

=====

PREVAYLER (TM)

The Free Software Prevalence Layer for Java

=====

Prevalence is the simplest, fastest and most transparent architecture for business object persistence, load-balancing and fault-tolerance.

Prevayler is the original free software prevalence layer implementation for Java.

Free Software License

=====

The Prevayler library is free software, distributed under a BSD license. See LICENSE.TXT in this directory for more details.

Features

=====

Prevayler implements ACID transactions and transparent business object persistence. It does not yet implement replication, which will enable load-balancing and fault-tolerance.

Performance Scalability

=====

10000 (ten thousand) times faster than Oracle. 3000 (three thousand) times faster than MySQL.

These are typical results for the Prevayler query scalability test running against DBMSs using JDBC, even when the DBMSs use local databases fully cached in RAM.

You can compile and run the test for yourself. Its source code is available for inspection in the "demos/scalability" directory starting at:

org.prevayler.demos.scalability.Main

It runs transaction-processing and query scalability tests against Prevayler and any JDBC database. Just follow the instructions displayed on the console.

Required Java Platform

=====

Prevayler 2.5 and below is written against the APIs of the Java 2 Platform

Standard Edition version 1.4. Prior to Prevayler 2.5 the output classes are targeting Java 1.4, while Prevayler 2.5 targets Java 1.6.

As of Prevayler 2.6 both code and compiled output will target Java 1.6.

#### Running Prevayler

=====

Prevayler is a prevalence framework. It is compiled in the "prevayler-XYZ-N.N.jar" files available in this distribution.

- \* prevayler-core-\${version}.jar
- \* prevayler-factory-\${version}.jar

The core and factory modules are required for basic Prevayler operation.

Using these two alone does not introduce any external dependencies.

- \* prevayler-xstream-\${version}.jar

The xstream module is an optional extension for using XML for journal and snapshot serialization, requiring the external XStream library.

- \* prevayler-log4j-\${version}.jar

The log4j module is an optional extension implementing Prevayler's Monitor

interface using Log4J. It naturally requires Log4J.

- \* prevayler-mirror-\${version}.jar

The mirror module is an experimental extension implementing simple master-slave replication. It is not yet very robust, but some users are already using it.

To run Prevayler, you must write an application of your own or use the following demo applications.

#### Demo Applications

=====

The Prevayler demo applications are available in the "demos" directory. They have the main() method and can be compiled and run directly.

- \* demos/demo1: org.prevayler.demos.demo1.Main

A tiny application that finds prime numbers and stores them using Prevayler.

- \* demos/jxpath: org.prevayler.demos.jxpath.Main

An example of using JXPath to query Java objects. See  
demos/jxpath/README  
for more details.

\* demos/tutorial: org.prevayler.tutorial.Main

A very simple quick-start example.

\* demos/scalability: org.prevayler.demos.scalability.Main

Mentioned previously.

### Learning Prevayler 1-2-3

=====

The prevalence concepts are ridiculously simple. Unlike using a database, though, writing an application using a prevalence layer actually requires you to know OO.

1. Read the "Object Prevalence Skeptical FAQ" in the "docs" directory.

2. Run the demos above and understand their source code. Use the javadoc in the "apidocs" directory as a reference.

3. Write a little application of your own using the Bank demo as an example.

The source code to Prevayler is available in the "src" directory. You are dearly invited to visit it. The core Prevayler implementation is only a couple thousand lines of code.

### Prevayler Pet Store

=====

A more elaborate Prevayler tutorial including a web interface (JSP) can be found at: <http://sourceforge.net/projects/presto>

### Contact Information

=====

All Prevayler resources are available from: <http://www.prevayler.org/>

If you know Java but have any trouble or doubt running Prevayler, please join our discussion lists.

Ideas, contributions and suggestions are welcome too.

Thanks,

The Prevayler team.

-----  
Copyright 2001-2011 by Klaus Wuestefeld and the Prevayler team  
"PREVAYLER" is a trademark of Klaus Wuestefeld.