

Reload Persistence Unit Properties

Example `reload-persistence-unit-properties` can be browsed at <https://github.com/apache/tomee/tree/master/examples/reload-persistence-unit-properties>

This example aims to simulate a benchmark campaign on JPA.

First you'll run your application then you'll realize you could need L2 cache to respect your SLA.

So you change your `persistence.xml` configuration, then restart your application, you wait a bit because you are using OpenEJB ;)...but you wait...

So to try to go faster on long campaign simply change your configuration at runtime to test it then when it works change your configuration file to keep the modification.

To do it we can simply use JMX.

OpenEJB automatically register one MBeans by entitymanager (persistence unit).

It allows you mainly to change your persistence unit properties even if more is possible.

The test itself

The test is simple: we persist an entity, we query it three times without cache then we activate cache and realize running again our queries that one is enough to do the same.

The output

In the output we find the 3 parts described just before.

```
INFO - TEST, data initialization
DEBUG - <t 1523828380, conn 93608538> executing stmtnt 1615782385 CREATE TABLE Person
(id BIGINT NOT NULL, name VARCHAR(255), PRIMARY KEY (id))
DEBUG - <t 1523828380, conn 93608538> [1 ms] spent
DEBUG - <t 1523828380, conn 1506565411> executing prepsmtnt 668144844 INSERT INTO
Person (id, name) VALUES (?, ?) [params=?, ?]
DEBUG - <t 1523828380, conn 1506565411> [0 ms] spent
INFO - TEST, end of data initialization
```

```
INFO - TEST, doing some queries without cache
DEBUG - <t 1523828380, conn 1506565411> executing prepstmt 1093240870 SELECT t0.name
FROM Person t0 WHERE t0.id = ? [params=?]
DEBUG - <t 1523828380, conn 1506565411> [0 ms] spent
DEBUG - <t 1523828380, conn 1506565411> executing prepstmt 1983702821 SELECT t0.name
FROM Person t0 WHERE t0.id = ? [params=?]
DEBUG - <t 1523828380, conn 1506565411> [0 ms] spent
DEBUG - <t 1523828380, conn 1506565411> executing prepstmt 1178041898 SELECT t0.name
FROM Person t0 WHERE t0.id = ? [params=?]
DEBUG - <t 1523828380, conn 1506565411> [1 ms] spent
INFO - TEST, queries without cache done
```

```
INFO - TEST, doing some queries with cache
DEBUG - <t 1523828380, conn 1506565411> executing prepstmt 1532943889 SELECT t0.name
FROM Person t0 WHERE t0.id = ? [params=?]
DEBUG - <t 1523828380, conn 1506565411> [0 ms] spent
INFO - TEST, queries with cache done
```