

# FatWire | Content Server 7

Version 7.6

## Backup and Recovery Guide

**Document Revision Date:** Mar. 28, 2011



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*FatWire Content Server Backup and Recovery Guide*

Document Revision Date: Mar. 28, 2011

Product Version: 7.6

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# Backup and Recovery

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

This document contains the following sections:

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

## Prerequisites

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

## Backup and Recovery Procedures

- [Content Server Installation Directory](#)
- [Shared Directory](#)
- [Web Application](#)
- [Portal Application](#)
- [Content Server Database](#) (excluding statistics)
- [LDAP](#)

## Content Server Installation Directory

### Backup

Jar or tar the Content Server 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 Content Server 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 Content Server 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 Content Server 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 Content Server web application must be backed up and recovered.

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

<code>.war / .ear</code> Deployment Method	Backup	Recovery
Non-Exploded. For CS on: <ul style="list-style-type: none"> <li>• Oracle AS</li> <li>• Sun JES</li> <li>• Sun Portal</li> <li>• WebSphere</li> </ul>	Unnecessary if the Content Server installation directory is backed up. (The <code>.war</code> and <code>.ear</code> files are contained in the CS installation directory: <code>&lt;cs_install_dir&gt;/ominstallinfo/app/</code> )	Refer to the steps on <a href="#">page 9</a> .
Exploded. For CS on: <ul style="list-style-type: none"> <li>• JBoss</li> <li>• Resin</li> <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, - and -</li> <li>• the Content Server installation directory is backed up.</li> </ul> (The <code>.war</code> and <code>.ear</code> files are contained in the CS installation directory: <code>&lt;cs_install_dir&gt;/ominstallinfo/app/</code> )	Refer to the steps on <a href="#">page 9</a> .
	With “development changes” to the files. <sup>a</sup> Backup is required. Refer to the steps on <a href="#">page 9</a> .	Refer to the steps on <a href="#">page 10</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 8.

### Recovery

1. Undeploy the Content Server application.
2. Recover the Content Server installation directory (for instructions, see [page 6](#)).
3. Redeploy the Content Server application.

## Exploded Files

### Backup

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

See [Table 1](#), on page 8.

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

Jar or tar the deployed Content Server 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 Content Server installation directory (for instructions, see [page 6](#)).
4. Unjar the backed up Content Server 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 Content Server web application:  

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

## Portal Application

This section applies to Content Server running on WebLogic Portal and JBoss Portal.

### Backup

**To back up an application running on WebLogic Portal**

Jar or tar the portal webspace.

For example:

```
tar -cvf wlportal_backup.tar /u01/software/WLPortal/  
user_projects/workspaces/portalspace  
  
jar cvf wlportal_backup.tar /u01/software/WLPortal/  
user_projects/workspaces/portalspace
```

**To back up an application running on JBoss portal**

Jar or tar the application server directory (this method will save both the portlet configuration and the portal application).

For example:

```
tar -cvf jbossportal_backup.tar /u01/software/JBoss/server/  
default  
  
jar cvf cs_web_backup.jar / u01/software/JBoss/server/default
```

### Recovery

**To recover an application running on WebLogic Portal**

1. Undeploy the Content Server portal application from the WebLogic Application Server.
2. Delete the portal webspace.
3. Unjar or untar the portal webspace in place of the deleted webspace.

For example:

```
tar -xvf <backup_dir>/wlportal_backup.tar  
jar xvf <backup_dir>/wlportal_backup.jar
```

### To recover an application running on JBoss Portal

1. Stop the application server.
2. Delete the application server directory.
3. Unjar or untar the backed up application server directory.

For example:

```
tar -xvf jbossportal_backup.tar /u01/software/JBoss/server
jar xvf cs_web_backup.jar /u01/software/JBoss/server
```

## Content Server Database

### Backup

- [SQL Server](#)
- [Oracle 10g/11g](#)
- [DB2 VP.x](#)

### SQL Server

#### To back up SQL 2000

1. Open Enterprise manager.
2. Connect to the database server.
3. Expand **Microsoft SQL Servers > SQL Server Group > *hostname* > Databases.**
4. Right-click the database to be backed up. Select **All Tasks > Backup Database.**
5. Under **Backup**, select **Database – complete.**
6. Under **Destination**, click **Add.**
7. Enter the path and file name for the backup file.
8. Click **OK.**

#### To back up SQL 2005

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 10g/11g

### To back up Oracle 10g/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 `$ORACLE_HOME/bin`.
4. Run the following command:  
`./exp`
5. At the prompts, enter the following responses (press **Enter** where a default response is listed):
  - Enter array fetch buffer size: **default**
  - Export file: `<file_name>.dmp`
  - Users: **default**
  - Export grants: **default**
  - Export table: **default**
  - Compress extents: **default**
6. Copy the backup file from `$ORACLE_HOME/bin` to a location of your preference.

## DB2 VP.x

### To back up DB2 VP.x

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 10g/11g](#)
- [DB2 V9.x](#)

### SQL Server

#### To recover SQL 2000

1. Open **Enterprise manager**.
2. Connect to the database server.
3. Expand **Microsoft SQL Servers > SQL Server Group > hostname > Databases**.
4. Right-click on the database to be restored.
5. Click **All Tasks > Restore Database**.
6. Under **Parameters**, select the most recent backup.
7. Click **OK**.

#### To recover SQL 2005

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 10g/11g

#### To recover Oracle 10g/11g

1. From the **Oracle Enterprise Manager**, delete and re-create the schema being restored.
2. Log in to the server as the oracle user.
3. Set `ORACLE_HOME` to the oracle database directory and `ORACLE_SID` to the database name.
4. Go to `$ORACLE_HOME/bin`.
5. Run the following command:

```
./imp <username>/<password> file=<path to backup file>/  
    <file_name>.dmp full=yes
```

## DB2 V9.x

### To recover DB2 V9.x

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 Content Server application

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

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

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

#### Note

For the following application servers, the cache will be cleared upon redeployment of the application: Resin, WebLogic, WebLogic Portal, Sun JES, Sun Portal, Oracle Application Server

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

```
rm -rf <web_app_dir>/jsp/cs_deployed/*
```

**Note**

For the following application servers, the JSPs will be cleared upon redeployment of the application: Sun Application Server, Sun Portal Server, and Oracle Application Server.

2. After starting the application server, ensure that all caches are synchronized.

