

# Oracle WebCenter Sites 12c R2 DataDiff Migration Tool

ORACLE WHITE PAPER | JANUARY 2018





## Disclaimer

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.



## Introduction

Upgrading Oracle WebCenter Sites (WCS) 11g to 12c is out-of-place—involves installing WCS 12c in a separate location as WCS 11g, and moving data, configuration from the 11g environment using the Upgrade Assistant. As you test and ready the 12c environment, content development continues on the 11g system, which is still live. When the 12c environment is ready to go live, content that was contributed into the 11g environment needs to be synced with the 12c environment.

The DataDiff Migration Tool is an enhanced Upgrade Assistant tool to save time and effort involved in synchronizing such additions between the 11g and 12c environments any number of times.

## Main Features

The DataDiff Migration Tool migrates artifacts—Basic Assets, Flex Assets, Flex Definitions, Templates, CSElements, Page Assets, Segments, Recommendations, Promotions, Content Query, File Resources, Dimensions, and Style Sheets.

With this tool:

- » All the newly added artifacts in the 11g environment are migrated to the 12c environment. Any modified artifact in the 11g environment is migrated to the 12c environment.
- » Artifacts that are modified in both 11g and 12c environments overwrites the 12c artifacts.
- » Artifacts that are changed only in the 12c environment and not in the 11g environment remain intact.
- » Additions of users, roles, Tree Tabs, Start Menus, and Site Navigations in the 11g environment after the initial upgrade are migrated to the 12c environment. However, changes to these artifacts are not migrated.

## How to Use the DataDiff Migration Tool?

Before you run the DataDiff Migration Tool, [upgrade WCS from the 11g to 12c](#) by using the Upgrade Assistant Tool, following the out-of-place upgrade process.

### Prerequisites

Ensure that you have the following prerequisites before you run the DataDiff Migration Tool:

- » Access to working instances of 11g and 12c WebCenter Sites.
- » Restart the WCS 12c server after the initial upgrade and validate that it's functioning as expected.
- » Back up Oracle Home and WCS' schema.

### Delta Migration from 11g to 12c

To migrate the delta data and assets from 11g to 12c, perform the following steps:

1. Stop WCS 12c Admin and Managed servers.
2. Replace the out-of-the box `sites-upgrade.jar` with the updated `sites-upgrade.jar` at the location—`{ORACLE_HOME}/wcsites/plugins/upgrade`. You can obtain the `sites-upgrade.jar` file from patch number 27421959. You can download the patch by visiting [support.oracle.com](http://support.oracle.com) and search for the patch.

3. Make the following changes:

- a. Remove the property `oracle.wcsites.upgrade.history` in the WCS configuration file, `wcs_properties.json` at the location—`{ORACLE_HOME}/user_projects/domains/{DOMAIN_NAME}/wcsites/wcsites/config/`.
- b. Change the upgraded flag from Y to N in the `schema_version_registry` table as follows and commit the changes:
  - **MSSQL.** `UPDATE DB_NAME.[dbo].[schema_version_registry] SET upgraded = 'N' WHERE owner = 'DEV_WCSITES'`
  - **Oracle.** `UPDATE schema_version_registry set upgraded='N' WHERE owner = 'DEV_WCSITES'; COMMIT;`

**Note:** Schema owner, such as `DEV_WCSITES` where `DEV` is the prefix, is the name of the owner created while running the Repository Creation Utility (RCU).

4. Run the upgrade assistant to synchronize delta changes from the 11g instance to the 12c instance as follows:
  - a. [Upgrade the schema](#) using Upgrade Assistant.
  - b. [Upgrade the configuration](#) using Upgrade Assistant.

**Note:** Ensure that you run schema upgrade prior to configuration upgrade.

5. Restart the WCS 12c server to check if delta changes are migrated from 11g to 12c accurately.

Repeat all the steps if you wish to run this tool again.

## Conclusion

Oracle WebCenter Sites provides DataDiff Migration Tool, a key tool to help synchronize the content between a live system and an upgraded system with no risk of data loss. You can now manage the transition to 12c environment from an 11g environment a lot more gracefully and in a phased manner.







**Oracle Corporation, World Headquarters**

500 Oracle Parkway  
Redwood Shores, CA 94065, USA

**Worldwide Inquiries**

Phone: +1.650.506.7000  
Fax: +1.650.506.7200

CONNECT WITH US

-  [blogs.oracle.com/oracle](https://blogs.oracle.com/oracle)
-  [facebook.com/oracle](https://facebook.com/oracle)
-  [twitter.com/oracle](https://twitter.com/oracle)
-  [oracle.com](https://oracle.com)

**Integrated Cloud Applications & Platform Services**

Copyright © 2018, Oracle and/or its affiliates. All rights reserved. This document is provided *for* information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

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. 0118

DataDiff Migration Tool  
January 2018  
Author: Debosri Brahma  
Contributing Authors: Keerthi Nutakki, Vinod Kandukuri, Sripathy Rao