Enterprise Beans Configuration

Enterprise Beans Configuration:

> Start **Sybase** Enterprise Beans configuration.

Summary of Enterprise Beans Configuration tasks:

- **Step 1:** Create a Database User.
- **Step 2:** Specify a data source for the enterprise beans container.
- **Step 3:** Install and deploy the beans (specifies the JAR file in which the beans are located).
- **Step 4:** Configure the YourCo database.

The set of sample enterprise beans has eight beans to deploy.

Five enterprise beans have container-managed persistence (CMP). These require database access to store their data:

- Account.jar
- Audit.jar (YourCo)
- History.jar (YourCo)
- Increment.jar
- Leave.jar (YourCo)

Three enterprise beans do not require database access:

- Access.jar (YourCo)
- Hello.jar
- Transfer.jar

Sybase Enterprise Beans Configuration

Since many of the Enterprise Bean Samples require database access, it is required that you follow the instructions for Database Configuration **before** configuring and running Enterprise Beans.

Step 1: Create a Database User.

- Create a Sybase user named **EJB** for the SAMPLE database.

- Using isql, enter:

```
sp_addlogin EJB, ejbuser, SAMPLE
go
use SAMPLE
go
sp_adduser EJB
go
grant all to EJB
go
```

- The password for **EJB***(all upper case)* is ejbuser, *all lower case*.
- The **EJB** user may have already been created as a part of the installation process. In that case, you may use this existing **EJB** user provided the **EJB** user has access to the SAMPLE database.

Sybase Enterprise Beans Configuration

Step 2: Specify a Default Data Source for the EJB Container.

1. From the Topology view in the Application Server Administrator's Console, expand the tree until the Default Container is displayed.

2. Click once on the Default Container. The properties window will display on the right side of the screen.

3. Choose the DataSource tab.

4. Use these values in the property sheet:

   ❍ *DataSource:* Click on the Change.. button, select the **sample** datasource from the list and click Ok. If the **sample** datasource is not available, then Configure the Database.

   ❍ *User ID:* EJB

   ❍ *Password:* ejbuser

5. Click Apply.

⚠️

● You can specify a data source just once for several enterprise beans belonging to the same container. If you skip this step, you must specify the data source, user ID, and password each time you add an enterprise bean to the container.

Sybase Enterprise Beans Configuration

Step 3: Install and Deploy the Enterprise Beans

1. From the Topology view in the Application Server Administrator's Console, expand the tree until the Default Container is displayed.

2. Click once to select the Default Container and right-click once.

3. Select Create ⟶ Enterprise Bean.

   ❍ **Name:** Type in the classname of the bean. The Samples' beans are: Access, Account, Audit, Hello, History, Increment, Leave, and Transfer.

   ❍ **JAR File:** Click Browse. Navigate to the <was_root>/deployableEJBs directory.

     ■ Double-click the JAR file to display the various ".ser" (deployment descriptor) files included within. (There is only one ".ser" file per JAR file in the Samples.)

     ■ Double-click the name of the ".ser" file that corresponds to the bean you are adding.

     ■ Confirm the deployment of the JAR file by choosing "Deploy Only" (if it is not already deployed). Wait for the bean to deploy - this may take several seconds.

     ■ Click OK on the window indicating that the bean was deployed successfully.

     ■ Click OK on the "Create Enterprise Bean" window to finish the bean creation.

4. Expand the Default Container on the left side of the window.

5. Click once on the bean you just deployed. View the bean and ensure that the properties are filled in correctly.

6. Stop and Start the Default Server:

   ❍ Select the Topology view

   ❍ Expand the tree until the Default Server is displayed

   ❍ Right-click on the Default Server and choose "Stop"; the wheel icons indicating the server's status should be red and white

   ❍ Once the server is stopped, right-click again and choose "Start"; the wheel icons indicating the server's status should be blue and white.

⚠

● When a bean is installed, its JAR file is automatically appended to the CLASSPATH environment variable.

● By default, the JAR file is placed in the directory named <was_root>/deployedEJBs, or in the directory specified when the IBM WebSphere Application Server Advanced Edition was installed.

Sybase Enterprise Beans Configuration

Step 4: Configure the YourCo SAMPLE database.

1. Run the servlet to populate the tables for the YourCo Leave entity bean. This will put initial values in the YourCo employees leave banks.