

TESLA

Anders Hammar, Devoteam

Jfokus 2012

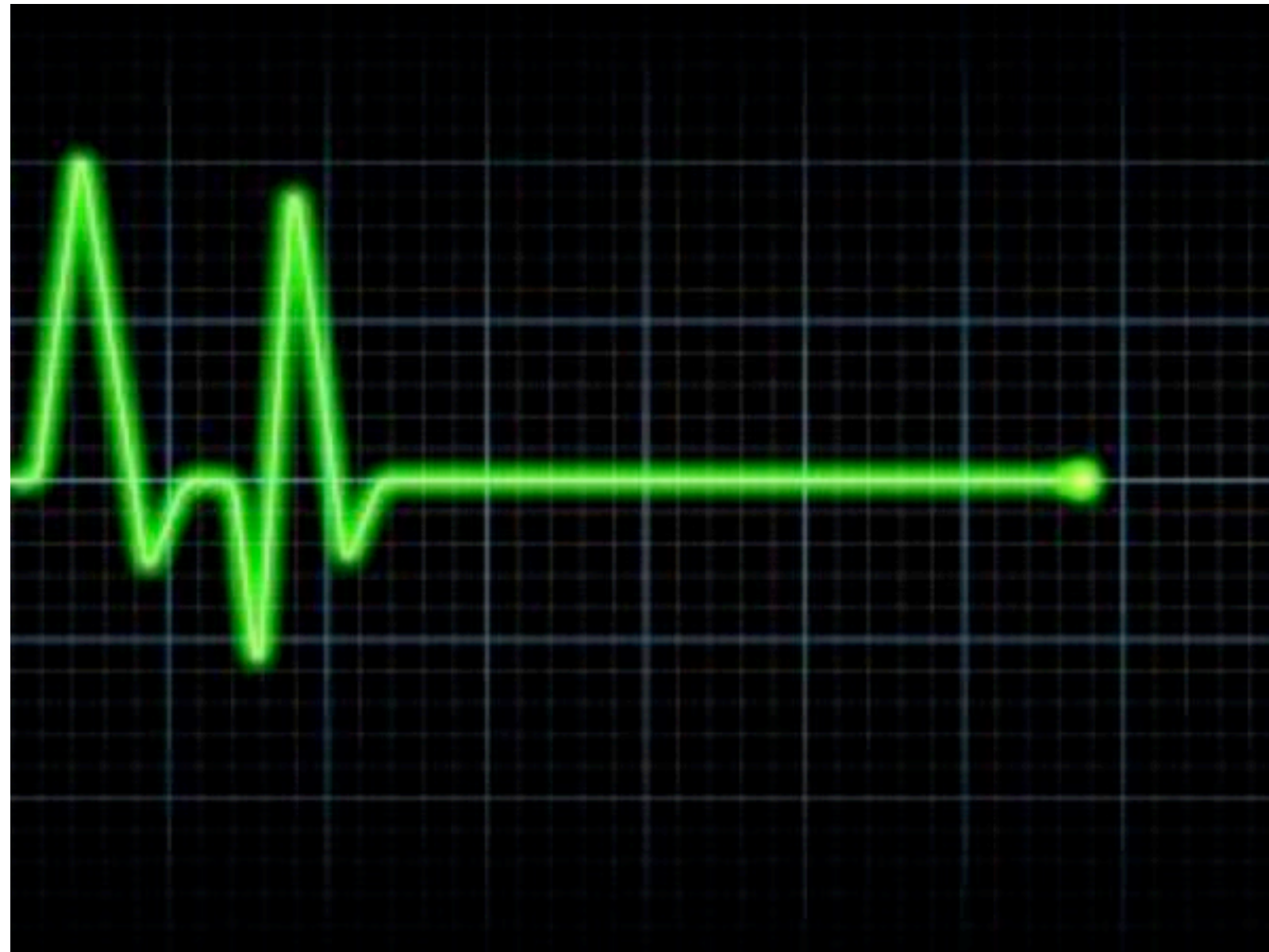
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“It’s not a fork!”

- Jason van Zyl

Why Tesla?

Why Tesla?



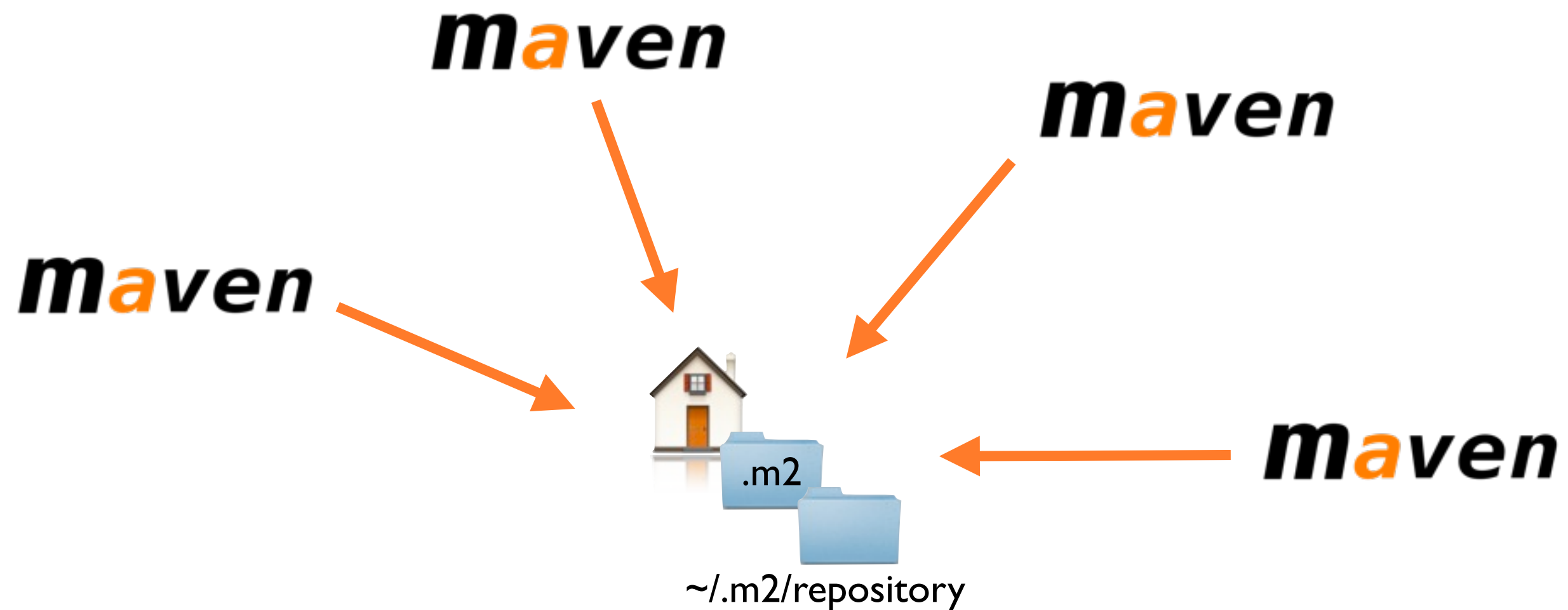
Why Tesla?

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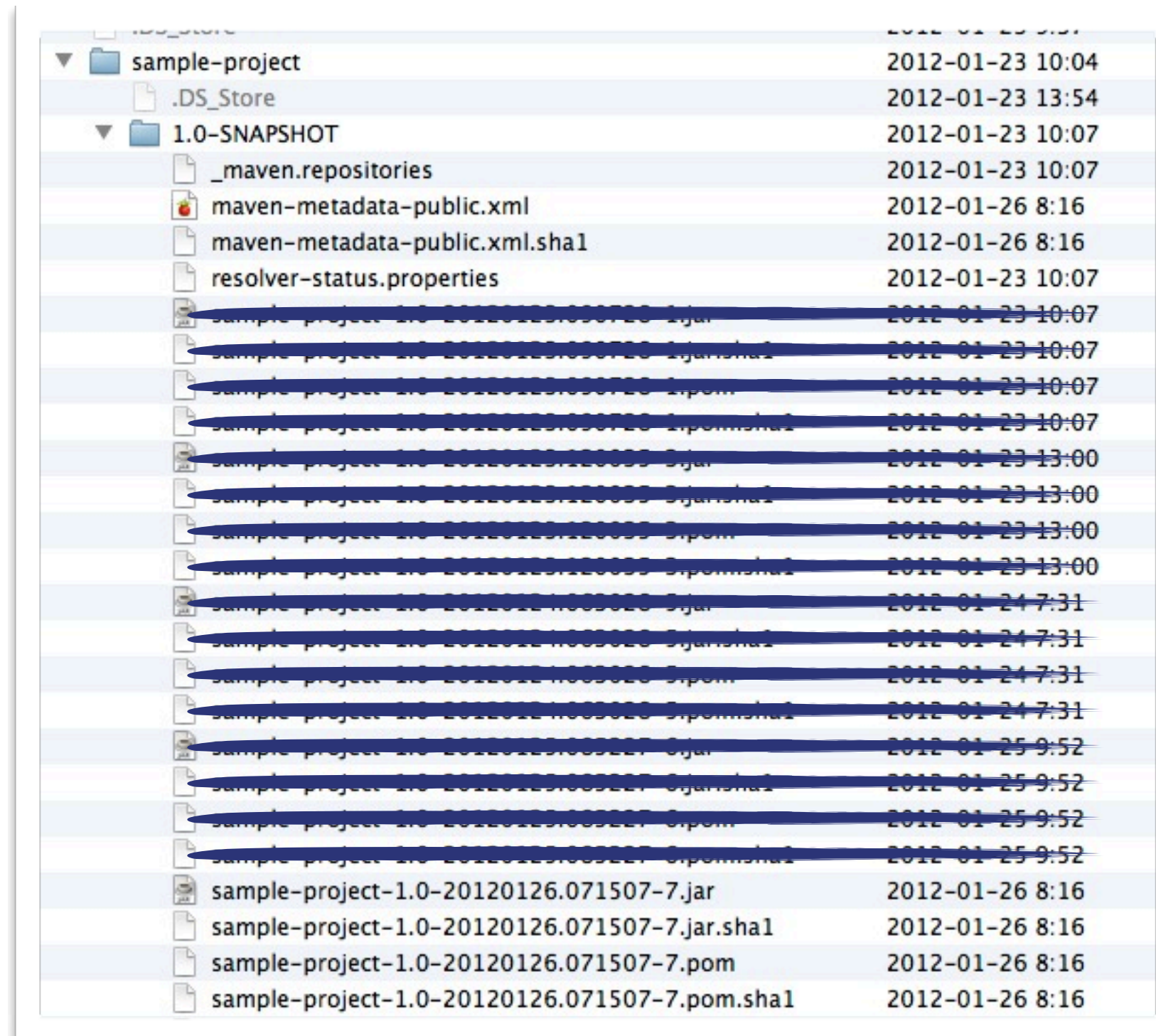
Features

- Local repository:
 - Concurrent Local Repository
 - Automatic Local Snapshot Purging
 - Split Local Repository
- Polyglot Support
- Plugin development:
 - Java 5 Annotation-based Plugin API
 - JSR-330 (DI) Components in Plugins
- Build Avoidance API
- Several New Extension Points
- TeslaShell
- More to come!

Concurrent Local Repository

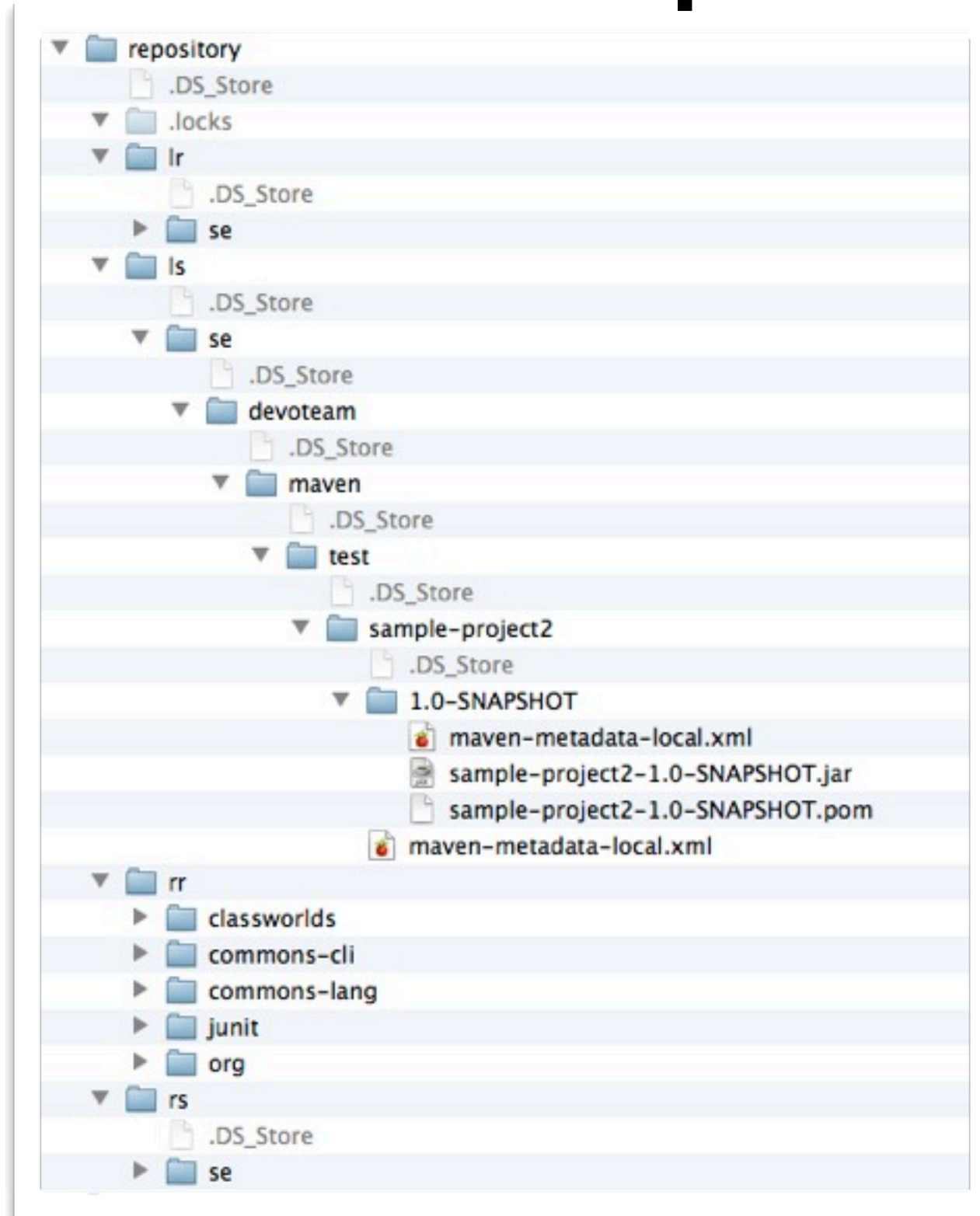


Automatic Local Snapshot Purging




| File Name | Timestamp |
|--|-----------------------------|
| sample-project | 2012-01-23 10:04 |
| .DS_Store | 2012-01-23 13:54 |
| 1.0-SNAPSHOT | 2012-01-23 10:07 |
| _maven.repositories | 2012-01-23 10:07 |
| maven-metadata-public.xml | 2012-01-26 8:16 |
| maven-metadata-public.xml.sha1 | 2012-01-26 8:16 |
| resolver-status.properties | 2012-01-23 10:07 |
| sample-project-1.0-20120123.030723-7.jar | 2012-01-23 10:07 |
| sample-project-1.0-20120123.030723-7.jar.sha1 | 2012-01-23 10:07 |
| sample-project-1.0-20120123.030723-7.pom | 2012-01-23 10:07 |
| sample-project-1.0-20120123.030723-7.pom.sha1 | 2012-01-23 10:07 |
| sample-project-1.0-20120123.120033-8.jar | 2012-01-23 13:00 |
| sample-project-1.0-20120123.120033-8.jar.sha1 | 2012-01-23 13:00 |
| sample-project-1.0-20120123.120033-8.pom | 2012-01-23 13:00 |
| sample-project-1.0-20120123.120033-8.pom.sha1 | 2012-01-23 13:00 |
| sample-project-1.0-20120124.003023-9.jar | 2012-01-24 7:31 |
| sample-project-1.0-20120124.003023-9.jar.sha1 | 2012-01-24 7:31 |
| sample-project-1.0-20120124.003023-9.pom | 2012-01-24 7:31 |
| sample-project-1.0-20120124.003023-9.pom.sha1 | 2012-01-24 7:31 |
| sample-project-1.0-20120125.003227-8.jar | 2012-01-25 9:52 |
| sample-project-1.0-20120125.003227-8.jar.sha1 | 2012-01-25 9:52 |
| sample-project-1.0-20120125.003227-8.pom | 2012-01-25 9:52 |
| sample-project-1.0-20120125.003227-8.pom.sha1 | 2012-01-25 9:52 |
| sample-project-1.0-20120126.071507-7.jar | 2012-01-26 8:16 |
| sample-project-1.0-20120126.071507-7.jar.sha1 | 2012-01-26 8:16 |
| sample-project-1.0-20120126.071507-7.pom | 2012-01-26 8:16 |
| sample-project-1.0-20120126.071507-7.pom.sha1 | 2012-01-26 8:16 |

Split Local Repository



Polyglot Support

sitebricks / pom.atom 

100644 | 67 lines (60 sloc) | 3.139 kb

```
1 repositories << "http://scala-tools.org/repo-releases/"
2
3 project "Sitebricks :: Parent" @ "https://github.com/dhanji/sitebricks"
4   id: com.google.sitebricks:sitebricks-parent:0.8.6-SNAPSHOT
5   inherit: org.sonatype.oss:oss-parent:6
6   packaging: pom
7
8   properties: [ org.testng.version: 5.8
9                 org.mortbay.jetty.version: 6.1.9
10                guice.version: 3.0
11                ch.qos.logback.version: 0.9.9
12                org.seleniumhq.webdriver.version: 0.9.7376
13                org.codehaus.jackson.version: 1.8.0 ]
14
15   overrides: [ com.google.sitebricks:sitebricks-converter:${project.version}
16                com.google.sitebricks:sitebricks:${project.version}
17                com.google.sitebricks:stat:${project.version}
18                com.google.sitebricks:sitebricks-client:${project.version}
19                org.mvel:mvel2:2.0.18
20                com.google.guava:guava:r09
21                com.google.code.gson:gson:1.6
22                com.google.inject:guice:${guice.version}
23                com.google.inject.extensions:guice-servlet:${guice.version}
24                com.google.inject.extensions:guice-multibindings:${guice.version}
25                net.jcip:jcip-annotations:1.0
26                com.intellij:annotations:7.0.3
27                org.freemarker:freemarker:2.3.10
28                commons-io:commons-io:1.4
29                commons-collections:commons-collections:20040616
```

Plugins: Annotations & JSR-330 DI

```
15  @Goal( "hello" )
16  @DefaultPhase( LifecyclePhase.VALIDATE )
17  @DefaultGoal
18  @ThreadSafe
19  @GeneratedResourceRoot( directory = "${outputDirectory}", includes = "**/*.properties,**/*.xml", filtering = "true" )
20  public class HelloWorldMojo
21      extends SisuMavenMojo
22  {
23
24      @Inject
25      private Hello hello;
26
27      @Configuration
28      @DefaultsTo( "${project}" )
29      @NonEditable
30      private MavenProject project;
31
32      /**
33       * The output directory.
34       */
35      @Configuration
36      @Property( "hello.outputDirectory" )
37      @DefaultsTo( "${project.build.directory}/hello" )
38      @Alias( "destinationDirectory" )
39      private File outputDirectory;
40
41      public void execute()
42          throws MojoExecutionException
43      {
44          trv
```

Build Avoidance API

```
ahammarMBP-3:~ anders$ mvn clean install
```

Import Maven Projects

Setup Maven plugin connectors
Discover and map Eclipse plugins to Maven plugin goal executions.

| Maven Build | Action |
|--|-------------------------------------|
| ▶ <input checked="" type="checkbox"/> maven-jar-plugin:2.3.1:jar | Install mavenarchiver basic support |
| ▶ <input checked="" type="checkbox"/> modello-maven-plugin:1.4.1:java | Install modello |
| ▶ <input checked="" type="checkbox"/> modello-maven-plugin:1.4.1:xpp3-extended-reader | Install modello |
| ▶ <input checked="" type="checkbox"/> modello-maven-plugin:1.4.1:xpp3-reader | Install modello |
| ▶ <input checked="" type="checkbox"/> modello-maven-plugin:1.4.1:xpp3-writer | Install modello |
| ▶ <input checked="" type="checkbox"/> modello-maven-plugin:1.4.1:xsd | Install modello |
| ▶ <input checked="" type="checkbox"/> plexus-component-metadata:1.5.5:generate-metadata | Install plexus-annotations |
| ▶ <input checked="" type="checkbox"/> plexus-component-metadata:1.5.5:generate-test-metadata | Install plexus-annotations |

0 errors Resolve All Later Auto Select

Description

License

? < Back Next > Cancel Finish


```
ahammarMBP-3:~ anders$ tsh

Tesla Shell (4.0)

Type 'help' for more information.

-----

tsh(/):-> help
Available pages:
  alias      Define an alias or list defined aliases.
  cd         Changes the current directory.
  cp         Copy command.
  echo       Print arguments to standard output.
  encrypt-password Encrypt passwords.
  exit       Exit the current shell.
  help       Display help pages.
  history    Display history.
  hostname   Displays the name of the current host.
  info       Display information about the shell and environment.
  logging    Command group: logging
  ls         List the contents of a file or directory.
  mkdir     Create a directory.
  mvn       Execute Maven.
  pom        Command group: pom
  pref       Command group: pref
  pwd        Displays the current directory.
  recall     Recall an item from history.
  rm         Remove a file.
  rmdir     Remove a directory.
  set        Set a variable or property.
  shell-env  Shell environment variables overview.
  shell-files Shell configuration files overview.
  shell-navigation Shell navigation overview.
  shell-syntax Shell syntax overview.
  source     Execute commands from a source into the current shell.
  unalias   Undefine an alias.
  unset     Unset a variable or property.
  wget      Fetch a file from a URL.

tsh(/):-> █
```

Building Maven 3 Core

| | Maven/Tesla (CLI) | TeslaShell |
|-----------|-------------------|------------|
| mvn clean | | |
| mvn test | ~54,2s | ~53,3 |
| mvn test | ~48,2s | ~43,8s |
| mvn test | ~48,6s | ~44,2s |
| mvn test | ~47,7s | ~44,8s |
| mvn test | ~48,4s | ~43,8s |
| mvn test | ~49,1s | ~43,7s |

More Info

- Homepage: <http://tesla.io/>
- Source: <http://github.com/etesla>
- Download: <http://us3.maven.org:8080/job/tesla-bootstrap/>

THANKS

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