Artifactory

maven repositories made easy

Jan Kriesten

Java User Group Hamburg - 27th May, 2009
Agenda

- Introduction
- Enter maven
- maven repositories
- Artifactory features
- Artifactory in action
- Resources
- Q & A
Introduction

‣ Software project development
  ❖ compile
  ❖ test
  ❖ package

‣ Version control system
  ❖ collaboration
  ❖ release management
  ❖ library distribution?

‣ Management for libraries is needed.
Enter maven (1)

- Build management
  - building
  - testing
  - reporting
  - documenting

- Dependency management
  - central repository for dependent libraries
Enter maven (2)

- Project Object Model (pom)

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project>
  <modelVersion>4.0.0</modelVersion>
  <groupId>de.footprint.projects</groupId>
  <artifactId>my-project</artifactId>
  <version>1.0.0</version>
  <packaging>war</packaging>

  <dependencies>
    <dependency>
      <groupId>javax.xml.ws</groupId>
      <artifactId>jaxws-api</artifactId>
      <version>2.1-1</version>
    </dependency>
  </dependencies>
</project>
```

- Dependency tree:

```
de.footprint.projects:my-project:war:1.0.0
  \- javax.xml.ws:jaxws-api:jar:2.1-1:compile
    +- javax.xml.bind:jAXB-api:jar:2.1:compile
      |  +- javax.xml.stream:stax-api:jar:1.0-2:compile
      |  \- javax.activation:activation:jar:1.1:compile
    +- javax.xml.soap:saaj-api:jar:1.3:compile
    +- javax.annotation:jsr250-api:jar:1.0:compile
    \- javax.jws:jsr181:jar:1.0:compile
```
maven repositories

- repo1.maven.org / repo2.maven.org
  - Central maven repositories
  - Libraries have to be kept up-to-date by developers
  - Not all library versions may be available (yet)
  - Company intern libraries not available (and shouldn’t be for public access)
  - Internet access needed

➡ Repository to provide internal and unavailable/pimped libraries needed
Artifactory features (1)

- Easy installation (Unix/Windows Service, WAR, Tomcat installation)
- User friendly admin interface
- maven artifacts management
  - UI upload
  - Auto generate POM
  - Nestable virtual repositories
  - Blocking of bad artifacts / bad checksums
  - Multi-format local imports
- Maven 1, 2 proxying
Artifactory features (2)

- Security
  - User / Group support
  - Role based access support
  - LDAP integration
  - Secured settings.xml passwords
DEMO
Resources

- Artifactory home:
  http://www.jfrog.org/products.php

- Mailing list / Nabble:
  http://www.nabble.com/Artifactory-Users-f19964.html
Questions welcome!