



BEA WebLogic Portal®

Guide for Creating Additional BEA Repositories

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Creating Additional BEA Repositories

Your content management system can be made up of multiple BEA Systems repositories and/or multiple third-party repositories. You can create multiple content repositories to meet your unique business needs. For example, if you need a physical separation of your content data then you can create multiple BEA Repositories.

You must be working within an XA domain to effectively use multiple repositories.

Note: For large projects with several thousand content items, you may need to use separate database instances and minimize changes done in the production environment.

This process has five major steps:

- [Step 1: Create Database Objects for the New Repository](#)
- [Step 2: Connect the New Repository to the Server](#)
- [Step 3: Associate your Portal Application with the New Repository](#)
- [Step 4: Start the Server](#)
- [Step 5: Create the New BEA Repository](#)

Step 1: Create Database Objects for the New Repository

In this step you will create database objects for your new content management additional database.

1. For Oracle, SQL Server, Sybase, or DB2 databases, create a database user for your additional content management database.
 - For **Oracle**, grant that user connectivity and resource privileges, and assign a default tablespace for the additional content management database objects.
 - For **SQL Server** and **Sybase**, create a database for the additional content management database objects and make that user the database owner (dbo) user for that database.
 - For **DB2**, grant that user `createTAB BINDADD connect` privileges to create the additional content management database objects.

Note: PointBase is not recommended for a production repository.

2. Set up your additional content management database in the `db_settings.properties` file.
 - a. Navigate to the `<BEA_HOME>\user_projects\domains\<YOUR_DOMAIN>` directory, and open the `db_settings.properties` file in a text editor.

OR

If you are using the sample domain, edit the `db_settings.properties` file from the following directory: `<BEA_HOME>\weblogic81\samples\domains\portal`.
 - b. Uncomment the database settings for your new target database.
 - c. Update the following settings for your additional content management database:

```
- server=<SERVER_NAME>
- dblogin=CONTENT_USER
- password=CONTENT_USER_PASSWORD
```
3. Within the `db_settings.properties` file, find the `p13n_modules`, `portal_modules` and `netuix_modules` lines at the top of the file.

- a. Copy these 3 lines and comment out the original settings by adding a `#` sign.
- b. Replace the original settings as follows:

```
- p13n_modules=p13n au bt ds with
p13n_modules=
```

Step 2: Connect the New Repository to the Server

- portal_modules=cm wlcs wps collaboration sample_cm with
portal_modules=cm cmv sample_cm
- netuix_modules=pf with
netuix_modules=

When you are finished, the section should look like this:

```
#p13n_modules=p13n au bt ds
#portal_modules=cm wlcs wps collaboration sample_cm
#netuix_modules=pf
p13n_modules=
portal_modules=cm cmv sample_cm
netuix_modules=
```

- c. Save the changes to the `db_settings.properties` file.
4. Create the additional content management database objects by running the `create_db.cmd` or `create_db.sh` script.
 - a. Navigate to the `<BEA_HOME>\user_projects\domains\<YOUR_DOMAIN>` directory, and double-click on the `create_db.cmd` file.

OR
 - b. If you are using the sample domain, run the `create_db.cmd` file from the following directory: `<BEA_HOME>\weblogic81\samples\domains\portal.`

Step 2: Connect the New Repository to the Server

1. Start WebLogic Server for your domain, and login to the console.
 2. Configure a new connection pool for your additional content management database.
 - a. Go to Services -> JDBC -> Connection Pools.
 - b. Right-click an existing XA Connection Pool and select Clone.
- Note:** For more information regarding XA connections, see <http://edocs.bea.com/platform/docs81/configwiz/examples.html#1074297>
- c. Choose a name for the new Connection Pool (For example: `contentPool2`).
 - d. In the General tab, edit the settings for the cloned pool to match those of the new database objects you will be using for the additional repository.
 - e. Click Clone, and apply the changes.

3. Update your data sources.
 - a. From Services -> JDBC -> Data Sources, right-click a data source.
 - b. Select “Clone...” from the drop-down menu.
 - c. Change the name of the data source from “Clone of ...” to something meaningful (For example: newContentDataSource).
 - d. Set the JNDI Name to match the new data source name.
 - e. Using the Pool Name drop down menu, set the pool to the new connection pool name (For example, contentPool2).
 - f. Click Clone, and apply the changes.

Step 3: Associate your Portal Application with the New Repository

The BEA Repository uses Entity Beans (EJBs) to associate a portal application with its data source(s). Because BEA’s default configuration is configured for just one data source (or repository), you’ll need to modify the XML files that maintain the EJB definitions for your data source(s). In short, you need to create new EJBs in these files that can be utilized by the additional repository you have created.

The easiest way to do this is to use the existing XML files as templates for creating the new EJB definitions and then add the new EJB definitions to the original file.

Redeploy Content EJBs to New Data Source (`ejb-jar.xml`, `weblogic-ejb-jar.xml`, and the `weblogic-cmp-rdbms-jar.xml`).

1. Create the workspace in which you will do your editing.
 - a. Create two temporary, working directories to use when completing your edits. For example, `c:\temp\working` and `c:\temp\newfiles`
 - b. Locate the `content_repo.jar` in the portal application directory that you want to associate with the new repository. For example, `<BEA home>/weblogic81/samples/portal/portalApp/content_repo.jar`
 - c. Place a copy of the `content_repo.jar` file in each of the working directories you have created.

Step 3: Associate your Portal Application with the New Repository

- d. Using a compression utility such as WinZip or JavaJar, unzip each content_repo.jar in its respective directory. At this point, the content_repo.jar files and their contents are identical.
- e. You will now work with three files:
 - ejb-jar.xml
 - weblogic-ejb-jar.xml
 - weblogic-ejb-rdbms-jar.xml

You will make edits to the files contained in your C:\temp\working directory and copy those changes to the files contained in your C:\temp\newfiles directory.

2. After creating the temp directories and files to work with, configure the ejb-jar.xml file.
 - a. Open the C:\temp\working\ejb-jar.xml file and open the C:\temp\newfiles\ejb-jar.xml file. You will have two files open.
 - b. In the C:\temp\working\ejb-jar.xml file, find and replace, EJB (EJB is case sensitive) with a new name. For example: EJBNew.

Note: You will need to use this new name throughout all of the files.
 - c. Copy the following from the C:\temp\working\ejb-jar.xml file to the C:\temp\newfiles\ejb-jar.xml file.

Copy everything between . . . from your c:\temp\working\ejb-jar.xml file	and paste before . . . in your c:\temp\newfiles\ejb-jar.xml file
<enterprise-beans> </enterprise-beans>	</enterprise-beans>
<relationships> </relationships>	</relationships>
<assembly-descriptor> </assembly-descriptor>	</assembly-descriptor>

- d. Save the C:\temp\newfiles\ejb-jar.xml.
3. Using the temporary directories and files you created in [Step 1](#), configure the META-INF/weblogic-ejb-jar.xml file.

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- a. Open the C:\temp\working\META-INF\weblogic-ejb-jar.xml file and the C:\temp\newfiles\META-INF\weblogic-ejb-jar.xml file. You will have two files open.
- b. In the C:\temp\working\META-INF\weblogic-ejb-jar.xml file, find and replace, EJB (EJB is case sensitive) with a new name. For example: EJBNew.
Note: Use the same name you used in Step 2b.
- c. In the C:\temp\working\META-INF\weblogic-ejb-jar.xml file, find and replace, (case sensitive) BEA_content with a new name (for example, BEA_content_new.)
- d. In the C:\temp\working\META-INF\weblogic-ejb-jar.xml file, find and replace <jndi-name>contentDataSource </jndi-name> (case sensitive), and replace with DataSource you defined in [Step 2: Connect the New Repository to the Server](#). (For example, <jndi-name>newContentDataSource</jndi-name>).
- e. Copy the following from the C:\temp\working\META-INF\weblogic-ejb-jar.xml file to the C:\temp\newfiles\META-INF\weblogic-ejb-jar.xml:

Copy everything between . . . from your

C:\temp\working\META-INF\weblogic-ejb-jar.xml **file**

and paste before . . . in your

C:\temp\newfiles\META-INF\weblogic-ejb-jar.xml **file**

<weblogic-ejb-jar> </weblogic-ejb-jar> </weblogic-ejb-jar>

- f. Save the C:\temp\newfiles\META-INF\weblogic-ejb-jar.xml file.
4. Using the temporary directories and files you created in [Step 1.](#), configure the META-INF/weblogic-cmp-rdbms-jar.xml file.
 - a. Open the C:\temp\working\weblogic-cmp-rdbms-jar.xml file and the C:\temp\newfiles\META-INF\weblogic-cmp-rdbms-jar.xml file. You will have two files open.
 - b. In the C:\temp\working\weblogic-cmp-rdbms-jar.xml file, find and replace EJB (EJB is case sensitive) with same name that you used in the //META-INF/weblogic-ejb-jar. For example: EJBNew.

Note: Use the same name you used in Step 2b.

- c. In the C:\temp\working\weblogic-cmp-rdbms-jar.xml temp file, find and replace, contentDataSource (case sensitive) with the DataSource you defined in “[Step 2: Connect the New Repository to the Server.](#)”. (For example: newContentDataSource)
- d. Copy the following from C:\temp\working\weblogic-cmp-rdbms-jar.xml file to the C:\temp\newfiles\META-INF\weblogic-cmp-rdbms-jar.xml file:

Copy everything starting at the first ... and ending at the last ... from the	and paste after the last ... in the
C:\temp\working\META-INF\weblogic-cmp-rdbms-jar.xml file	C:\temp\newfiles\META-INF\weblogic-cmp-rdbms-jar.xml file
<weblogic-rdbms-bean> </weblogic-rdbms-bean>	</weblogic-rdbms-bean>
<weblogic-rdbms-relation> </weblogic-rdbms-relation>	</weblogic-rdbms-relation>

5. In the C:\temp\newfiles directory, re-zip or re-compress the content_repo.jar file. Overwrite the existing content_repo.jar file with the new file of the same name that contains your edited XML files. Be sure to keep the files in their original directory structure, including the META-INF directory.
6. Copy the new content_repo.jar file you just created back into the original install directory. For example <BEA home>/weblogic81/samples/portal/portalApp/

Step 4: Start the Server

Restart the WebLogic Server to redeploy content_repo.jar.

Step 5: Create the New BEA Repository

To add a new repository:

1. Open the Administration Portal. (Start -> Programs -> BEA WebLogic Platform 8.1 -> Examples -> WebLogic Portal -> WebLogic Administration Portal)
2. Select “Content” in the menu at the top of the screen.

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3. In the Browse and Edit Content Resource tree to the left, select Repository from the View drop-down menu.



4. In the Manage Repositories tree to the left, right click on the Virtual Content Repository.



5. Select Add Repository from the pop-up menu (or click the Add Repository button in editor pane).



6. In the Editor pane, provide the following information:

Field	Description
Repository Name	The name you give your new repository. For example: MyNewRepository
Connection Class	(com.bea.content.spi.internal.RepositoryImpl)

Note: When you create a new repository, if you cut and paste the properties from a text pad document, be sure to delete any trailing blanks.

7. Click Add Property, and provide the following parameters:

The screenshot shows the 'Add Repository' form in a web browser. The 'Repository Name' field is filled with 'MyNewRepository'. Below it are fields for 'Connection Class', 'Username', and 'Password'. There is a 'Properties' section with a table:

Key	Value
key1	value1

Below the properties is an 'Add Property' button. At the bottom is a 'Repository Cache Settings' section with two columns: 'Node Cache' and 'Binary Cache'. Each column has four rows of settings:

Node Cache		Binary Cache	
Maximum Entries:	50	Maximum Entries:	10
Time To Live (seconds):	6000	Time To Live (seconds):	6000
		Cache Size/Item (bytes):	1024
Is Enabled:	<input checked="" type="checkbox"/>	Is Enabled:	<input checked="" type="checkbox"/>

At the bottom left of the form is a 'Create' button.

Key	Value
NODE_OPS_HOME	$\{APPNAME\} . BEA_content_<the\ name\ you\ chose,\ in\ our\ example,\ it\ was\ new> . RepoNodeOpsHome$ For example: $\{APPNAME\} . BEA_content_RepoNodeOpHome$
OBJECT_CLASS_OPS_H OME	$\{APPNAME\} . BEA_content_<the\ name\ you\ chose,\ in\ our\ example,\ it\ was\ new> . RepoObjectClassOpsHome$
SEARCH_OPS_HOME	$\{APPNAME\} . BEA_content_<the\ name\ you\ chose,\ in\ our\ example,\ it\ was\ new> . RepoSearchOpsHome$

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8. Click Create.