

APACHE SLING & FRIENDS TECH MEETUP 10-12 SEPTEMBER 2018

What's new in the Sling developer tooling? Robert Munteanu – Adobe Systems Inc







@rombert



- Motivation
- Challenges
- Work done so far
- Future plans



Motivation



Why can't we be friends?





A little history

SLING-2978 - Create tooling top-level directory and move maven and id...

...e under it

Moved the current IDE tooling from whiteboard/asanso to trunk/tooling/ide.

git-svn-id: https://svn.apache.org/repos/asf/sling/trunk@1506951 13f79535-47bb-0310-

master \$\infty\$ sling-ide-tooling-1.2.2 sling-ide-tooling-1.2.0

grombert committed on Jul 25, 2013

o parents commi

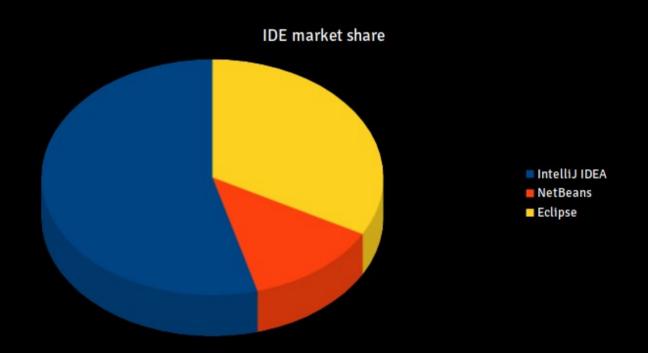
Showing 90 changed files with 4,990 additions and 0 deletions.



- Sling IDE Tooling for Eclipse 1.0.0 released -01/Jul/2014
- Sling IDE Tooling for Eclipse 1.1.0 released -14/Mar/2016
- Sling IDE Tooling for Eclipse 1.2.0 released -21/Jan/2018



IDE market share statistics



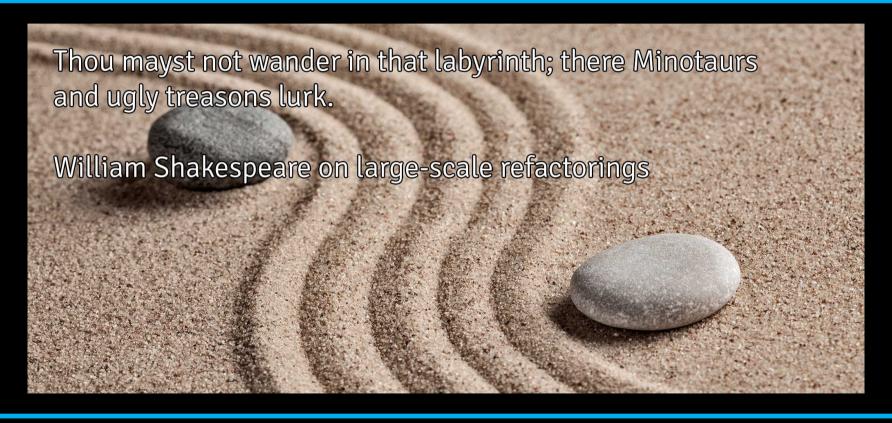
Source: https://zeroturnaround.com/rebellabs/developer-productivity-report-2017-why-do-you-use-java-tools-you-use/



Challenges



IDE-specific code



IDE-specific extensions

```
<extension
        point="org.eclipse.core.expressions.propertyTesters">
        propertyTester
id="org.apache.sling.ide.eclipse.internal.ExportableResourceTester"
              type="org.eclipse.core.resources.IResource"
              namespace="org.apache.sling.ide.eclipse"
              properties="canBeExported,canBeImported"
class="org.apache.sling.ide.eclipse.core.internal.ContentResourceTes
ter">
        </extension>
```



IDE-specific behaviour

Andreas Schaefer added a comment - 03/Mar/16 23:44

I finally you get Eclipse going and I think the issue is that Eclipse works on changes. The IntelliJ plugin does something similar but it also has a feature to force the push to the server and there is where I see the issue cropping up.

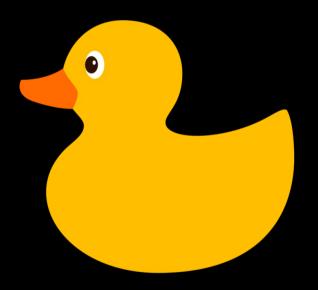


IDE-specific toolchain





IDE-specific toolchain







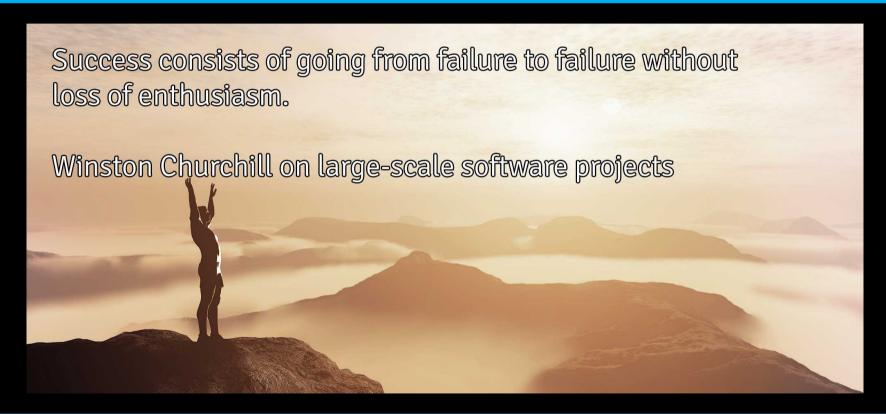
- Eclipse plug-ins require a p2 repository to get dependencies
- Tycho only supports http p2 repositories
- Can't easily mix Tycho and non-Tycho projects in the same reactor build
- We need plain Maven dependencies to use them outside of Eclipse



Approach



Refactoring

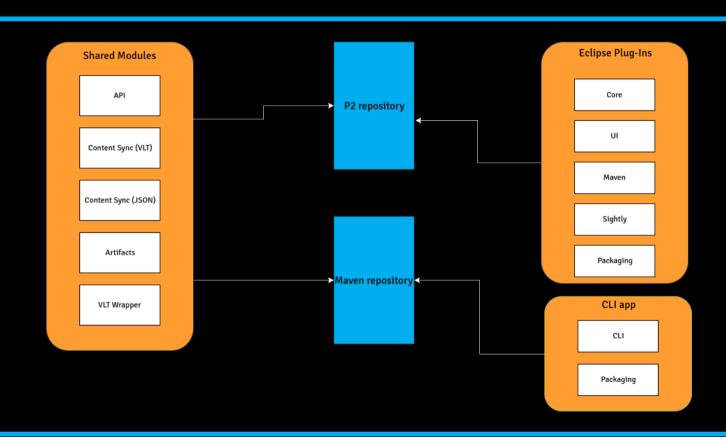




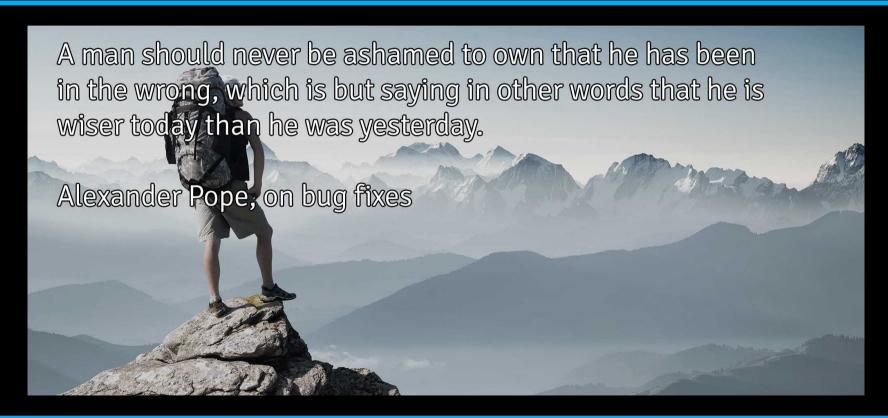
- Extract Eclipse-free and OSGi-free interfaces
- Many times implementations are one-liner delegates to the Eclipse APIs
- Rethink component lifecycle to make them easier to reuse in other environemnts



Build refactoring

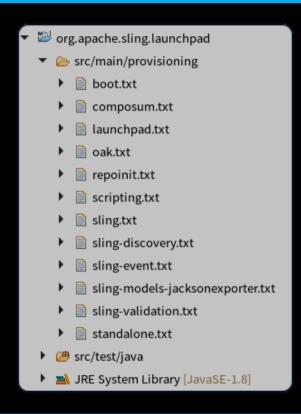


In other news...





Better support for the provisioning model





Enhanced validation

- ▼ asrc/main/content/jcr_root [nt:folder]
 - ▼ 🔂 apps [nt:folder]
 - ▼ 🔂 workshop [sling:Folder]
 - ▼ article [sling:Folder]
 - VersionHelper.java [nt:file]
 - - helper.js [nt:file]
 - listing.html [nt:file]
 - welcome.html [nt:file]

- ▼ ∰ src/main/content/jcr_root [nt:folder]
 - ▼ 🔂 content [nt:folder]
 - ▼ 🔂 workshop [nt:folder]
 - ▶ ‰ ide-tooling [nt:unstructured]
 - intro [nt:unstructured]



- Additional preferences for Maven project configurators
 - Sling IDE → Maven Project Configurator
- Support for the bnd-maven-plugin
- Support for the filevault-package-mavenplugin



Demo

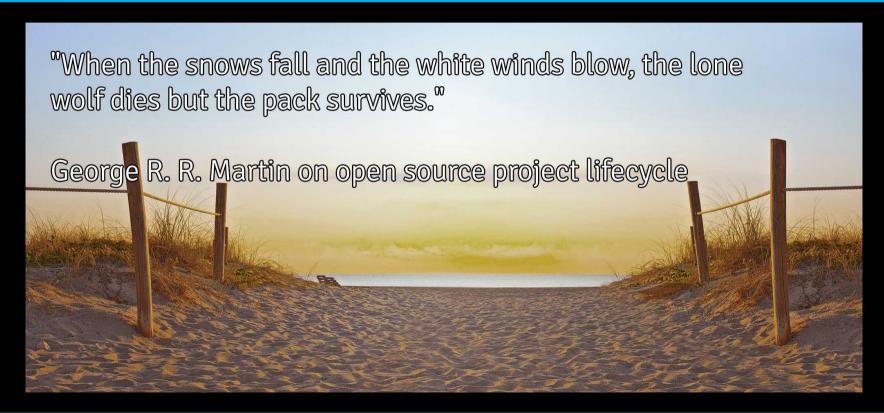




Future plans



Community expansion





- Simplified code contributions don't need to code in Eclipse
- Simpler API reuse can be picked in on other IDEs



- IntelliJ
- Netbeans



Wrap-up



- https://sling.apache.org/documentation/devel opment/ide-tooling.html
- https://github.com/apache/sling-ide-tooling