

**adaptTo()**

**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?

“Thou leathern-jerkin, crystal-button, knot-pated, agatering, puke-socking, caddis-garter, smooth-tongue, Spanish pouch!”

Shakespeare, speaking to a vi user.



## 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  sling-ide-tooling-1.2.2 sling-ide-tooling-1.2.0



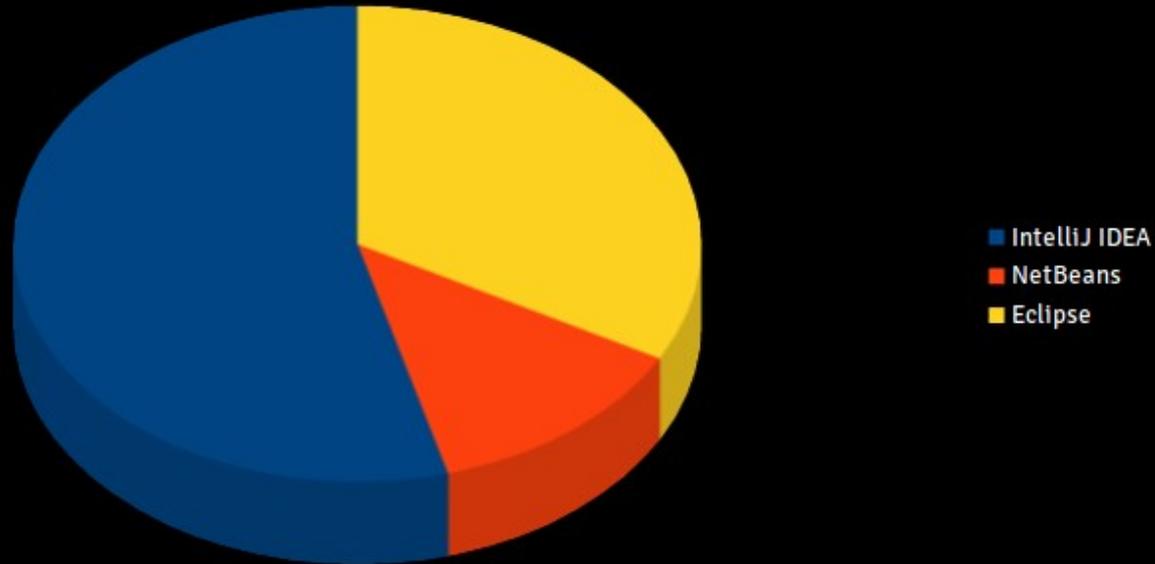
**rombert** committed on Jul 25, 2013

0 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

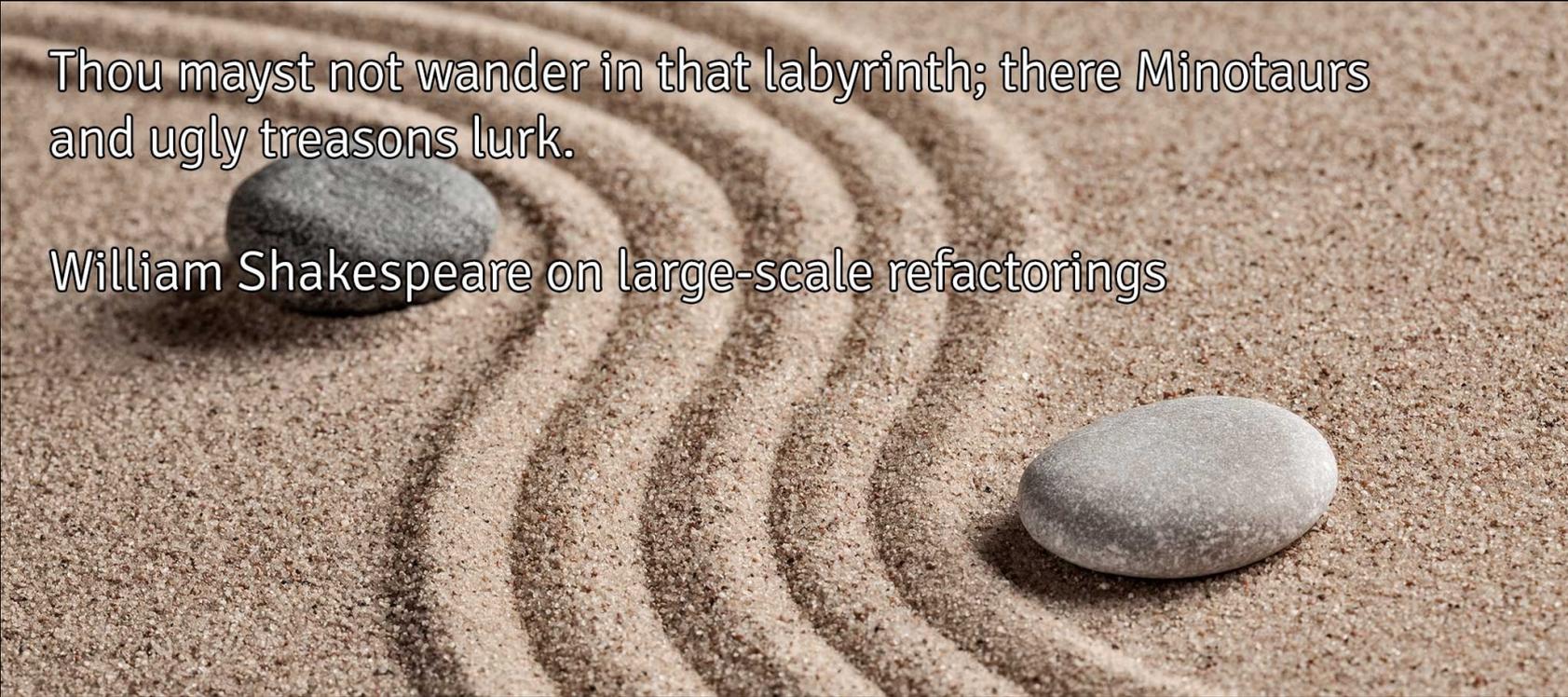
IDE market share



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



# Challenges



Thou mayst not wander in that labyrinth; there Minotaurs  
and ugly treasons lurk.

William Shakespeare on large-scale refactorings



## 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.ContentResourceTester">
    </propertyTester>
  </extension>
```

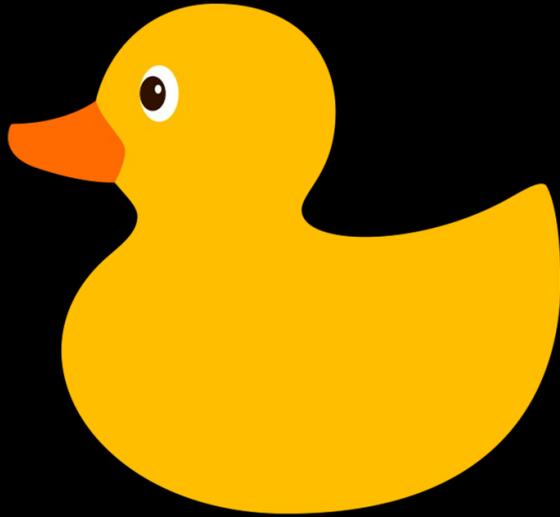
▼  [Andreas Schaefer](#) added a comment - 03/Mar/16 23:44

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.



“Lying, the telling of beautiful untrue things, is the proper aim of Art.”

Oscar Wilde, on building Eclipse plug-ins with Maven



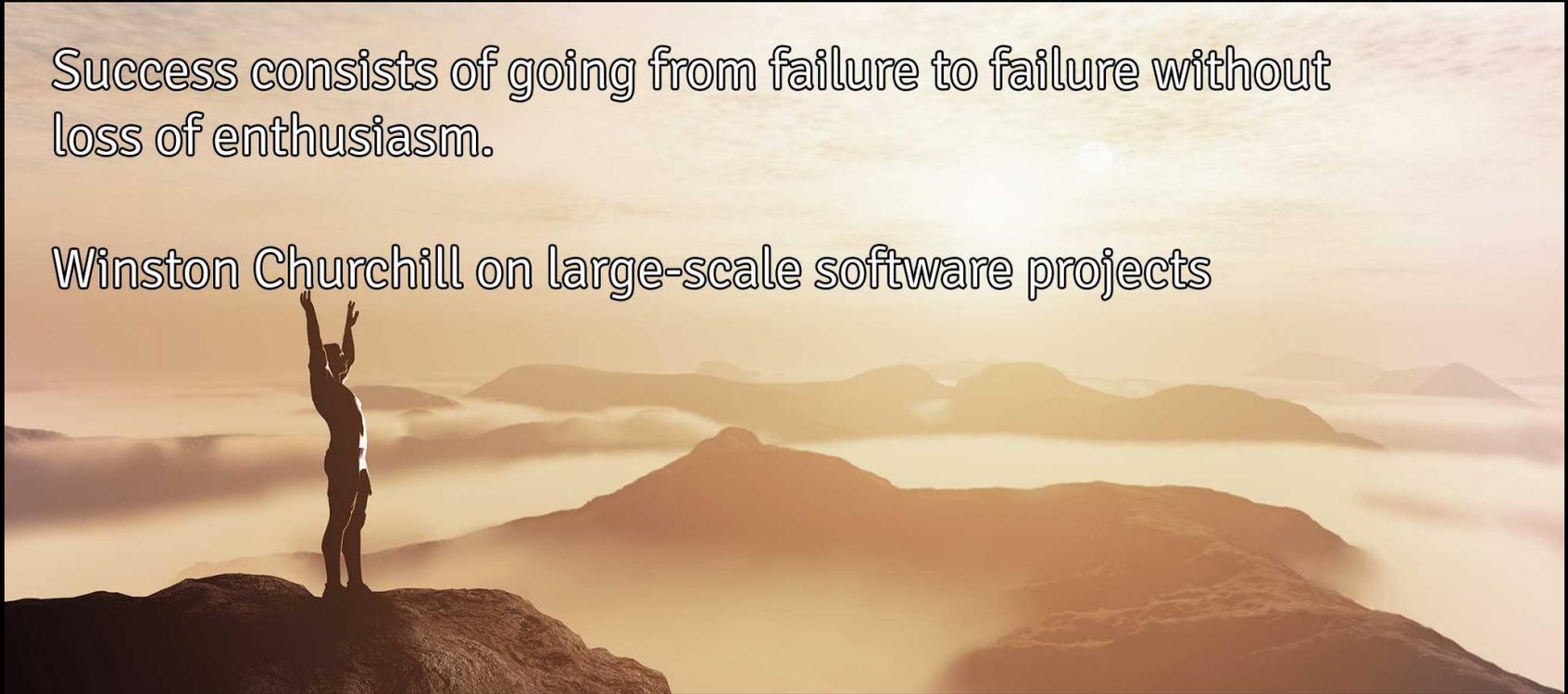
- Eclipse plug-ins require a p2 repository to get dependencies
- Tycho only supports http p2 repositories
- Can't easily mix Tycho and non-Tycho projects in the same reactor build
- We need plain Maven dependencies to use them outside of Eclipse



# Approach

Success consists of going from failure to failure without loss of enthusiasm.

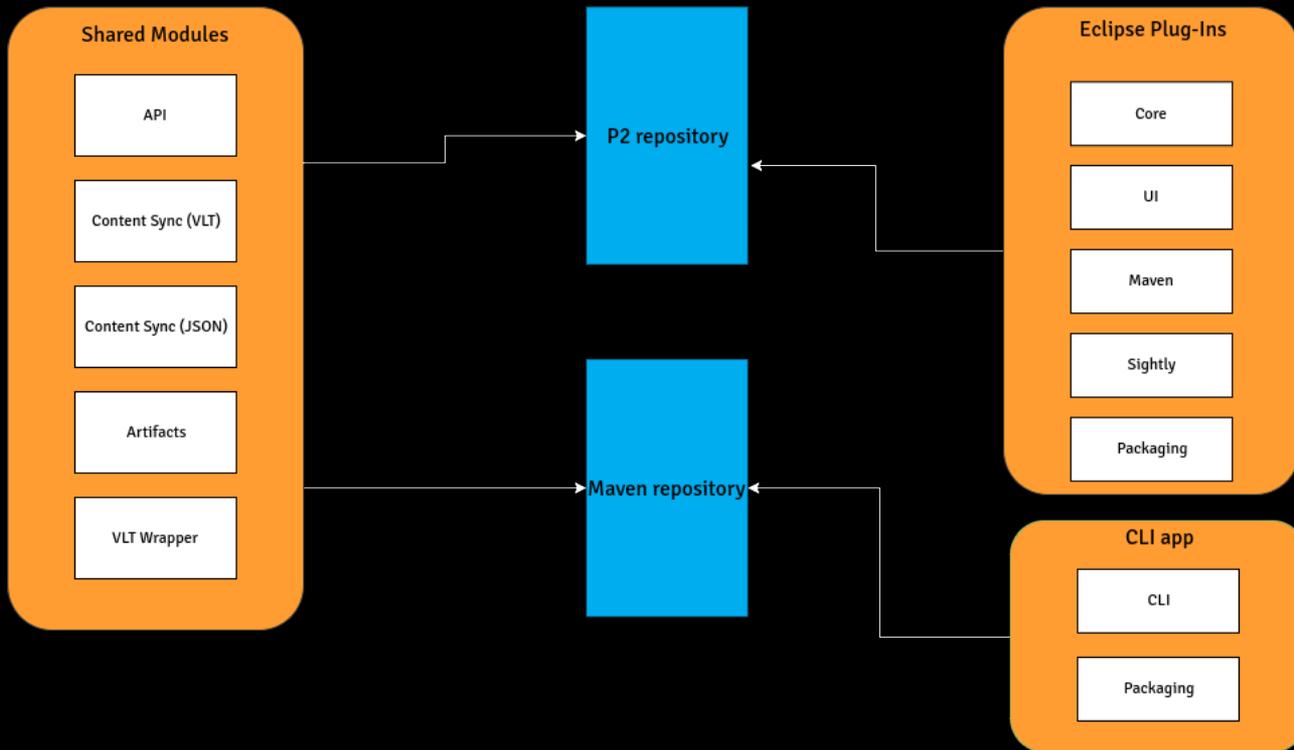
Winston Churchill on large-scale software projects





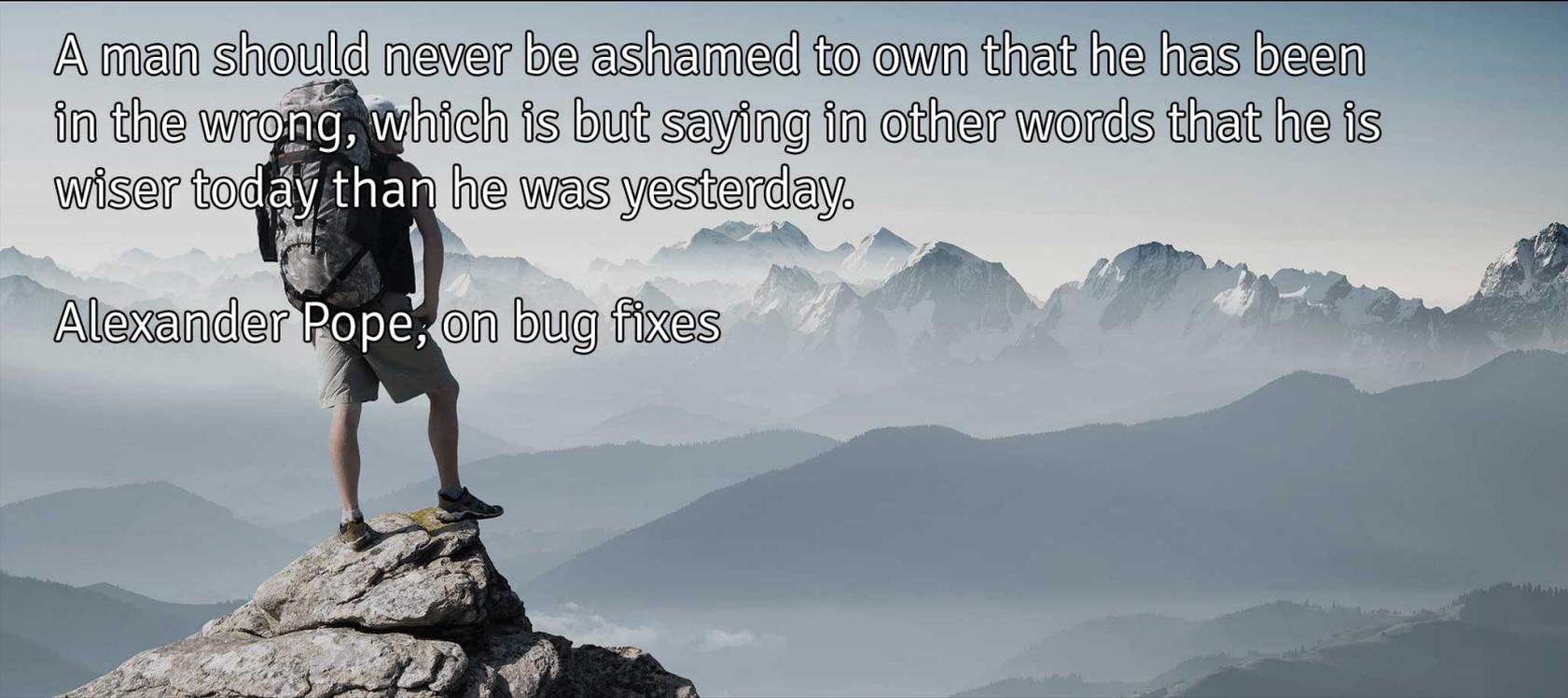
- Extract Eclipse-free and OSGi-free interfaces
- Many times implementations are one-liner delegates to the Eclipse APIs
- Rethink component lifecycle to make them easier to reuse in other environments

# Build refactoring

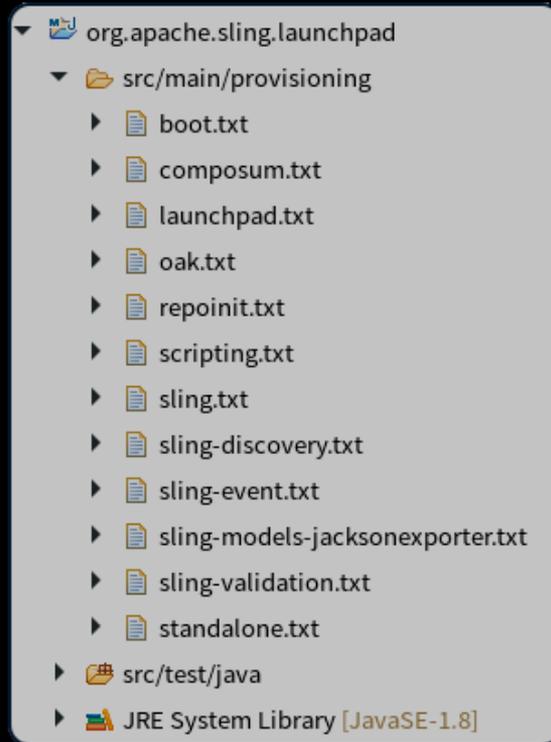


A man should never be ashamed to own that he has been in the wrong, which is but saying in other words that he is wiser today than he was yesterday.

Alexander Pope, on bug fixes

A hiker with a large backpack stands on a rocky peak, looking out over a vast mountain range under a clear sky. The hiker is wearing a dark shirt, shorts, and a hat. The mountains in the background are layered and hazy, creating a sense of depth.

## Better support for the provisioning model



▼  src/main/content/jcr\_root [nt:folder]

▼  apps [nt:folder]

▼  workshop [sling:Folder]

▼  article [sling:Folder]

 VersionHelper.java [nt:file]

▼  welcome [sling:Folder]

 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]

    ▶  sling-basics [nt:unstructured]

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

Après moi, le déluge

Louis XIV, after a failed on-stage demo

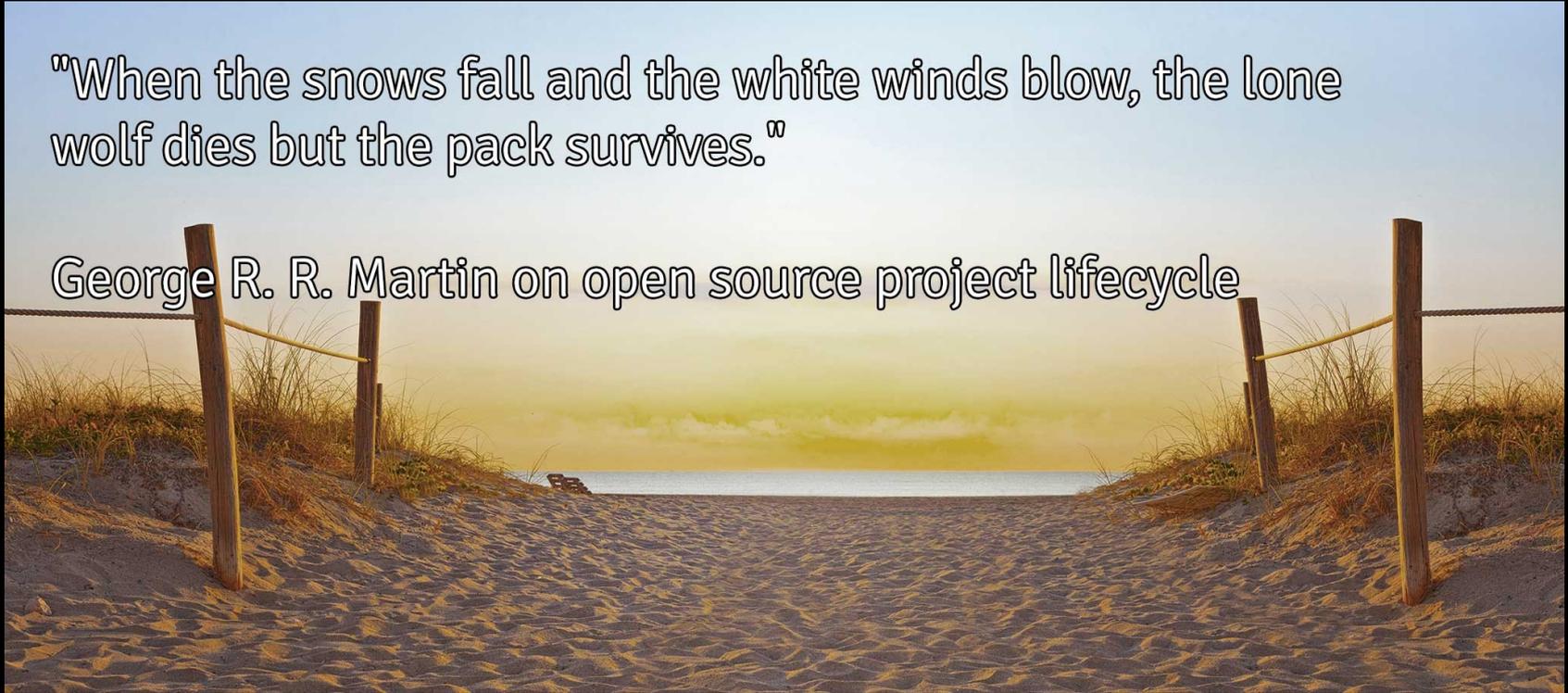




# Future plans

"When the snows fall and the white winds blow, the lone wolf dies but the pack survives."

George R. R. Martin on open source project lifecycle





Onboard more contributors

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



Validate in more IDEs

- IntelliJ
- Netbeans



# Wrap-up

- <https://sling.apache.org/documentation/development/ide-tooling.html>
- <https://github.com/apache/sling-ide-tooling>