

# Injection of EntityManager Example

## Overview

Shows use of **@PersistenceContext** to have an **EntityManager** with an **EXTENDED** persistence context injected into a **@Stateful** bean. An EJB 3 **@Entity** bean is used with the EntityManager to create, persist and merge data to a database.

If you need to use a TRANSACTION persistence context, see [this example](#).

The source for this example is in the "injection-of-entitymanager" directory located in the [openejb-examples.zip](#) available on the download page.

## The Code

### The Stateful bean

Error formatting macro: snippet: java.lang.NullPointerException

### The Entity bean

Error formatting macro: snippet: java.lang.NullPointerException

### The persistence unit

Error formatting macro: snippet: java.lang.NullPointerException

## Writing a unit test for the example

Error formatting macro: snippet: java.lang.NullPointerException

Curious on the InitialContext parameters used? See the [Injection of DataSource Example](#) for an explanation of how any Resource can be configured via properties in the TestCase itself or via an openejb.xml file.

## Running

Running the example is fairly simple. In the "injection-of-entitymanager" directory of the [examples zip](#), just run:

```
$ mvn clean install
```

Which should create output like the following.

```
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T E S T S
-----

Running org.superbiz.injection.jpa.MoviesTest
Apache OpenEJB 3.0    build: 20080408-04:13
http://openejb.apache.org/
INFO - openejb.home = /Users/dblevins/work/openejb-3.0/examples/injection-of-entitymanager
INFO - openejb.base = /Users/dblevins/work/openejb-3.0/examples/injection-of-entitymanager
INFO - Configuring Service(id=Default Security Service, type=SecurityService, provider-id=Default Security
Service)
INFO - Configuring Service(id=Default Transaction Manager, type=TransactionManager, provider-id=Default
Transaction Manager)
INFO - Configuring Service(id=movieDatabaseUnmanaged, type=Resource, provider-id=Default JDBC Database)
INFO - Configuring Service(id=movieDatabase, type=Resource, provider-id=Default JDBC Database)
INFO - Configuring Service(id=Default JDK 1.3 ProxyFactory, type=ProxyFactory, provider-id=Default JDK 1.3
ProxyFactory)
INFO - Found EjbModule in classpath: /Users/dblevins/work/openejb-3.0/examples/injection-of-entitymanager/target
/classes
INFO - Configuring app: /Users/dblevins/work/openejb-3.0/examples/injection-of-entitymanager/target/classes
INFO - Configuring Service(id=Default Stateful Container, type=Container, provider-id=Default Stateful
Container)
INFO - Auto-creating a container for bean Movies: Container(type=STATEFUL, id=Default Stateful Container)
INFO - Configuring PersistenceUnit(name=movie-unit)
INFO - Loaded Module: /Users/dblevins/work/openejb-3.0/examples/injection-of-entitymanager/target/classes
INFO - Assembling app: /Users/dblevins/work/openejb-3.0/examples/injection-of-entitymanager/target/classes
INFO - PersistenceUnit(name=movie-unit, provider=org.apache.openjpa.persistence.PersistenceProviderImpl)
ERROR - JAVA AGENT NOT INSTALLED. The JPA Persistence Provider requested installation of a ClassFileTransformer
which requires
    a JavaAgent. See http://openejb.apache.org/3.0/javaagent.html
INFO - Jndi(name=MoviesLocal) --> Ejb(deployment-id=Movies)
INFO - Created Ejb(deployment-id=Movies, ejb-name=Movies, container=Default Stateful Container)
INFO - Deployed Application(path=/Users/dblevins/work/openejb-3.0/examples/injection-of-entitymanager/target
/classes)
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 2.095 sec

Results :

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
```