

What's New in Gerrit 2.12 and 2.13 What's coming in 2.14

Gerrit User Summit 2016

David Pursehouse, CollabNet

Statistics

	2.14	2.13	2.12	2.11	2.10	2.9	2.8	2.7
Date	--	Sep '16	Nov '15	Apr '15	Jan '15	Jul '14	Dec '13	Sep '13
Commits *	769 ***	2632	1357	1330	632	1281	1373	272
Issues **	--	85	132	69	30	43	72	9
Contributors	39 ***	83	43	51	49	48	54	31

↑
2.13 is by far the biggest release

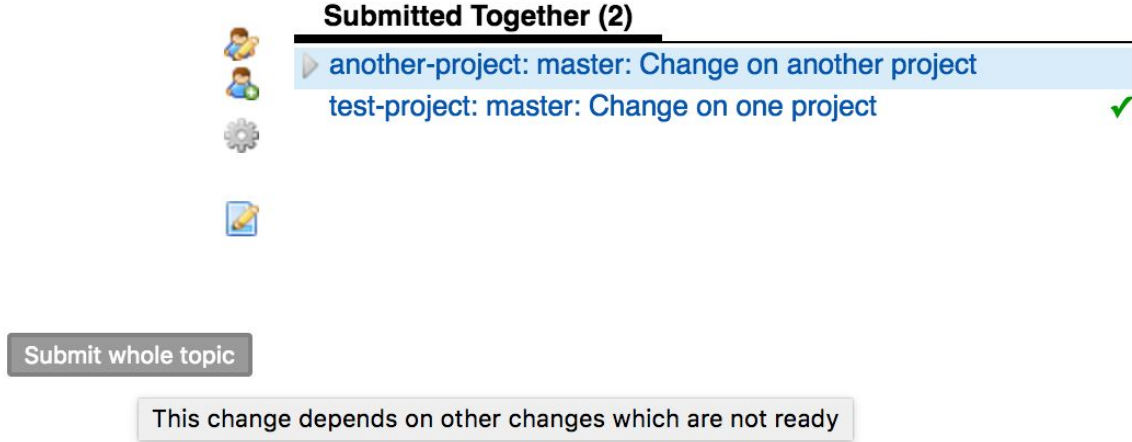
* Not including merge commits ** Including fixes on dot releases *** As of 2016/10/27

New in 2.12

- Submit whole topic
- Submit change with ancestors
- Signed push

Submit Whole Topic

Submit changes with same topic across projects in one operation
Block submit of changes until all are ready



Note: This feature is disabled by default

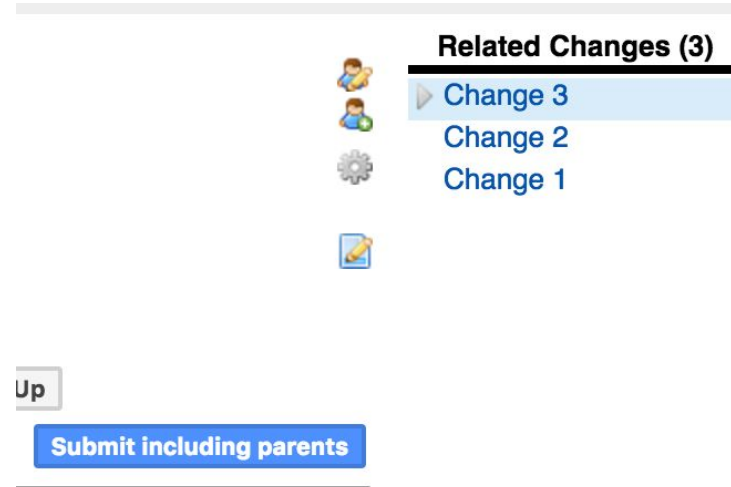
Submit Changes with Ancestors

Submitting a change causes ancestors to also be submitted

Instead of submitting each one top down

No more merge queue - submit either succeeds or fails

No more “Submitted, Merge Pending” state



Signed Push

Users can add GPG key(s) to account

Admin can enable / require signed push per project

Email notification when a key is changed (also for SSH keys)

Change screen shows signed push status for changes

David Pursehouse 

Push certificate is valid and key is trusted

Note: signed push is broken until 2.12.4

New in 2.13

- Support for Git LFS
- Metrics
- Hooks plugin
- Allow to see diff of merge commits
- Allow to reject implicit merges

Support for Large File Storage (LFS) plugin

LFS support can be provided by a plugin

Reference implementation in the 'lfs' plugin

- Support for File System and/or Amazon S3
- Uses LFS server implementation provided by JGit

Custom plugin could also implement LFS itself

Metrics

Metrics can be sent to external monitoring systems

- Process info
- Cache statistics
- HTTP response statistics
- and more: <https://gerrit-review.googlesource.com/Documentation/metrics.html>

Reference implementations:

- Elastic Search
- Graphite
- JMX / jconsole

Hooks plugin

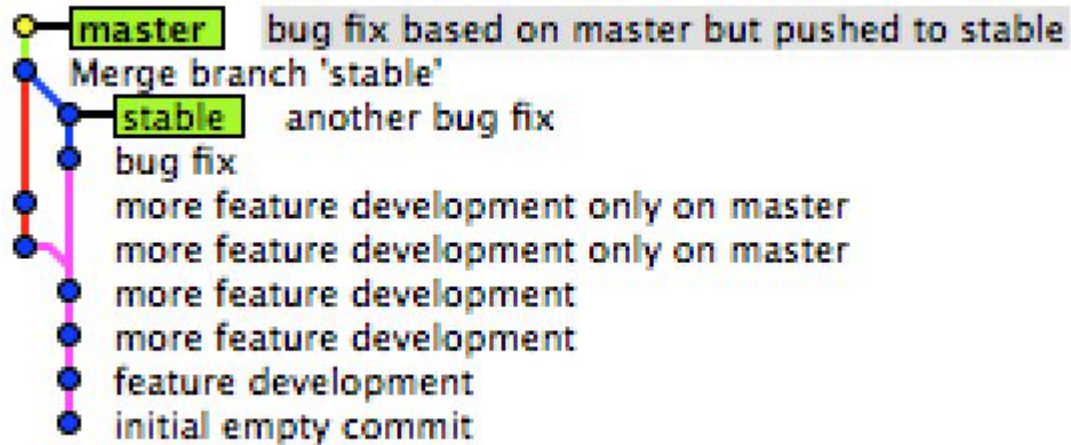
Server-side hooks functionality moved to a plugin

Drop-in replacement:

- Same functionality
- Same configuration

Reject implicit merges

New option to reject changes pushed to wrong branch



Diff of merge commits

Parent(s) 4807acdb507221aed7d3acc141bb2a1ed94a11ad
55a07fc6a5a847d4e37cdaef3481e3d5a2acfbca
Change-Id I39a30eec32b6cb0ef02622b8a328f5be345ebf8a

Files Open All Diff against Parent 1 Parent 2 Edit

File Path

- Commit Message
- Merge List
- Documentation/database-setup.txt
- gerrit-acceptance-tests/src/test/java/com/google/gerrit/acceptance/rest/change/AbstractSubmit.java
- gerrit-acceptance-tests/src/test/java/com/google/gerrit/acceptance/server/project/ProjectWatchIT.java
- gerrit-gwtui/src/main/java/com/google/gerrit/client/change/CommitBox.java
- gerrit-gwtui/src/main/java/com/google/gerrit/client/change/CommitBox.ui.xml
- gerrit-server/src/main/java/com/google/gerrit/server/git/BatchUpdate.java
- gerrit-server/src/main/java/com/google/gerrit/server/git/MergeUtil.java
- gerrit-server/src/main/java/com/google/gerrit/server/git/RebaseSorter.java
- gerrit-server/src/main/java/com/google/gerrit/server/git/strategy/RebaseSubmitStrategy.java

2: e60800
1: e8e615
Auto Merge

Coming in 2.14...

- Assignee field for changes
- Improved reviewer suggestion
- Email: HTML, new templates, inbound email
- Support for Robot comments
- Polymer UI
- Elastic Search ?






Change Assignees

Changes can be assigned to specific user

New search operator: `assignee`

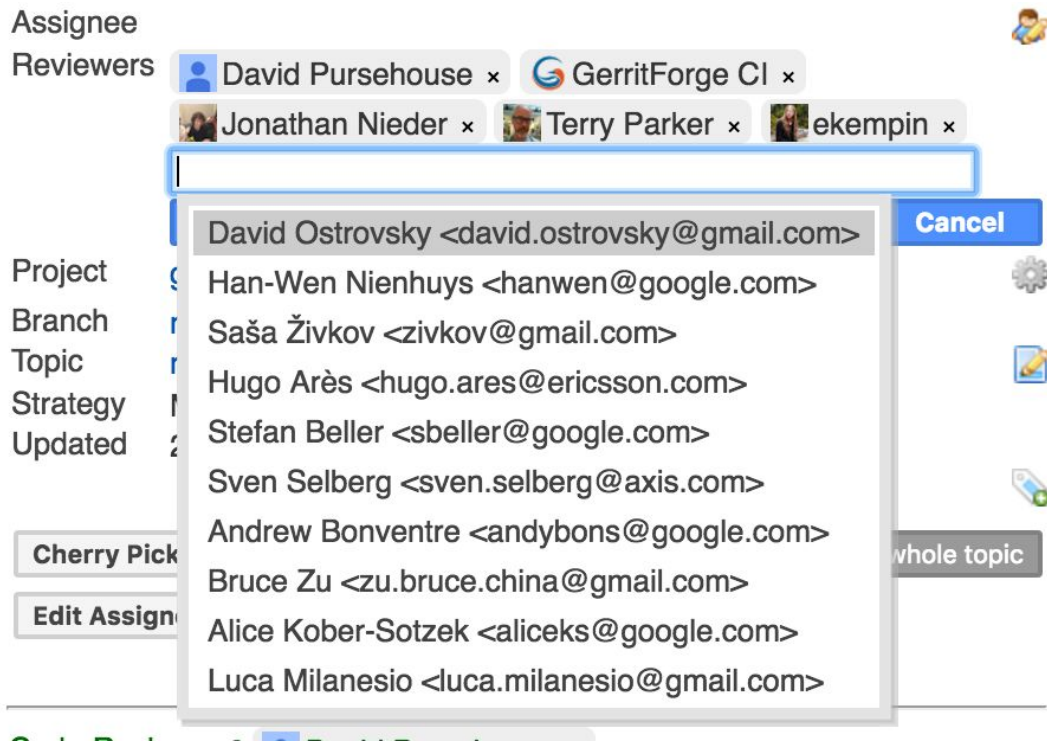
Assigned changes are highlighted in dashboards

Search for status:open

	<i>Subject</i>	<i>Status</i>	<i>Owner</i>	<i>Assignee</i>	<i>Project</i>	<i>Branch</i>
☆	Release notes for Gerrit 2.13.3		 David Pursehouse	 David Pursehouse	homepage	md-pages
☆	bazel: wct tests.		 Han-Wen Nienhuys		gerrit	master
☆	Bazel: Allow to consume jgit from development tree		 David Ostrovsky		gerrit	master
☆	Rename ewah dependency to javaewah		 David Ostrovsky		gerrit	master

Reviewer Suggestion (1)

Default suggestion:
reviewers who have
recently reviewed user's
changes



The screenshot shows a Gerrit review interface. At the top, the 'Assignee' is 'GerritForge CI'. Below it, the 'Reviewers' list includes 'David Pursehouse', 'Jonathan Nieder', 'Terry Parker', and 'ekempin'. A dropdown menu is open, displaying a list of suggested reviewers with their names and email addresses. The suggestions are: David Ostrovsky, Han-Wen Nienhuys, Saša Živkov, Hugo Arès, Stefan Beller, Sven Selberg, Andrew Bonventre, Bruce Zu, Alice Kober-Sotzek, and Luca Milanese. The interface also shows fields for 'Project', 'Branch', 'Topic', 'Strategy', and 'Updated', along with buttons for 'Cherry Pick' and 'Edit Assignee'. A 'Cancel' button is visible in the top right of the dropdown menu.

Assignee
Reviewers
Project
Branch
Topic
Strategy
Updated
Cherry Pick
Edit Assignee

Reviewers: David Pursehouse x, GerritForge CI x, Jonathan Nieder x, Terry Parker x, ekempin x

Suggested Reviewers:

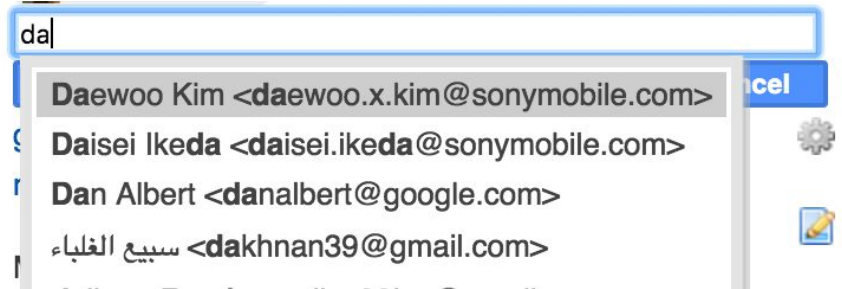
- David Ostrovsky <david.ostrovsky@gmail.com>
- Han-Wen Nienhuys <hanwen@google.com>
- Saša Živkov <zivkov@gmail.com>
- Hugo Arès <hugo.ares@ericsson.com>
- Stefan Beller <sbeller@google.com>
- Sven Selberg <sven.selberg@axis.com>
- Andrew Bonventre <andybons@google.com>
- Bruce Zu <zu.bruce.china@gmail.com>
- Alice Kober-Sotzek <aliceks@google.com>
- Luca Milanese <luca.milanesio@gmail.com>

Cancel

Reviewer Suggestion (2)

Filtered suggestion:

- Reviewers who have recently reviewed user's changes, filtered by typed characters
- Accounts from the index
- Suggestions from plugins



Email

New template framework allows HTML emails

Velocity templates are deprecated

Inbound email - more info in Patrick's talk

Support for robot comments

Differentiate between human and automated reviews

More info in Edwin's talk

Polymer UI

Switch between Polymer and GWT

Many improvements in Polymer UI

More details in Andrew's talk