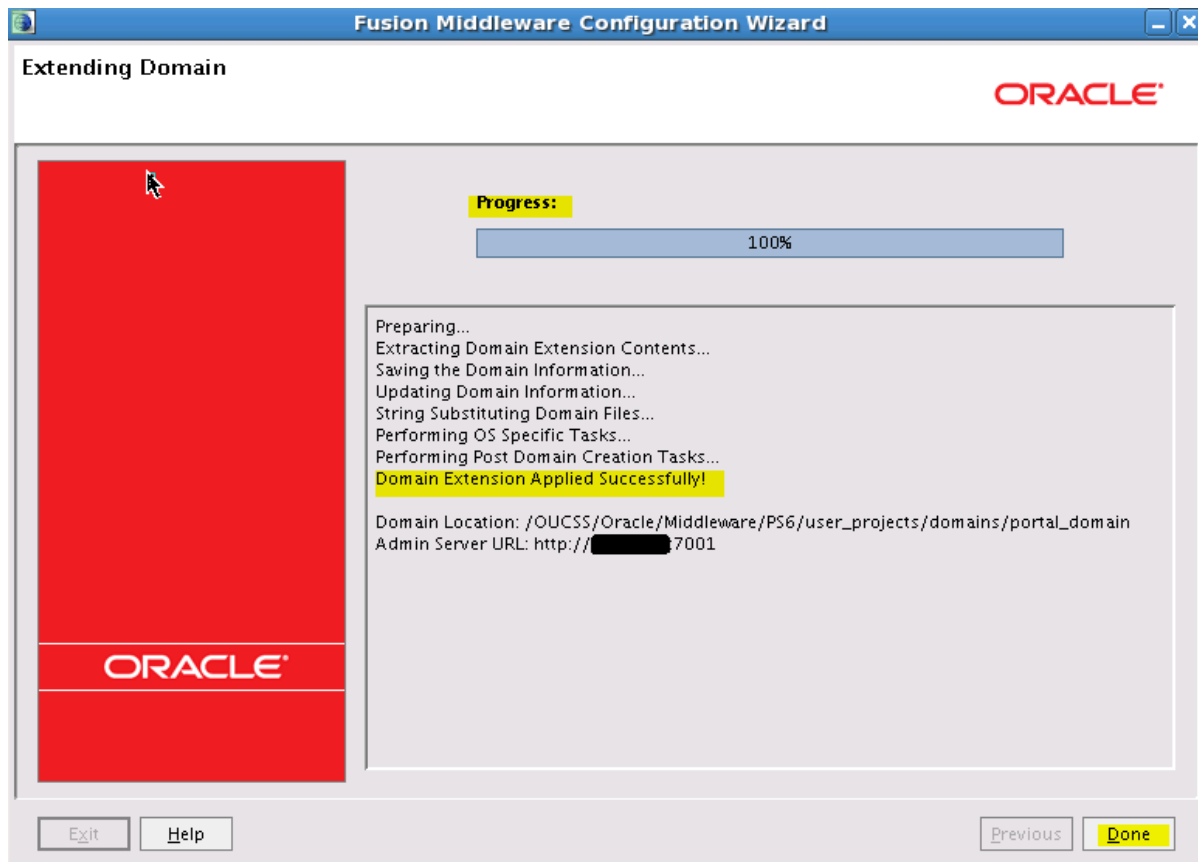
Exit Help Previous Next

- 8 If the user wishes to configure more than one managed server. In this case if user wants to configure the mobile application on different managed server then click on the “Add” on the above depicted picture and provide the name as “OUCSSMobility” for Instance and unique Listen port.

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

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





- 10 Start AdminServer and confirm that the managed server is created by login to WebLogic Admin Console. Start the servers to verify that the managed server is running fine.

Configure the Domain OUCSS Portlets Producer

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

Assumptions

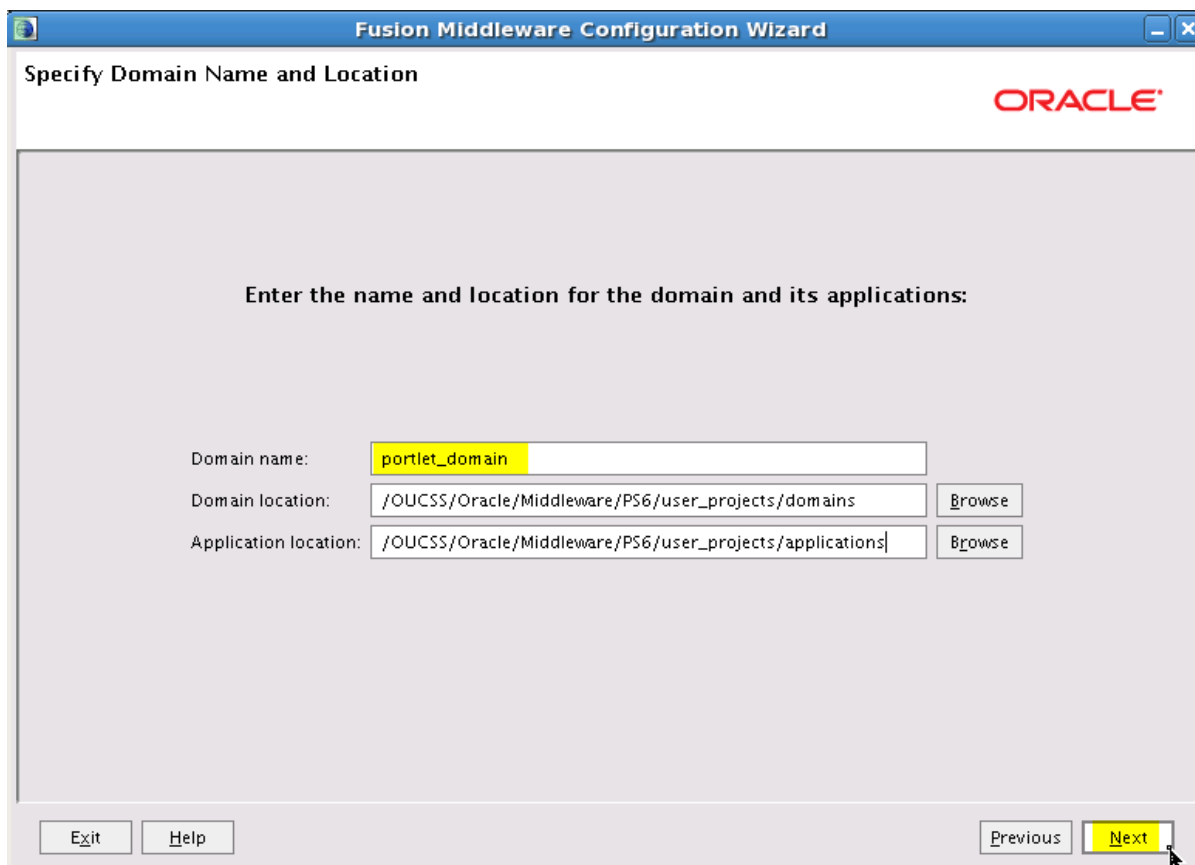
- The Portal is built using the “WebCenter Portal - Portlet Producer Application” template.
- A new domain is created to install the OUCSS Portlet Producer Application.
- WebCenter schemas (MDS, ACTIVITIES, WEBCENTER and PORTLET) are created using RCU.

Creating the Domain

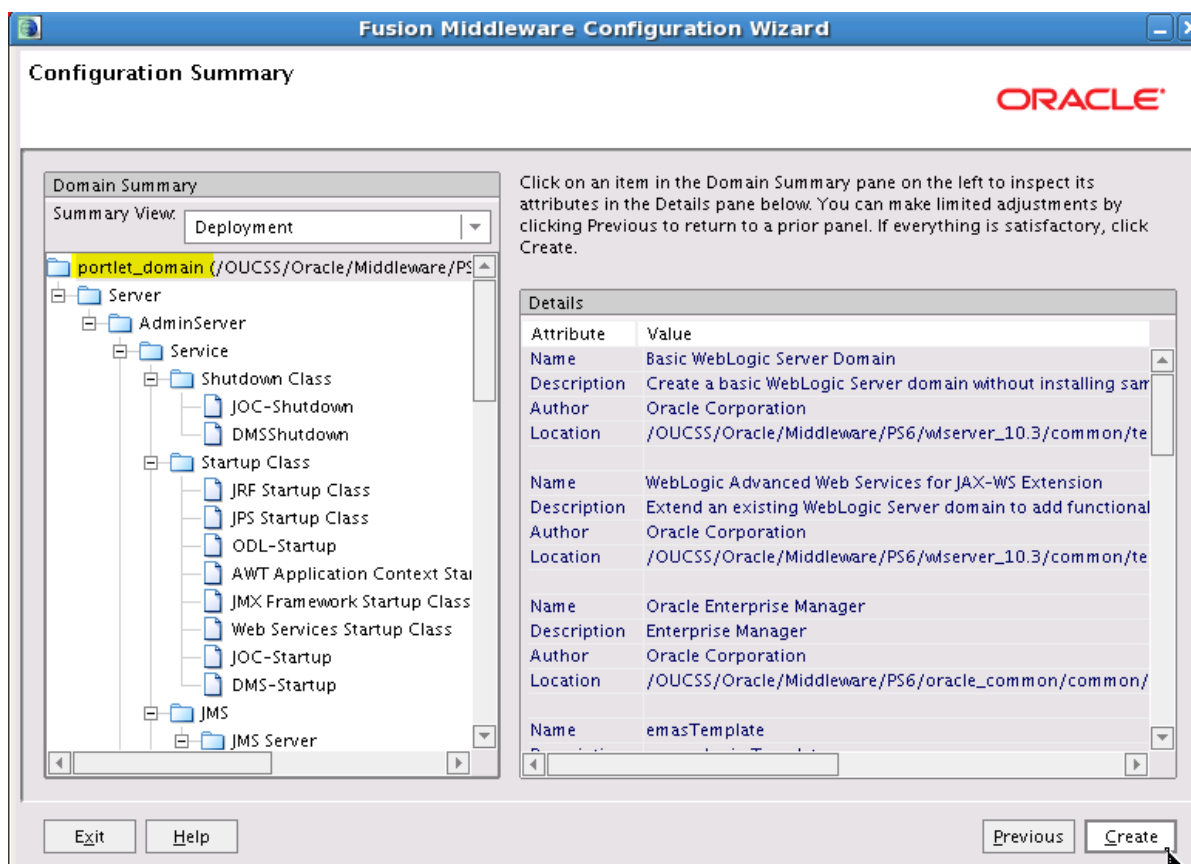
Note: If you do not want to create a new domain, and would like to extend and already existing domain, please skip to [Extend the Domain Using the WebCenter Producer Template](#) section of this document.

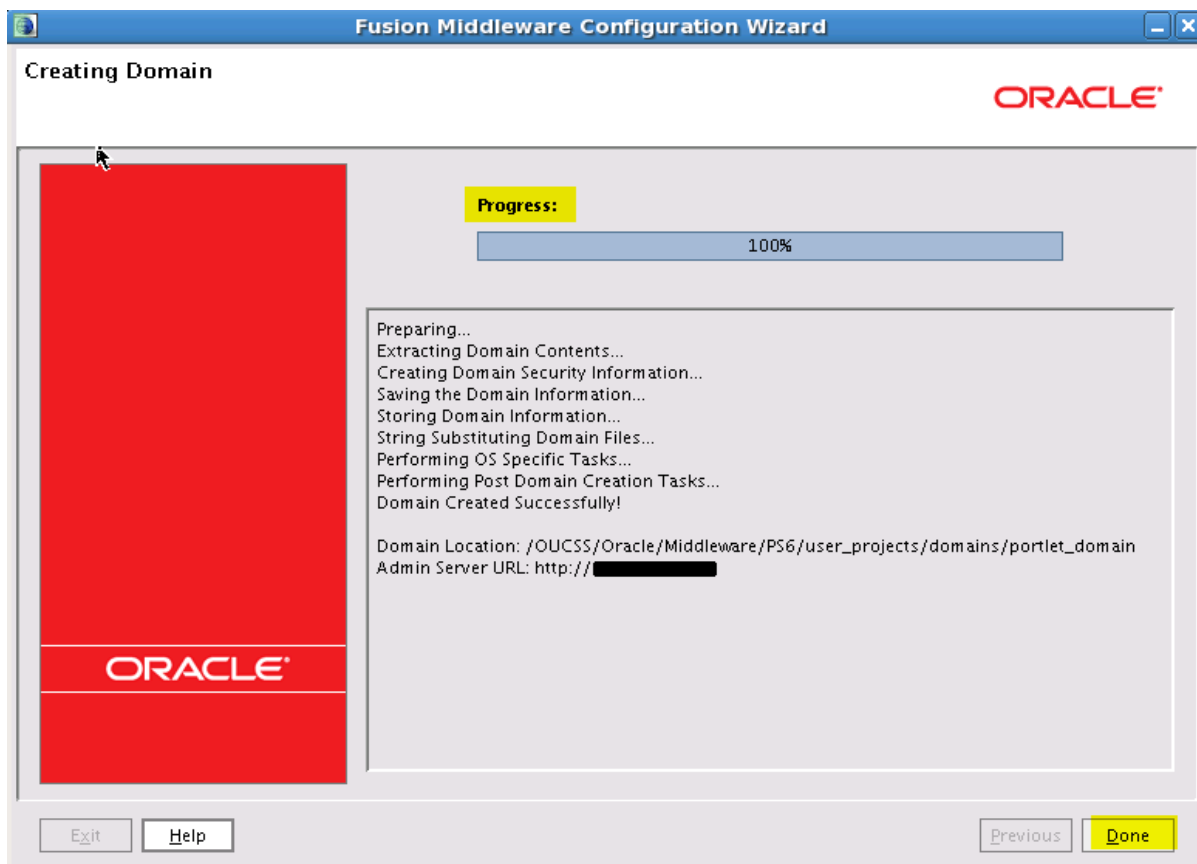
To configure and create a new domain:

- 1 Follow Steps 1 – 5 from [Creating the Domain](#) section described above.
- 2 Specify a domain name and location. For this example, the domain is named “portlet_domain”.



- 3 Follow Steps 7 – 10 from [Creating the Domain](#) section described above to complete creation of the domain.

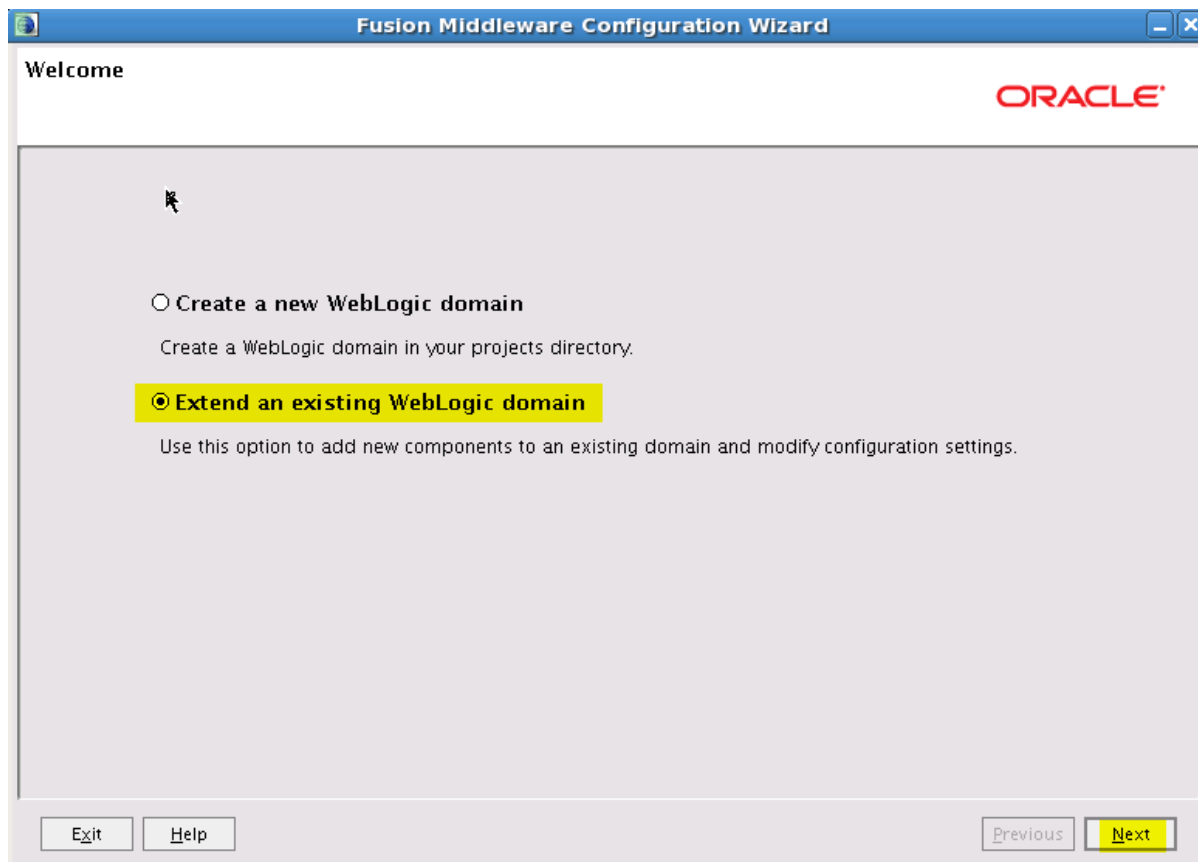




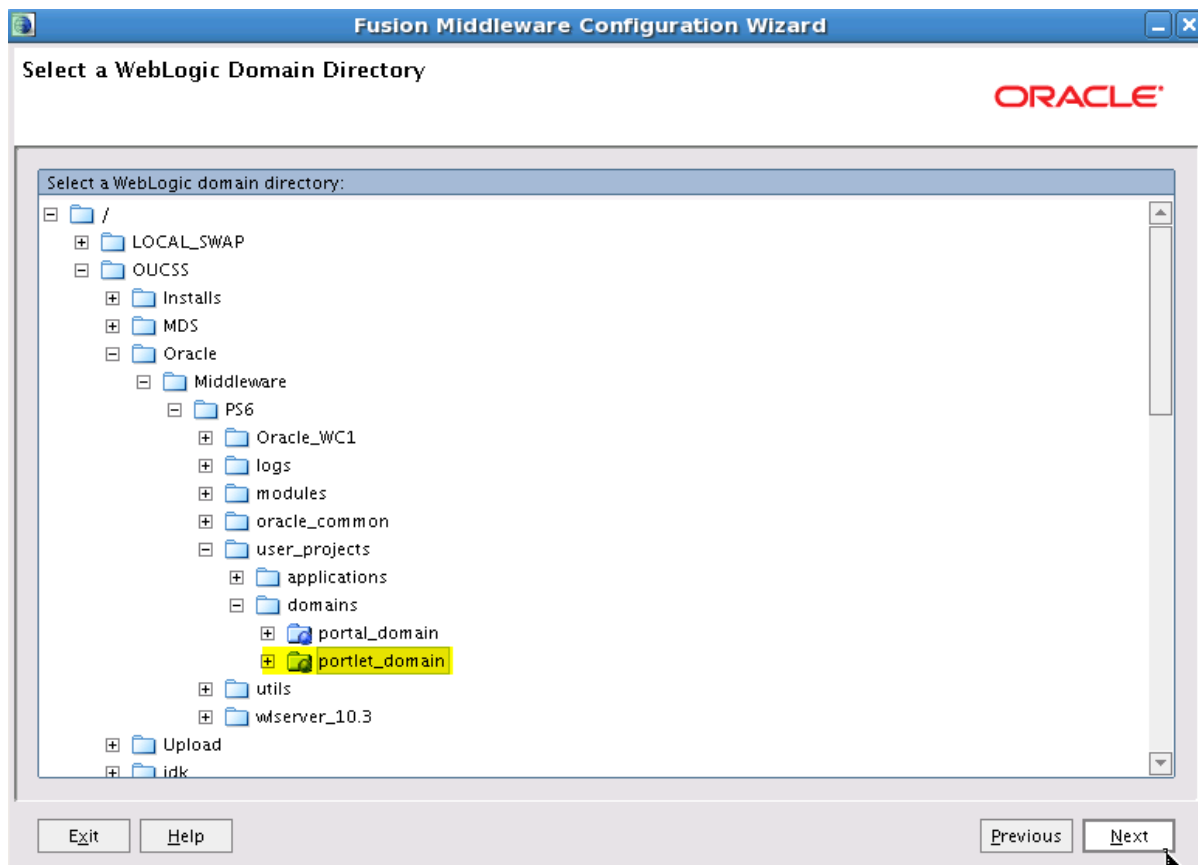
Extend the Domain Using the WebCenter Producer Template

OUCSS Portlets Producer application can be deployed only on managed server created using WebCenter Producer template. To extend the domain,

- 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**.

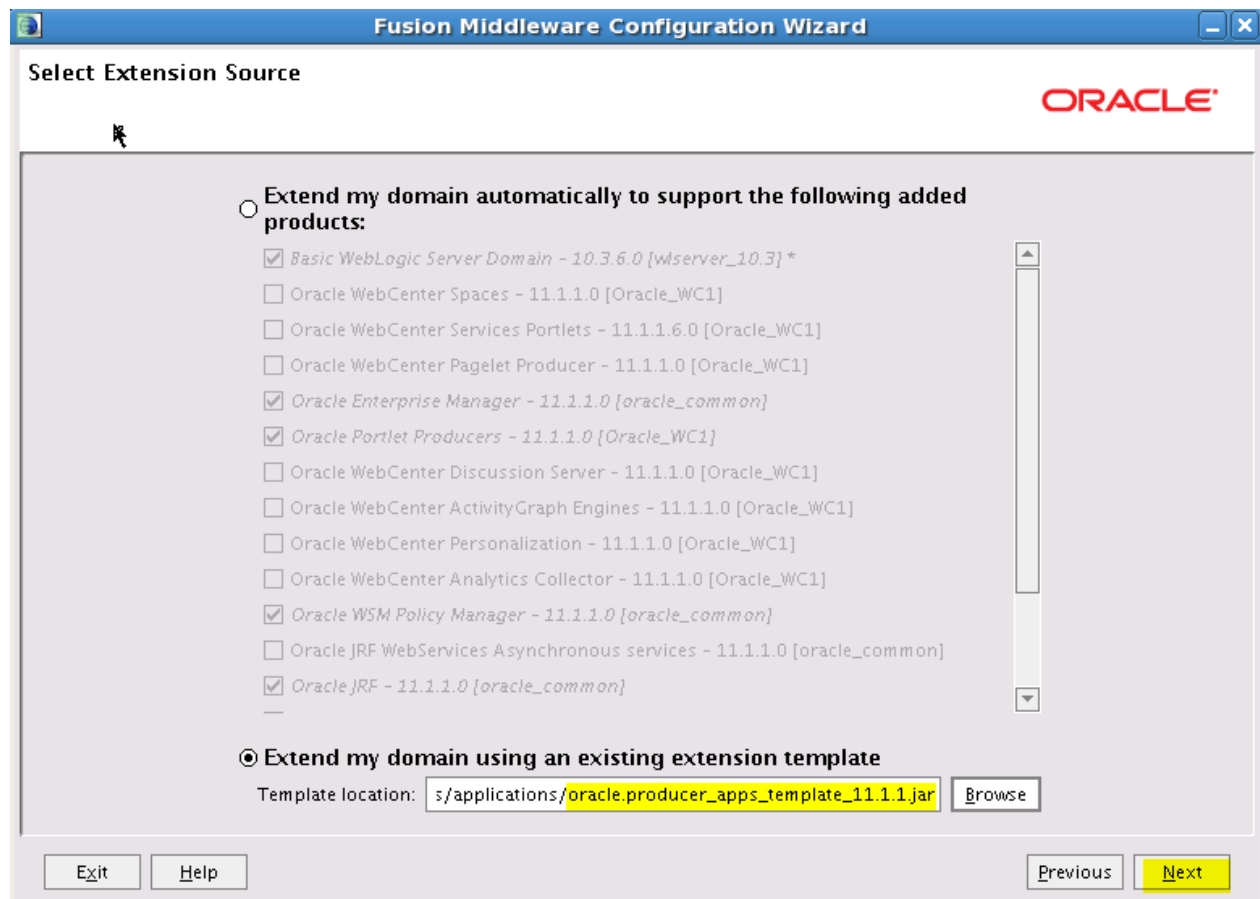


- 3 Locate and select domain name (for e.g. **portlet_domain**) from the domain directory tree, then click **Next**.



- 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.producer_apps_template_11.1.1.jar.
```



- 5 Continue steps 5 through 9 from [Extend the Domain Using the WebCenter Portal Template](#) section detailed in this document to complete extension of the domain. If needed, configure the Managed Server (default WC_Portlet) as per installation requirements.

