

Oracle Utilities Customer Self Service

Installing/ Upgrading OUCSS with WCP V12.2.1.4

Release 2.2.1.0

December 2021
(Revised May 2022)

Copyright © 2011, 2022, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Table of Contents

Overview..... 4

 Additional Resources4

 Acronyms.....4

Installing OUCSS..... 6

 Software Requirements.....6

 Verifying the Pre-Installation7

 Installing OUCSS on WCP V12.2.1.47

Upgrading OUCSS 10

 Pre-Upgrade Considerations.....10

 Upgrade Steps.....11

Chapter 1

Overview

This whitepaper describes the steps to install Oracle Utilities Customer Self Service (OUCSS) with WebCenter Portal (WCP) V12.2.1.4 and upgrade Oracle Utilities Customer Self Service from an older version of WCP to V12.2.1.4.

The document complements the *Oracle Utilities Customer Self Service Installation Guide* and *Oracle Utilities Customer Self Service Implementation Guide*. Since the install and upgrade process of OUCSS along with other Oracle software (WebLogic Server, SOA, etc.) and Utilities edge applications (OUCCB, OUNMS, OUMDM, etc.) remain fairly same between older WCP and WCP V12214, this document's primary purpose is to identify and elaborate only on the differences between setup steps applicable to WCP V12214. For detailed installation/ upgrade steps (related to installing OUCSS BPEL flows, OUNC, CCB-MDM and CCB-NMS flows), refer to the *Oracle Utilities Customer Self Service Installation Guide*.

The following chapters are included in this chapter:

- [Additional Resources](#)
- [Acronyms](#)

Additional Resources

Resource	Location
Oracle Utilities Customer Self Service Installation Guide	Check Oracle Utilities Customer Self Service on the Oracle Technology Network (OTN) web site (http://www.oracle.com/technetwork/apps-tech/utilities/documentation/index.html) for the latest version of the documents
Oracle Utilities Customer Self Service Implementation Guide	

Acronyms

Term	Expanded Form
OUCSS	Oracle Utilities Customer Self Service
OUCCB	Oracle Utilities Customer Care and Billing

Term	Expanded Form
WCP	WebCenter Portal
OUNC	Oracle Utilities Notification Center
MDM	Oracle Utilities Meter Data Management
NMS	Oracle Utilities Network Management System
SOA	Service Oriented Architecture

Chapter 2

Installing OUCSS

This chapter includes the following topics:

- [Software Requirements](#)
- [Verifying the Pre-Installation](#)
- [Installing OUCSS on WCP V12.2.1.4](#)

Software Requirements

The following software must be installed and configured prior to installing Oracle Utilities Customer Self Service:

- Oracle WebCenter V12.2.1.4 on WebLogic Server V12.2.1.4
- Oracle Utilities Customer Care and Billing V2.4.0.3 or higher

Please note that Oracle Utilities Customer Self Service works with Oracle Utilities Customer to Meter as well.

To integrate with Oracle Utilities Meter Data Management:

- Oracle Utilities Meter Data Management V2.1.0.3 or higher
- Oracle Utilities Customer Care and Billing Integration to Oracle Utilities Meter Data Management V12.1.1 Media Pack with latest patch level

To integrate with Oracle Utilities Network Management System:

- Oracle Utilities Network Management System V1.12.2
- Oracle Utilities Customer Care and Billing Integration to Oracle Utilities Network Management System V12.1.1 Media Pack with latest patch level

For other requirements in the CCB-MDM integrated flows, refer to the **CCB-NMS Integrated Flows** section in the *Oracle Utilities Customer Self Service Installation Guide*.

- Oracle MapViewer V11.1.1.7.2 on WebLogic Service V10.3.6 for Outage Map

Verifying the Pre-Installation

To verify the pre-installation:

1. Follow the pre-installation tasks mentioned in the *Oracle Utilities Customer Self Service Installation Guide*.
2. Create or configure the edge applications that should be connected to OUCSS.

To configure OUCCB, see the configuration information in the *Oracle Utilities Customer Care and Billing Implementation Guide*, including the sections related to Oracle Utilities Meter Data Management (if it is integrated).

3. Oracle recommends separate WebLogic domains for OUCSS Portal application (portal_domain) and other Oracle applications (OUCSS inbound services, BPEL flows and OUNC). Make sure that this is taken care.
4. For information on the domain topologies for installation on both clustered environment and standalone installation, refer to the *Oracle Utilities Customer Self Service Installation Guide*.

For clustered environment, follow the instructions in the *Installing a Managed Server for Custom Portals Whitepaper* available on Oracle Technology Network (https://docs.oracle.com/cd/E65174_01/PDF/E36187-07.pdf). Please note that this whitepaper refers to older versions of Oracle applications. Make sure to use the latest application versions wherever applicable.

5. For clustered installation, make sure the load balancer is installed on a separate managed server to route the requests between nodes of the cluster.
6. To install and set up WebCenter Portal V12.2.1.4, refer to the *Oracle Fusion Middleware Installing and Configuring Oracle WebCenter Portal* document available on Oracle Technology Network.
7. Make sure that both the admin and managed servers are up and running. Also, verify that the Node Manager is running. Installation scripts will use Node Manager to start-stop managed servers several times during the installation.

Refer to the *Oracle Utilities Customer Self Service Installation Guide* for more information.

Installing OUCSS on WCP V12.2.1.4

To install Oracle Utilities Customer Self Service on WCP V12.2.1.4:

1. Follow the pre-installation tasks mentioned in the Oracle Utilities Customer Self Service Installation Guide.
2. Create or configure the edge applications that should be connected to OUCSS.

To configure OUCCB, see the configuration information in the *Oracle Utilities Customer Care and Billing Implementation Guide*, including the sections related to Oracle Utilities Meter Data Management (if it is integrated).

3. Oracle recommends separate WebLogic domains for OUCSS Portal application (portal_domain) and other Oracle applications (OUCSS inbound services, BPEL flows and OUNC). Make sure that this is taken care.
4. Download the package.
 - a. Login to My Oracle Support (<https://support.oracle.com/>).

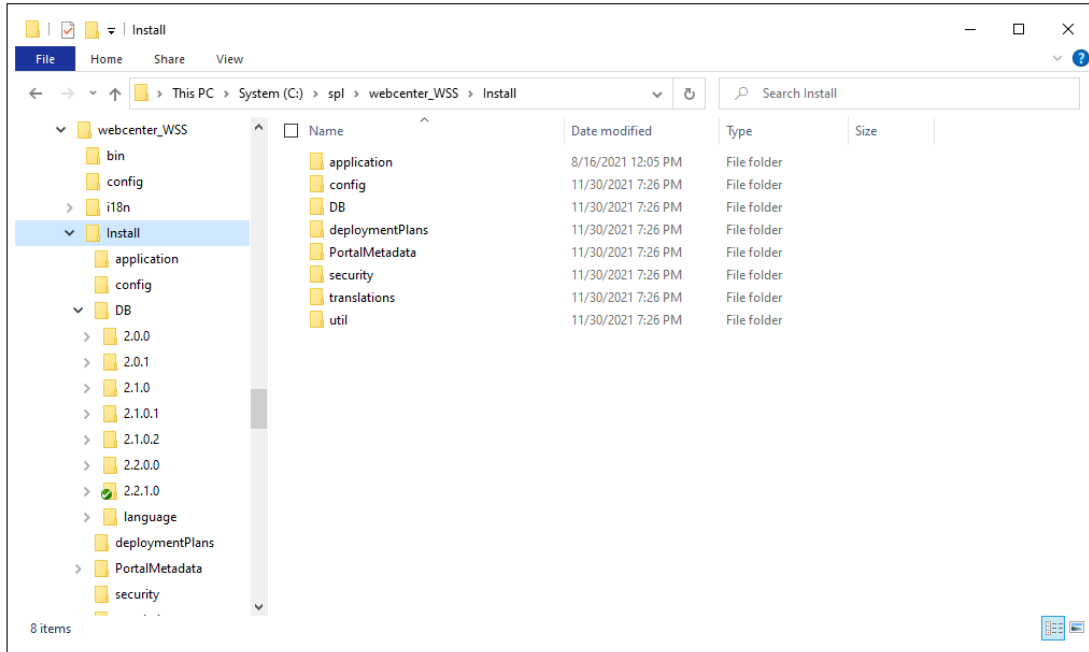
Note: If you are not a My Oracle Support registered user, click **Register here** and follow the registration instructions.

- b. On the **Home** page, navigate to the **Patches and Updates** tab.
- c. In the **Patch Search** group, select **Product or Family (Advanced)**.
- d. In the **Product** field, select **Oracle Utilities Customer Self Service**.

- e. In the **Release** field select the release number.

For example: Oracle Utilities Customer Self Service Version 2.2.1.0 or search for patch/ Bug 33650744 - Oracle Utilities Customer Self Service Version 2.2.1.0

- f. Download the **p33650744_210_Generic.zip** file. It includes the Readme.txt and webcenter_WSS.zip files.
5. Locate **webcenter_WSS.zip** in the installation folder and unzip the contents to <<MW_HOME>>/<<OUCSS_Product_Home>> subfolder.
6. Make sure the distribution package contains 2.2.1.0 folder inside <<MW_HOME>>/<<OUCSS_Product_Home>>/webcenter_WSS/Install/DB.



7. Set up path variables followed by WLS environmental variables. For instructions, refer to the **Install Steps** section in the *Oracle Utilities Customer Self Service Installation Guide*.
8. Perform the remaining steps to install OUCSS in the target environment.
9. Verify the post-installation tasks in the checklist. For instructions, refer to the *Oracle Utilities Customer Self Service Installation Guide*.
10. Verify if the following tables exist in the OUCSS database schema.
- SS_ACCESS_ROLE
 - SS_ACCESS_ROLE_L
 - SS_CONFIGURATION
 - SS_EDGE_APPLICATION
 - SS_EDGE_APPLICATION_L
 - SS_KEYS
 - SS_LABEL
 - SS_LABEL_L
 - SS_LANGUAGE
 - SS_LINE_OF_BUSINESS
 - SS_LINE_OF_BUSINESS_L
 - SS_LOB_ACCESS_ROLE

- SS_LOB_ACCESS_ROLE_PORTLET
- SS_LOB_ACCROLE_PRTL_ACTION
- SS_LOOKUP
- SS_LOOKUP_L
- SS_LOOKUP_VAL
- SS_LOOKUP_VAL_L
- SS_MESSAGE
- SS_MESSAGE_L
- SS_OFFER
- SS_OFFER_LANGUAGE
- SS_OFFER_SET
- SS_OFFER_SET_L
- SS_PORTLET
- SS_PORTLET_ACTION
- SS_PORTLET_L
- SS_RESOURCE
- SS_RESOURCE_L
- SS_SET
- SS_SET_ACCESS
- SS_SET_USERS
- SS_TRAIN
- SS_TRAIN_L
- SS_TRAIN_PORTLET
- SS_USER
- SS_USER_LOB_ACCESS_ROLE

11. Verify if the OUCSS data source has been created. To do so, login into the WebLogic Server console and check the **Data Sources** table. For more information, refer to the *Oracle Utilities Customer Self Service Installation Guide*.
12. Check if all OUCSS shared libraries are deployed from the WLS deployment console. For shared library names, refer to the *Oracle Utilities Customer Self Service Installation Guide*.
13. Verify if the OUCSS email session has been created.
14. Navigate to Enterprise Manager and check for the ADF connections. The web service connections are needed by the taskflows to connect to edge applications.
15. Make sure that the Security Credentials OUCSS_XAI_BASIC_KEY, OUCSS_INTG_BASIC_KEY, and OUCSS_OUNC_BASIC_KEY are successfully created.
16. Perform post-installation steps mentioned in the Oracle Utilities Customer Self Service Installation Guide.

Chapter 3

Upgrading OUCSS

This chapter includes the following topics:

- [Pre-Upgrade Considerations](#)
- [Upgrade Steps](#)

Pre-Upgrade Considerations

Consider the following during the pre-upgrade:

- Mosaic and Unicorn themes are deprecated in Oracle WebCenter V12.2.1.4. They will not be installed during the WCP installation, but they will still be available to be used by existing templates provided by the OUCSS V2.2.1.0 distribution package.
- Both the Mosaic and Unicorn themes have changed their bootstrap versions. So, the templates and skins built based on these themes in the older version of WCP should be modified to support this new styling. OUCSS Residential Template and OUCSSMosaic are two out-of-the-box portal assets that use Mosaic theme. Hence, these two assets in the OUCSS V2.2.1.0 distribution were updated to align with newer bootstrap version.
- If customizations were performed on top of OUCSS Residential Template and OUCSSMosaic in the previous version of WCP, those customizations should be merged into these two assets provided with OUCSS V2.2.1.0.

Do not just copy the source from older customizations to this upgraded environment as-is for these two assets.

- If Mosaic and Unicorn themes were used to create any portal asset (other than out-of-the-box assets), modify those as well to align with newer bootstrap version.
- WCP V12.2.1.4 continues to support Alta and Unicorn themes. So, portal assets built on these two themes can be simply copied over to the upgraded environment. OUCSS V2.2.1.0 uses Alta theme to build OUCSS Commercial Template and OUCSSAlta skin. Hence, customization built on top of these two assets can be copied over from source to target environment.
- Portal assets (such as templates, skins, resource catalogs, etc.) cannot be exported from older versions of WebCenter Portal to WebCenter Portal V12.2.1.4. WCP V12.2.1.4 does not have backward compatibility for assets created in older versions.
- OUCSS V2.2.1.0 is shipped with portals and portal assets that are compatible with WCP V12.2.1.4. After installing OUCSS V2.2.1.0 in the target environment, all other remaining customized assets and portal changes (adding portal pages post installation) should be merged into the target environment.
- Proceed with the steps listed in the [Upgrade Steps](#) section.

Upgrade Steps

To upgrade OUCSS from an older version:

1. Perform the steps mentioned in the **Upgrading OUCSS** chapter in *Oracle Utilities Customer Self Service Installation Guide*.

Important! Note that the OUCSS version to be upgraded is 2.2.1.0 (not 2.2.0.0 as mentioned in the Installation Guide) and WebCenter Portal version is 12.2.1.4 (not older version of 12c as mentioned in Installation Guide).

2. Perform pre-upgrade steps (taking the OUCSS database backup, exporting MDS metadata, exporting portal resources and taking backup of extend.oucss.portal.war).
3. After exporting MDS metadata, make sure the folder structure contains 'site\webcenter' in folder hierarchy. If a folder structure is found with 'site\site' as folder hierarchy, rename that to match 'site\webcenter'. Details of the steps for exporting MDS metadata are mentioned in installation guide.
4. Exporting portal resources is necessary to avoid any source portal corruption. These exported resources cannot be imported into WCP V12.2.1.4 as-is due to backward compatibility issue.

Refer to the **Customizing and Extending the OUCSS Custom Portal** whitepaper for instructions to export portal resources.

5. Import the exported MDS metadata and extension project (extend.oucss.portal.war) into the target environment after taking care of 'site/site' folder hierarchy.
6. Download the OUCSS 2.2.1.0 package and set up the environment as described in steps 1–7 in the **Installing OUCSS Portal** section of the *Oracle Utilities Customer Self Service Installation Guide*.
7. Upgrade the OUCSS DB schema.

Verify that the value of /oucssInstall/oucssPortal/database/installedVersion property in InstallProperties.xml reflects the version of the OUCSS Portal that you currently running.

For example: If the current version installed is OUCSS 2.1.0, set this property to value 2.1.0. Execute rest of the steps as mentioned in the *Oracle Utilities Customer Self Service Installation Guide* to proceed with the OUCSS DB upgrade.

8. Execute the following command to update the database to 2.2.1.0 with the refreshDB task.

```
ant -f InstallBuild.xml refreshDB -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml | tee refreshDB.log
```
9. Install the OUCSS Portal V2.2.1.0. Refer to the [Installing OUCSS on WCP V12.2.1.4](#) section for the steps.

This serves as the base for OUCSS V2.2.1.0 over WebCenter Portal V12.2.1.4 and merge the customizations into the target environment over out-of-the-box offerings.

10. Install the portal extension project (extend.oucss.portal.war) exported from source environment into the target environment.

Make sure to update the implementation version in MANIFEST.MF. Refer to the *Oracle Utilities Customer Self Service Installation Guide* for more information.

11. Import the exported MDS customizations into the target environment.
12. Portal resources are now ready to be imported or merged into the target environment.

Refer to the **Import Portal Resources** section in the *Oracle Utilities Customer Self Service Installation Guide* to import the portal resources. Note that the target environment here is OUCSS V2.2.1.0 (and not V2.2.0.0 as mentioned in the document).

13. Ensure utmost care while copying page templates as there are constraints related to change of bootstrap version of Mosaic and Unicorn themes. Page templates built on these themes need to use modified stylesheet in the new bootstrap version. If OUCSS Residential Template and/or OUCSSMosaic skin were customized before, then use the

same from OUCSS V2.2.1.0 and merge the customizations done on top of the base version in older OUCSS implementation.

14. Create the resource catalogs. Refer to the **Import Portal Resources** section in the *Oracle Utilities Customer Self Service Installation Guide* for steps.
15. While importing skins, take care of the constraints with Mosaic and Unicorn themes. Follow similar approach as with the page templates.
16. There is no direct approach to export navigation from the older OUCSS Portal. All modifications to out-of-the-box navigation (adding/removing pages) should be implemented from Portal Administration.

For more information, refer to the **Navigations** section in the **Import Portal Resources** chapter of the *Oracle Utilities Customer Self Service Installation Guide*.