News from Git
in Java Land

Kevin Sawicki (GitHub)
Matthias Sohn (SAP)
What is Git?

- Distributed Version Control System (DVCS)
- Local
  - History
  - Committing
  - Branching
  - Merging
- Easy to synchronize
Git At Eclipse

- **JGit**
  - Lightweight Java implementation of Git
  - [http://www.eclipse.org/jgit](http://www.eclipse.org/jgit)

- **EGit**
  - Eclipse Team Provider for Git
  - Built on JGit
  - [http://www.eclipse.org/egit](http://www.eclipse.org/egit)

- 248 repositories hosted
Version 1.0

- Commit Search
- Staging View
- Blame Annotations
- Commit Viewer
- Notes Support
- Distributed Hashtable Support
- GitHub Mylyn Connector
Commit 5073f6d1 [git]

Jens Baumgart <jens.baumgart@sap.com> on 3/2/12 7:16 AM
Jens Baumgart <jens.baumgart@sap.com> on 3/2/12 7:21 AM

Parent: 61ba6c9d8f62d01d0a1a

Tags:

**Message**

UI tests: introduce property uittest.vmparams and increase timeout

A property uittest.vmparams is added to allow the configuration of the VM parameters during UI test execution. Additionally the SWTBot widget search timeout is set to 10s (5s before) to improve test stability.

Change-Id: I554afdf57268bf5e0d79854c8c0bab273d9ae35

**Files (1)**

- org.eclipse.egit.ui.test/pom.xml

**Branches (16)**

- branchConfiguration
- change/4899/8
- change/4999/10
- change/5047/2
- change/5110/3
- change/5221/3

Commit | Diff | Notes |

'**test**' – 578 commit matches

<table>
<thead>
<tr>
<th>egit - /Users/d029788/src/git/egit/.git (315)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5073f6d1: UI tests: introduce property uittest.vmparams and increase timeout (Jens Baumgart on Mar 2, 2012 11:06 PM)</strong></td>
</tr>
<tr>
<td><strong>0573c608: GitCloneWizardTest: ignore tests causing timeouts (Jens Baumgart on Mar 1, 2012 4:31 AM)</strong></td>
</tr>
</tbody>
</table>
Review Notes

Commit 5073f6d1e46727de3a3420e1f243c500bea210e2

Note Content

Code-Review+2: Matthias Sohn <matthias.sohn@iap.com>
IP-Clean+1: Matthias Sohn <matthias.sohn@iap.com>
Verified+1: Hudson CI
Submitted-by: Matthias Sohn <matthias.sohn@iap.com>
Submitted-at: Fri, 02 Mar 2012 08:10:35 -0500
Reviewed-on: https://git.eclipse.org/r/5221
Project: git/git
Branch: refs/heads/master
Version 1.1  September 2011

- Reflog View
- Project Set Import & Export
- GitHub Pull Request Support
<table>
<thead>
<tr>
<th>Commit</th>
<th>Commit Message</th>
<th>Date</th>
<th>Reflog Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>5dde...</td>
<td>Properly filter EGit generated contents from commit ...</td>
<td>2012-03-18 19:59</td>
<td>rebase -i (pick): Add tests for ProjectUtil</td>
</tr>
<tr>
<td>6d63...</td>
<td>Add tests for ProjectUtil</td>
<td>2012-03-18 19:39</td>
<td>rebase -i (pick): Add tests for ProjectUtil</td>
</tr>
<tr>
<td>79c9...</td>
<td>Ensure that test projects are disposed</td>
<td>2012-03-18 19:39</td>
<td>rebase -i (pick): Add tests for ProjectUtil</td>
</tr>
<tr>
<td>a006...</td>
<td>Enable Git Command Group actions for Repository Viewer</td>
<td>2012-03-18 19:39</td>
<td>commit: Add tests for ProjectUtil</td>
</tr>
<tr>
<td>2636...</td>
<td>Ensure that test projects are disposed</td>
<td>2012-03-18 19:39</td>
<td>commit: Add tests for ProjectUtil</td>
</tr>
<tr>
<td>8f89...</td>
<td>Add tests for ProjectUtil</td>
<td>2012-03-18 19:39</td>
<td>commit (amend): Add tests for ProjectUtil</td>
</tr>
<tr>
<td>4b74...</td>
<td>Add tests for ProjectUtil</td>
<td>2012-03-18 19:39</td>
<td>checkout: moving from master to testProjectUtil</td>
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<tr>
<td>b7ff...</td>
<td>Show branch name in dialog title and message</td>
<td>2012-03-18 19:39</td>
<td>checkout: moving from master to testProjectUtil</td>
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<tr>
<td>7ff84e...</td>
<td>Add tests for ProjectUtil</td>
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</table>
Faster Decorations
Distributed Filesystem Support
Project Rename & Move
Gists from Console View
● Submodules Support
● Branch Project Tracking
● Repository Import Extension Point
  ○ GitHub
  ○ Gerrit
● Stash Support
● Improved Rename Support
● Garbage Collector Support
● Import repository from installed plugin
  ○ Eclipse-SourceReferences
● Workspace patches
● Push a single branch/tag/commit
Import repository from installed plugin
JGit Modules

- Core library
- HTTP server
- Distributed hashtable layer
- Distributed filesystem layer
- Command line interface
- Ant tasks
Why Use JGit?

- Small footprint
- Flexible storage
- Many JVM languages
- Permissive license (EDL)
- Available from Maven Central
Built With JGit

- Gerrit Code Review
- Gitblit
- Agit
- NGit
Gerrit Code Review

● **Gerrit 2.2**
  ○ Project meta data and permissions stored in git
  ○ New UI for permission settings
  ○ Prolog rule engine allows workflow customization
  ○ Lots of usability improvements

● **Gerrit 2.3 (rc0)**
  ○ support for simplified use of submodules

● Mylyn Integration
● Skalli Integration
● Gerrit@Eclipse available for all projects
Add support for dropping a stashed commit

Introduces a new menu option for stashed commits shown in the Git Repositories view that prompts to delete the selected stashed commit.

Change-Id: lc217e11212213840490337852db3af4cea168ee8

<table>
<thead>
<tr>
<th>Comments (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Kevin Sawicki, Mar 21, 2012 7:35 PM</td>
</tr>
<tr>
<td>2: Hudson CI, Mar 21, 2012 7:46 PM</td>
</tr>
<tr>
<td>3: Hudson CI, Mar 21, 2012 7:47 PM</td>
</tr>
<tr>
<td>4: Kevin Sawicki, Mar 21, 2012 11:12 PM</td>
</tr>
<tr>
<td>5: Hudson CI, Mar 21, 2012 11:12 PM</td>
</tr>
<tr>
<td>6: Hudson CI, Mar 21, 2012 11:14 PM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Review</th>
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<tr>
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<table>
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<tr>
<th>Patch Sets</th>
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<tbody>
<tr>
<td>Patch Set 1</td>
</tr>
<tr>
<td>Patch Set 2</td>
</tr>
<tr>
<td>Patch Set 3</td>
</tr>
</tbody>
</table>

| Author | Kevin Sawicki <kevin@github.com> |
| Commit | b3238d60b9a379ebfe7143e44a1786104f4c7e1b |
| Refs | refs/changes/99/5399/3 |

Changes:
- org.eclipse.egit.core/src/org/eclipse/egit/core/op/StashDropOperation.java
- org.eclipse.egit.ui/plugin.properties
- org.eclipse.egit.ui/plugin.xml
- org.eclipse.egit.ui/src/org/eclipse/egit/ui/UIText.java
- org.eclipse.egit.ui/src/org/eclipse/egit/ui/internal/repository/tree/command/StashDropCommand.java
- org.eclipse.egit.ui/src/org/eclipse/egit/ui/uitext.properties

Publish Comments... Fetch... Compare With Base... Abandon... Compare with Patch Set 1 Compare with Patch Set 2

Gerrit Mylyn Integration
Publish Comments
Change lc217e112 – [repoView] Add support for dropping a stashed commit

Verified
- +1 Verified
- 0 No score
- -1 Fails

Code Review
- +2 Looks good to me, approved
- +1 Looks good to me, but someone else must approve
- 0 No score
- -1 I would prefer that you didn't submit this
- -2 Do not submit

IP Clean
- +1 IP review completed
- 0 No score
- -1 Unclean IP, do not check in

Did you also consider bug 345123 and change l70c5cd0e47061b213ea25f42937f803c1a47111d here?
Open Task l70c5cd0e47061b213ea25f42937f803c1a47111d in Eclipse.org Reviews
Open 'https://git.eclipse.org/r/##/q/l70c5cd0e47061b213ea25f42937f803c1a47111d_n.z'

Publishes 0 draft(s).

Vote on a Review from Eclipse
- Self service for repository creation
- Project activity feed

Gerrit Skalli Integration
Gerrit @ Eclipse

https://git.eclipse.org/r/
**recent activity / last 14 days / 18 commits by 5 authors**

**daily activity**

- Dec 28
- Dec 27
- Dec 26
- Dec 29
- Jan 02
- Jan 03
- Jan 06
- Jan 07

**active repositories**

- test/jgit: 94.4%
- ticgit: 5.6%

**active authors**

- kevin@gitblit: 44.4%
- tomasz@gitblit: 33.3%
- matthias@gitblit: 11.1%
- jmoger@gitblit: 5.6%
- spearcog@gitblit: 5.6%

**today**

**15:32**

*test/jgit*

**test commit**

James Moger committed db1b367 to master

**15:31**

*ticgit*

**test commit**

James Moger committed 626119c7 to deving

**2 days ago**

**10:15**

*test/jgit*

**Merge "Use constants from ConfigConstants in CoreConfig"**

Matthias Sohn committed f9725423 to master

**4 days ago**

**16:27**

*test/jgit*

**Provide file mode of paths in index from IndexDiff**

Kevin Sawicki committed 69451b83 to master

**16:24**

*test/jgit*

**Use constants from ConfigConstants in CoreConfig**

Kevin Sawicki committed 6e95df77 to master

**Gitblit - Git Repository Viewer**
Agit - Android Git Client
### Quick Facts

- 3,634 commits
- 4 merge commits
- 0 merges with content changes
- 36 authors
- 36 committers
- 277,158 lines added
- 160,125 lines changed
- 179,339 lines removed
- 3,022 files added
- 11,711 files edited
- 2,091 files removed

### Contributors who made the changes

<table>
<thead>
<tr>
<th>Authors</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. John Arthorne</td>
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