Introduction to Bitergia Analytics Dashboard & Platform

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Outline

Overview of Bitergia Analytics Dashboard

Main features & characteristics

Use cases

Example dashboard: [http://opnfv.biterg.io](http://opnfv.biterg.io)
Overview of Bitergia Analytics Dashboard
Overview
Review of the rest of panels

Timing Panels

How long does it take to close things? (issues, tickets, changesets, etc.)

Look for peaks in median and 80th percentile.
Review of the rest of panels

Timing Panels

Always a decreasing trend at the right hand side.

Things can’t be open longer than the time from their creation to now.

If median time to close is 50 days, this decreasing trend will begin 50 days ago, because things open from 49 days ago will be biased by the upper bound mentioned above.
Review of the rest of panels

Backlog Panels

*Things* that remain open (tickets, issues, changesets, etc.)

E.g. look for companies with more open things.
Review of the rest of panels

Backlog Vs. Timing Panels

**Timing:**

Do some companies have to wait longer to get their things approved/closed?

**Timing + Backlog:**

Do companies with more open things have to wait longer to get their things approved/closed?
Review of the rest of panels

Data Status

Information about when different sources were last updated.
Main Features

Architecture

Some Features
Architecture

Grimoire Lab Architecture (draft)

(*) Under development

Bitergia
Main Features

- Drill down
- Time frame filters
- Sharing / embedding
- Data export (CSV...)
- API access
  (ElasticSearch API)

Allowed users can create widgets and panels

Data filters

Search box
Drill Down

![Commit and Time Graph](image1)

<table>
<thead>
<tr>
<th>Repository</th>
<th>Commits</th>
<th>Authors</th>
<th>Organizations</th>
<th>Added Lines</th>
<th>Removed Lines</th>
<th>Avg. Lines/Commit</th>
<th>Avg. Files/Commit</th>
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</thead>
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<tr>
<td>git://git.aospODEV.org/openheos</td>
<td>1,097</td>
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<td>23</td>
<td>2126</td>
<td>2127</td>
<td>2.028</td>
<td>1.082</td>
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<td>4410</td>
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<td>5033</td>
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<td>70.5</td>
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<tr>
<td>git://git.aospDEV.org/moon</td>
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<td>git://git.aospDEV.org/photon</td>
<td>121</td>
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<td>1716</td>
<td>79.124</td>
<td>2.396</td>
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<td>git://git.aospDEV.org/lmbuild</td>
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<tr>
<td>git://git.aospDEV.org/heleng-ssl</td>
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<td>8</td>
<td>6</td>
<td>2620</td>
<td>1340</td>
<td>40.482</td>
<td>3.169</td>
</tr>
<tr>
<td>git://git.aospDEV.org/compass4aDev</td>
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<td>7</td>
<td>4</td>
<td>4561</td>
<td>550</td>
<td>71.542</td>
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</tr>
</tbody>
</table>

**Organizations**

- ENEA AB
- Huawei
- Orange
- Intel
- Ericsson
- Linux Foundation
- ZTE Corporation
- Mitreps
- Unknown
- SUSE
- Red Hat
- Callabas
- AT&T
- Canonical, Ltd.
- NEC
- Nokia
- Cisco
- Dell
- NTT DOCOMO
- ARM
- Juniper
- OpenStack Foundation
- Freescale

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**Bitergia**
Drill Down (Filters)

When drilling down, a **filter** appears (field:value)

Mouse over: Enable/disable, pin/unpin, invert, remove, edit
Time Range Selection

Special filter: **Time Range** (top right corner)

Any time range of activity can be selected
Search Box

General search box for filtering purposes:

- Look for specific field matches:
  - author_name:"Cedric Ollivier"

- Look for keywords:
  - Cedric Ollivier => Either Juan or Hernandez across all fields
Sharing / Embedding

We can share / embed panels at any moment

Eg: share with a team the data for a given repository during the last year
We can share / embed panels at any moment

Eg: share dashboard as it was saved
**Data Export**

Data in tables can be exported

Time Frame & Filters will be applied
Data Validation

Since we can filter activity:

- We can work at the level of developer or repository
- This helps to find inconsistencies in the data
  - List of commits, changesets, repositories by a developer
  - Affiliations, unique identities
  - Checking of oddities in the data, such as peaks
Aggregation of Data

Since Kibana allows for new features

- drill down, time range filter, creation of own widgets and others

We can aggregate all information in a single dashboard

- So we can later share or filter per project of interest
Creation of Widgets and Panels

When allowed:

- Edit widgets
- Create new ones
- Build own panels
API Access

ElasticSearch documentation:


Example:

curl -XGET 'https://elasticsearch_instance:443/project/git/_search/'

Other tools can be used for viz instead of Kibana
Final remarks
Final remarks

We’re still shaping the product: you can take advantage of that.

The system is quite flexible.
Feedback is welcome!