

# Arquillian Persistence Extension

Example arquillian-jpa can be browsed at  
<https://github.com/apache/tomee/tree/master/examples/arquillian-jpa>

A sample showing how to use TomEE, Arquillian and its Persistence Extension.

Note that it doesn't work with embedded containers (openejb, tomee-embedded) if you don't use workarounds like <https://github.com/rmannibucau/persistence-with-openejb-and-arquillian> (see src/test/resources folder).

## Running (output)

```
-----  
TESTS  
-----
```

```
Running org.superbiz.arquillian.test.persistence.PersistenceTest  
oct. 01, 2014 6:30:23 PM org.apache.openejb.arquillian.common.Setup findHome  
INFO: Unable to find home in: /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-jpa/target/apache-tomee-remote  
oct. 01, 2014 6:30:23 PM org.apache.openejb.arquillian.common.MavenCache getArtifact  
INFO: Downloading org.apache.openejb:apache-tomee:7.0.0-SNAPSHOT:zip:webprofile  
please wait...  
oct. 01, 2014 6:30:23 PM org.apache.openejb.arquillian.common.Zips unzip  
INFO: Extracting '/home/rmannibucau/.m2/repository/org/apache/openejb/apache-tomee/7.0.0-SNAPSHOT/apache-tomee-7.0.0-SNAPSHOT-webprofile.zip' to  
'/home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-jpa/target/apache-tomee-remote'  
oct. 01, 2014 6:30:24 PM org.apache.tomee.arquillian.remote.RemoteTomEEContainer configure  
INFO: Downloaded container to: /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-jpa/target/apache-tomee-remote/apache-tomee-webprofile-7.0.0-SNAPSHOT  
INFOS - Server version: Apache Tomcat/8.0.14  
INFOS - Server built: Sep 24 2014 09:01:51  
INFOS - Server number: 8.0.14.0  
INFOS - OS Name: Linux  
INFOS - OS Version: 3.13.0-35-generic  
INFOS - Architecture: amd64  
INFOS - JVM Version: 1.7.0_67-b01  
INFOS - JVM Vendor: Oracle Corporation  
INFOS - The APR based Apache Tomcat Native library which allows optimal performance in production environments was not found on the java.library.path:  
/usr/java/packages/lib/amd64:/usr/lib64:/lib64:/lib:/usr/lib  
INFOS - Initializing ProtocolHandler ["http-nio-52256"]  
INFOS - Using a shared selector for servlet write/read  
INFOS - Initializing ProtocolHandler ["ajp-nio-40071"]  
INFOS - Using a shared selector for servlet write/read  
INFOS - Using 'openejb.jdbc.datasource-
```

```
creator=org.apache.tomee.jdbc.TomEEDataSourceCreator'
INFO - ****
INFO - OpenEJB http://tomee.apache.org/
INFO - Startup: Wed Oct 01 18:30:26 CEST 2014
INFO - Copyright 1999-2013 (C) Apache OpenEJB Project, All Rights Reserved.
INFO - Version: 7.0.0-SNAPSHOT
INFO - Build date: 20141001
INFO - Build time: 04:53
INFO -
*****  

INFO - openejb.home = /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-jpa/target/apache-tomee-remote/apache-tomee-webprofile-7.0.0-SNAPSHOT
INFO - openejb.base = /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-jpa/target/apache-tomee-remote/apache-tomee-webprofile-7.0.0-SNAPSHOT
INFO - Created new singletonService
org.apache.openejb.cdi.ThreadSingletonServiceImpl@13158bbd
INFO - Succeeded in installing singleton service
INFO - openejb configuration file is '/home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-jpa/target/apache-tomee-remote/apache-tomee-webprofile-7.0.0-SNAPSHOT/conf/tomee.xml'
INFO - Configuring Service(id=Tomcat Security Service, type=SecurityService, provider-id=Tomcat Security Service)
INFO - Configuring Service(id=Default Transaction Manager, type=TransactionManager, provider-id=Default Transaction Manager)
INFO - Configuring Service(id=demoDataSource, type=Resource, provider-id=Default JDBC Database)
INFO - Using 'openejb.system.apps=true'
INFO - Configuring enterprise application: openejb
INFO - Using openejb.deploymentId.format '{ejbName}'
INFO - Auto-deploying ejb openejb/Deployer: EjbDeployment(deployment-id=openejb/Deployer)
INFO - Auto-deploying ejb openejb/ConfigurationInfo: EjbDeployment(deployment-id=openejb/ConfigurationInfo)
INFO - Auto-deploying ejb MEJB: EjbDeployment(deployment-id=MEJB)
INFO - Configuring Service(id=Default Stateless Container, type=Container, provider-id=Default Stateless Container)
INFO - Auto-creating a container for bean openejb/Deployer: Container(type=STATELESS, id=Default Stateless Container)
INFO - Enterprise application "openejb" loaded.
INFO - Creating TransactionManager(id=Default Transaction Manager)
INFO - Creating SecurityService(id=Tomcat Security Service)
INFO - Creating Resource(id=demoDataSource)
INFO - Disabling testOnBorrow since no validation query is provided
INFO - Creating Container(id=Default Stateless Container)
INFO - Not creating another application classloader for openejb
INFO - Assembling app: openejb
INFO - Using
'openejb.jndiname.format={deploymentId}{interfaceType.openejbLegacyName}'
INFO - Jndi(name=openejb/DeployerBusinessRemote) --> Ejb(deployment-id=openejb/Deployer)
```

```

INFOs -
Jndi(name=global/openejb/openejb/Deployer!org.apache.openejb assembler.Deployer) -->
Ejb(deployment-id=openejb/Deployer)
INFOs - Jndi(name=global/openejb/openejb/Deployer) --> Ejb(deployment-
id=openejb/Deployer)
INFOs - Jndi(name=openejb/ConfigurationInfoBusinessRemote) --> Ejb(deployment-
id=openejb/ConfigurationInfo)
INFOs -
Jndi(name=global/openejb/openejb/ConfigurationInfo!org.apache.openejb assembler.classi-
c.cmd.ConfigurationInfo) --> Ejb(deployment-id=openejb/ConfigurationInfo)
INFOs - Jndi(name=global/openejb/openejb/ConfigurationInfo) --> Ejb(deployment-
id=openejb/ConfigurationInfo)
INFOs - Jndi(name=MEJB) --> Ejb(deployment-id=MEJB)
INFOs - Jndi(name=global/openejb/MEJB!javax.management.j2ee.ManagementHome) -->
Ejb(deployment-id=MEJB)
INFOs - Jndi(name=openejb/MEJB) --> Ejb(deployment-id=MEJB)
INFOs - Created Ejb(deployment-id=openejb/Deployer, ejb-name=openejb/Deployer,
container=Default Stateless Container)
INFOs - Created Ejb(deployment-id=MEJB, ejb-name=MEJB, container=Default Stateless
Container)
INFOs - Created Ejb(deployment-id=openejb/ConfigurationInfo, ejb-
name=openejb/ConfigurationInfo, container=Default Stateless Container)
INFOs - Started Ejb(deployment-id=openejb/Deployer, ejb-name=openejb/Deployer,
container=Default Stateless Container)
INFOs - Started Ejb(deployment-id=MEJB, ejb-name=MEJB, container=Default Stateless
Container)
INFOs - Started Ejb(deployment-id=openejb/ConfigurationInfo, ejb-
name=openejb/ConfigurationInfo, container=Default Stateless Container)
INFOs - Deployed
MBean(openejb.user.mbeans:application=openejb,group=org.apache.openejb assembler.monit-
oring,name=JMXDeployer)
INFOs - Deployed Application(path=openejb)
INFOs - Creating ServerService(id=cxf-rs)
INFOs - ** Bound Services **
INFOs - NAME IP PORT
INFOs - -----
INFOs - Ready!
INFOs - Initialization processed in 2589 ms
INFOs - Importing a Tomcat Resource with id 'UserDatabase' of type
'org.apache.catalina.UserDatabase'.
INFOs - Creating Resource(id=UserDatabase)
INFOs - Démarrage du service Catalina
INFOs - Starting Servlet Engine: Apache Tomcat (TomEE)/8.0.14 (7.0.0-SNAPSHOT)
INFOs - Starting ProtocolHandler ["http-nio-52256"]
INFOs - Starting ProtocolHandler ["ajp-nio-40071"]
INFOs - Server startup in 140 ms
oct. 01, 2014 6:30:30 PM org.apache.openejb.client.EventLogger log
INFOs: RemoteInitialContextCreated{providerUri=http://localhost:52256/tomee/ejb}
INFOs - Extracting jar: /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-
jpa/target/arquillian-test-working-dir/0/UserPersistenceTest.war
INFOs - Extracted path: /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-

```

```
jpa/target/arquillian-test-working-dir/0/UserPersistenceTest
INFO - using default host: localhost
INFO - ----- localhost -> /UserPersistenceTest
INFO - Using
'openejb.session.manager=org.apache.tomee.catalina.session.QuickSessionManager'
INFO - Configuring enterprise application: /home/rmannibucau/dev/Apache/tomee-
trunk/examples/arquillian-jpa/target/arquillian-test-working-dir/0/UserPersistenceTest
INFO - Configuring Service(id=Default Managed Container, type=Container, provider-
id=Default Managed Container)
INFO - Auto-creating a container for bean
UserPersistenceTest_org.superbiz.arquillian.test.persistence.PersistenceTest:
Container(type=MANAGED, id=Default Managed Container)
INFO - Creating Container(id=Default Managed Container)
INFO - Using directory /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-
jpa/target/apache-tomee-remote/apache-tomee-webprofile-7.0.0-SNAPSHOT/temp for
stateful session passivation
INFO - Configuring PersistenceUnit(name=demoApplicationPU)
INFO - Auto-creating a Resource with id 'demoDataSourceNonJta' of type 'DataSource'
for 'demoApplicationPU'.
INFO - Configuring Service(id=demoDataSourceNonJta, type=Resource, provider-
id=demoDataSource)
INFO - Creating Resource(id=demoDataSourceNonJta)
INFO - Disabling testOnBorrow since no validation query is provided
INFO - Adjusting PersistenceUnit demoApplicationPU <non-jta-data-source> to Resource
ID 'demoDataSourceNonJta' from 'null'
INFO - Enterprise application "/home/rmannibucau/dev/Apache/tomee-
trunk/examples/arquillian-jpa/target/arquillian-test-working-
dir/0/UserPersistenceTest" loaded.
INFO - Assembling app: /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-
jpa/target/arquillian-test-working-dir/0/UserPersistenceTest
INFO - OpenJPA dynamically loaded a validation provider.
INFO - Starting OpenJPA 2.4.0-nonfinal-1598334
INFO - Using dictionary class "org.apache.openjpa.jdbc.sql.HSQLDictionary" (HSQL
Database Engine 2.3.2 ,HSQL Database Engine Driver 2.3.2).
INFO - Connected to HSQL Database Engine version 2.2 using JDBC driver HSQL Database
Engine Driver version 2.3.2.
INFO - SELECT SEQUENCE_SCHEMA, SEQUENCE_NAME FROM INFORMATION_SCHEMA.SYSTEM_SEQUENCES
--> 0ms
INFO - CREATE TABLE User (id BIGINT NOT NULL, name VARCHAR(255), PRIMARY KEY (id))
--> 0ms
INFO - PersistenceUnit(name=demoApplicationPU,
provider=org.apache.openjpa.persistence.PersistenceProviderImpl) - provider time
1075ms
INFO - Existing thread singleton service in SystemInstance():
org.apache.openejb.cdi.ThreadSingletonServiceImpl@13158bbd
INFO - OpenWebBeans Container is starting...
INFO - Adding OpenWebBeansPlugin : [CdiPlugin]
INFO - All injection points were validated successfully.
INFO - OpenWebBeans Container has started, it took 224 ms.
INFO - Deployed Application(path=/home/rmannibucau/dev/Apache/tomee-
trunk/examples/arquillian-jpa/target/arquillian-test-working-
```

```
dir/0/UserPersistenceTest)
```

INFOS - At least one JAR was scanned for TLDs yet contained no TLDs. Enable debug logging for this logger for a complete list of JARs that were scanned but no TLDs were found in them. Skipping unneeded JARs during scanning can improve startup time and JSP compilation time.

AVERTISSEMENT - Potential problem found: The configured data type factory 'class org.dbunit.dataset.datatype.DefaultDataTypeFactory' might cause problems with the current database 'HSQL Database Engine' (e.g. some datatypes may not be supported properly). In rare cases you might see this message because the list of supported database products is incomplete (list=[derby]). If so please request a java-class update via the forums. If you are using your own IDataTypeFactory extending DefaultDataTypeFactory, ensure that you override getValidDbProducts() to specify the supported database products.

```
INFOS - insert into USER (ID, NAME) values (1, TomEE) --> 1ms
```

```
INFOS - insert into USER (ID, NAME) values (1, 2)TomEE,Old) --> 0ms
```

```
INFOS - SELECT COUNT(t0.id) FROM User t0 --> 0ms
```

```
INFOS - SELECT t0.name FROM User t0 WHERE t0.id = 2 --> 0ms
```

```
INFOS - UPDATE User SET name = OpenEJB WHERE id = 2 --> 1ms
```

```
INFOS - select ID, NAME from USER order by ID --> 0ms
```

```
INFOS - select ID, NAME from USER order by ID --> 0ms
```

```
INFOS - select ID, NAME from USER order by ID --> 0ms
```

```
INFOS - select ID, NAME from USER order by ID --> 0ms
```

```
INFOS - delete from USER --> 0ms
```

```
oct. 01, 2014 6:30:34 PM org.apache.openejb.client.EventLogger log
```

```
INFOS: RemoteInitialContextCreated{providerUri=http://localhost:52256/tomee/ejb}
```

```
INFOS - Undeploying app: /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-jpa/target/arquillian-test-working-dir/0/UserPersistenceTest
```

```
oct. 01, 2014 6:30:34 PM org.apache.openejb.arquillian.common.TomEEContainer undeploy
```

```
INFOS: cleaning /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-jpa/target/arquillian-test-working-dir/0
```

```
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 11.242 sec
```

```
INFOS - A valid shutdown command was received via the shutdown port. Stopping the Server instance.
```

```
INFOS - Pausing ProtocolHandler ["http-nio-52256"]
```

```
INFOS - Pausing ProtocolHandler ["ajp-nio-40071"]
```

```
INFOS - Arrêt du service Catalina
```

```
INFOS - Stopping ProtocolHandler ["http-nio-52256"]
```

```
INFOS - Stopping ProtocolHandler ["ajp-nio-40071"]
```

```
INFOS - Stopping server services
```

```
INFOS - Undeploying app: openejb
```

```
INFOS - Closing DataSource: demoDataSource
```

```
INFOS - Closing DataSource: demoDataSourceNonJta
```

```
INFOS - Destroying ProtocolHandler ["http-nio-52256"]
```

```
INFOS - Destroying ProtocolHandler ["ajp-nio-40071"]
```

Results :

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