



EGit and JGit 1.0 Release and Graduation Review

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About



EGit is an Eclipse Team provider for Git. Git is a distributed SCM, which means every developer has a full copy of all history of every revision of the code, making queries against the history very fast and versatile. The EGit project is implementing Eclipse tooling for the JGit Java implementation of Git.

JGit is an EDL (BSD) licensed, lightweight, pure Java library implementing Git.

Introduction



EGit and JGit are Technology sub projects.

- <http://eclipse.org/egit>
- <http://eclipse.org/jgit>

This release is the seventh release for both projects at Eclipse.org, and the goal is to build an Eclipse community around Git. Main use cases can now be done using EGit without using native Git.

EGit and JGit 1.0 will graduate and ship as part of Indigo

Consistent and Rapid Releases



EGit and JGit release consistently and rapidly.

As of 2011-05-26...

4 weeks ago v0.12.1

3 months ago v0.11.1

5 months ago v0.10.1

8 months ago v0.9.1

11 months ago v0.8.1

14 months ago v0.7.0

Committer Diversity



There are many individuals and companies involved with EGit (15 committers) and JGit (9 committers)

- Ageto
- Dewire
- GitHub
- Google
- IBM
- Red Hat
- SAP
- Tasktop

JGit Features (1)



- **Git Porcelain API**
 - new commands
 - blame, clean, ls-remote
 - enhanced commands
 - checkout: path support, reset: path support
- **Initial support for JGit Ant tasks**
 - git-init, git-clone, git-checkout
- **Merge for parallel delete/modification**
- **Many bug fixes**

JGit Features (2)



jgit.storage.dht storage SPI implementation for JGit

- permits storing the Git repository in a distributed hashtable, NoSQL system, or other database

storage system implementations based on this SPI

- Apache HBase
- Apache Cassandra
- an in-memory implementation for unit testing
- a JDBC implementation for SQL
- a generic cache provider that can ride on top of memcache

EGit Features



- Git commit search and commit viewer
- Staging View
- Show Blame Annotations
- new menu actions
 - Compare index with HEAD
 - Replace with HEAD, commit and ref
- Usability improvements
 - simplify create new branch workflow
 - history view: graph rendering, relative date
 - synchronize view: commit action, improved menus and wizard, auto-fetch changes before synchronize
 - commit: commit viewer with notes support, enhanced commit dialog, non-modal commit from staging view
 - improved sharing wizard
- Many bug fixes

GitHub Connector



- EGit includes a GitHub Connector in 1.0
 - works with issues and gist API

A screenshot of a web browser window displaying a GitHub issue page. The browser's address bar shows the URL "787: Labels list doesn't refresh after adding/removing from ...". The page title is "Task 787" and the repository is "github/github". The issue title is "Labels list doesn't refresh after adding/removing from issue". The status is "closed", created on "Apr 19, 2011 9:57 PM", and modified on "Apr 20, 2011 1:11 PM". The reporter is "Reporter" and the assignee is "Assignee". The "Attributes" section shows a "Milestone" dropdown set to "None" and "Labels" including "frontend" and "issues". The "Description" section contains a numbered list of steps: "1. Open an issue", "2. Select Labels drop-down menu", "3. Select a label from the 'Add labels to this issue' dialog", and "4. Close the dialog". Below the list, it says "Labels list isn't updated on issue page." and "Refreshing the page shows the newly added label." It also mentions "Tested in Chromium 10." The "Comments (1)" section shows a comment by "Joshua Peek" on "Apr 20, 2011 1:11 PM" with the content "89cbd9cd81d96d5902d560d85e8181a5d7542b09". There is a "New Comment" section at the bottom with an empty text area. The browser's context menu is open, showing "Context" and "GitHub".

Non Code Aspects



User Guide and extensive Contributor Guide

- http://wiki.eclipse.org/EGit/User_Guide
- http://wiki.eclipse.org/EGit/GitHub/User_Guide
- http://wiki.eclipse.org/JGit/User_Guide
- http://wiki.eclipse.org/EGit/Contributor_Guide
- <http://wiki.eclipse.org/EGit/GitHub/ContributorGuide>

Lively discussion on mailing lists show a growing community:

- <http://dev.eclipse.org/mhonarc/lists/jgit-dev/maillist.html>
- <http://dev.eclipse.org/mhonarc/lists/egit-dev/maillist.html>

Bugzilla (as of 2011-05-26)



- JGit:
 - 23 bugs open, 31 enhancements
 - 21 bugs (8 enhancements) fixed since last release

- EGit:
 - 231 bugs open, 144 enhancements
 - 28 bugs (12 enhancements) fixed since last release

Features EGit 1.0

supported partial missing irrelevant

add	format-patch	shortlog	relink	rev-parse
am	gc	show	remote	show-branch
archive	grep	stash	repack	verify-tag
bisect	init	status	replace	whatchanged
branch	log	submodule	annotate	tree compare
bundle	merge	tag	blame	.gitignore
checkout	mv	config	cherry	daemon
cherry-pick	notes	fast-export	count-objects	visual merge tool
clean	pull	fast-import	difftool	HTTP support
clone	push	filter-branch	fsck	Mylyn integration
commit	rebase	mergetool	get-tar-commit-id	Staging view
describe	reset	pack-refs	help	Synchronize view
diff	revert	prune	merge-tree	History view
fetch	rm	reflog	rerere	Repositories view

Committers - JGit



- Chris Aniszczyk (Red Hat)
- Christian Halstrick (SAP)
- Gunnar Wagenknecht (Ageto)
- Mathias Kinzler (SAP)
- Matthias Sohn (SAP)
- Robin Rosenberg (Dewire)
- Sasa Zivkov (SAP)
- Shawn Pearce (Google)
- Stefan Lay (SAP)

Committers - EGit



- Benjamin Muskalla (Tasktop)
- Chris Aniszczyk (Red Hat)
- Christian Halstrick (SAP)
- Dariusz Luksza (Independent)
- Gunnar Wagenknecht (Ageto)
- Jens Baumgart (SAP)
- ***Kewin Sawicki (GitHub) - NEW***
- Matthias Sohn (SAP)
- Mik Kersten (Tasktop)
- Mykola Nikishov (Independent)
- Robin Rosenberg (Dewire)
- Shawn Pearce (Google)
- Stefan Lay (SAP)
- Mathias Kinzler (SAP)
- Remy Suen (IBM)

Community



Significant new code contributions from the community in 1.0

Gerrit Code Review: <http://egit.eclipse.org>

- JGit

- "Command support for line history" CQ 5110 (Kevin Sawicki)

- EGit

- "Mylyn Github Integration" CQ 4787 (Christian Tutz, David Green)
- "Git Staging View" CQ 5115 (Matthias Sohn, Remy Suen and Bernard Leach)

IP Logs



- JGit

- <http://www.eclipse.org/jgit/iplog/current.xml>

- EGit

- <http://www.eclipse.org/egit/iplog/current.xml>

Schedule



- 1.1 - September 2011 (Indigo SR1)
 - evolve API
 - stash support
 - git.eclipse.org run by jgit
- 2.0 - December 2011
 - finalize API
- 2.1 - February 2012 (Indigo SR2)
- 2.2 - June 2012
 - include in all relevant EPP packages
 - ship with SDK by default

Project Plan



Available at

- <http://eclipse.org/projects/project-plan.php?projectid=technology.egit>
- <http://eclipse.org/projects/project-plan.php?projectid=technology.jgit>

Themes

- Usability
- Enable use without command-line git
- Documentation Improvements
- Building a Community