

**Oracle® WebCenter Sites**

Backup and Recovery Guide

11g Release 1 (11.1.1)

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Oracle® WebCenter Sites Backup and Recovery Guide, 11g Release 1 (11.1.1)

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## About This Guide

This document contains a set of guidelines and procedures for backing up Oracle WebCenter Sites components. It does *not* contain information regarding the backup of application server and database server settings or customizations.

The *Oracle WebCenter Sites* application, discussed in this document, is a former FatWire product. *Oracle WebCenter Sites* is the current name of the application previously known as *FatWire Content Server*. In this guide, *Oracle WebCenter Sites* is also called *WebCenter Sites*.

### Audience

This document is written for installation and system engineers with experience installing WebCenter Sites. Users of this document should have a comprehensive knowledge of backing up and recovering web applications, such as WebSphere, Tomcat, and WebLogic. Users should also have experience installing the WebCenter Sites application and should be familiar with backing up and recovering database servers.

### Conventions

The following text conventions are used in this guide:

- **Boldface** type indicates graphical user interface elements that you select.
- *Italic* type indicates book titles, emphasis, or variables for which you supply particular values.
- `Monospace` type indicates file names, URLs, sample code, or text that appears on the screen.
- **Monospace bold** type indicates a command.

### Third-Party Libraries

Oracle WebCenter Sites and its applications include third-party libraries. For additional information, see *Oracle WebCenter Sites 11gR1: Third-Party Licenses*.



# Backup and Recovery

This document contains the following sections:

- [Prerequisites](#)
- [Backup and Recovery Procedures](#)
- [Running the Recovered Application](#)

## Prerequisites

- Before backing up any part of WebCenter Sites, it is best to shut down the application server. If you must make a live backup of WebCenter Sites, ensure the site is not in use and no requests are being made to the application server.
- Before recovering any part of WebCenter Sites, ensure the application server is shut down.

## Backup and Recovery Procedures

- [WebCenter Sites Installation Directory](#)
- [Shared Directory](#)
- [Web Application](#)
- [WebCenter Sites Database](#)
- [WebCenter Sites Database](#) (excluding statistics)
- [LDAP](#)

## WebCenter Sites Installation Directory

### Backup

Jar or tar the WebCenter Sites installation directory.

For example:

```
tar -cvf ContentServer_backup.tar /u01/CS/Install
jar cvf ContentServer_backup.jar /u01/CS/Install
```

### Recovery

Unjar or untar the backed up WebCenter Sites installation directory.

For example:

```
tar -xvf ContentServer_backup.tar
jar xvf ContentServer_backup.jar
```

## Shared Directory

### Backup

#### Note

Backing up the Shared directory is unnecessary if it is located in the WebCenter Sites installation directory, *and* the installation directory was backed up.

To back up the Shared directory, jar or tar the directory.

For example:

```
tar -cvf Shared_backup.tar /u01/CS/Shared
jar cvf Shared_backup.jar /u01/CS/Shared
```

### Recovery

#### Note

Recovering the Shared directory is unnecessary if it is located in the WebCenter Sites installation directory, *and* the installation directory was recovered.

To recover the Shared directory, unjar or untar the backed up Shared directory and use it to replace the existing one.

For example:

```
tar -xvf Shared_backup.tar
jar xvf Shared_backup.jar
```

## Web Application

[Table 1](#) summarizes which types of files in a WebCenter Sites web application must be backed up and recovered.

**Table 1:** Backup and Recovery Information for `.war` and `.ear` files

<code>.war</code> / <code>.ear</code> Deployment Method	Backup	Recovery
Non-Exploded. For WebCenter Sites on WebSphere	Unnecessary if the WebCenter Sites installation directory is backed up. (The <code>.war</code> and <code>.ear</code> files are contained in the WebCenter Sites installation directory: <code>&lt;cs_install_dir&gt;/ominstallinfo/app/</code> )	Refer to the steps on <a href="#">page 11</a> .
Exploded. For WebCenter Sites on: <ul style="list-style-type: none"> <li>• Tomcat</li> <li>• WebLogic</li> </ul>	No “development changes” to the files. <sup>a</sup> Backup is unnecessary if: <ul style="list-style-type: none"> <li>• The files have not been changed during development,</li> <li>- and -</li> <li>• the WebCenter Sites installation directory is backed up.</li> </ul> (The <code>.war</code> and <code>.ear</code> files are contained in the WebCenter Sites installation directory: <code>&lt;cs_install_dir&gt;/ominstallinfo/app/</code> )	Refer to the steps on <a href="#">page 11</a> .
	With “development changes” to the files. <sup>a</sup> Backup is required. Refer to the steps on <a href="#">page 11</a> .	Refer to the steps on <a href="#">page 12</a> .

- a. The term “development changes” denotes changes to content, the data model, template code, publishing destinations, and so on.

## Non-Exploded Files

### Backup

See [Table 1, on page 10](#).

### Recovery

1. Undeploy the WebCenter Sites application.
2. Recover the WebCenter Sites installation directory (for instructions, see [page 8](#)).
3. Redeploy the WebCenter Sites application.

## Exploded Files

### Backup

#### To back up exploded files with no development changes

See [Table 1, on page 10](#).

#### To back up exploded files with development changes

Jar or tar the deployed WebCenter Sites web application. Label the backup to distinguish it from the compressed `cs.war` file.

For example:

```
tar -cvf cs_web_backup.tar /u01/software/Tomcat/webapps/cs
jar cvf cs_web_backup.jar /u01/software/Tomcat/webapps/cs
```

### Recovery

#### To recover exploded files with no development changes

1. Stop the application server.
2. Delete the exploded web application.

For example:

```
rm -rf /u01/software/Tomcat/webapps/cs/*
```

3. Recover the WebCenter Sites installation directory (for instructions, see [page 8](#)).
4. Unjar the backed up WebCenter Sites web application:

For example:

```
cd /u01/software/Tomcat/webapps/cs
jar xvf <cs_install_dir>/ominstallinfo/app/cs.war
```

**To recover exploded files with development changes**

1. Stop the application server.
2. Delete the exploded web application.  

```
rm -rf /u01/software/Tomcat/webapps/cs
```
3. Unjar or untar the backed up WebCenter Sites web application:  

```
cd /u01/software/Tomcat/webapps  
tar -xvf <path to backup directory>/cs_web_backup.tar
```

## WebCenter Sites Database

### Backup

- [SQL Server](#)
- [Oracle 11g](#)
- [DB2 9.7](#)

### SQL Server

**To back up SQL 2005/2008/2008R2**

1. Open **SQL Server Management Studio**.
2. Connect to the database server.
3. Expand **Databases**.
4. Right-click on the database to be backed up. Click **Tasks > Backup**.
5. Under **Backup type**, select **Full**. Under **Destination**, click **Add**.
6. Enter the path and file name for the backup file. Click **OK**.
7. Under **Destination**, select the newly created backup location.
8. Click **OK**.

## Oracle 11g

### To back up Oracle 11g

1. Log in to the server as the oracle user.
2. Set ORACLE\_HOME to the oracle database directory and ORACLE\_SID to the database name.
3. Login to sqlplus as sys. Then, do the following:
  - a. Use the create directory sql to map to the OS directory, where the exports will be stored. For example:

```
SQL> create directory exp_dp_dir as '/u01/backup/exports';
```
  - b. Grant permissions for database export and directory access. For example:

```
SQL> grant read,write on directory exp_dp_dir to system;  
SQL> grant EXP_FULL_DATABASE to system
```
4. Run the **expdp** command to start exporting. For example:

```
expdp system/<password> DIRECTORY=exp_dp_dir  
DUMPFILE=<file_name>.dmp FULL=y SCHEMA=<YOUR_SCHEMA>;
```

## DB2 9.7

### To back up DB2 9.7

1. Log in to the server as the db2inst user.
2. Run the following command:

```
db2 force applications all
```
3. Run the following command:

```
db2 backup db <db_name> to <backup_dir>
```

#### Note

After the command has completed, note the timestamp. This timestamp will be included in the name of the database backup file.

## Recovery

- [SQL Server](#)
- [Oracle 11g](#)
- [DB2 V9.7](#)

### SQL Server

#### To recover SQL 2005/2008/2008R2

1. Open **SQL Server Management Studio**.
2. Expand **Databases**.
3. Right-click on the database to be restored. Select **Tasks > Restore > Database**.
4. Under **Source for restore**, select **From database**.
5. Under **Select the backup sets to restore**, select the most recent backup.
6. Click **Script** at the top.

This step opens the query editor containing the `restore` statement.
7. Edit the query by adding **REPLACE**, after **WITH**.

This will allow the database log to be overwritten.
8. Click **Execute**.

### Oracle 11g

#### To recover Oracle 11g

1. Log in to the server as the oracle user.
2. Set `ORACLE_HOME` to the oracle database directory and `ORACLE_SID` to the database name.
3. Go to `$ORACLE_HOME/bin`.
4. Run the following command:

```
./impdp system/<password> DIRECTORY=exp_dp_dir  
DUMPFILE=<file_name>.dmp SCHEMAS=<YOUR_SCHEMA>;
```

### DB2 V9.7

#### To recover DB2 V9.7

1. Log in to the server as the `db2inst` user.
2. Run the following command:

```
db2 force applications all
```
3. Run the following command:

```
db2 restore db <db_name> from <backup_dir> replace existing
```

## LDAP

### Backup

Use an LDAP browser and export the LDAP configuration.

### Recovery

Start with a clean LDAP server. Then use an LDAP browser and import the backed up LDAP configuration.

## Running the Recovered Application

### To run the recovered WebCenter Sites application

1. Before starting the application server:
  - a. Clear the search indexes:

```
rm -rf <shared_dir>/lucene/Global/*
```
  - b. If you are using Tomcat, clear the application server cache:

```
rm -rf <server_dir>/tmp/*
rm -rf <server_dir>/work/*
```

#### Note

For the WebLogic application server, the cache will be cleared upon redeployment of the application.

- c. If you are using Tomcat or WebLogic, clear the compiled JSPs:

```
rm -rf <web_app_dir>/jsp/cs_deployed/*
```
2. After starting the application server, ensure that all caches are synchronized.

