

FatWire | Content Server 7

Version 7.6 Patch 2

Backup and Recovery Guide

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About This Guide

This guide provides information about backing up and recovering FatWire Content Server components.

Who Should Use This Guide

This guide is intended for users who install, upgrade, and service FatWire Content Server and its applications.

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

FatWire Content Server and its applications include third-party libraries. For additional information, see *FatWire Content Server 7.6 Patch 2: Third-Party Licenses*.

Backup and Recovery

This document contains a set of guidelines and procedures for backing up and recovering FatWire Content Server components. It does *not* contain information about 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 FatWire Content Server, it is best to shut down the application server. If you must make a live backup of Content Server, ensure the site is not in use and no requests are being made to the application server.
- Before recovering any part of Content Server, ensure 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</code> / <code>.ear</code> Deployment Method	Backup	Recovery
Non-Exploded. For CS on: <ul style="list-style-type: none"> • Oracle AS • Sun JES • Sun Portal • WebSphere 	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><cs_install_dir>/ominstallinfo/app/</code>)	Refer to the steps on page 11 .
Exploded. For CS on: <ul style="list-style-type: none"> • JBoss • Tomcat • WebLogic 	No “development changes” to the files. ^a Backup is unnecessary if: <ul style="list-style-type: none"> • The files have not been changed during development, - and - • 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><cs_install_dir>/ominstallinfo/app/</code>)	Refer to the steps on page 11 .
	With “development changes” to the files. ^a Backup is required. Refer to the steps on page 11 .	Refer to the steps on page 12 .

- 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 Content Server application.
2. Recover the Content Server installation directory (for instructions, see [page 8](#)).
3. Redeploy the Content Server 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 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 8](#)).
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.

