# Oracle WebCenter Content Upgrade

## Part 2: Upgrade WCC from 11.1.1.9 to 12.2.1.4

## Table of Contents

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# Upgrade: Webcenter Content from 11g (11.1.1.9) to 12c (12.2.1.4)

## Understanding Oracle WebCenter Upgrade

### Understanding the Interoperability and Compatibility Restrictions

Before upgrading Oracle WebCenter Content from 11g (11.1.1.9) to 12c (12.2.1.4.0), you should understand how your current 11g environment will be affected by the upgrade. For new and depreciated features in 12.2.14 you can check then Webcenter content 12c (12.2.1.4) Oracle standard documentations. This Lab will focus on to upgrade Webcenter Content 11.1.1.9 to 12.2.1.4, which includes UCM, IPM, IBR, Capture and Web UI. Also, you must understand the difference between in place and out of place upgrades. Refer below to understand it.

Be aware that the process to upgrade 11.1.1.9 to 12.1.1.4 will be same as mentioned in this Lab, however based on the functionalities configured and other products installed in the same middleware however, you have to take extra precautions during initial analysis of the environment. For example, if you are using any functionality or feature which is deprecated in 12.2.1.4, then you will get the error.

Few Example:

**[1] Folder_g**

Folders_g is no longer available in 12.2.1. So _Folders_g_ must be migrated to _Framework Folders_ prior to upgrading to 12.2.1.4. If Folders_g is enabled, then upgrade will not proceed. It will fail during readiness check and during the examine phase of schema upgrade

**[2] Web UI:**

WebCenter Content 12c now supports a single WebLogic Server domain for all WebCenter Content and Capture components. It does not, however, support a direct upgrade of the domain hosting the Oracle WebCenter Content - Web UI from Release 11g to 12c. You will need to decommission the existing 11g Web UI domain and then extend the target upgraded WebCenter Content 12c domain with the Web UI component.

This is a post upgrade task and explained in detail in the later section of this Lab during upgrade.

### Oracle WebLogic Server and WebCenter Oracle Home Binaries - Upgraded Out of Place

We install the Oracle Fusion Middleware Infrastructure 12c (12.2.1.4.0) (which includes Weblogic along with JRF) and the Oracle WebCenter Content binaries in a new Oracle Home. That means you have to install Webcenter content 12.2.1.4 in a new directory. So, the upgrade of binaries is considered as out of place as the existing binaries are not overwritten.

### Schemas - Upgraded In Place

All existing schemas are upgraded in-place, which means that the Upgrade Assistant updates and overwrites the schemas during the upgrade process. The servers must be down during this process.

**Exception:** The Oracle WebCenter Sites schemas are upgraded out of place.

# Upgrade: Webcenter Content from 11g (11.1.1.9) to 12c (12.2.1.4)

**Domain Directory Reconfiguration - Upgraded In Place**

The existing Webcenter Content 11g domain is upgraded in place. Which means, during the upgrade you select the location of the existing 11g domain, that will be reconfigured it to point to the new 12c (12.2.1.4.0) oracle home directory

**Domain Component Configuration - Upgraded In Place**

After the reconfiguration of the existing 11g domain, the Upgrade Assistant is used again to upgrade any remaining domain component configurations to point to the new 12c (12.2.1.4.0) oracle home directory.

## Starting Points for an Oracle WebCenter Upgrade

Before you begin your upgrade, verify that your components are eligible for an upgrade to this release. If a component is not at a supported starting point, then you must upgrade it to a supported starting point before you can start an upgrade to 12c (12.2.1.4.0).

To upgrade your current Webcenter Content to 12.2.1.4, the minimum version required in your existing environment is 11.1.1.9. Which means, you can't upgrade any version lower than 11.1.1.9 (like 11.1.1.8 or 11.1.1.7 etc.) directly to 12.2.1.4. Whatever

……………………………………………………………………………

**Content and Capture Pre-Upgrade Tasks**

**For Content:**

- Disable all deprecated or obsolete components before upgrade.

  The following components should be disabled before the upgrade because they are obsolete or disabled.

  - AppAdapterUniversal
  - CIS_Helper
  - ContentTrackerReports
  - SiteStudioExternalApplications
  - FormEditor (which uses the now deprecated FCKEditor)
  - proxyconnections8
  - UrmAgent
  - PDFExportConverter (IBR)
  - Folders_g

**Follow this - Enabling or Disabling a Component Using the Component Manager**

  - ………………………………………………………………..
  -

# Upgrade: Webcenter Content from 11g (11.1.1.9) to 12c (12.2.1.4)

**Migrate Policy store from File based to Database (Only If you are using File Based Policy Store)**

Migrate the policy store to database-based policy store if your WebCenter Portal 11g environment uses a file-based policy store or Oracle Internet Directory (OID) as the policy store.

You can validate it from EM console.

If in below navigation shows Database, then skip this step. If it shows File, then you have to first upgrade it to Database, then proceed for upgrade.



……………………………………………………………………
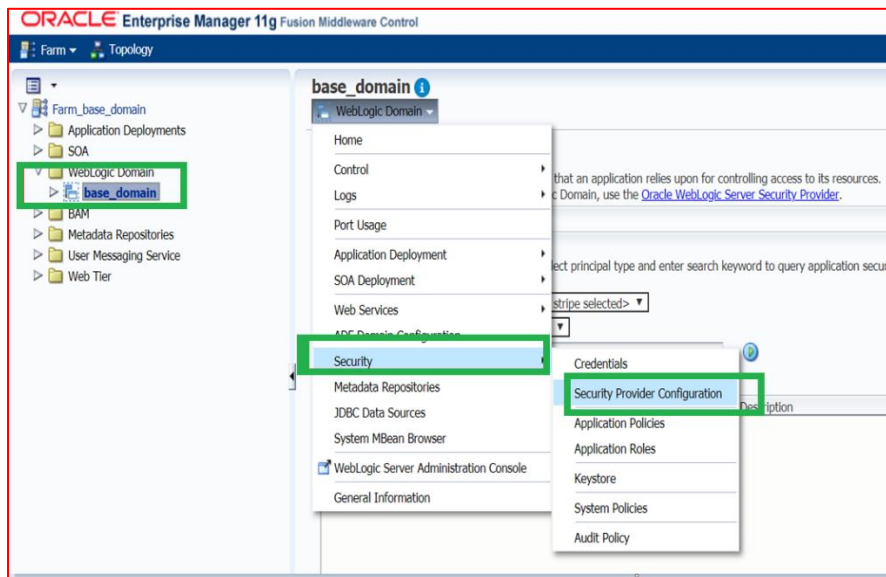
Data Source JNDI Name: As you have given during Data Source creation

User Name: User that you have crated with RCU, WCC_OPSS in our Lab and password.

Root DN: cn=DBSecurityStore

And click OK

# Upgrade: Webcenter Content from 11g (11.1.1.9) to 12c (12.2.1.4)



Select yes on prompt



You can see progress on the screen.
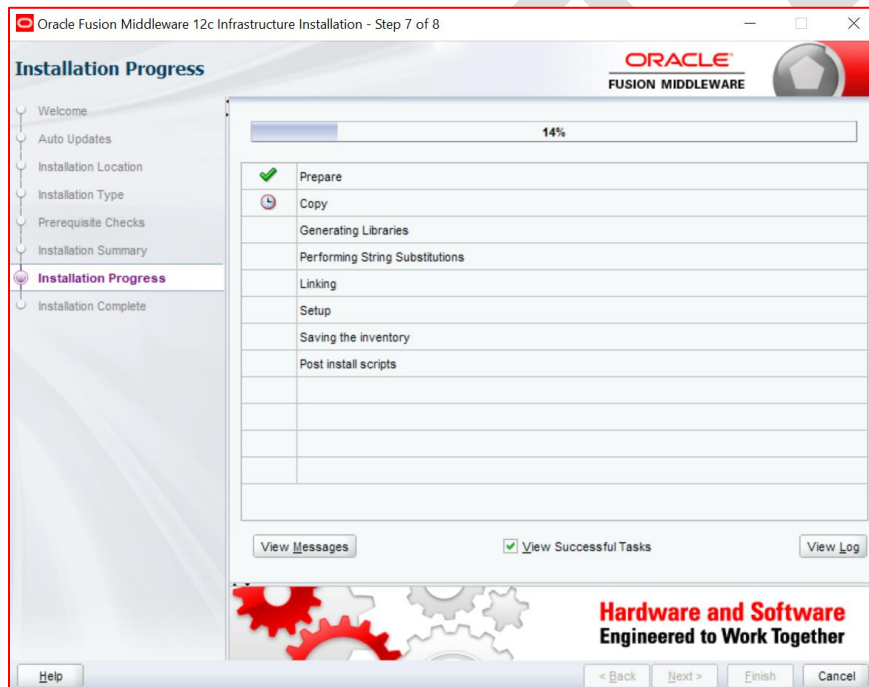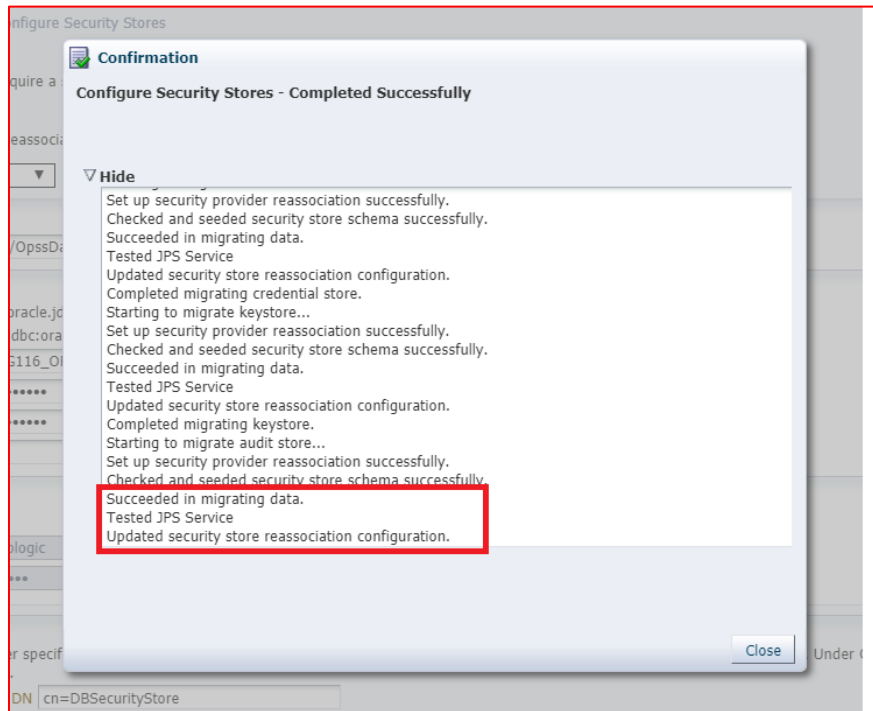
Once all done it will show 100%, click on next

# Upgrade: Webcenter Content from 11g (11.1.1.9) to 12c (12.2.1.4)
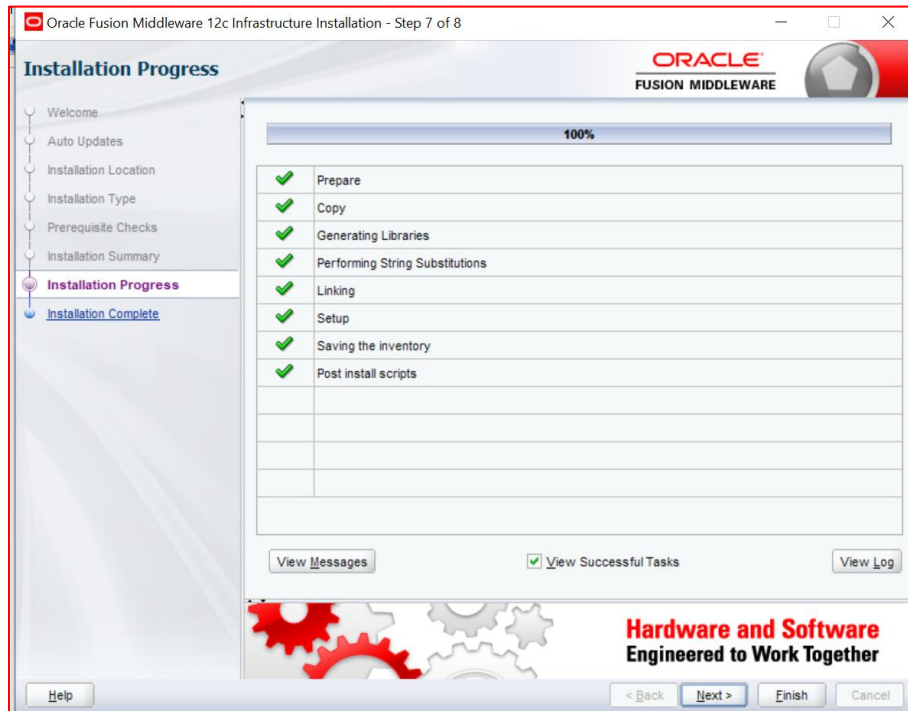


## Stopping Servers and Processes

Stop complete domain as per your environment.

## Upgrading Product Schemas and create new required schemas

### Identifying Existing Schemas Available for Upgrade

Login to database and run below query to check all exiting 11G schemas and version.

```
SET LINE 120
COLUMN MRC_NAME FORMAT A14
COLUMN COMP_ID FORMAT A20
COLUMN VERSION FORMAT A12
COLUMN STATUS FORMAT A9
COLUMN UPGRADED FORMAT A8
SELECT MRC_NAME, COMP_ID, OWNER, VERSION, STATUS, UPGRADED FROM SCHEMA_VERSION_REGISTRY WHERE OWNER LIKE 'WCC_%'
ORDER BY MRC_NAME, COMP_ID;
```

**Note –** Change Owner like in above query as per your schemas prefix.

Below are the current 11G schemas and versions.

# Upgrade: Webcenter Content from 11g (11.1.1.9) to 12c (12.2.1.4)

```
SQL> SELECT MRC_NAME, COMP_ID, OWNER, VERSION, STATUS, UPGRADED FROM SCHEMA_VERSION_REGISTRY WHERE OWNER LIKE 'WCC_%' ORDER BY MRC_NAME, COMP_ID;

MRC_NAME       COMP_ID              OWNER                    VERSION      STATUS    UPGRADED
-------------- -------------------- ------------------------ ------------ --------- --------
WCC            CAPTURE              WCC_CAPTURE              11.1.1.8.0   VALID     N
WCC            IPM                  WCC_IPM                  11.1.1.2.1   VALID     N
WCC            IRM                  WCC_ORAIRM               11.1.1.2.1   VALID     N
WCC            MDS                  WCC_MDS                  11.1.1.9.0   VALID     N
WCC            OCS                  WCC_OCS                  11.1.1.9.0   VALID     N
WCC            OCSSEARCH            WCC_OCSSEARCH            11.1.1.9.0   VALID     N
WCC            URMSERVER            WCC_URMSERVER            11.1.1.9.0   VALID     N
```

**Starting the Upgrade Assistant**

**Go to C:\wcc12c\middleware\oracle_common\upgrade\bin**
**Windows:** ua.bat   (this time without –readiness)
**Unix Base O.S:** ./ua.sh
Click next on welcome screen



**Verifying the Schema Upgrade**

After completing all the upgrade steps, verify that the upgrade was successful by checking that the schema version in schema_version_registry has been properly updated.

SET LINE 120
COLUMN MRC_NAME FORMAT A14
COLUMN COMP_ID FORMAT A20
COLUMN VERSION FORMAT A12
COLUMN STATUS FORMAT A9
COLUMN UPGRADED FORMAT A8
SELECT MRC_NAME, COMP_ID, OWNER, VERSION, STATUS, UPGRADED FROM SCHEMA_VERSION_REGISTRY WHERE OWNER LIKE 'WCC_%' ORDER BY MRC_NAME, COMP_ID;

**Upgrading WebCenter in a Clustered Topology**

# Upgrade: Webcenter Content from 11g (11.1.1.9) to 12c (12.2.1.4)

If you have multi machine clustered environment (horizontal clustering – multiple managed servers running on different machines in a cluster) then do this otherwise you can skip this in case of standalone (vertical) domain.

Make sure you have infra and content installed on all nodes at same path as of primary server.

Once upgrade completed on primary node, just pack and unpack upgraded domain on all clustered servers.

Got to C:\wcc12c\middleware\oracle_common\common\bin

Run below command to pack domain

**Windows**:

pack.cmd -managed=true -domain=C:\oracle\Middleware\user_projects\domains\wcc_domain -template= C:\oracle\Middleware\user_projects\domains\wcc12214.jar -template_name="wccupgrade"

**Unix Based:**

./pack.sh -managed=true -domain=<path</wcc_domain -template=<path_to_store>/wcc12214.jar - template_name="wccupgrade"

Copy wcc12214.jar template to all clustered machine and run below unpack command:

Go to C:\wcc12c\middleware\oracle_common\common\bin and run unpack as below

Assuming template jar copied at C:\oracle\Middleware\user_projects\domains -

## Extend Domain for Web UI

You can't 11g Web UI to 12.2.1.4 due to Architecture change in the product. Once upgraded, you have to extend domain to include Web UI. Please refer below for instructions.

Configuring the Oracle WebCenter Content Server Domain to Include WebCenter Content - Web UI
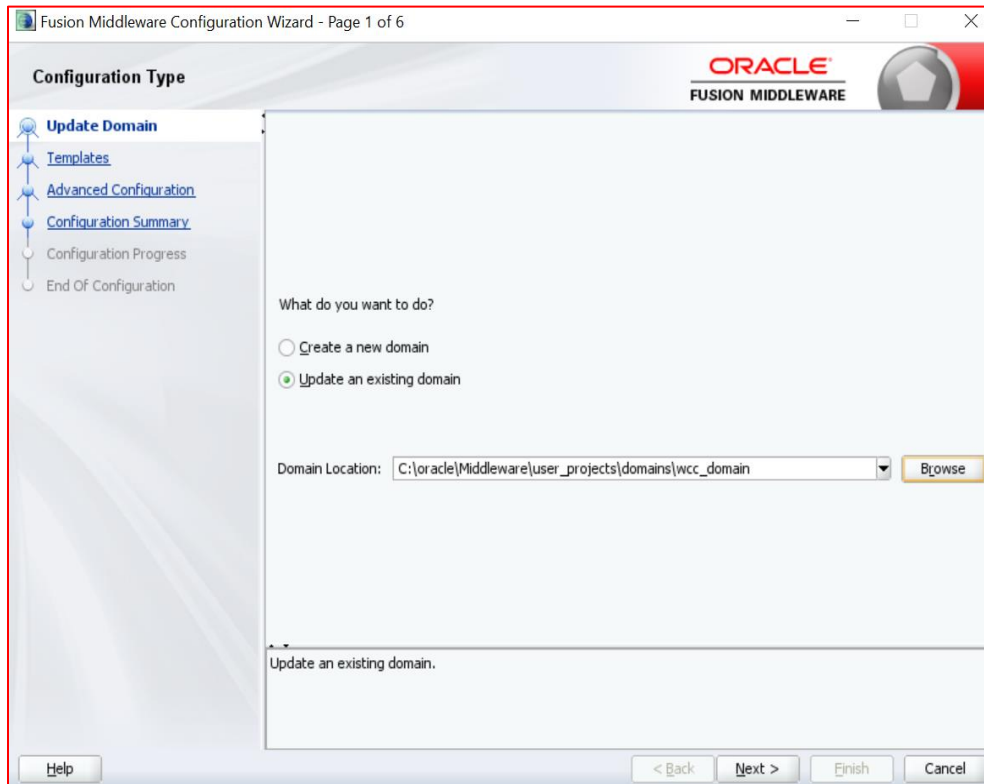
Stop complete domain

Go to C:\wcc12c\middleware\oracle_common\common\bin and initiate configuration wizard

config.cmd (Windows), ./config.sh (Unix based)

select option update and existing domain, and browse your domain.

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-Dcom.sun.jndi.ldapURLParsing=legacy
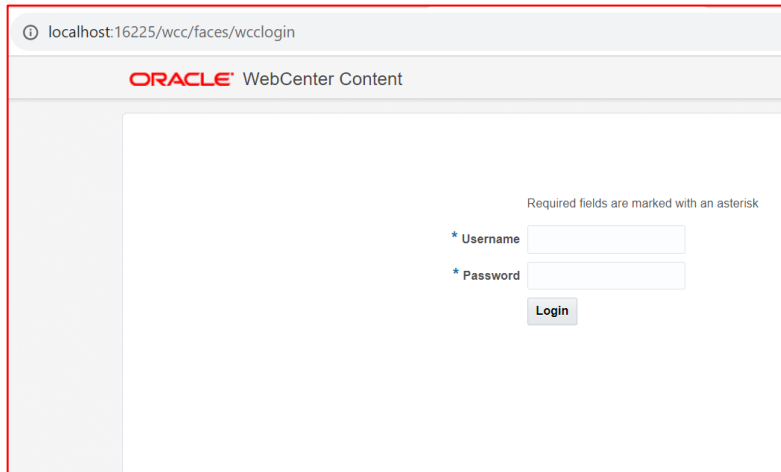
At below place (EXTRA_JAVA_PROPERTIES) –

```
set EXTRA_JAVA_PROPERTIES=-Djps.subject.cache.key=5 -Djps.subject.cache.ttl=600000 -Djps.policystore.hybrid.mode=false -DUSE_JAAS=false -Djps.auth.debug=false -Djps.combiner.optimize
set EXTRA_JAVA_PROPERTIES=%EXTRA_JAVA_PROPERTIES% -Doracle.capture.home=C:\wcc12c\middleware\wccapture
set EXTRA_JAVA_PROPERTIES=%EXTRA_JAVA_PROPERTIES% -Dipm.oracle.home=C:\wcc12c\middleware\wccontent
set EXTRA_JAVA_PROPERTIES=%EXTRA_JAVA_PROPERTIES% -Ducm.oracle.home=%UCM_ORACLE_HOME% -Dorg.eclipse.persistence.moxy.annotation.xml-value-extension=true
set EXTRA_JAVA_PROPERTIES=-Djavax.management.builder.initial=weblogic.management.jmx.mbeanserver.WLSMBeanServerBuilder -Dcom.sun.jndi.ldapURLParsing=legacy  %EXTRA_JAVA_PROPERTIES%
@REM Set final environment user overrides, if available.
```

Restart complete domain and access URL again. This fix applicable for EM console error as well where EM console also didn't come and throw above mentioned error in log file.
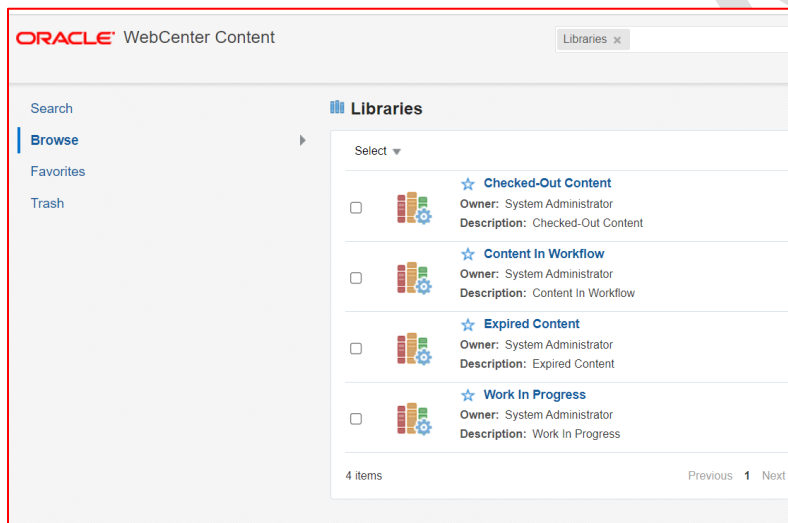
Fix2: Make sure UCM server is up and running properly

# Upgrade: Webcenter Content from 11g (11.1.1.9) to 12c (12.2.1.4)

[http://localhost:16225/wcc](http://localhost:16225/wcc)



Interface once you login.

# Upgrade: Webcenter Content from 11g (11.1.1.9) to 12c (12.2.1.4)

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