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)

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 T E S T S
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Running org.superbiz.arquillian.test.persistence.PersistenceTest
oct. 01, 2014 6:30:23 PM org.apache.openejb.arquillian.common.Setup findHome
INFOS: 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
INFOS: 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
INFOS: 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
INFOS: 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-
```

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creator=org.apache.tomee.jdbc.TomEEDataSourceCreator'
INFOS -
********************************************************************************
INFOS - OpenEJB http://tomee.apache.org/
INFOS - Startup: Wed Oct 01 18:30:26 CEST 2014
INFOS - Copyright 1999-2013 (C) Apache OpenEJB Project, All Rights Reserved.
INFOS - Version: 7.0.0-SNAPSHOT
INFOS - Build date: 20141001
INFOS - Build time: 04:53
INFOS -
********************************************************************************
INFOS - openejb.home = /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-
jpa/target/apache-tomee-remote/apache-tomee-webprofile-7.0.0-SNAPSHOT
INFOS - openejb.base = /home/rmannibucau/dev/Apache/tomee-trunk/examples/arquillian-
jpa/target/apache-tomee-remote/apache-tomee-webprofile-7.0.0-SNAPSHOT
INFOS - Created new singletonService
org.apache.openejb.cdi.ThreadSingletonServiceImpl@13158bbd
INFOS - Succeeded in installing singleton service
INFOS - 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'
INFOS - Configuring Service(id=Tomcat Security Service, type=SecurityService,
provider-id=Tomcat Security Service)
INFOS - Configuring Service(id=Default Transaction Manager, type=TransactionManager,
provider-id=Default Transaction Manager)
INFOS - Configuring Service(id=demoDataSource, type=Resource, provider-id=Default JDBC
Database)
INFOS - Using 'openejb.system.apps=true'
INFOS - Configuring enterprise application: openejb
INFOS - Using openejb.deploymentId.format '{ejbName}'
INFOS - Auto-deploying ejb openejb/Deployer: EjbDeployment(deployment-
id=openejb/Deployer)
INFOS - Auto-deploying ejb openejb/ConfigurationInfo: EjbDeployment(deployment-
id=openejb/ConfigurationInfo)
INFOS - Auto-deploying ejb MEJB: EjbDeployment(deployment-id=MEJB)
INFOS - Configuring Service(id=Default Stateless Container, type=Container, provider-
id=Default Stateless Container)
INFOS - Auto-creating a container for bean openejb/Deployer: Container(type=STATELESS,
id=Default Stateless Container)
INFOS - Enterprise application "openejb" loaded.
INFOS - Creating TransactionManager(id=Default Transaction Manager)
INFOS - Creating SecurityService(id=Tomcat Security Service)
INFOS - Creating Resource(id=demoDataSource)
INFOS - Disabling testOnBorrow since no validation query is provided
INFOS - Creating Container(id=Default Stateless Container)
INFOS - Not creating another application classloader for openejb
INFOS - Assembling app: openejb
INFOS - Using
'openejb.jndiname.format={deploymentId}{interfaceType.openejbLegacyName}'
INFOS - Jndi(name=openejb/DeployerBusinessRemote) --> Ejb(deployment-
id=openejb/Deployer)
```

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

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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
```