Oracle Utilities Customer Self Service

Whitepaper: Installing a Managed Server for Custom Portals

Release 2.1.0 Service Pack 2

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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 <u>Oracle Utilities Documentation</u> 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 the 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**.

	Fusion Middleware Configuration Wizard	
Welcome	Þ. "	ORACLE
	• Create a new WebLogic domain	
	Create a WebLogic domain in your projects directory.	
	Use this option to add new components to an existing domain and modify configuration setti	ings.
E <u>x</u> it	Help	Previous <u>N</u> ext

5 Choose the "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.

Fusion Midgleware Configuration Wizard	
Select Domain Source	ORACLE
Generate a domain configured automatically to support the following produces of the following	icts:
☑ Basic WebLogic Server Domain - 10.3.6.0 [wiserver_10.3] *	
Oracle WebCenter Spaces - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter Services Portlets - 11.1.1.6.0 [Oracle_WC1]	
Oracle WebCenter Pagelet Producer - 11.1.1.0 [Oracle_WC1]	
🔽 Oracle Enterprise Manager - 11.1.1.0 [oracle_common]	
Oracle Portlet Producers - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter Discussion Server - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter ActivityGraph Engines - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter Personalization - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter Analytics Collector - 11.1.1.0 [Oracle_WC1]	
✓ Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]	
Oracle JRF WebServices Asynchronous services - 11.1.1.0 [oracle_common]	
✓ Oracle JRF - 11.1.1.0 [oracle_common]	
Basic WebLogic SIP Server Domain - 10.3.6.0 [wlserver_10.3]	T
O Base this domain on an existing template	
Template location: /OUCSS/Oracle/Middleware/PS6	wse
E <u>x</u> it <u>H</u> elp	Previous <u>N</u> ext

6 Specify a domain name and location.

	Fusion Middleware Configuration Wizard					
Specify Domain Name and L	ocation	ORACLE				
Enter the name and location for the domain and its applications:						
Domain name: Domain location: Application locati		<u>B</u> rowse B <u>r</u> owse				
E <u>x</u> it <u>H</u> elp		Previous 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.

	Fusion Middleware Configuration Wizard	_×
Configure Administrato	r User Name and Password	ORACLE
Dis <u>c</u> ard Changes		
*Name:	weblogic	
*User password:	****	
*Confirm user password:	*****	
Description:	This user is the default administrator.	
E <u>x</u> it <u>H</u> elp		Previous Next

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

Fusion Middl	eware Configuration Wizard
onfigure Server Start Mode and JDK	ORACLE
efore putting your domain into production, make sure Securing a Production Environment' in the WebLogic Ser WebLogic Domain Startup Mode	that the production environment is secure. For more information, see the topic over documentation.
 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. 	Available JDKs Sun SDK 1.6.0_45 @ /OUCSS/jdk/jdk1.6.0_45
• 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.	O Other JDK Location:
Exit Help	Previous Next

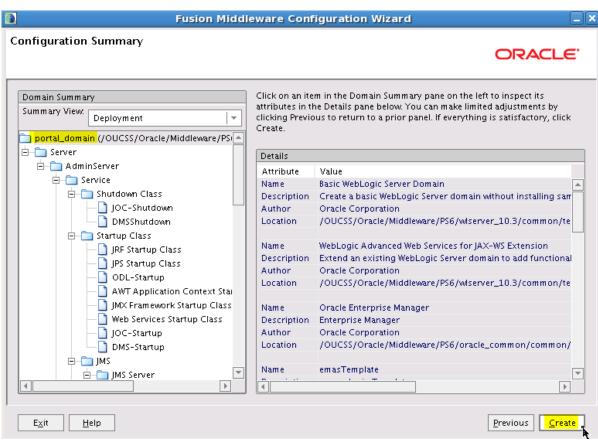
9 Configure the JDBC schema. This step is used to configure the MDS Schema that was created by running the Repository Creation Utility (RCU) as part of the Pre-Installation Tasks.

ote: Change only	the input fields b	elow that you wish to m	odify and values will b	e applied to :	all selected rows.	
Vendor:				DBMS/S	ervice:	
Driver:					Name:	
Schema Owner:					Port:	
:hema Password: [AC configuration f	or component sc) Convert to Gric		RAC multi data source	e 🔿 Dor	i't convert	
AC configuration f			RAC multi data source Host Name	: O Dor Port	i't convert Schema Owner	SchemaPasswor

Fusion Middleware Configuration Wizard	_>
est JDBC Component Schema	ORACLE
Status Component Schema JDBC Connection URL Image: Status Component Schema jdbc:oracle:thin:@ JDBC Connection URL Image: Schema jdbc:oracle:thin:@ Image: Schema jdbc:oracle:thin:@	
Select All Unselect All Connection Result Log User= LINUX_MDS	
Password=""""""""""""""""""""""""""""""""""""	
E <u>x</u> it <u>H</u> elp	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, then click Create to create the domain.



۹.	Fusion Middleware Configuration Wizard
Creating Domain	ORACLE'
	Progress: 100%
	Preparing Extracting Domain Contents Creating Domain Security Information Saving the Domain Information Storing Domain Information String Substituting Domain Files Performing OS Specific Tasks Performing Post Domain Creation Tasks Domain Created Successfully! Domain Location: /OUCSS/Oracle/Middleware/PS6/user_projects/domains/portal_domain Admin Server URL: http://:7001
	Previous Done

Progress screen indicating the domain is successfully created.

Extend the Domain Using the WebCenter Portal Template

The OUCSS Portal application can be deployed only on a managed server created using the 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, then click Next.

	Fusion Middleware Configuration Wizard	_>
Welcome		ORACLE
	O Create a new WebLogic domain	
	Create a WebLogic domain in your projects directory.	
	• Extend an existing WebLogic domain	
	Use this option to add new components to an existing domain and modify configuration setti	ngs.
Exit	Help	Previous <u>N</u> ext

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

🔊 💦	Fusion Middleware Configuration Wizard	_ ×
Select a WebLog	ic Domain Directory	ORACLE [.]
Select a WebLogic o	Iomain directory:	
🕀 📄 Insta	lls	
🛨 📄 MDS		
🗆 🖂 Orac	le	
🗆 🖂 N	liddleware	
Ξ.	D PS6	
	🗄 🛅 Oracle_WC1	
[E 💼 logs	
	🗄 🧰 modules	
	E in oracle_common	
[∃ 🛄 user_projects	
	🛨 🧰 applications	
	domains Image: Comparison of the second se	
[🗄 🧰 utils	
[∃ 🛅 wiserver_10.3	
🕀 📄 Uplo	ad	
🕀 🗋 jdk		
🕀 📄 OraclePr	od	
🕀 🚞 ade		
⊕ ade_auto □ ade_auto □		T
	dumns	
E <u>x</u> it <u>H</u> elp		Previous <u>N</u> ext

4 Choose the "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	/applic	ations,	/oracle.wc_	_custom_	_portal_	_template_	11.1.1
.ja	r.											

Fusion Middleware Configuration Wizard	_×_
Select Extension Source	ORACLE
$_{\rm O}$ Extend my domain automatically to support the following added products:	
✓ Basic WebLogic Server Domain - 10.3.6.0 [wlserver_10.3] *	
Oracle WebCenter Spaces - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter Services Portlets - 11.1.1.6.0 [Oracle_WC1]	
Oracle WebCenter Pagelet Producer - 11.1.1.0 [Oracle_WC1]	
🗹 Oracle Enterprise Manager - 11.1.1.0 [oracle_common]	
Oracle Portlet Producers - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter Discussion Server - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter ActivityGraph Engines - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter Personalization - 11.1.1.0 [Oracle_WC1]	
Oracle WebCenter Analytics Collector - 11.1.1.0 [Oracle_WC1]	
✓ Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]	
✓ Oracle JRF WebServices Asynchronous services - 11.1.1.0 [oracle_common]	
✓ Oracle JRF - 11.1.1.0 [oracle_common]	T
—	
Extend my domain using an existing extension template	
Template location: pplications/ <mark>oracle.wc_custom_portal_template_11.1.1.jar</mark> B	rowse
Exit Help	Previous Next

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.

Vendor:			DBMS/Service:			
	Driver:		-	- Hos	st Name:	
Schei	Schema Owner:]	·1	Port:	
AC cor	nfiguration for component		to RAC multi data source	e O D	on't convert	
AC cor			to RAC multi data source Host Name	e OD	on't convert Schema Owner	Schema Password
	O Convert to (idLink O Convert			Schema Owner	Schema Password
	Component Schema Component Schema Lustom Portal Activities Sci Lustom Portal WebCenter S	idLink O Convert DBMS/Service m orcl	Host Name dbhost.example.coi dbhost.example.coi	Port 1521 1521	Schema Owner PROD_ACTIVITIES	
	Component Schema Component Schema	idLink O Convert DBMS/Service m orcl	Host Name dbhost.example.cou	Port 1521	Schema Owner L PROD_ACTIVITIES L PROD_WEBCENTER L PROD_MDS	

6 Choose "Managed Servers, Clusters, and Machines" to configure the managed server, then click Next.

۹.	Fusion Middleware Configuration Wizard	_ ×
Select Optional Configuratio	n	ORACLE
k		
	 JMS Distributed Destination Select JMS Distributed Destination Type Managed Servers, Clusters and Machines Add or Delete Modify Settings Deployments and Services Target to Servers or Clusters JMS File Store Modify Settings 	
Exit Help		Previous Next

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

	Fusion Middleware Co	onfiguration Wiz	ard	_ X
Configure Managed Servers रे				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/	
,				
E <u>x</u> it <u>H</u> elp				Previous <u>N</u> ext

8 Perform this step to configure more than one managed server. To configure the mobile application on a different managed server, click Add in the Confugre Managed Servers screen, then provide the name (OUCSSMobility) for the Instance, and a unique Listen port.

Note: After this step is completed, configure machines/clusters and assign servers per your environment's requirements.

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

Fusion Middle	eware Conf	iguration Wizard
Configuration Summary		ORACLE
Domain Summary Summary View. Deployment portal_domain (/OUCSS/Oracle/Middleware/PS) Server	attributes in th clicking Previc Extend.	m in the Domain Summary pane on the left to inspect its he Details pane below. You can make limited adjustments by ous to return to a prior panel. If everything is satisfactory, click
AdminServer	Details	
	Attribute	Value
Shutdown Class	Name	portal_domain
	Description	
JOC-Shutdown	Author	Oracle Corporation
DMSShutdown	Location	/OUCSS/Oracle/Middleware/PS6/user_projects/domains/po
E Startup Class	Name	Oracle WebCenter Custom Portal
JRF Startup Class	Description	This selection configures Oracle WebCenter Custom Portal Se
JPS Startup Class	Author	Oracle Corporation
— DDL-Startup	Location	/OUCSS/Oracle/Middleware/PS6/Oracle_WC1/common/tem
	Location	
JMX Framework Startup Class	Name	Oracle WebCenter Portal: Product Properties
	Description	This selection configures the base properties for all Oracle W
-] JOC-Startup	Author	Oracle Corporation
DMS-Startup	Location	/OUCSS/Oracle/Middleware/PS6/Oracle_WC1/common/tem
□ □ JMS □ □ □ IMS Server □	Name	Oracle WebCenter Framework
E <u>x</u> it <u>H</u> elp		Previous

	Fusion Middleware Configuration Wizard
Extending Domain	ORACLE'
k	Progress: 100%
ORACLE	Preparing Extracting Domain Extension Contents Saving the Domain Information Updating Domain Information String Substituting Domain Files Performing OS Specific Tasks Performing Post Domain Creation Tasks Domain Extension Applied Successfully! Domain Location: /OUCSS/Oracle/Middleware/PS6/user_projects/domains/portal_domain Admin Server URL: http://
E <u>x</u> it <u>H</u> elp	Previous Done

10 Start the AdminServer and confirm that the managed server is created by logging in to the WebLogic Administration Console and starting the servers.