

# GNOME activity around the world

GUADEC-ES, Zaragoza, 24-26 Oct 2014

Alvaro del Castillo San Felix

acs@bitergia.com

<http://bitergia.com>

Oct 25, 2014





©2013 Bitergia

Some rights reserved. This presentation is distributed under the  
“Attribution-ShareAlike 3.0” license, by Creative Commons, available at  
<http://creativecommons.org/licenses/by-sa/3.0/>

# Bitergia: an spin-off

- Bridging the gap between developers and stakeholders
- OpenSource Software Development analytics, metrics and dashboards
- Company starting operations in June 2012
- Software development analytics services to FLOSS projects to improve the development process.
- Working with Redhat, OpenStack, Liferay, Wikimedia, Puppet Labs, CENATIC, Emergya and others.

<http://bitergia.com>

# GNOME Summary

- GNOME: GNU Network Object Model Environment (A desktop!)
- Started in August 1997 by Miguel de Icaza and Federico Mena
- Free Software
- We love it!
- <http://gnome.org>

# GNOME Project: git repositories



# Bitergia

- <http://git.gnome.org>
- 570 repositories (Excluding archived)
- 1,126,066 commits and 7,531 developers
- Results: <http://projects.bitergia.com/gnome-dashboard/browser/scm.html>

# GNOME Project: mailing lists



# Bitergia

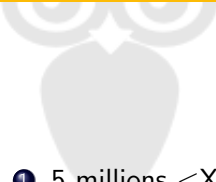
- <http://git.gnome.org>
- 228 mailing lists
- 850,621 mail messages and 57,287 participants
- Results: <http://projects.bitergia.com/gnome-dashboard/browser/mls.html>



# Bitergia

- Some long standing contributors GNOME HERE
- Do you really know GNOME project?
- Let's play

Q: X GNOME total number of lines of code


- 
- 1 5 millions < X
- 2 5 < X < 10 millions
- 3 10 < X < 15 millions
- 4 15 < X < 20 millions
- 5 20 < X < 25 millions
- 6 More, much more!



## A: X GNOME total number of lines of code

- CLOC: 18,750,066
- Mediawiki and plugins: 4,155,734
- Liferay Portal: 3,284,389
- OpenStack projects: 1,239,629

## Q: Javascript position between languages?

- 
- 1 Just behind C
- 2 In the Top 5
- 3 In the Top 10
- 4 In the Top 15
- 5 Javascript for GNOME desktop. Are you crazy?

# A: Javascript position between languages?

Millions of code lines:

- 1 12.7 C,C++ code
- 2 2.3 XML
- 3 0.7 C sharp
- 4 0.6 HTML
- 5 0.5 Python
- 6 0.5 Shell
- 7 0.3 Javascript

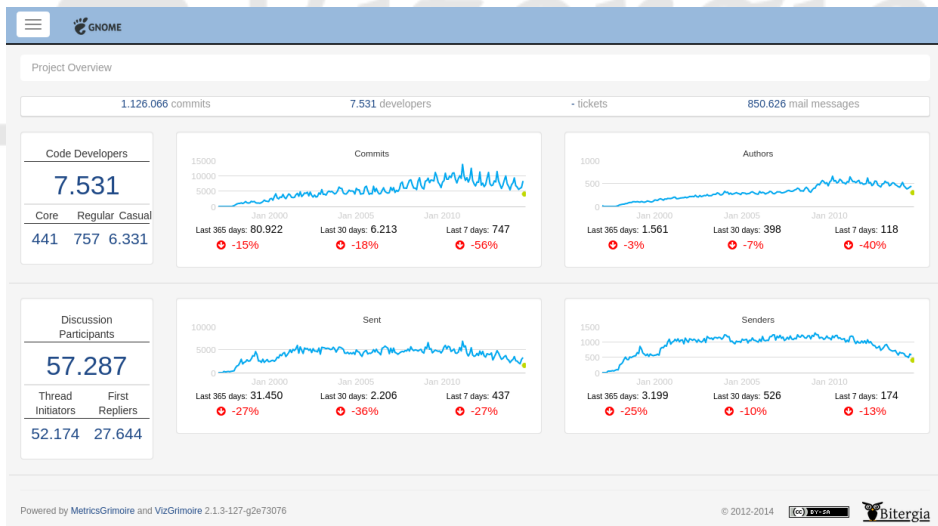
## Q: Top repository by commits?

- 1 ORBit
- 2 Evolution
- 3 GTK+
- 4 Nautilus
- 5 GNOME System Tools
- 6 GIMP
- 7 Gnumeric

## A: Top repository by commits?

- 1 gtk+
- 2 evolution
- 3 gimp
- 4 gnome-continuous-yocto
- 5 gdk-pixbuf
- 6 gnumeric
- 7 nautilus
- 8 glib
- 9 gnome-control-center
- 10 evolution-data-server

# The GNOME Community Metrics Dashboard: Tour



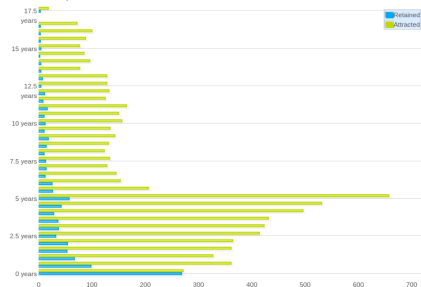
# Demographics



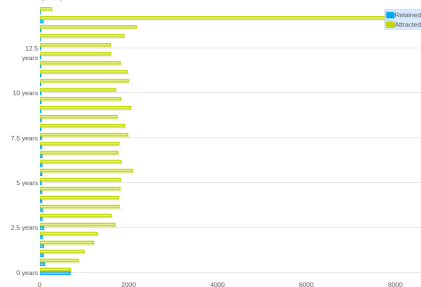
Project Overview / Demographics

## Attraction / retention

Source code developers



Discussion participants

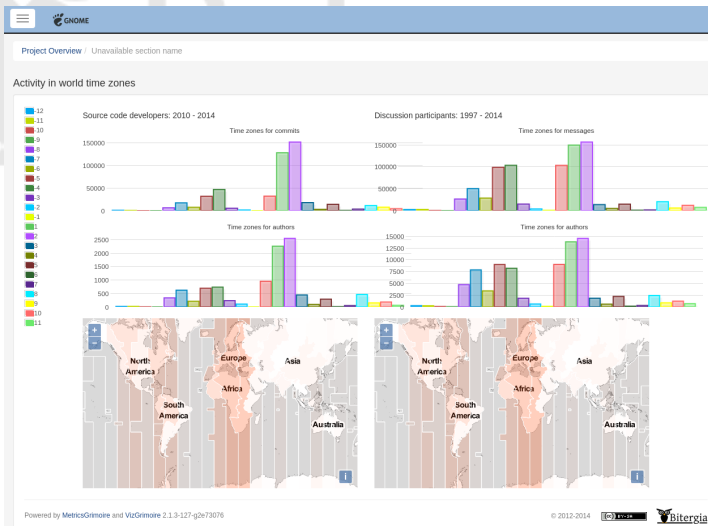


**Attracted:** Number of contributors entering the project for each cohort. In charts, cohorts are organized by "age" (time since they entered the project), each bar representing one of these cohorts. Large bars for any age mean that the community was attracting many contributors that time ago.

**Retained:** Number of remaining contributors (those still active) for each cohort. Large top bars (corresponding to older cohorts) mean that experienced contributors are still active. Large bottom bars mean that new contributors are being retained.

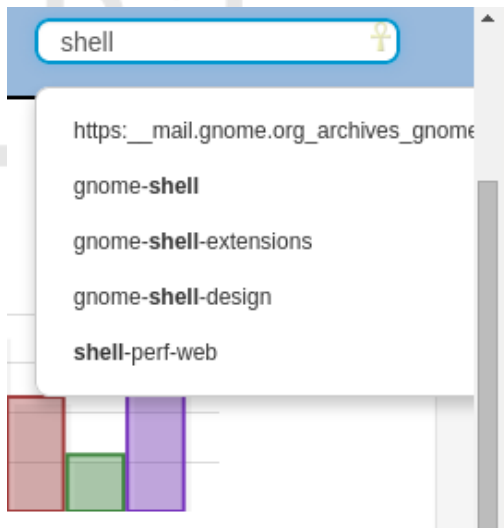
The ratio between retained and attracted contributors for a cohort represents the retention ratio for that cohort (fraction of contributors of that age that are still active).

# Time zones activity





# Searching



# Going into the repositories: Source code



# Bitergia

- Only F-Spot from All Top 40 repositories since 1997 is not active
- Activity sustainable during all time
- Low activity repos: gdk-pixbuf, nautilus, tracker, gnome-info, gtkhtml, gnome-applets, balsa, f-spot, tomboy

# Going into the repositories: Domains

- A first approach to affiliations activity
- src, svn: filtering needed
- gmail, gnome, linux: individuals the first position
- redhat, novell, colabora
- Ximian and Helixcode (history, now Xamarian), OpenedHand (now Intel), Imendio (now Lanedo)

# Going into the mailing lists



# Bitergia

- Common pattern: High activity during first phase of project and then decay. Development mailing lists.
- First language specific: gnome-es position 29

# Demographics for source code

- How is going the community?
- More than 7500 authors contributing code: 441 core, 757 regular, 6331 casual
- GNOME is attracting more than 250 people new each year nowadays
- From this 250 people, more than 25 stay in the project for several years
- GNOME is pretty good preserving the knowledge and the community
- 93 people in the project for more than 10 years

# Time zone analysis

- Using time zone in git commit date (uses contributors local time).
- Not valid in cvs or svn: the commit uses the date for the server.
- Source code: Europe is clearly leading the development from 2010-2014.
- Mailing lists: Activity more distributed around the world.

# Next steps

- Update the dash under the Bitergia Community Program.
- Add tickets analysis.
- Filter bots.
- Group repositories under categories(projects).

This is the end

# Have you enjoyed with GNOME metrics? Learnt something new?

<http://projects.bitergia.com/gnome-dashboard/>  
<http://projects.bitergia.com/kde/>

acs@bitergia.com