

What's new in GrimoireLab?

CHAOSSCon Europe - Brussels - Feb. 1st, 2019

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A long time ago in a university not far,
far away ...

Counting Potatoes: the Size of Debian 2.2

Jesús M. González-Barahona, Miguel A. Ortuño Pérez, Pedro de las Heras Quirós, José Centeno González and Vicente Matellán Olivera

Debian is the largest Free Software distribution, with well over 2,800 source packages in the latest stable release (Debian 2.2) and more than 4,000 source packages in the release currently in preparation. But, how large is “the largest”? In this paper, we use David Wheeler’s sloccount system to determine the number of physical source lines of code (SLOC) of Debian 2.2 (aka Potato). We show that Debian 2.2 includes over 56,000,000 physical SLOC (almost twice than Red Hat 7.1, released about 8 months later), showing that the Debian development model (based on the work of a large group of voluntary developers spread around the world) is at least as capable as other development methods (like the more centralized one, based on the work of employees, used by Red Hat or Microsoft) to manage distributions of this size.

օլ անխօնեց՝ ուսզ քն կը Բայ օր Միջօրով) յօ անամեց գլուխքունց օլ լին Տիզե.

Խոլով է ալ յշար աշ սպարյա աշ օլիւր գուղօնաւու աւելոց (լիկ լին անօր շեմայի աւելոց օնց՝ բայզ օն լին Խոլով Սքրիպտ գուղօնաւու աւոց (բայզ օն լին Խոլով օլ ա յանց Ցուոն օլ խոլութան գուղօնեւու շնորհագ տօսագ լին 28'000'000 երկուսի ՏՇՕԾ (այսօտ լինց կը Բայ շ. լ.՝ թեյշազ արօնու զ անօրուս յաւը.)՝ շրունց լին լին երկուսի տառ օլ օօց (ՏՇՕԾ) օլ Սքրիպտ շ. լ.՝ Ա՛ շնորհ լին Սքրիպտ շ. լ.՝ անօրուս օլ օօց.

What has changed since last year?



Marcos



Marcos

What have we done in 1 year?



Numbers, numbers, numbers...

CHAOS

Dashboard / Editing Git (unsaved)

Save Cancel Add Options Share ⌘ ⌘ January 29th 2017, 14:25:46.371 to January 29th 2018, 14:25:46.372

Uses lucene query syntax Search

Actions ➔

Git

2,127 # Commits 21 # Authors 16 # Repositories

Organizations

- Bitergia
- Universidad Rey Juan ...
- Unknown
- BBVA Data & Analytics
- Inocybe



Organizations

Organization	Commits	Authors	Touched Files	Added Lines	Removed Lines	Projects	Repositories	Avg. Lines/Commit
Bitergia	2,099	12	5,523	876784	216837	1	16	521.02
Universidad Rey Juan Carlos	18	1	41	841	359	1	2	66.667
Unknown	8	7	12	59	31	1	4	11.25
BBVA Data & Analytics	1	1	3	61	7	1	1	68
Inocybe	1	1	1	1	1	1	1	2

Numbers, numbers, numbers...

CHAOS

Dashboard / Editing Git (unsaved)

Save Cancel Add Options Share ⌘ January 29th 2017, 14:25:46.371 to January 29th 2018, 14:25:46.372

Uses lucene query syntax Search

Actions ➔

+ project: "GrimoireLab" NOT Empty Commits NOT Bots Add a filter +

Git Organizations Organizations

Overview Git GitHub PRs GitHub Issues Mailing Lists Community Data Status About

CHAOS

Dashboard / Editing Git (unsaved)

Save Cancel Add Options Share ⌘ Last 1 year

Uses lucene query syntax Search

Actions ➔

+ project: "GrimoireLab" NOT Empty Commits NOT Bots Add a filter +

Git Organizations Organizations

Commits: 2,215 # Authors: 42 # Repositories: 16

Organizations

- Bitergia
- GSoC
- Unknown
- Universidad Rey Juan ...
- Independent
- Mozilla
- Samsung
- CloudBees

Search

Organization	Commits	Authors	Touched Files	Added Lines	Removed Lines	Projects	Repositories	Avg. Lines/Commit
Bitergia	2,046	11	5,147	215486	193880	1	16	200.081
GSoC	63	1	234	90283	64901	1	3	2,463.238
Unknown	49	27	65	1121	2696	1	9	77.898
Universidad Rey Juan Carlos	47	1	144	4822	594	1	8	115.234
Independent	5	1	8	153	23	1	1	35.2
Mozilla	2	1	2	2	2	1	1	2
Samsung	2	1	2	2	0	1	2	1
CloudBees	1	1	6	194	0	1	1	194

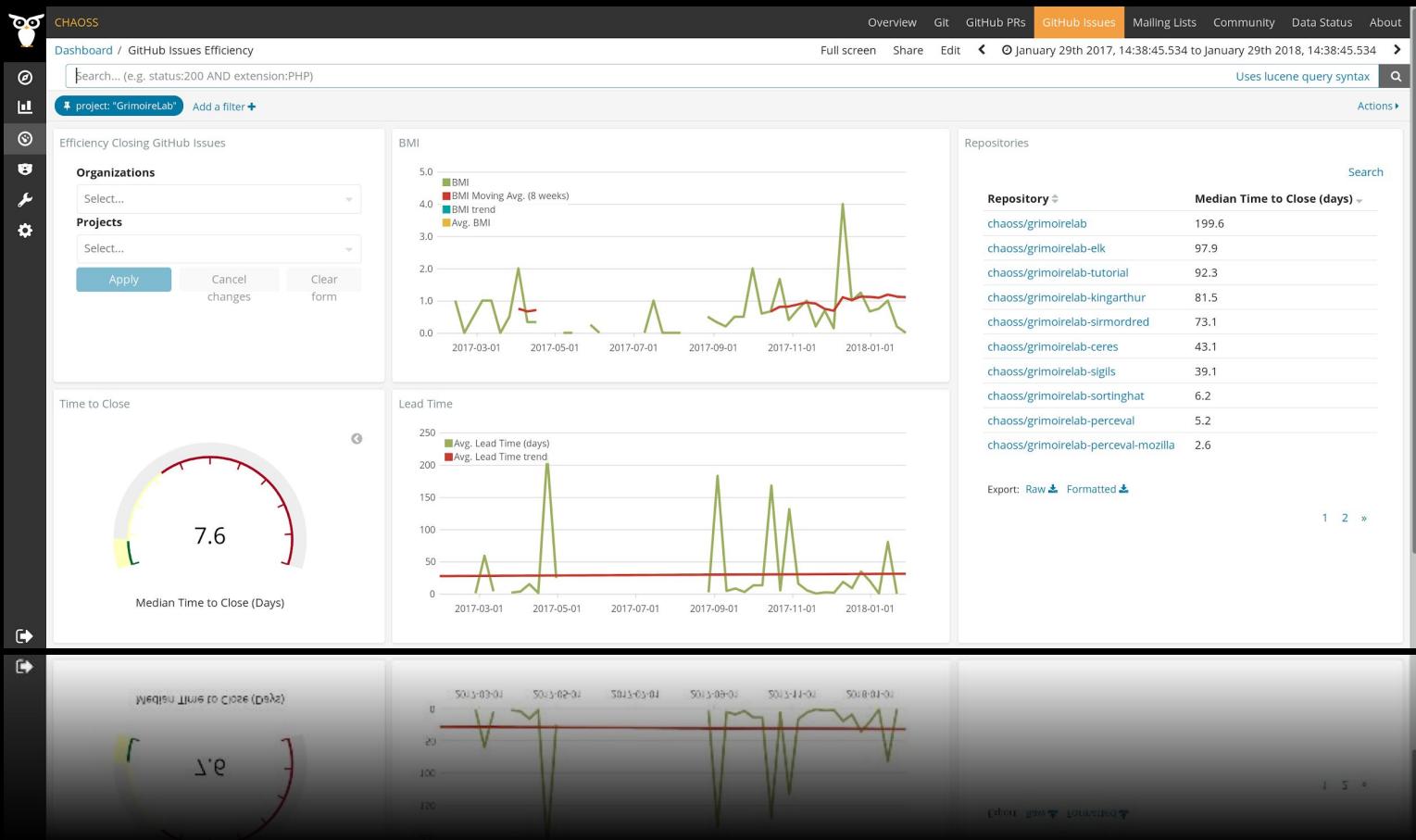
Thank you
GSOC!!

Google Summer Of Code

Improvements in **GrimoireLab Manuscripts**

Getting ready for GSOC 2019!!

Numbers, numbers, numbers...



Numbers, numbers, numbers...

CHAOS

Dashboard / GitHub Issues Efficiency

Search... (e.g. status:200 AND extension:PHP)

+ project: "GrimoireLab" Add a filter +

Efficiency Closing GitHub Issues

BMI

Overview Git GitHub PRs GitHub Issues Mailing Lists Community Data Status About

Full screen Share Edit ⌘ January 29th 2017, 14:38:45.534 to January 29th 2018, 14:38:45.534

Uses lucene query syntax

Actions ▾

CHAOS

Dashboard / GitHub Issues Efficiency

Search... (e.g. status:200 AND extension:PHP)

+ project: "GrimoireLab" Add a filter +

Efficiency Closing GitHub Issues

Organizations

Select...

Projects

Select...

Apply Cancel changes Clear form

BMI

BMI Moving Avg. (8 weeks)

BMI trend

Avg. BMI

2018-03-01 2018-05-01 2018-07-01 2018-09-01 2018-11-01 2019-01-01

Time to Close

Median Time to Close (Days)

11.3

Lead Time

Avg. Lead Time (days)

Avg. Lead Time trend

2018-03-01 2018-05-01 2018-07-01 2018-09-01 2018-11-01 2019-01-01

Repositories

Search

Repository	Median Time to Close (days)
chaoss/grimoirelab-kibiter	160.9
chaoss/grimoirelab-tutorial	48.1
chaoss/grimoirelab-sirmordred	20.4
chaoss/grimoirelab-sigils	19
chaoss/grimoirelab-kingarthur	17
chaoss/grimoirelab-manuscripts	14.9
chaoss/grimoirelab-elk	13.9
chaoss/grimoirelab-hatstall	11.9
chaoss/grimoirelab-perceval-opnfv	8.2
chaoss/grimoirelab	7.3

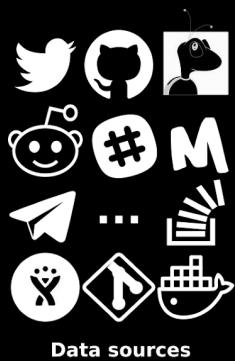
Export: Raw Formatted

1 2 »

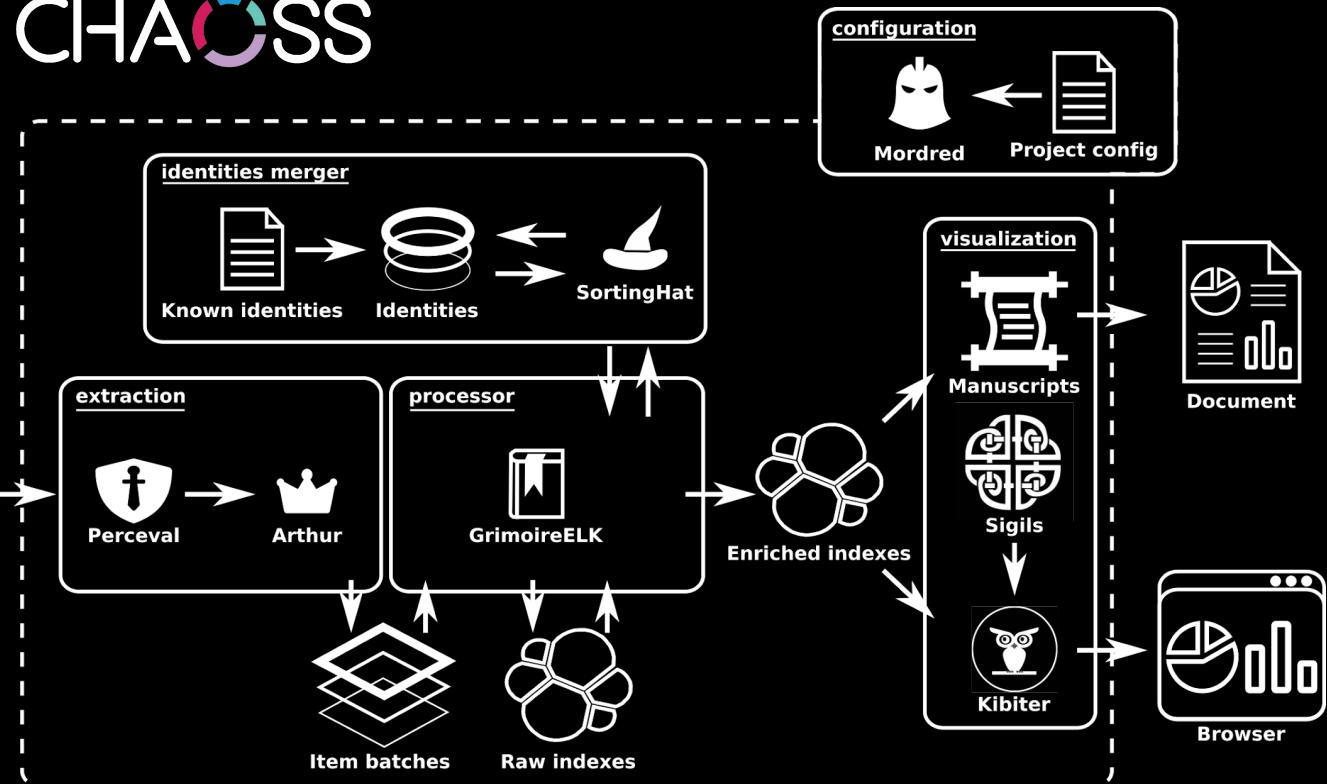
GrimoireLab as
a platform



CHAOS



Data sources



GrimoireLab is not a data collector

GrimoireLab is not a dashboard

GrimoireLab is not a product

GrimoireLab is not an “academic” project

It's not a data collector, but...

GrimoireLab

beyond data collection



Source Code

Git, Baazar*, Mercurial*

(*exporting to git)



Tickets / issues

Bugzilla, GitHub Issues,
GitLab Issues, JIRA,
Launchpad, Phabricator
Maniphest, Redmine



Code Review

Gerrit, GitHub Pull
Requests, GitLab Merge
Requests



Continuous Integration

Jenkins



Mailing lists / Forums

Askbot, Discourse, Gmane,
Hyperkitty, mbox files,
NNTP, Pipermail, Stack
Exchange



Chat

IRC (Supybot), Slack,
Telegram



Downloads

Apache http logs



Wiki

Confluence, MediaWiki



Meetings

Meetup, Mozilla Reps
events



Others

crates.io, Docker Hub, RSS,
Twitter

New data sources:

Mattermost (development sponsored by Red Hat & Bitergia)

GitLab (development sponsored by GitLab & Bitergia)

Groups.io (development sponsored by The Linux Foundation &
Bitergia)

SortingHat 1.0 (72% complete)

New GraphQL API

```
1+ query identities {
2+   uidentities {
3+     uid
4+     profile {
5+       name
6+       email
7+       gender
8+     }
9+     identities {
10+      id
11+      name
12+      email
13+      username
14+      source
15+    }
16+  }
17+ }
```

QUERY VARIABLES
1 null

```
{
  "data": {
    "uidentities": [
      {
        "uid": "0f9949815a8e8ef771cfefe60aedbc142d7405be",
        "profile": {
          "name": "Luis Cañas",
          "email": "lcanas@bitergia.com",
          "gender": "M"
        },
        "identities": [
          {
            "id": "0f9949815a8e8ef771cfefe60aedbc142d7405be",
            "name": null,
            "email": "lcanas@bitergia.com",
            "username": null,
            "source": "mls"
          },
          {
            "id": "5ca99d0e8e4618d9454e93fe0cf5d281alaed4990",
            "name": "Luis Cañas",
            "email": null,
            "username": null,
            "source": "mls"
          }
        ]
      },
      {
        "uid": "fac2242f069766037e8bc611e6a9fc3c795215a2",
        "profile": {
          "name": "Santiago Dueñas",
          "email": "sduenas@bitergia.com",
          "gender": "M"
        },
        "identities": [
          {
            "id": "4225149aa4e51f4b97a1053d871664f06d057128",
            "name": null,
            "email": null,
            "username": null,
            "source": "mls"
          }
        ]
      }
    ]
  }
}
```

SortingHat 1.0 (72% complete)

New GraphQL API

New Hatstall is coming! (based in React)

It's not a dashboard, but...

GrimoireLab Sigils

chaoss.github.io/grimoirelab-sigils



GrimoireLab Sigils by CHAOSS

CHAOSS GMD WG panels for Code Development

- **Lines of Code Changed:** panel focused on the number of lines of code changed.
 - **Maintainer Response to Merge Request Duration:** panel focused on the time to response after a pull request took place.
 - **Pull Requests Merged:** panel focused on the number of Pull Requests merged.

GrimoireLab Sigils Panels

- **Community Structure:** find who are your core, regular and casual contributors.
 - **Data Status:** data freshness information.
 - **Demographics:** attraction and retention of contributors.
 - **Gerrit Review Efficiency:** efficiency closing reviews in Gerrit.
 - **Git Demographics:** attraction and retention of developers specifically for Git.
 - **Git:** metrics focused on Git commits.
 - **GitHub Backlog:** focused on pending (open) tasks.
 - **GitHub Issues Efficiency:** efficiency closing issues on GitHub.
 - **GitHub Issues Timing:** metrics focused on how long issues remain open.
 - **GitHub Issues:** activity and community metrics focused on Issues.
 - **GitHub Pull Requests Efficiency:** efficiency closing Pull Requests.
 - **GitHub Pull Requests Timing:** metrics focused on how long pull requests remain open.
 - **GitHub Pull Requests:** activity and community metrics focused on Pull Requests.
 - **GitLab Issues Efficiency:** efficiency closing issues on GitLab.
 - **GitLab Merge Requests Efficiency:** efficiency solving (merging or closing) MRs on GitLab.
 - **Lifecycle:** Level of activity in git repositories
 - **Mediawiki:** contains metrics focused on reviews, including editions, revisions and editors.
 - **Overview:** summary of basic metrics on all analyzed sources.

GrimoireLab Sigils

chaoss.github.io/grimoirelab-sigils

GrimoireLab Sigils by CHAOS

Lifecycle

This panel provides a quick view of the lifecycle of the top 25 git repositories by activity and authors for a given period of time.

Definition

Active: at least 1 commit per month

Charts

- Evolution of the number of active repositories during selected period of time, and its trend
- Top 25 git repositories by number of commits for selected period of time, showing level of activity by month
- Top 25 git repositories by number of active authors for selected period of time, showing level of active authors by month

[Edit this doc](#)

[Edit this doc](#)

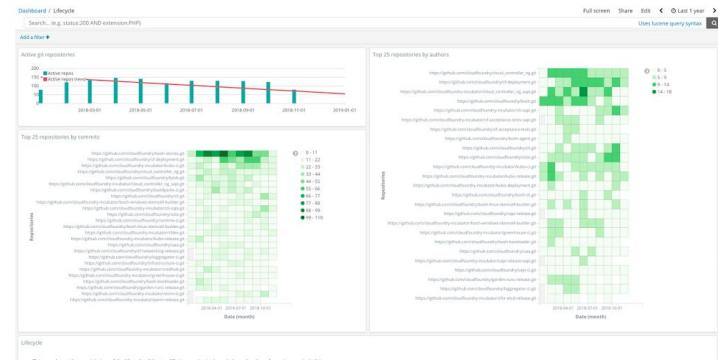
GrimoireLab Sigils by CHAOS

CHAOS GMD WG panels for Code Development

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GrimoireLab Sigils Panels

- **Community Structure:** find who are your core, regular and casual contributors.



Bitergia Analytics Panels Collection

bitergia.gitlab.io/panel-collections

Bitergia Analytics Panels by Bitergia

This site contains documentation for the set of standard panels included in Bitergia Analytics platform.

Open Source Program Office

[Contributors Growth](#): panel focused on the growth of the community in all of the data sources

[Efficiency: Timing overview](#): this panel focuses on time to first attention and time to close tickets.

[Engagement: Contributions overview](#): panel focused on engagement in terms of contributions.

[Organizational Diversity](#): panel focused on organizational diversity for contributions and contributors

[Organizational Diversity by domains](#): panel focused on organizational diversity for contributions and contributors specifying the domains information.

Sample collection

[Sample Documentation File](#): includes info about a given panel.

[Sample Documentation File](#): includes info about a given panel.

Sample collections

[Sample Documentation File](#): includes info about a given panel.

GrimoireLab
beyond
dashboards

Updated Kibiter!

chaoss.biterg.io

It's not a product, but ...

GrimoireLab as
an open
platform

Bitergia Analytics bitergia.com

CHAOSS GMD WG Implementations

github.com/chaoss/wg-gmd/tree/master/implementations

CROSSMINER www.crossminer.org

Generic Repository AnALyzer github.com/bitergia/graal

VBoard github.com/dlumbrer/VBoard



It's not an "academic" project, but ...

GrimoireLab as research tool

≡ **Google** Académico

grimoirelab 

Artículos Aproximadamente 27 resultados (0,02 s)

Cualquier momento Quizás quisiste decir: **grimoire lab**

Desde 2019 Perceval: software project data at your will [PDF] researchgate.net

Desde 2018 S Dueñas, V Cosentino, G Robles... - Proceedings of the 40th ..., 2018 - dl.acm.org

Desde 2015 ... 15 }, 16 "origin": "https://github.com/grimoirelab/perceval.git", ... 17 } } ... As can be seen, the backend for Git requires the URL where the repository is located (<https://github.com/grimoirelab/perceval.git>), then the JSON documents produced are redirected to the file perceval.test ...

Intervalo específico...   Citado por 2 Artículos relacionados Las 2 versiones

Ordenar por relevancia [PDF] arxiv.org

Ordenar por fecha

Cualquier idioma Towards Identifying Paid Open Source Developers-A Case Study with Mozilla Developers M Clae, M Mäntylä, M Kuutila, U Farooq - arXiv preprint arXiv:1804.02153, 2018 - arxiv.org

Buscar sólo páginas en español ... 3 METHODOLOGY 3.1 Data extraction To answer the research questions, we mined data from Mozilla's Mercurial repositories1. We extracted the history of all commits using git-remote-hg2 and the GrimoireLab tools3. In addition, we extracted issue comments from Mozilla's ...

incluir patentes   Artículos relacionados Las 2 versiones 

incluir citas

Crear alerta

Towards automatically identifying paid open source developers M Clae, M Mäntylä, M Kuutila, U Farooq - Proceedings of the 15th ..., 2018 - dl.acm.org

... repositories1. We extracted the history of all commits using git-remote-hg2 and the GrimoireLab tools3 ... commits. 1https://hg.mozilla.org 2https://github.com/felipec/git-remote-hg 3https://grimoirelab.github.io/ 4http://bugzilla.mozilla.com ...   Las 3 versiones

[PDF] Graal: The Quest for Source Code Knowledge V Cosentino, S Duenas, A Zerouali, G Robles... - researchgate.net [PDF] researchgate.net

... Graal leverages on and extends the functionalities of GrimoireLab, a strong free software tool developed by Bitergia, a company devoted to offer commercial software development analytics, and part of the CHAOSS project of the Linux Foundation ...   Las 2 versiones 

Gitana: A software project inspector V Cosentino, JLC Izquierdo, J Cabot - Science of Computer Programming, 2018 - Elsevier

... [3] target the analysis of Eclipse forums and Wang et al. [4] study the context of StackOverflow. Examples of more general tools are GrimoireLab 1 and Kibble 2. They ...   Las 2 versiones 

Gitana: A software project inspector V Cosentino, JLC Izquierdo, J Cabot - Science of Computer Programming, 2018 - Elsevier



Join us!



github.com/chaoss/grimoirelab-*
(repositories being migrated from
github.com/grimoirelab)

bit.ly/grimoirelab-mailman

#GrimoireLab in
irc.freenode.net

@GrimoireLab
#GrimoireLab



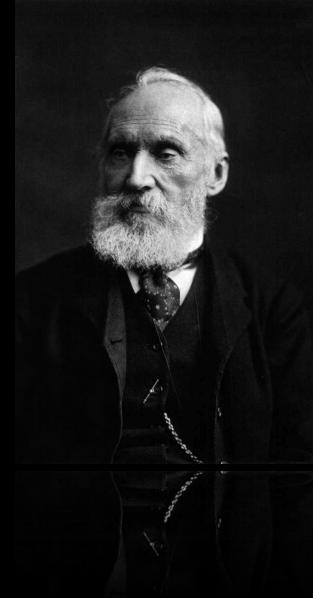
About Bitergia

Software Development Analytics
For Your Peace of Mind

“To measure is to know”

“If you can not measure it,
you cannot improve it”

Lord Kelvin



 Bitergia

Why Bitergia? Products & Services Customers Partners About Open Source Contact

Software Development Monitoring Made Easy

Bitergia solves any question you might have about your software development processes

Activity	Size
 What? How many?	 How big? How many?
 How fast? Average time?	 How old? New one? Inactive ones?
 Where from? Organizations? Gender?	

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[LEARN MORE](#)

Monitor flows of open source projects
with Bitergia



Customers



midokura

Engine Yard™



Joomla!™

Pivotal

Codethink



The Document
Foundation



CoreOS

moz://a

Couchbase



OPEN CONTAINER
INITIATIVE



BBVA

CLOUD FOUNDRY

AUTODESK®



FINOS

confluent



CHEF™

Santander

UBER



GitLab



Bitergia



WE ARE HIRING

DevOps Engineer
Sales Manager (North America)

Let's go for questions!

Manrique López

CEO at **Bitergia**

jsmanrique@bitergia.com

