Oracle® Warehouse Builder

Release Notes

11*g* Release 2 (11.2)

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This document contains important information not included in the Oracle Warehouse Builder documentation.

This document provides the following information about Oracle Warehouse Builder 11*g* Release 2 (11.2):

- Documentation Accessibility
- Related Publications
- Requirements
- Upgrading to Oracle Warehouse Builder 11g Release 2 (11.2.0.4)
- Postupgrade Tasks
- How to Use Oracle Warehouse Builder Release 11.2.0.4 with Oracle Database Release 12.1?
- Using Oracle Warehouse Builder 11.2.0.2 Client with 11.2.0.3 Server
- Documentation Corrections and Additions
- Known Issues and Limitations
- Resolved Issues

1 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

2 Related Publications

The Oracle Warehouse Builder 11g Release 2 (11.2) documentation set includes these publications:

- Oracle Warehouse Builder Concepts
- Oracle Warehouse Builder Installation and Administration Guide



- Oracle Warehouse Builder Sources and Targets Guide
- Oracle Warehouse Builder Data Modeling, ETL, and Data Quality Guide
- Oracle Warehouse Builder API and Scripting Reference
- Oracle Warehouse Builder OMB*Plus Command Reference
- Oracle Warehouse Builder Release Notes

To access the documentation set, including the latest version of the release notes, refer to the following Web site:

http://www.oracle.com/technetwork/developer-tools/warehouse/documentation/library/index.html

3 Requirements

For the latest information on platform-specific requirements, certifications and patches, refer to the following Web site:

https://support.oracle.com

4 Upgrading to Oracle Warehouse Builder 11*g* Release 2 (11.2.0.4)

This section describes the steps to upgrade Oracle Warehouse Builder 11*g* Release 2 (11.2.0.1, 11.2.0.2, and 11.2.0.3) installation to Release 11.2.0.4.

- "Upgrading from Oracle Warehouse Builder 11g Release 2 (11.2.0.1 or 11.2.0.2) to Release 11.2.0.4: Oracle Warehouse Builder Server-Side Patch"
- "Upgrading from Oracle Warehouse Builder Release 11.2.0.3 to Release 11.2.0.4:
 Oracle Warehouse Builder Server-Side Patch"
- Upgrading from Oracle Warehouse Builder 11g Release 1 (11.2.0.1, 11.2.02, or 11.2.0.3) to Release 11.2.0.4: Oracle Warehouse Builder Client-Side Patch

4.1 Upgrading from Oracle Warehouse Builder 11*g* Release 2 (11.2.0.1 or 11.2.0.2) to Release 11.2.0.4: Oracle Warehouse Builder Server-Side Patch

On all Oracle Database 11*g* platforms, Oracle Warehouse Builder 11*g* server-side functionality is an integral part of Oracle Database 11*g* database server. Before any user upgrade the Database installation in-place that is, reusing existing <code>OWB_HOME</code> for new Oracle Database installation, users must back up the <code>OWB_HOME/owb/bin/admin</code> directory. Consult the Oracle Database 11*g* Release 2 (11.2.0.4) documentation to upgrade an existing Oracle Database 11.2.0.1 or 11.2.0.2 to Release 11.2.0.4.

Note: *OWB_HOME* is the home directory where Oracle Warehouse Builder is installed.

After you perform the steps required to upgrade to Oracle Database 11.2.0.4, perform the postinstallation steps required for Oracle Warehouse Builder 11*g* Release 2 (11.2.0.4) as described in "Postinstallation Steps for Oracle Warehouse Builder 11*g* Release 2 (11.2.0.4)".

4.1.1 In-place Upgrade of Database

After following the steps for the in-place upgrade of the Oracle Database 11.2.0.4, perform these postinstallation steps.

The two different server-side installation scenarios are

- "Inplace Upgrade (Reuse Existing OWB_HOME)"
- "Out of Place Upgrade of New OWB_HOME"

4.1.1.1 Postinstallation Steps for Oracle Warehouse Builder 11 *g* **Release 2 (11.2.0.4)** Use the following steps to complete the installation of the Oracle Warehouse Builder 11.2.0.4 on Oracle Warehouse Builder server-side:

Inplace Upgrade (Reuse Existing OWB_HOME)

This section describes the postinstallation steps for inplace upgrade (reuse existing <code>OWB_HOME</code>).

1. Stop and exit all Oracle Warehouse Builder components, including the Control Center Service, known as the Runtime Platform Service in Oracle Warehouse Builder 10.1 and earlier releases.

To stop the Control Center, run the $stop_service.sql$ script. In SQL*Plus, run the following command:

```
sqlplus OWBSYS/OWBSYS_password@OWB_HOME/owb/rtp/sql/stop_service.sql
```

A return value of Not Available indicates that you successfully stopped the service.

Stop the browser from running:

- On Windows OWB_HOME\owb\bin\win32\stopOwbbInst.bat
- On UNIX OWB_HOME/owb/bin/unix/stopOwbbInst.sh

If the Oracle Warehouse Builder server-side installation is on an Oracle 10*g* database, then continue to step 7.

- **2.** Run the following SQL statement to identify the <code>OWB_HOME</code> for the current installation. The <code>rtrepos.properties</code> file is located in the path indicated by the <code>SERVER_SIDE_HOME</code> of the query.
 - a. sqlplus OWBSYS/OWBSYS_PASSWORD
 - **b.** SELECT host_name, server_side_home from wb_rt_service_nodes s, v\$instance v where s.instance_number=v.instance_number;

```
HOST_NAME
SERVER_SIDE_HOME
yourhost_machine
OWB HOME
```

- **3.** For an existing repository that is installed on an Oracle 11*g* database (not Oracle 10*g*), ensure that *OWB_HOME* and *ORACLE_SID* values are pointing to the database where the repository is installed. Ensure that the PATH contains *OWB_HOME*/bin.
- **4.** During the preparation for the RDBMS in-place migration, the <code>OWB_ HOME/owb/bin/admin</code> directory should have been backed up. Copy the rtrepos.properties file from the backed up <code>OWB_HOME/owb/bin/admin</code> directory

to the current <code>OWB_HOME/owb/bin/admin</code> directory. If the file is not backed up, then continue with step 6.

5. Run the following command:

On Windows

OWB_HOME\owb\bin\win32\rt_mgr.bat OWBSYS OWBSYS_password OWB_Repository_Host
Repository_Port Repository_Service_Name

On UNIX

 ${\it OWB_HOME/owb/bin/unix/rt_mgr.sh~OWBSYS_password~OWB_Repository_Host~Repository_Port~Repository_Service_Name}$

For permission issues in Linux and UNIX environments, run the command again as a root user.

The output displays on the computer screen as.

CompilerOracle: exclude oracle/wh/runtime/platform/service/Service run Host Name: yourhost machine

rtrepos.properties:

OWB HOME

Runtime properties upgrade is done successfully!

For Oracle RAC systems, locate the rtrepos.properties file from the host name and directory location from the rt_mgr application. Copy the rtrepos.properties file from this location to all other nodes in the Oracle RAC cluster.

6. If step 5 fails, then run this step as the OWBSYS user to reset the repository password. Enter the password when prompted for a value.

After completing this step, continue to step 7. There is no need to run step 5 again.

- sqlplus OWBSYS/OWBSYS_PASSWORD
- @OWB_HOME/owb/reposasst/secHelper.pks
- @OWB_HOME/owb/reposasst/secHelper.plb
- @OWB_HOME/owb/reposasst/upg/load_java.sql OWBSYS_OWBSYS_PASSWORD
- @OWB_HOME/owb/rtp/sql/reset_repository.sql
- SELECT host_name, server_side_home from wb_rt_service_nodes s, v\$instance v where s.instance_number=v.instance_number;

For Oracle RAC systems, the query after the reset_repository script displays the host and home where the owb/bin/admin/rtrepos.properties file is referenced and updated. It should be copied to all other nodes in the Oracle RAC cluster.

The reset_repository forces the user to register the location again using the Control Center Manager.

7. From a command prompt, navigate to the <code>OWB_HOME/owb/reposasst/upg</code> directory and run the following command:

```
sqlplus /nolog @upg112to11204.sql
```

Enter the database connection information, Oracle Warehouse Builder repository owner credentials, and the SYS user credentials.

The upgrade utility proceeds to upgrade Oracle Warehouse Builder objects associated with the selected repository owner.

The upgrade utility logs any errors in the file OWB_

<code>HOME/owb/reposasst/upg/LOG.TXT</code>. You can ignore any creation errors reported due to objects that are existing. An example of such an error is displayed below.

```
DROP TABLE dataflow_dependency_t;

ERROR at line 1:

ORA-00942: table or view does not exist

CREATE TABLE alldataflow_dependency_t (

ERROR at line 1:

ORA-00955: name is used by an existing object
```

8. Refer to "Known Issues and Limitations" for a list of limitations concerning the Upgrade process.

For certain upgrade scenarios, you must perform additional steps.

9. Start the Control Center Service using the start_service.sql script.

```
sqlplus OWBSYS/OWBSYS_password@OWB_HOME/owb/rtp/sql/start_service.sql
```

A return value of Available indicates that you successfully started the service. If the service fails to start, run the start_service.sql script again.

If the service fails to start after two attempts, run the service_doctor script to determine the cause using the following command:

```
sqlplus OWBSYS/OWBSYS_password@OWB_HOME/owb/rtp/sql/service_doctor.sql
```

The return value should indicate that the service script is accessible to the database server.

Out of Place Upgrade of New OWB_HOME

This section describes the postinstallation steps for out of place upgrade of new OWB_HOME.

1. Stop and exit all Oracle Warehouse Builder components, including the Control Center Service, known as the Runtime Platform Service in Oracle Warehouse Builder 10.1 and earlier releases.

To stop the Control Center, run the stop_service.sql script. In SQL*Plus, run the following command:

```
sqlplus OWBSYS/OWBSYS_password@OWB_HOME/owb/rtp/sql/stop_service.sql
```

A return value of Not Available indicates that you successfully stopped the service.

Stop the browser from running:

- On Windows OWB HOME\owb\bin\win32\stopOwbbInst.bat
- On UNIX OWB_HOME/owb/bin/unix/stopOwbbInst.sh

If the Oracle Warehouse Builder server-side installation is on an Oracle 10g database, then continue to step 8.

- **2.** Run the following SQL statement to identify the <code>OWB_HOME</code> for the current installation. The <code>rtrepos.properties</code> file is located in the path indicated by the <code>SERVER_SIDE_HOME</code> of the query.
 - a. sqlplus OWBSYS/OWBSYS_PASSWORD
 - **b.** SELECT host_name, server_side_home from wb_rt_service_nodes s, v\$instance v where s.instance_number=v.instance_number;

```
HOST_NAME

SERVER_SIDE_HOME

yourhost_machine

OWB HOME
```

- **3.** For an existing repository that is installed on an Oracle 11*g* database (not Oracle 10*g*), ensure that *OWB_HOME* and *ORACLE_SID* values are pointing to the database where the repository is installed. Ensure that the PATH contains *OWB_HOME*/bin.
- **4.** Copy the rtrepos.properties file from the previous Oracle Warehouse Builder installation to the new Oracle Warehouse Builder installation.
 - cp PREVIOUS_OWB_HOME/owb/bin/admin/rtrepos.properties NEW_OWB_ HOME/owb/bin/admin
- **5.** Run the following SQL statement as the OWBSYS user to reset the CC home value. Enter in the directory location for the new OWB_HOME when prompted.
 - sqlplus OWBSYS/OWBSYS_PASSWORD
 - @New_OWB_HOME/owb/UnifiedRepos/reset_owbcc_home.sql
- **6.** Run the following command:

On Windows - OWB_HOME\owb\bin\win32\rt_mgr.bat OWBSYS_password OWB_Repository_Host Repository_Port Repository_Service_Name

On UNIX - OWB_HOME/owb/bin/unix/rt_mgr.sh OWBSYS OWBSYS_password OWB_ Repository_Host Repository_Port Repository_Service_Name

For permission issues in Linux and UNIX environments, run the command again as a root user.

The output displays on the computer screen as.

```
CompilerOracle: exclude oracle/wh/runtime/platform/service/Service run
Host Name: yourhost_machine
rtrepos.properties:

OWB_HOME
```

Runtime properties upgrade is done successfully!

For Oracle RAC systems, locate the rtrepos.properties file from the host name and directory location from the rt_mgr application. Copy the rtrepos.properties file from this location to all other nodes in the Oracle RAC cluster.

7. If step 6 fails, then run the following SQL statement as the OWBSYS user to reset the repository password. Enter the password when prompted for a value.

After completing this step, continue to step 8. There is no need to run step 6 again.

sqlplus OWBSYS/OWBSYS PASSWORD

- @OWB HOME/owb/reposasst/secHelper.pks
- @OWB_HOME/owb/reposasst/secHelper.plb
- @OWB_HOME/owb/reposasst/upg/load_java.sql OWBSYS_OWBSYS_PASSWORD
- @OWB_HOME/owb/rtp/sql/reset_repository.sql
- SELECT host_name, server_side_home from wb_rt_service_nodes s, v\$instance v where s.instance number=v.instance number;

For Oracle RAC systems, the query after the reset_repository script displays the host and home where the owb/bin/admin/rtrepos.properties file is referenced and updated. It should be copied to all other nodes in the Oracle RAC cluster.

The reset_repository forces the user to register the locations again using the Control Center Manager.

8. From a command prompt, navigate to the <code>OWB_HOME/owb/reposasst/upg</code> directory and run the following command:

```
sqlplus /nolog @upg112to11204.sql
```

Enter the database connection information, Oracle Warehouse Builder repository owner credentials, and the SYS user credentials.

The upgrade utility proceeds to upgrade Oracle Warehouse Builder objects associated with the selected repository owner.

The upgrade utility logs any errors in the file OWB_

<code>HOME/owb/reposasst/upg/LOG.TXT</code>. You can ignore any creation errors reported due to objects existing. An example of such an error is displayed below.

```
DROP TABLE dataflow_dependency_t;

ERROR at line 1:

ORA-00942: table or view does not exist

CREATE TABLE alldataflow_dependency_t (

ERROR at line 1:

ORA-00955: name is used by an existing object
```

- **9.** If the reset_repository.sql has been executed in step 7, then all existing locations must be reset through the Control Center Manager application.
- **10.** Refer to "Known Issues and Limitations" for a list of limitations concerning the Upgrade process.

For certain upgrade scenarios, you must perform additional steps.

11. Start the Control Center Service using the start_service.sql script.

```
sqlplus OWBSYS/OWBSYS_password@OWB_HOME/owb/rtp/sql/start_service.sql
```

A return value of Available indicates that you successfully started the service. If the service fails to start, run the start_service.sql script again.

If the service fails to start after two attempts, run the <code>service_doctor</code> script to determine the cause using the following command:

```
\verb|sqlplus OWBSYS|/OWBSYS\_| password @OWB\_HOME/owb/rtp/sql/service\_doctor.sql| \\
```

The return value should indicate that the service script is accessible to the database server.

4.2 Upgrading from Oracle Warehouse Builder Release 11.2.0.3 to Release 11.2.0.4: Oracle Warehouse Builder Server-Side Patch

Go to "Upgrading from Oracle Warehouse Builder 11g Release 2 (11.2.0.1 or 11.2.0.2) to Release 11.2.0.4: Oracle Warehouse Builder Server-Side Patch" and follow the steps. Skip step 5 mentioned in the "Inplace Upgrade (Reuse Existing OWB_HOME)" and "Out of Place Upgrade of New OWB_HOME", the remaining steps are the same.

4.3 Upgrading from Oracle Warehouse Builder 11*g* Release 1 (11.2.0.1, 11.2.02, or 11.2.0.3) to Release 11.2.0.4: Oracle Warehouse Builder Client-Side Patch

Oracle Warehouse Builder 11*g* Release 2 (11.2.0.1, 11.2.0.2, and 11.2.0.3) client-side functionality is available only on two platforms, Windows 32-bit and Linux x86.

To patch Oracle Warehouse Builder 11.2.0.1, 11.2.0.2, and 11.2.0.3 client-side to Release 11.2.0.4, you must apply the Oracle Database 11.2.0.4 patch set to Oracle Warehouse Builder 11.2.0.1, 11.2.0.2, and 11.2.0.3 Oracle home.

4.3.1 Pre-Installation Steps

Before you install the Release 11.2.0.4 patch on Linux x86 platforms, you must log in as the UNIX user that owns the Oracle Warehouse Builder installation.

Back up the <code>OWB_HOME/owb/bin/admin</code> directory before performing the upgrade.

4.3.2 Upgrading from Oracle Warehouse Builder 11g Release 2 (11.2.0.1, 11.2.0.2, and 11.2.0.3)

Without uninstalling the existing Oracle Warehouse Builder software, install the Oracle Database 11.2.0.4 patch set into Oracle Warehouse Builder 11.2.0.1, 11.2.0.2, or 11.2.03 home directory.

Use the following steps to install the patch:

- **1.** Extract (unzip) the Oracle Database 11.2.0.4 patch set archive into a temporary directory on your local system, for example, *temp_dir*.
- 2. Run the Oracle Universal Installer directly from the archive stage extracted in Step

On Windows, run temp_dir\setup.exe.

On Linux, run temp_dir/runInstaller.

- **3.** Follow the prompts in Oracle Universal Installer.
- **4.** For the home details, specify the home directory of the existing Oracle Warehouse Builder 11.2.0.1, 11.2.0.2, or 11.2.0.3 installation.

Note: For Oracle Warehouse Builder patches of older releases (such as Oracle Warehouse Builder 10.2.0.*x*), users were required to start the Oracle Universal Installer from the installed home of Oracle Warehouse Builder home directory.

For Oracle Warehouse Builder 11.2.0.4, the requirement is to start Oracle Universal Installer from the patch archive. Installing Oracle Warehouse Builder 11.2.0.4 patch by starting Oracle Universal Installer from the installed home of Oracle Warehouse Builder home directory results in an incomplete installation.

5 Postupgrade Tasks

After you perform the steps required to upgrade to Oracle Database release 11.2.0.4 and if the host name or port number, or service name has changed, perform the following postinstallation steps required for Oracle Warehouse Builder 11g Release 2 (11.2.0.4):

1. Copy rtrepos.properties from the old OWB_HOME to the new home:

```
cp OLD_ORACLE_HOME/owb/bin/admin/rtrepos.properties
ORACLE_HOME_11204>/owb/bin/admin/
```

2. Reset the OWB CC home:

```
cd $ORACLE_HOME_11204/owb/UnifiedRepos
sqlplus / as sysdba
SQL> @?/owb/UnifiedRepos/reset_owbcc_home.sql ORACLE_HOME_11204
```

3. Run the inplace upgrade script:

```
cd $ORACLE_HOME_11204/owb/reposasst/upg
sqlplus /nolog @upg112to11204.sql
```

4. Check for invalid packages:

```
sqlplus / as sysdba
    SQL> col c1 heading 'owner' format a15
    SQL> col c2 heading 'name' format a40
    SQL> col c3 heading 'type' format a15
    SQL> select owner c1, object_type c3, object_name c2 from dba_objects where
status != 'VALID' and owner = 'OWBSYS' order by owner, object_type;
    no rows selected
```

- **5.** Update the connection string for the runtime connection.
 - **1.** Query the existing values:

```
select node_id, instance_number, connect_spec, enabled, runtime_version,
server_side_home from wb_rt_service_nodes;
```

2. Update the appropriate row using the *node_id* returned in the earlier step:

```
declare
    v_result number := 0;
    Begin
    v_result := wb_location_helper.fixRTServiceNode(NODE_ID,'HOST','PORT','SERVICE_NAME','SERVER_SIDE_HOME');
    END;
//
```

6. Modify the design time locations:

Where OWB_WKSP is the installed workspace, and OWB_REPO is the Repository.

Now for every design location, copy and paste the following block into the SQLPlus session substituting the design time location name:

```
declare
    v_result boolean := FALSE;
    Begin
    v_result := wb_rt_reset_location.fixDTLocation('ORACLE_DESIGN_TIME_
LOCATION','HOST','PORT','<SERVICE_NAME>','11.2','','');
    END;
//
```

7. Modify the runtime locations:

Where OWB_WKSP is the installed workspace, and OWB_REPO is the Repository.

Now for every runtime location, copy and paste the following block into the SQLPlus session substituting the run time location name:

```
declare
    v_result boolean := FALSE;
    Begin
        v_result := wb_rt_reset_location.fixRTLocation('ORACLE_RUN_TIME_
LOCATION','HOST','PORT','SERVICE_NAME','11.2','','');
    END;
```

- **8.** Refer to My Oracle Support Note 1526360.1 to upgrade and verify status of all locations in the Warehouse Builder Repository Browser.
- **9.** Start the runtime service using the SQL*Plus script, start_service.sql. Log in to the Runtime Repository owner and run the following command:

```
sqlplus OWBSYS/OWBSYS_PASSWORD @ORACLE_HOME/owb/rtp/sql/start_service.sql
```

The script attempts to start the Runtime Service, waits for a short time for the service to start, and then reports the final running state of the Runtime Service. This reports AVAILABLE if the Runtime Service was already started or was started successfully.

- **10.** After running upgrade scripts on an OWB repository, Oracle recommends that you run the Optimize Repository service to ensure optimal performance. This service needs to run only one time per repository. The following are the steps:
 - 1. Sign in to the OWB client as a workspace owner.
 - **2.** Select **Tools** and click the **Optimize Repository** option.
 - **3.** After the service completes, perform the OWB operations.

6 How to Use Oracle Warehouse Builder Release 11.2.0.4 with Oracle Database Release 12.1?

This section describes the inplace migration steps that must be completed at the server-side only and the instructions on how to use Oracle Warehouse Builder with Oracle Database release 12.1.

- In-place Migration Steps on the Server-Side
- Oracle Warehouse Builder on a Pluggable Database

6.1 In-place Migration Steps on the Server-Side

If the Oracle Warehouse Builder release 11.2.0.4 runtime was initially installed on Oracle Database release 10.2 or 11.1 instance, and that database instance is migrated to Oracle Database release 12.1, the following steps must be followed. If the migrated database was 11.2, skip to step 4.

1. Run the following SQL statement to identify the ORACLE_HOME for the current installation. The rtrepos.properties file is located in the path indicated by SERVER_SIDE_HOME.

```
sqlplus OWBSYS/OWBSYS_PASSWORD
    SELECT host_name, server_side_home from wb_rt_service_nodes s, v$instance v
where s.instance_number=v.instance_number;
HOST_NAME SERVER_SIDE_HOME yourhost_machine
ORACLE_HOME
```

2. Remove the ORACLE_HOME/owb/bin/admin/rtrepos.properties file.

```
rm ORACLE_HOME/owb/bin/admin/rtrepos.properties
```

3. Run this step as the OWBSYS user to reset the repository password. Enter the password when prompted for a value.

```
sqlplus OWBSYS/OWBSYS_PASSWORD
          @ORACLE_HOME/owb/rtp/sql/reset_repository.sql OWBSYS_PASSWORD
          SELECT host_name, server_side_home from wb_rt_service_nodes s,
v$instance v where s.instance number=v.instance number;
```

For Oracle RAC systems, after the reset_repository script displays the host and home where the <code>ORACLE_HOME/owb/bin/admin/rtrepos.properties</code> file is referenced and updated, copy it to all other nodes in the Oracle RAC cluster.

The reset_repository forces the user to register all locations again using the Control Center Manager.

- **4.** Modify all the design-time and runtime locations that are converted to Oracle Database release 12.1 by following these steps:
 - Log into SQL*Plus as OWBSYS user.
 - **2.** Set the Oracle Warehouse Builder workspace.
 - **3.** Fix the release version on every location.

Example 1 Modify Design-Time Location

Where OWB_WKSP is the installed workspace, and OWB_REPO is the installed 11.2.0.4 repository.

Now, for every design location that is converted to an Oracle Database release 12.1, copy the following block into the SQL*Plus session substituting the design time location name:

Example 2 Modify Runtime Location

Where OWB_WKSP is the installed workspace, and OWB_REPO is the installed 11.2.0.4 repository.

Now, for every runtime location that is converted to an Oracle Database release 12.1, copy the following block into the SQL*Plus session substituting the design time location name:

Refer to My Oracle Support Note 1526360.1 to upgrade and verify status of all locations in the Warehouse Builder Repository Browser.

6.2 Oracle Warehouse Builder on a Pluggable Database

Oracle Warehouse Builder on a pluggable database operates the same as a multi-instance or an <code>OWB_HOME</code> configuration. ODI-EE license is required to use this functionality.

Initial Installation

The following are the key points:

■ For a given multitenant container database (CDB), there can be 1..n pluggable databases (PDB). Each of these PDBs exist on their own and have their own service name.

- Every PDB runs its own runtime service, and requires its own properties files and log directories.
- Connection to the PDB instance is in host:port:pdb_name (not the multitenant container database)
- Each PDB must be configured before installing the next database.

Refer to My Oracle Support Note 1332043.1 to install the Oracle Warehouse Repository within a PDB instance.

To configure the multi-instance, perform the following steps:

1. Stop the Oracle Warehouse Builder runtime server.

```
sqlplus OWBSYS/OWBSYS_PASSWORD@pdb_name
     @?/owb/rtp/sql/stop_service.sql
     @?/owb/rtp/sql/setup_rt_for_multi_instances.sql pdb_name
```

2. Start the Oracle Warehouse Builder runtime server.

- **3.** Install workflow in the PDB instance (if required)
- Before installing workflow on Oracle Database release 12.1, make the following change:

Remove this value from the sqlnet.ora file when the workflow schema installation completes.

Detaching PDB from a Multitenant Container Database

The following are the key points:

- In order to detach a PDB from a multitenant container database, firstly, shut down all the Oracle Warehouse Builder processes using that PDB instance.
- Close any running Oracle Warehouse Builder products.
- Stop the Runtime Service using the SQL*PLUS script, stop_service.sql:

```
sqlplus OWBSYS/OWBSYS_PASSWORD@pdb_name
    @?/owb/rtp/sql/stop_service.sql
```

■ Use Oracle Database Configuration Assistant to manage pluggable databases. unplugg PDB from the PDB archive, and create pdb_file:

```
pdb_name.tar.gz
```

Back up the \$ORACLE_HOME/owb/bin/admin/pdb_name directory. It contains the following files:

```
rtrepos.properties
Runtime.properties
```

Connecting PDB to a CDB

This process is similar to the process defined in My Oracle Support Note 434272.1 to update Oracle Warehouse Builder after a database cloning. The steps depend upon the following two cases:

- Case1: PDB name and connection details remain the same during the import into a CDB
 - 1. Using Oracle Database Configuration Assistant, manage pluggable databases, create a pluggable database from PDB archive, follow the steps to import the file created by unplugging the PDB instance from the CDB.

```
pdb_name.tar.gz
```

- **2.** Use the same name as the original PDB for the Pluggable Database Name.
- **3.** When the import completes, create the \$ORACLE_HOME/owb/bin/admin/pdb_name directory and move the following files into the directory:

```
rtrepos.properties
Runtime.properties
```

4. Start the runtime service using start_service.sql:

```
sqlplus OWBSYS/OWBSYS_PASSWORD@pdb_name
    @?/owb/rtp/sql/start_service.sql
```

- Case 2: PDB name or host name changes during the import into a CDB
 - 1. Using Oracle Database Configuration Assistant, manage pluggable databases, create a pluggable database from PDB archive, follow the steps to import the file created by unplugging the PDB instance from the CDB.

```
old_pdb_name.tar.gz
```

- **2.** Create a new name for the Pluggable Database Name new_pdb_name.
- **3.** When the import completes, create the \$ORACLE_HOME/owb/bin/admin/old_pdb_name directory and move the following files into the directory:

```
rtrepos.properties
Runtime.properties
```

4. The process to reset the rtrepos.properties file is as follows

```
sqlplus OWBSYS/OWBSYS_PASSWORD@new_pdb_name
```

- Load the wb_rt_reset_location/wb_location_helper packages:

```
@?/owb/rtasst/wb_rt_reset_location.pls
@?/owb/rtasst/wb_rt_reset_location.plb
@?/owb/rtasst/wb_location_helper.pls
@?/owb/rtasst/wb_location_helper.plb
```

- Reset the multi-instance:

```
@?/owb/rtp/sql/rollback_setup_rt_for_multi_instances.sql
```

- If the runtime is contained in this new PDB instance, do the following:

```
select node_id, instance_number, connect_spec, enabled, runtime_version,
server_side_home from wb_rt_service_nodes;
```

Update the appropriate row using the node_id:

```
declare
    v_result number := 0;
    Begin
    v_result := wb_location_helper.fixRTServiceNode(NODE_
ID,'HOST','PORT','SERVICE_NAME','SERVER_SIDE_HOME');
    END;
//
```

- Create a new rtrepos.properties file for this PDB instance:

@?/owb/rtp/sql/reset_repository.sql OWBSYS_Password

- Configure Oracle Warehouse Builder for multi-instance:

- **5.** Follow the steps to modify the Design time location and Runtime location as described in "Modify the design time locations:" and "Modify the runtime locations:".
- **6.** Follow steps 8 and 9.

7 Using Oracle Warehouse Builder 11.2.0.2 Client with 11.2.0.3 Server

On platforms where Oracle Warehouse Builder 11.2.0.3 is not yet available, Oracle Warehouse Builder 11.2.0.2 client is certified for use with databases running Oracle Warehouse Builder 11.2.0.3. However, patch 12874883 must be applied for the 11.2.0.2 client to fully enable this support.

For more detailed information, refer to the following Web site:

https://support.oracle.com

8 Using Oracle Warehouse Builder 11.2.0.3 Client with 11.2.0.4 Server

On platforms where Oracle Warehouse Builder 11.2.0.4 is not yet available, Oracle Warehouse Builder 11.2.0.3 client is certified for use with databases running Oracle Warehouse Builder 11.2.0.4. However, patch 16568042 must be applied for the 11.2.0.3 client to fully enable this support.

For more detailed information, refer to the following Web site:

```
https://support.oracle.com
```

9 Documentation Corrections and Additions

This section lists the correction to Oracle Warehouse Builder Data Modeling, ETL, and Data profiling Guide.

Workflow Connections with SQL*NET

Defining workflow connections with SQL*Net is not supported and results in a RTC-5336 error when testing the connection.

Set Based Failover Row Based is Deprecated

Starting with Release 11.2.0.3, the Set Based Failover Row Based feature is deprecated.

Host Name Causes Performance Issues

Some environment may have abnormal performance issues if host names are used. Use an IP address instead.

10 Known Issues and Limitations

This section lists the known issues and limitations for 11*g* Release 2 (11.2) Release. They are grouped into the following categories:

- "Control Center"
- "Design Center Client"
- "Languages and Translations"
- "Mapping Designs and Configurations"
- "Non-Oracle Database Connectivity"
- "OMB*Plus Scripts"
- "Oracle Warehouse Builder Connector for SAP"
- "Oracle Warehouse Builder on Exadata"
- "Repository Browser"
- "Repository Upgrades and Migrations from Oracle Warehouse Builder 11.1 or Earlier"
- "Software and Repository Upgrade Issues"
- "Locale Builder Issue"
- "Oracle Workflow Supports Latest JDBC Driver from Release 10.2"
- "Existence of an Object in the Schema With the Same Name as the Target Schema in the Database"

10.1 Control Center

9777682: CONTROL CENTER SERVICE MAY FAIL TO START WITH ORA-29532 ERROR ON AIX ON POWER (64-BIT)

On IBM AIX on POWER Systems (64-bit), Oracle Warehouse Builder Control Center Service may fail to start with the error ORA-29532 when started from within the Oracle Database (for example, using start_service.sql or the automatic startup from check_service job).

Workaround: Edit the run_service.sh file. Before the line starting java, add the following lines of code:

MPROTECT_TXT=OFF export MPROTECT_TXT

Save the run service. sh file. Restart the Control Center service.

For more information about restarting the Control Center service, see the "Managing the Control Center and Repository" chapter in *Oracle Warehouse Builder Installation and Administration Guide*.

This is not an issue in Oracle Warehouse Builder release 11.2.0.4.

10.2 Design Center Client

8596439: Oracle Warehouse Builder ONLINE HELP LINKS FROM DESIGN CENTER START PAGE NOT WORKING

In Oracle Warehouse Builder integrated installation that is included with Oracle Database 11.2, links from the Start Pages in the Design Center to Oracle Warehouse Builder online help does not function properly. This problem does not affect Oracle Warehouse Builder standalone installation.

Workaround: To open the online help from the Start Page, temporarily rename or delete the file <code>OWB_HOME/jlib/oracle_ice.jar</code>.

This is not an issue in Oracle Warehouse Builder release 11.2.0.1 or later.

8661211: OWB DESIGN CENTER WARNING: UNKNOWN DIRECTIVE: SETSKIPJ2SDKCHECK

When you start Oracle Warehouse Builder Design Center on Windows, you may notice the following warning in the command window that is displayed while starting the Design Center:

WARNING: Unknown directive: SetSkipJ2SDKCheck

Workaround: You can ignore this warning and proceed with logging in to the Design Center.

This is not an issue in Oracle Warehouse Builder release 11.2.0.1 or later.

10.3 Languages and Translations

5031270: NAMES OF SEEDED OBJECTS IN THE REPOSITORY ARE NOT TRANSLATED

Seeded objects in the repository are not translated. These include, for example, the names of predefined transformations as displayed under the Public Transformations node of the Globals Navigator. This also includes the default project named MY_PROJECT, the default Control Center named DEFAULT_CONTROL_CENTER, the folder called DERIVED_DATA_RULES that contains derived data rules, and the default configuration called DEFAULT_CONFIGURATION.

3066632: ORACLE WAREHOUSE BUILDER FLAT FILE SAMPLE WIZARD COUNTS A MULTIBYTE CHARACTER LENGTH AS 1

When translated into Japanese, Oracle Warehouse Builder Flat File Sample Wizard does not handle multibyte characters in delimited files correctly. The wizard handles a multibyte character in delimited files as 1 length.

Workaround: Manually edit the length using the Flat File Sample Wizard.

10.4 Mapping Designs and Configurations

This section describes mapping designs, configurations, and limitations of database links.

Limitations on Using Database Links Between Oracle Database Versions

When Oracle Warehouse Builder mapping that uses database links for data movement between Oracle Databases is executed on a given target database, connectivity between database versions are limited by compatibility supported for database links between the source and target database. For example, Oracle Warehouse Builder mapping running on Oracle Database 11.2 cannot access data on Oracle Database 10.1 over a database link. For a compatibility matrix that details support for database links between database versions, see note 207303.1 on My Oracle Support.

6050580: MAPPINGS WITH TIMESTAMP DATA MAY BEHAVE INCORRECTLY

Under some conditions, you may encounter unexpected behavior when running a mapping that loads and transforms timestamp data. For example, if you deploy and run a mapping that transforms a column from TIMESTAMP type to VARCHAR2, the resulting data in the target column may be incorrect.

Workaround: This behavior does not arise when using the Mapping Debugger. Run the mapping and load the data using the Mapping Debugger.

9882655: DEFAULT EXECUTION UNIT FOR CODE TEMPLATE (CT) MAPPINGS MAY NOT ALWAYS BE VALID

Oracle Warehouse Builder assigns default execution units to a Code Template (CT) mapping in the following circumstances:

- When the user selects **Default Execution Units** in the execution view of the Mapping Editor
- When validating or generating code for a CT mapping with no assigned execution units
- When importing a CT mapping with no assigned execution units from MDL

You should always review automatically generated default execution units for CT mappings, to ensure that processing and data are distributed optimally among locations. For some complex mappings, Oracle Warehouse Builder may generate default execution units that fail to validate. In such cases, use the Execution View to assign operators to execution units manually.

9830333: ERROR PLS-00305 WHEN DEPLOYING MAPPINGS WITH A REPOSITORY HOSTED ON ORACLE DATABASE 10.2

When hosting Oracle Warehouse Builder repository in Oracle Database 10.2, and using Table operators with long physical names in a mapping, Oracle Warehouse Builder may generate PL/SQL code containing types with non-unique names. In such cases, deployment fails with error PLS-00305.

Workaround: Assign shorter names to the Table operators.

This is not an issue in Oracle Warehouse Builder release 11.2.0.3 or later.

10.5 Non-Oracle Database Connectivity

To connect to non-Oracle databases, you need the JDBC driver corresponding to that database. Non-Oracle JDBC drivers are not shipped as part of Oracle Warehouse

Builder software. You can obtain the JDBC drivers from the vendor and copy them to the <code>OWB HOME/owb/lib/ext</code> folder.

Table 1 lists the drivers that are required to connect to DB2, SQL Server, and Teradata. For other databases, consult your vendor.

Table 1 Drivers Required to Connect to Non-Oracle Databases

Database Name	Drivers
DB2	db2jcc.jar
	db2jcc_license_cu.jar
SQL Server	sqljdbc.jar
Teradata	tdgssconfig.jar
	tdgssjava.jar
	terajdbc4.jar

10.6 OMB*Plus Scripts

7135670: OMBPLUS CANNOT LOAD SCRIPTS CONTAINING NON-ASCII CHARACTERS

If you use OMB*Plus to run a Tcl script containing non-ASCII characters, the characters may be corrupted in OMB*Plus. Scripts with non-ASCII NLS characters may not execute successfully. There is no workaround.

10.7 Oracle Warehouse Builder Connector for SAP

5215322: ORACLE WAREHOUSE BUILDER CONNECTOR TO SAP R/3 REQUIRES SAP LIBRARY FILE

Workaround: To access SAP R/3 in the Design Center, first obtain the SAP RFC library from SAP and copy it to the <code>OWB_CLIENT_HOME/owb/bin/admin</code> directory.

To access SAP R/3 in the Control Center, first obtain the SAP RFC library from SAP and copy it to the <code>OWB_SERVER_HOME/owb/bin/admin</code> directory. <code>OWB_SERVER_HOME</code> is the directory where Oracle Warehouse Builder Control Center Service is installed.

10.8 Oracle Warehouse Builder on Exadata

Using Oracle Warehouse Builder 11*g* Release 2 in an Exadata environment requires additional setup steps. Contact Oracle Support for details.

10.9 Repository Browser

5129228: MULTIPLE REPOSITORY BROWSER SESSIONS FROM A SINGLE CLIENT MACHINE NOT SUPPORTED

If you start multiple Repository Browser sessions from a single Internet browser on a single client computer, you may encounter unexpected results. This scenario is not supported. As a consequence, you cannot browse multiple repositories with a single Internet browser on a single computer.

Workaround: Each Repository Browser session requires its own Internet cookies storage. If feasible, you can start multiple, different Internet browsers to maintain separate Repository Browser sessions on the same computer.

10.10 Repository Upgrades and Migrations from Oracle Warehouse Builder 11.1 or Earlier

9835013: ARRAYINDEXOUTOFBOUNDSEXCEPTION DURING MDL IMPORT

When importing MDL files, you may encounter the following errors:

- Trying to access invalid Object
- MDL1261: Error importing OWBAssoc_CopyOfMDW

Workaround: You can use the following workarounds:

- Increase the heap size when running the Repository Assistant
 On Windows, edit the OWB_HOME\owb\bin\win32\reposinst.bat file. On UNIX,
 edit OWB_HOME/owb/bin/unix/reposinst.sh. Increase the value set for the -Xmx flag.
- Increase the heap size when running the Design Center client Edit the OWB_HOME/bin/owb.conf file and increase the value set for the -Xmx flag in the AddVMOption.

Oracle Warehouse Builder 11.2 Repository Must Contain a Workspace Before Upgrade of Oracle Warehouse Builder 10.2 or 11.1 Repository MDL Export

If you are upgrading Oracle Warehouse Builder 10.2 or 11.1 repository to Oracle Warehouse Builder 11.2 by exporting the entire repository to MDL with the Repository Assistant, then importing it into Oracle Warehouse Builder 11.2, then your destination Oracle Warehouse Builder 11.2 repository must have at least one Oracle Warehouse Builder 11.2 workspace in it before you can import the MDL.

If your Oracle Warehouse Builder 11.2 repository does not contain a workspace before import, then you must create a dummy workspace, with a name that does not conflict with the names of any workspaces to be imported.

Follow the instructions in *Oracle Warehouse Builder Installation and Administration Guide* to create a workspace. At step 6 in the Repository Assistant, assign a workspace name and workspace owner that do not conflict with workspaces and workspace owners you actually plan to use. If importing an Oracle Warehouse Builder 10.2 repository, the workspace name should be the name of the source schema in which the repository was stored in Oracle Warehouse Builder 10.2.

You can then run Repository Assistant again to import your Oracle Warehouse Builder 10.2 or 11.1 repository export MDL file to your Oracle Warehouse Builder 11.2 repository.

Patch Addressing Multiple Repository Upgrade Issues

Before upgrading or migrating repository contents from a previous release, review Note 1074813.1 on My Oracle Support, and also the white paper "Master Note for Oracle Warehouse Builder Upgrade To 11.2" for details of migration options and processes, and known issues that may affect the migration process.

Customers using Oracle Warehouse Builder 11.2.0.1 should consider applying patch 9802120, which resolves all known upgrade and migration-related issues as of the date of its release. See My Oracle Support for more details.

https://support.oracle.com

10.11 Software and Repository Upgrade Issues

9970120: UPGRADE TABLE DEPLOYMENTS MAY FAIL WHEN USING CONTROL CENTER SERVICE ON DOUBLE-BYTE CHARACTER SET PLATFORMS

When running the Control Center Service on a platform with double byte character sets, an Upgrade deployment of a table may fail. In this situation, Oracle Warehouse Builder generates an invalid upgrade script.

Workaround: Force the Control Center Service to run in English by adding a JVM option to run_service.sh (on Linux) or run_service.bat (on Windows) and then restarting the Control Center Service.

On UNIX, edit the OWB_HOME/owb/bin/unix/run_service.sh file and replace the entry set JVM_OPTIONS=-Xmx768M with the following:

set JVM_OPTIONS="-Xmx768M -Duser.language=en"

On Windows, edit the <code>OWB_HOME\owb\bin\win32\run_service.bat</code> file and replace the entry set <code>JVM_OPTIONS=-Xmx768M</code> with the following:

set JVM_OPTIONS=-Xmx768M -Duser.language=en

Updating Client-Side Preference.Properties Before Upgrading Repository to Oracle Warehouse Builder 11.2.0.2

Using Oracle Warehouse Builder Design Center with an Oracle Warehouse Builder repository of a different patch level can cause repository corruption. The Design Center can check for inconsistent repository versions at connect time. To enable this check, edit <code>OWB_CLIENT_HOME/owb/bin/admin/Preference.properties</code> on each client installation, and update the OverrideRuntimeVersionCheck and OverrideRepositoryVersionCheck preferences as follows:

OverrideRuntimeVersionCheck=false

OverrideRepositoryVersionCheck=false

This change must be applied manually to all Oracle Warehouse Builder 11.2.0.1 Design Center installations.

Applying Oracle Warehouse Builder 11.2.0.2 patch to the Design Center host also updates these preferences.

Large Oracle Warehouse Builder Repository Upgrades May Appear to Hang at 96%

When upgrading or importing a very large older repository into Oracle Warehouse Builder 11.2, the import process may appear to hang around 96% complete. The import process can take several hours or more on large files, and shows a 96% complete status for much of this period before completing successfully. Do not interrupt the import process if it appears to still be running.

This is not an issue in Oracle Warehouse Builder release 11.2.0.3 or later.

10.12 Locale Builder Issue

12699232: Locale Builder in Standalone Version of Oracle Warehouse Builder Does Not Work

After the installation of the standalone version of Oracle Warehouse Builder, the Locale Builder does not work. The following error is displayed when you run <code>OWB_HOME\bin\lbuilder.bat</code>.

```
Exception in thread "main" java.lang.NoClassDefFoundError: ice/pilots/html4/DDocument at java.lang.Class.forName0(Native Method) at java.lang.Class.forName(Class.java:164) at oracle.help.Help.<init>(Unknown Source) at oracle.help.Help.<init>(Unknown Source) at DataDef.<init>(DataDef.java:218) at DataDef.main(DataDef.java:3238)
```

Workaround: **On Windows**, update the <code>OWB_HOME\bin\lbuilder.bat</code> file to use <code>OWB_HOME/jlib/oracle_ice5.jar</code> instead of the original file.

On UNIX, update the <code>OWB_HOME/bin/lbuilder</code> file to use <code>OWB_HOME/jlib/oracle_ice5.jar</code> instead of the original file.

10.13 Oracle Workflow Supports Latest JDBC Driver from Release 10.2

10325293: The installation of Oracle Workflow with SQLNET.Allowed_Logon_ Version=11 in SQLNET.ORA file, displays an error.

Workaround: Oracle Workflow does not support the use of the new JDBC driver ojdbc5.jar or later. The driver ojdbc14.jar should be downloaded and replaced within OWB_HOME/owb/wf/lib directory.

10.14 Existence of an Object in the Schema With the Same Name as the Target Schema in the Database

12776878: If an object exists in the schema with the same name as the target schema in the database, then an error is displayed.

For example:

When you call SchemaQ.ObjectZ from Schema A, it looks within Schema A for Q.Z. Z is not found and displays the following error:

```
ORA-06550: ..: PLS-00302: component 'XYZ' must be declared
```

Workaround: Rename one of the Q objects to *R* or some letter other than Q.

11 Resolved Issues

The following is a limited list of known issues from previous releases. These issues were reported in a previous set of release notes and are now resolved in Oracle Warehouse Builder 11g Release 2 (11.2).

2577706: POST MAPPING PROCESS RUNS REGARDLESS OF SUCCESS/FAILURE OF MAPPING

4483510: PLUGGABLE MAPPINGS DO NOT WORK IN SAP MAPPINGS

4558688: SCRIPT GENERATION FOR IMPORT OF METADATA FOR EXTERNAL TABLES FAILS FOR LONGER DEFINITIONS

4581172, 4658511: DEFERRED OBJECTS LISTED IN METAMODEL QUERY

5122612: UNABLE TO CREATE MULTIBYTE TARGET USER IN OMB PLUS

5017820, 4915836: NON-EUROPEAN FONT GLYPHS ARE CORRUPTED IN DATA OBJECT EDITOR DIAGRAM EXPORT TO SVG

5176858: USER INPUT IN A CUSTOM DIALOG MAY TRIGGER THE INCORRECT OUTCOMING TRANSITION

5189802: EXECUTING A CUBE MAPPING MAY GENERATE ERROR ORA-20101

5212360: MAPPINGS CREATED IN OMB*PLUS MAY NEED AUTOLAYOUT WHEN EDITED MANUALLY

5213153, 5191402: NLS: NON-ASCII CHARACTERS ARE CORRUPTED IN GENERATED EEX FILE

5372377: CANNOT SET DATE WHEN MIDDLE-TIER LOCALE IS DIFFERENT

7562355: SHOW SOURCE FOR GENERATED TABLE GIVES SPORADIC RESULTS

8283391: ICONSET CANNOT BE CHANGED FOR OBJECT INSTANCE IN THE UI

8596439: ORACLE WAREHOUSE BUILDER ONLINE HELP LINKS FROM DESIGN CENTER START PAGE NOT WORKING

8702449: ERROR WHEN CREATING NEW FILE MODULE WITH JAPANESE LOCALE

8788004: ORACLE WAREHOUSE BUILDER DESIGN CENTER START PAGES CONTAIN BROKEN LINKS TO ORACLE WAREHOUSE BUILDER ONLINE HELP

Oracle Warehouse Builder Release Notes, 11*g* Release 2 (11.2) F24470-08

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