



# EGit and JGit 1.1 Release 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 8th 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 1.1 will ship as part of Indigo SR1**

# Consistent and Rapid Releases



EGit and JGit release consistently and rapidly.

As of Sept 2011...

3 months ago	v1.0.0 (graduated)
4 months ago	v0.12.1 (more usable)
6 months ago	v0.11.3 (usable)
8 months ago	v0.10.1 (somewhat usable)
11 months ago	v0.9.3 (sucks less)
14 months ago	v0.8.4 (sucks)
17 months ago	v0.7.0 (really painful)

# Committer Diversity



There are many individuals and companies involved with EGit (16 committers) and JGit (9 committers)

- Ageto
- Dewire
- GitHub
- Google
- IBM
- Twitter
- SAP
- Tasktop

# JGit Features



- Git Porcelain API
  - new commands
    - ReflogCommand
    - DiffCommand
    - ListTagCommand
    - DeleteTagCommand
  - enhanced commands
    - ResetCommand now supports recursive reset on given directory
- Shallow cloning support
- New blame command in JGit command line
- Performance improvements
- Many bug fixes

# EGit Features



- New Reflog View
- Support for Team Project Sets
- Logical Model Support
- Improved Synchronize View
  - Synchronize filtered on folder
  - drag and drop staging / unstaging in Git Changeset Model
  - new "Fetch Changes" checkbox in synchronize wizard
  - performance improvements
- New menu actions
  - Staging View: "Add to Git Index", "Replace with File in Git Index", "Open Working Tree Version", "Remove from Git Index"
  - Double-click opening of commits in push result table
  - Synchronize View: "Mark as Merged", "Open Merge Tool", "Open Properties > Git" on Eclipse project now displays link to current HEAD
  - Repositories View: "Switch to" and "Show In > Reflog" on repository nodes, enable "Synchronize with Each Other" when two ref or tag nodes are selected
- Usability improvements
  - Allow dragging of commits from History view
  - New preference to ignore whitespace changes in blame annotations
  - History View always displays HEAD and other additional refs
  - More information displayed in merge, fetch and push results dialogs
- Many bug fixes

# GitHub Connector Features



- Pull Request Support

- Pull Requests can now be added as a Mylyn Task Repository type
- The Pull Request task editor displays the commits and supports opening commits in the EGit commit viewer

- Import and Clone

- Projects can now be cloned using the new "Import > Git > Repositories from GitHub" wizard
- Projects cloned will appear in the Git Repositories view once the clone has completed

- GitHub Java API

- now supports the entire GitHub v3 API



# Non Code Aspects



## User Guide and extensive Contributor Guide

- [http://wiki.eclipse.org/EGit/User\\_Guide](http://wiki.eclipse.org/EGit/User_Guide)
- [http://wiki.eclipse.org/EGit/GitHub/User\\_Guide](http://wiki.eclipse.org/EGit/GitHub/User_Guide)
- [http://wiki.eclipse.org/JGit/User\\_Guide](http://wiki.eclipse.org/JGit/User_Guide)
- [http://wiki.eclipse.org/EGit/Contributor\\_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 2011-09-12)



- JGit:
  - 47 bugs open, 44 enhancements
  - 10 bugs (6 enhancements) fixed since last release
  
- EGit:
  - 379 bugs open, 180 enhancements
  - 136 bugs (19 enhancements) fixed since last release

# Features EGit 1.1

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 (Twitter)
- 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



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

# Community



Significant new code contributions from the community in 1.1

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

- JGit

- "UploadPack shallow clone support" CQ 5517 (Matt Fischer)

- EGit

- "Team project set support" CQ 5438 (Robin Stocker)

# IP Logs



- JGit

- <https://bugs.eclipse.org/bugs/attachment.cgi?id=203409>

- EGit

- <https://bugs.eclipse.org/bugs/attachment.cgi?id=203067>

# Schedule



- 2.0 - December 2011
  - evolve API
  - stash support
  - 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