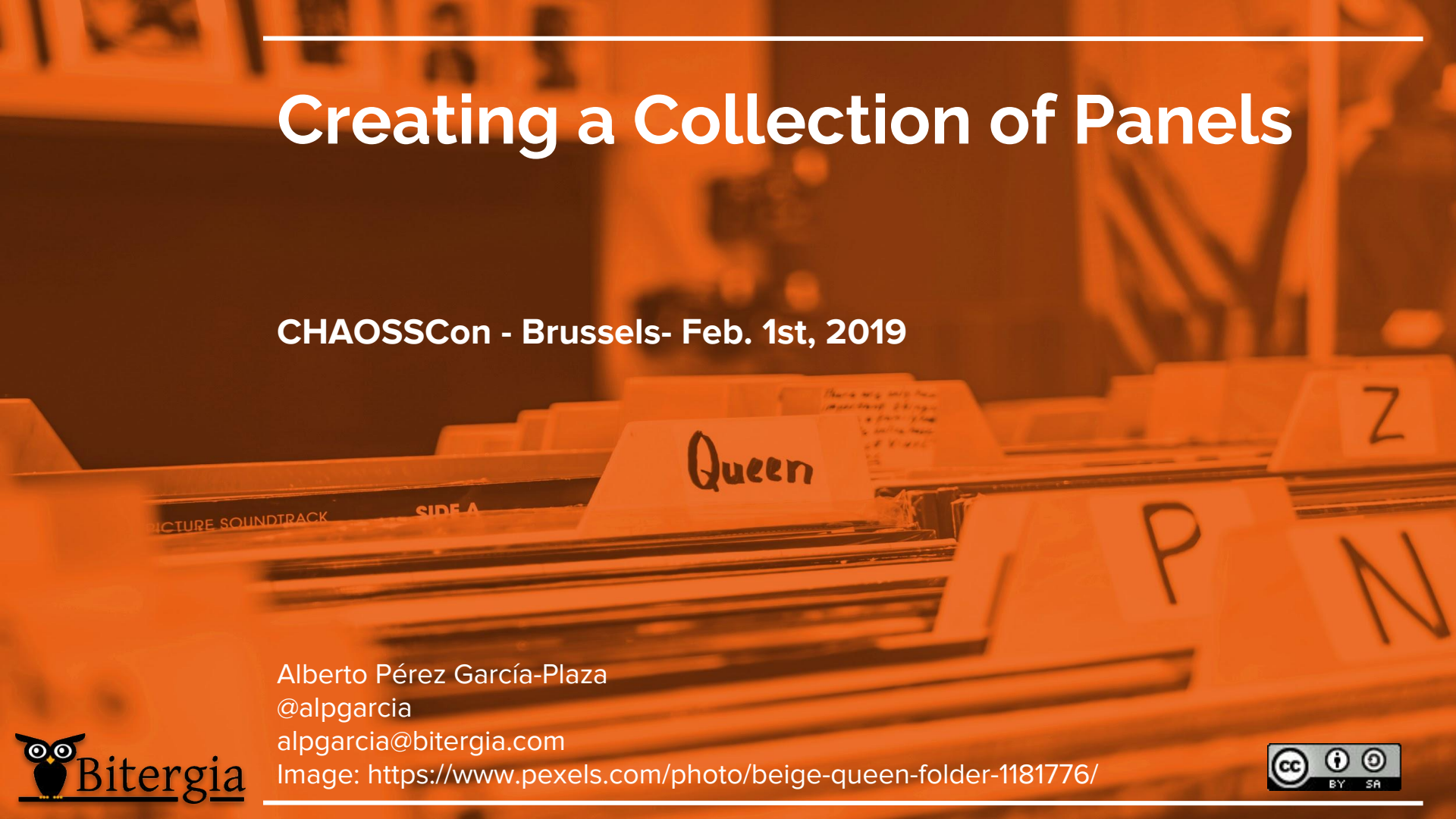
Creating a Collection of Panels

CHAOSSCon - Brussels- Feb. 1st, 2019



Alberto Pérez García-Plaza
@alpgarcia
alpgarcia@bitergia.com
Image: https://www.pexels.com/photo/beige-queen-folder-1181776/

Bitergia

CC BY SA

/me

@alpgarcia

My name is **Alberto** Pérez

Part of Bitergia's **Analytics** Team

Stuff related to **data**, **metrics** & **panels**

More info at http://garciaplaza.com

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/me

@alpgarcia

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Help us in our journey **building panels**!

Outline

From **Panels** to **Collections**

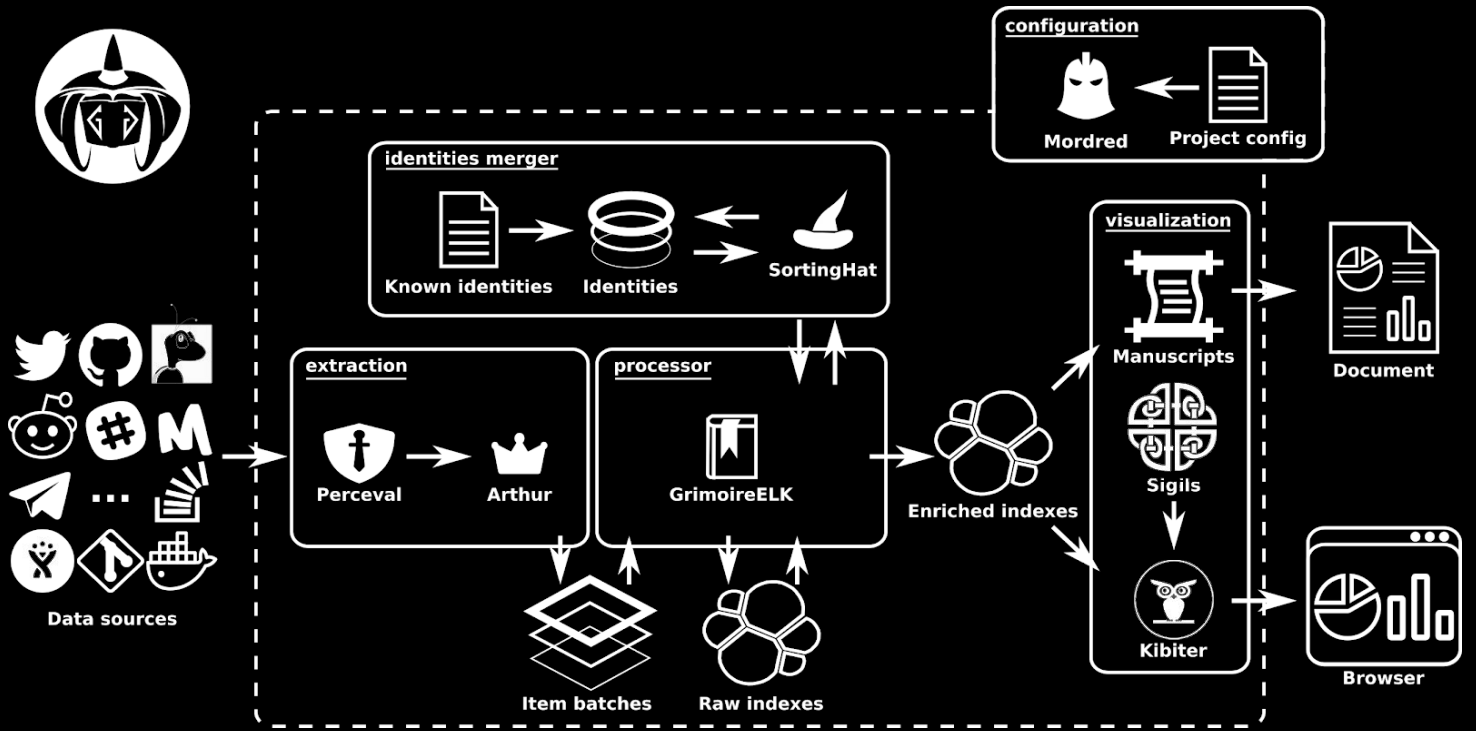
Where are GrimoireLab panels?

Motivation

Collections

CHAOSS Collection & more

/where



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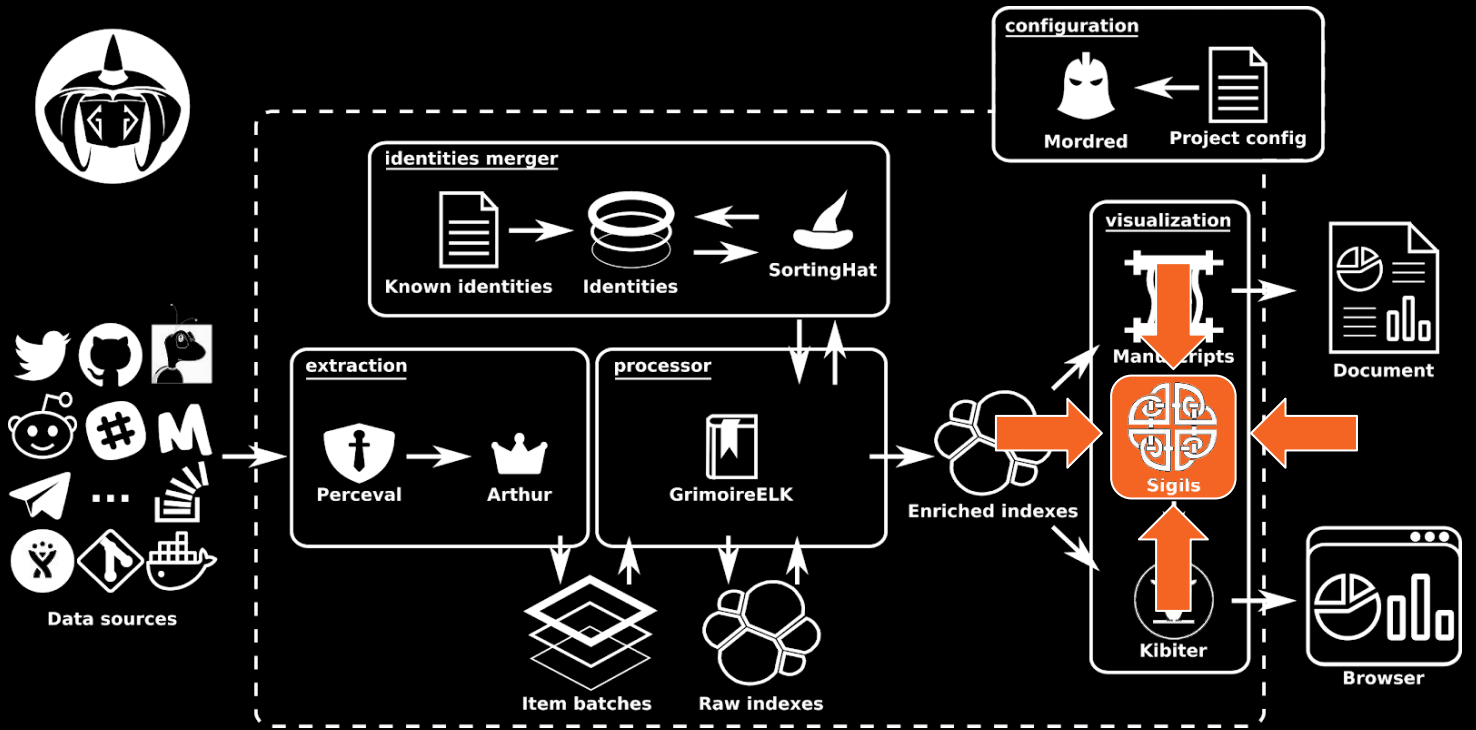
/where



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Motivation

Current state of things in Sigils

What do we need to improve?

Are there known issues?

/motivation

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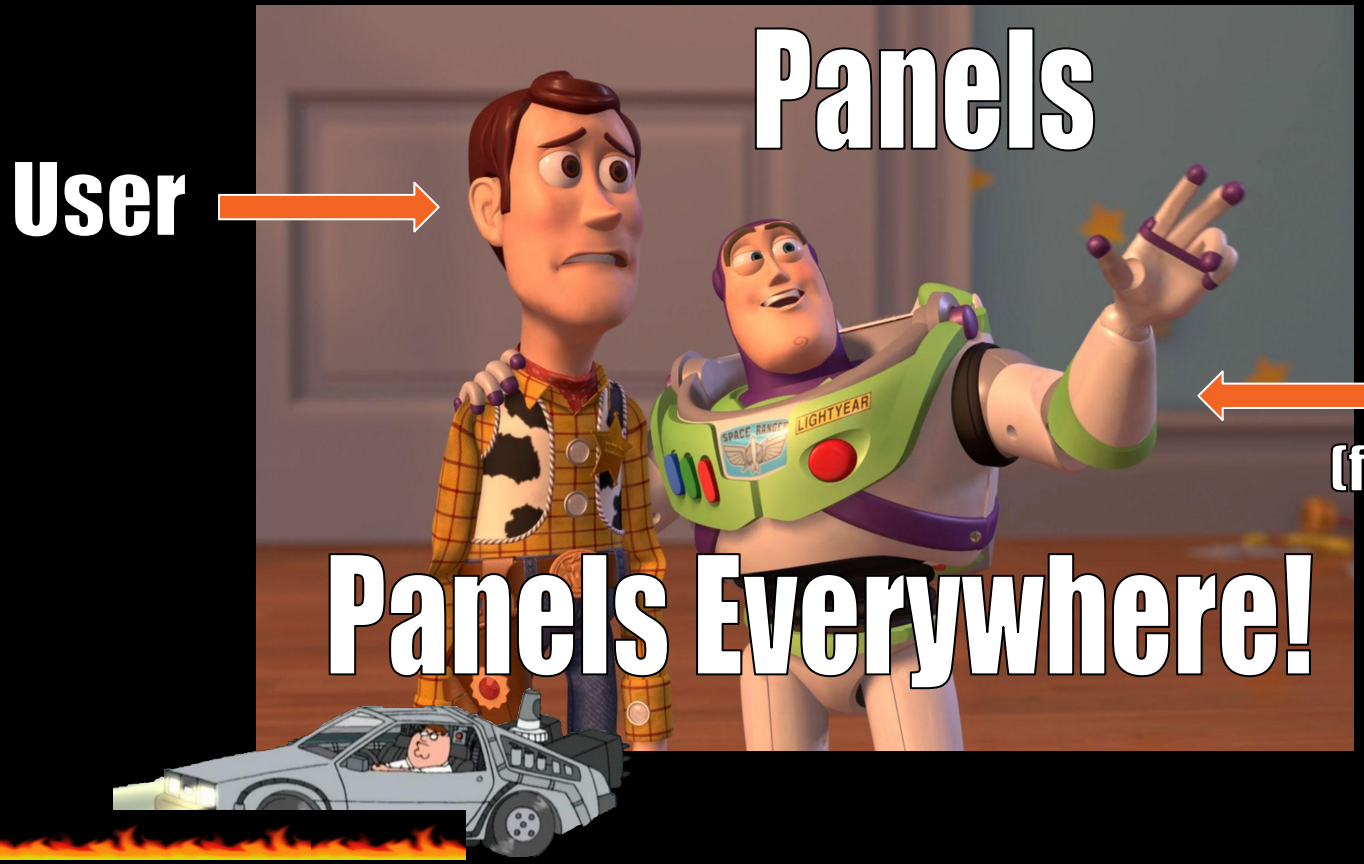
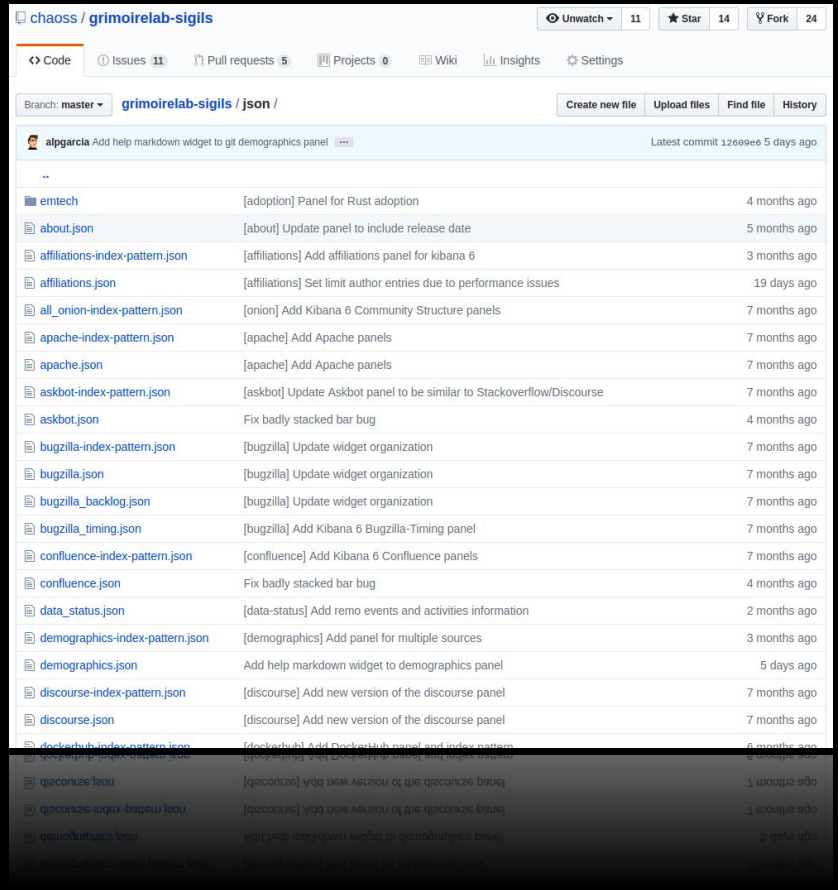
User
Panels
Me
Panels Everywhere!


User
Panels
Me
(from 2018)
Panels Everywhere!

many panels



chaoss / grimoirelab-sigils

Unwatch 11 | Star 14 | Fork 24

Code | Issues 11 | Pull requests 5 | Projects 0 | Wiki | Insights | Settings

Branch: master | grimoirelab-sigils / json / | Create new file | Upload files | Find file | History

alpgarcia Add help markdown widget to git demographics panel ··· Latest commit 12609e6 5 days ago

..		
emtech	[adoption] Panel for Rust adoption	4 months ago
about.json	[about] Update panel to include release date	5 months ago
affiliations-index-pattern.json	[affiliations] Add affiliations panel for kibana 6	3 months ago
affiliations.json	[affiliations] Set limit author entries due to performance issues	19 days ago
all_onion-index-pattern.json	[onion] Add Kibana 6 Community Structure panels	7 months ago
apache-index-pattern.json	[apache] Add Apache panels	7 months ago
apache.json	[apache] Add Apache panels	7 months ago
askbot-index-pattern.json	[askbot] Update Askbot panel to be similar to Stackoverflow/Discourse	7 months ago
askbot.json	Fix badly stacked bar bug	4 months ago
bugzilla-index-pattern.json	[bugzilla] Update widget organization	7 months ago
bugzilla.json	[bugzilla] Update widget organization	7 months ago
bugzilla_backlog.json	[bugzilla] Update widget organization	7 months ago
bugzilla_timing.json	[bugzilla] Add Kibana 6 Bugzilla-Timing panel	7 months ago
confluence-index-pattern.json	[confluence] Add Kibana 6 Confluence panels	7 months ago
confluence.json	Fix badly stacked bar bug	4 months ago
data_status.json	[data-status] Add remo events and activities information	2 months ago
demographics-index-pattern.json	[demographics] Add panel for multiple sources	3 months ago
demographics.json	Add help markdown widget to demographics panel	5 days ago
discourse-index-pattern.json	[discourse] Add new version of the discourse panel	7 months ago
discourse.json	[discourse] Add new version of the discourse panel	7 months ago
dockerhub-index-pattern.json	[dockerhub] Add DockerHub panel and index pattern	6 months ago

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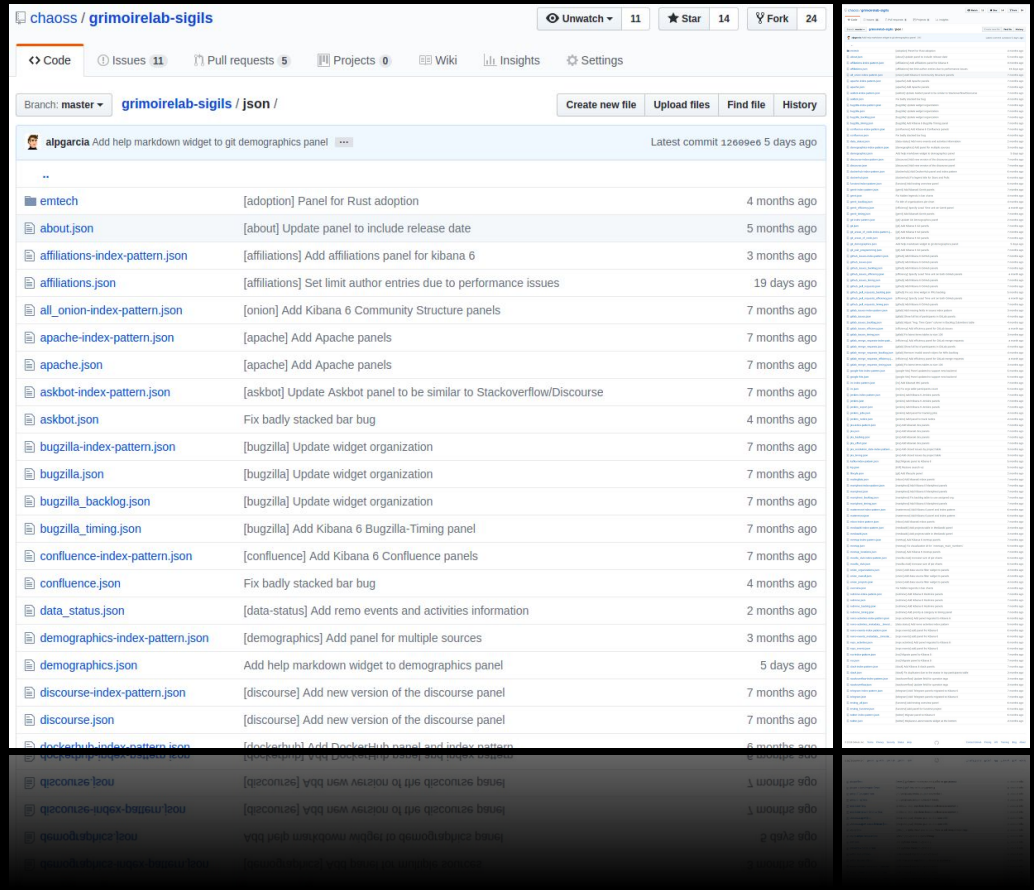
/motivation

Too many panels



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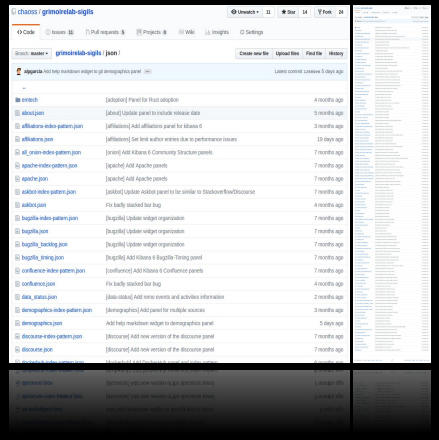
/motivation

- Too many panels
  - Overwhelming bunch of files



Hides contributions

Difficult to find a particular panel or set of panels

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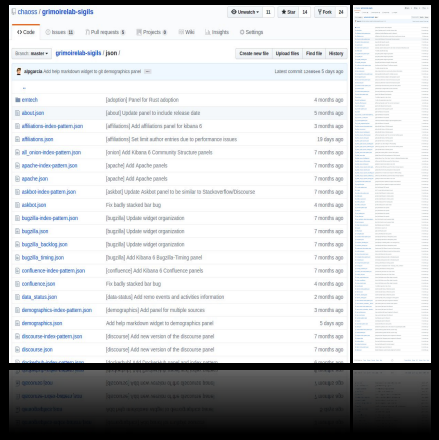
/motivation

- Too many panels
  - Overwhelming bunch of files



→ Hides contributions

→ **Scares users**

Difficult to find a particular panel or set of panels

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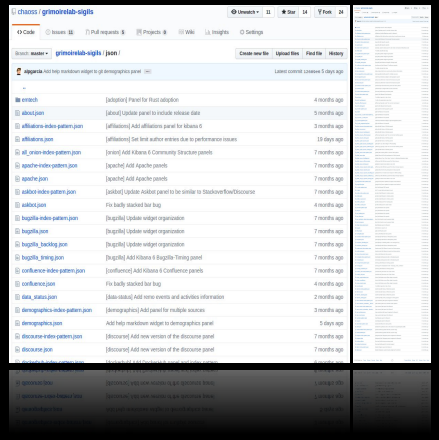
/motivation

- Too many panels
  - Overwhelming bunch of files



→ Hides contributions

→ Scares users **& contributors**

Difficult to find a particular panel or set of panels

Difficult to define and share a set of panels

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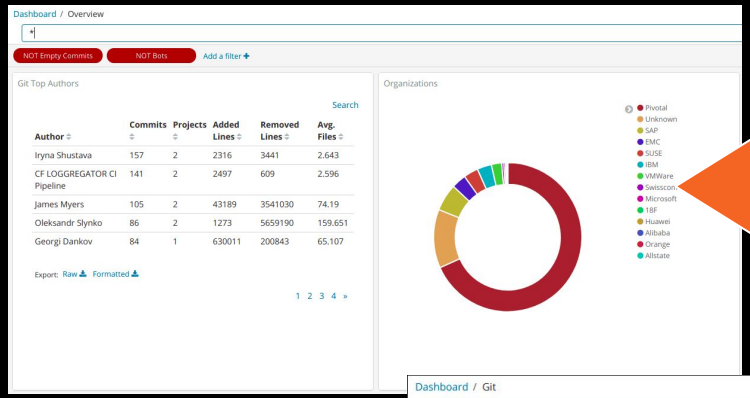
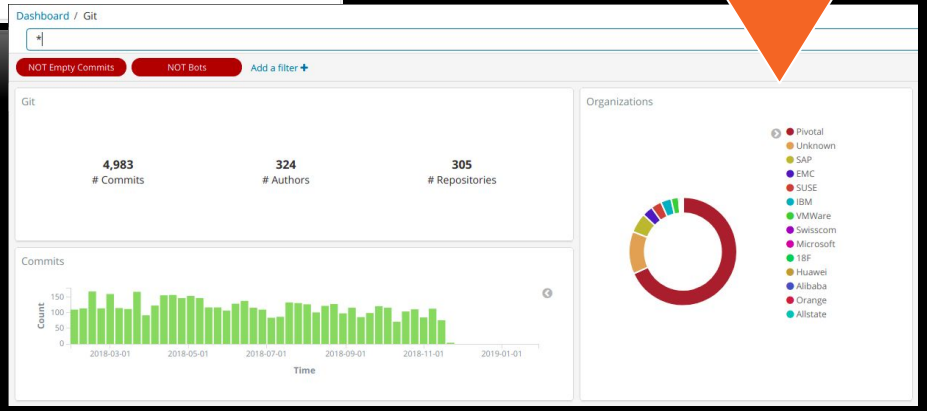
I didn't touch that panel...

...but it's been modified!!

Overview

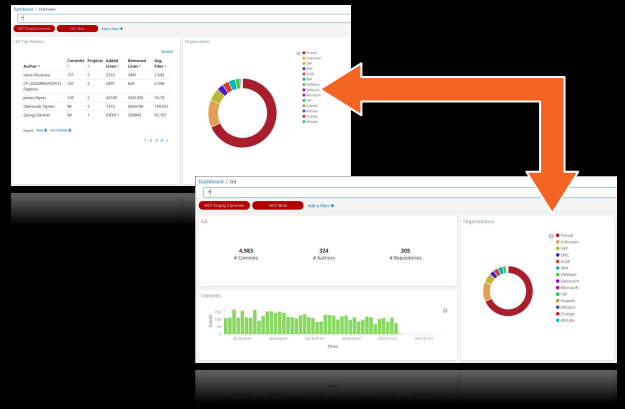


Git



/motivation

- Self-contained panels
  - visualizations
  - searches
  - index patterns



→ Duplicated widgets

Import could unexpectedly modify other panels

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Documentation?

Documentation?

/motivation

What happened in this community during those months to have such peaks of activity? There are usually different reasons for this, although this goes from summits to programms such as the Google Summer of Code or Outreachy activities.

The most active developers

TBD

The most active organizations

TBD

The most active repositories

TBD

Last seven days of activity

[This approach works for almost any panel and for any time selection. There is a specific section for the last 7 days as this seems to be a useful timeframe to have a look at. Others such as months or quarters can be selected in the same way.]

The summary of the acti
panel for any dashboard

16 lines (12 sloc) | 737 Bytes

Raw Blame History

Git

The Git panel shows information about commits in git repositories. For each commit, git stores meta-information about who authored the commit (author), and when, and about who included the commit in the repository (committer), and when.

Each author and committer in git are usually identified by a name and an email address. We use the information in the email addresses to find domains and as a first approach to enrich the information to obtain organizations information.

Dates and times (author time, committer time) in git are expressed usually in the time zone of the computer where the person performed the action (creation of the commit, or merging of it in the repository). We use that to display time zone information.

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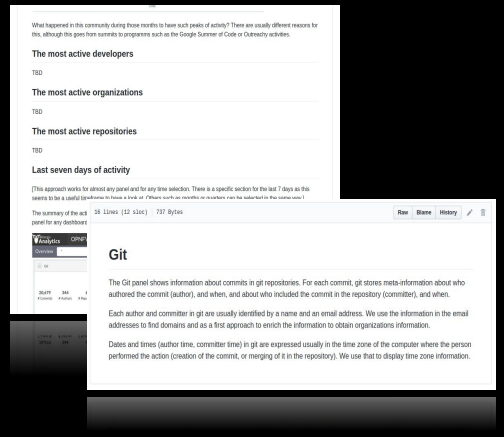
/motivation

- Lack of documentation
  - Undocumented panels
  - Poorly documented ones



→ Reduces usability

Use cases behind panels are unknown

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Collections

Possible solutions for known problems

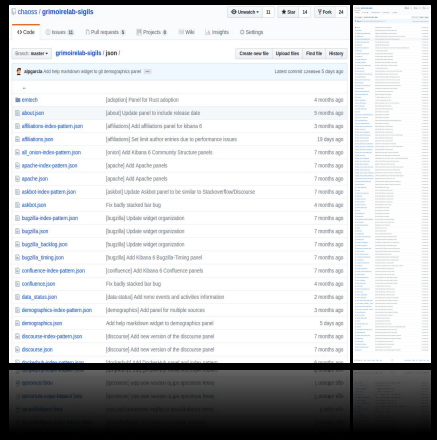
Too many panels together

Self-contained panels with duplicated widgets

Lack of documentation

/collections

- Too many panels
  - Overwhelming bunch of files



→ Hides contributions

→ Scares users & contributors

Let’s separate panels into smaller sets

Use your own repo if you want

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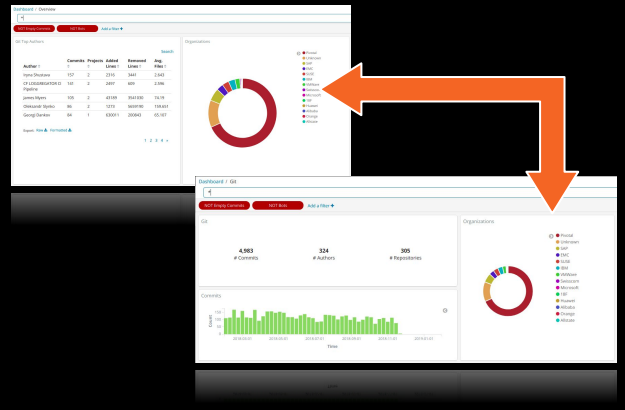
/collections

- Self-contained panels
  - visualizations
  - searches
  - index patterns



→ Duplicated widgets

Export widgets in separate files (WIP)

Store widgets only once per collection

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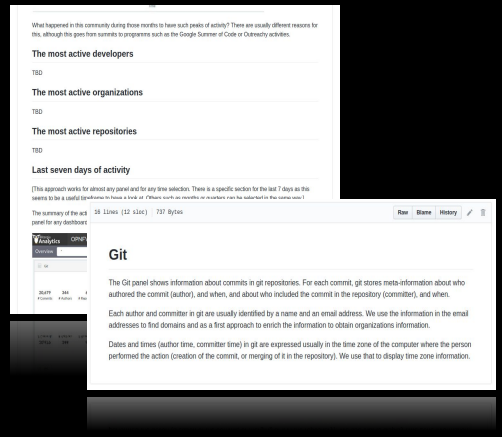
- Lack of documentation
  - Undocumented panels
  - Poorly documented ones

⇒ Reduces usability



Use Jekyll for documentation

Each panel must have a MarkDown page

Documentation?

Staring at you

/motivation

Summarizing, it's time for tidying up

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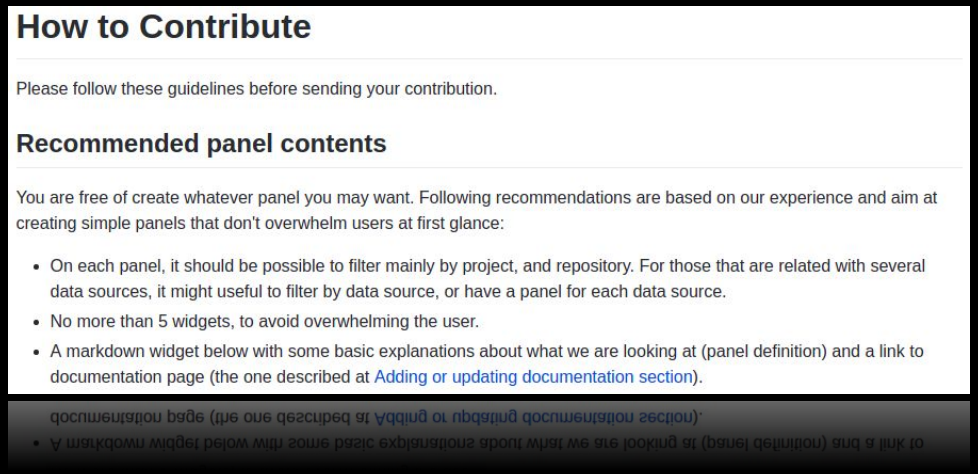
How to contribute?

- Panel(s) to an existing collection
  - Get some GrimoireLab data
  - Follow guidelines at

https://github.com/chaoss/grimoirelab-sigils/blob/master/CONTRIBUTING.md



How to Contribute

Please follow these guidelines before sending your contribution.

Recommended panel contents

You are free of create whatever panel you may want. Following recommendations are based on our experience and aim at creating simple panels that don't overwhelm users at first glance:

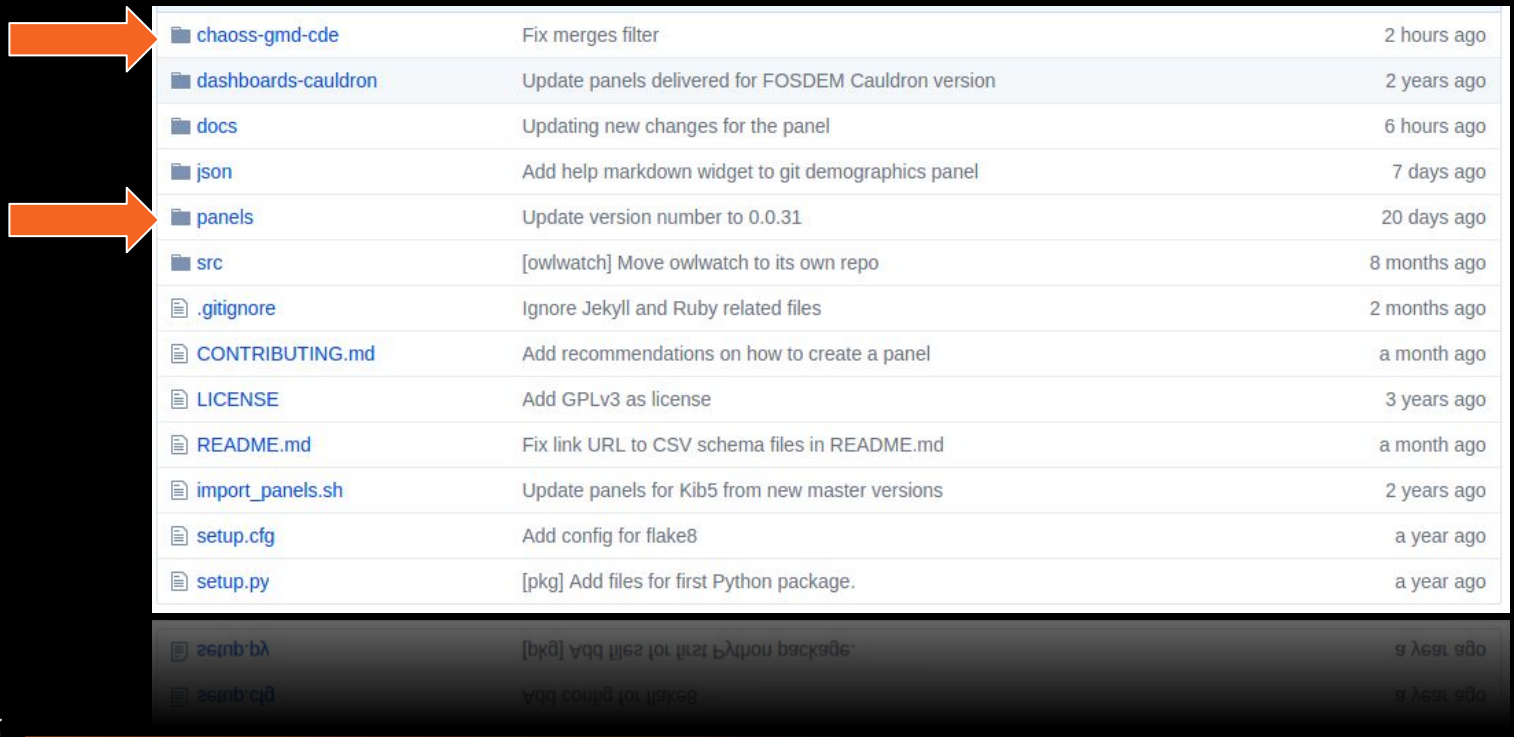
- On each panel, it should be possible to filter mainly by project, and repository. For those that are related with several data sources, it might useful to filter by data source, or have a panel for each data source.
- No more than 5 widgets, to avoid overwhelming the user.
- A markdown widget below with some basic explanations about what we are looking at (panel definition) and a link to documentation page (the one described at Adding or updating documentation section).

How to contribute?

- Create **your own collection**
  - **Control everything** inside
    - You could add tests, CI...
  - You can ask to include it **in GrimoireLab**
  - You can share it from **your own repo**
    - Send us a link!

Collection Structure

- JSON files



chaoss-gmd-cde	Fix merges filter	2 hours ago
dashboards-cauldron	Update panels delivered for FOSDEM Cauldron version	2 years ago
docs	Updating new changes for the panel	6 hours ago
json	Add help markdown widget to git demographics panel	7 days ago
panels	Update version number to 0.0.31	20 days ago
src	[owlwatch] Move owlwatch to its own repo	8 months ago
.gitignore	Ignore Jekyll and Ruby related files	2 months ago
CONTRIBUTING.md	Add recommendations on how to create a panel	a month ago
LICENSE	Add GPLv3 as license	3 years ago
README.md	Fix link URL to CSV schema files in README.md	a month ago
import_panels.sh	Update panels for Kib5 from new master versions	2 years ago
setup.cfg	Add config for flake8	a year ago
setup.py	[pkg] Add files for first Python package.	a year ago

Collection Structure

- Documentation files

chaoss-gmd-cde	Fix merges filter	2 hours ago
dashboards-cauldron	Update panels delivered for FOSDEM Cauldron version	2 years ago
docs	Updating new changes for the panel	6 hours ago
json	Add help markdown widget to git demographics panel	7 days ago
panels	Update version number to 0.0.31	20 days ago
src	[owlwatch] Move owlwatch to its own repo	8 months ago
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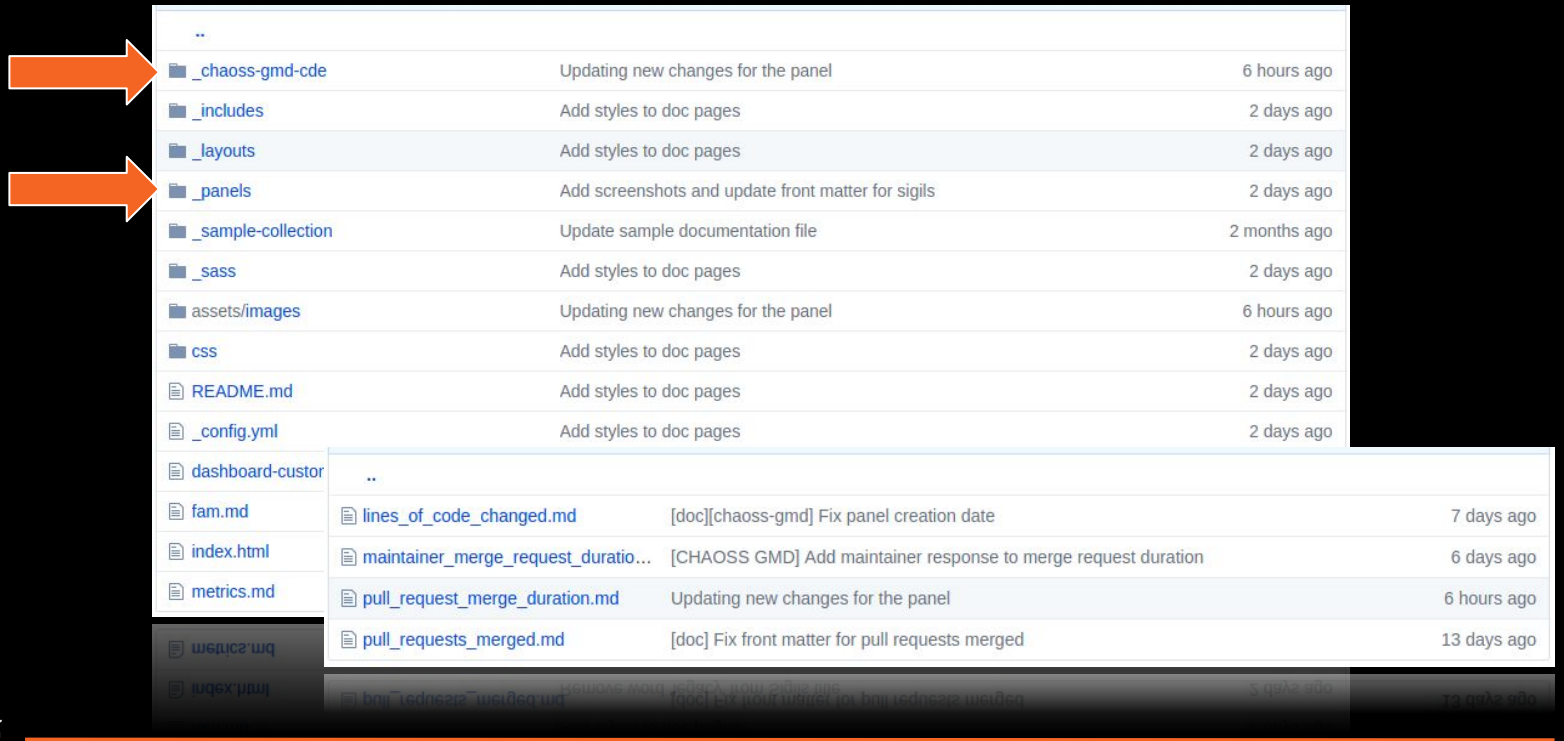
Collection Structure

- Documentation files



..		
_chaoss-gmd-cde	Updating new changes for the panel	6 hours ago
_includes	Add styles to doc pages	2 days ago
_layouts	Add styles to doc pages	2 days ago
_panels	Add screenshots and update front matter for sigils	2 days ago
_sample-collection	Update sample documentation file	2 months ago
_sass	Add styles to doc pages	2 days ago
assets/images	Updating new changes for the panel	6 hours ago
css	Add styles to doc pages	2 days ago
README.md	Add styles to doc pages	2 days ago
_config.yml	Add styles to doc pages	2 days ago
dashboard-custor		
fam.md		
index.html		
metrics.md		

..		
lines_of_code_changed.md	[doc][chaoss-gmd] Fix panel creation date	7 days ago
maintainer_merge_request_duratio...	[CHAOSS GMD] Add maintainer response to merge request duration	6 days ago
pull_request_merge_duration.md	Updating new changes for the panel	6 hours ago
pull_requests_merged.md	[doc] Fix front matter for pull requests merged	13 days ago

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Tools: Archimedes

- Export/Import (**WIP**)

Name	Last commit	Last update
..		
index-patterns	Add 'Engagement: Contributions Overview' ...	5 days ago
visualizations	Add Contributors Growth panel	1 day ago
dashboard_4434c9a0-18dd-11e9-ba47-d5cb...	Add Contributors Growth panel	1 day ago
dashboard_69208f40-18cb-11e9-ba47-d5cb...	Add efficiency timing overview panel to OSPO	6 days ago
dashboard_6e0e2900-18c0-11e9-872f-e170...	Add Organizational Diversity by Domains panel	5 days ago
dashboard_ab68fe20-17f2-11e9-872f-e1701...	Add Organizational Diversity panel	5 days ago
dashboard_b7b169e0-14e3-11e9-8aa		

Name	Last commit	Last update
..		
index-pattern_0211efb0-14ca-11e9-8aac-ef7...	Add 'Engagement: Contributions Overview' ...	5 days ago
index-pattern_a04a4150-18bc-11e9-872f-e1...	Add efficiency timing overview panel to OSPO	6 days ago

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Tools: Jekyll

- Available in GitHub & GitLab
  - Front matter: meta info

```
---
title: Lines of Code Changed
description: panel focused on the…
author: Miguel-Ángel Fernández Sánchez
created_at: 2019-01-16
grimoirelab_version: 0.2.3
screenshot: lines_of_code_chaged.png
layout: panel
---
```

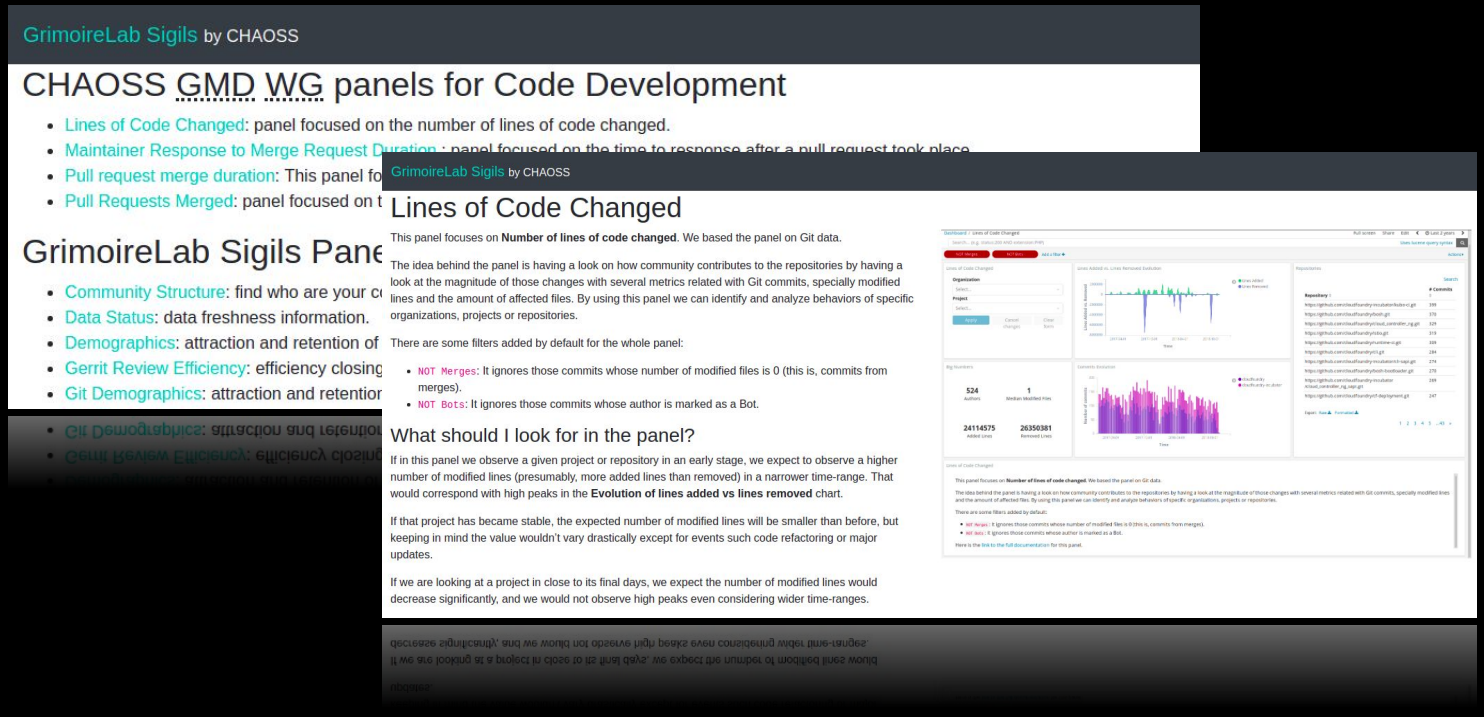
Tools: Jekyll

- Available in GitHub & GitLab
  - Front matter: used for rendering pages

```
---
title: Lines of Code Changed
description: panel focused on the…
author: Miguel-Ángel Fernández Sánchez
created_at: 2019-01-16
grimoirelab_version: 0.2.3
screenshot: lines_of_code_chaged.png
layout: panel
---
```

Tools: Jekyll

- Each MD is deployed as a web page



CHAOSS collection & more

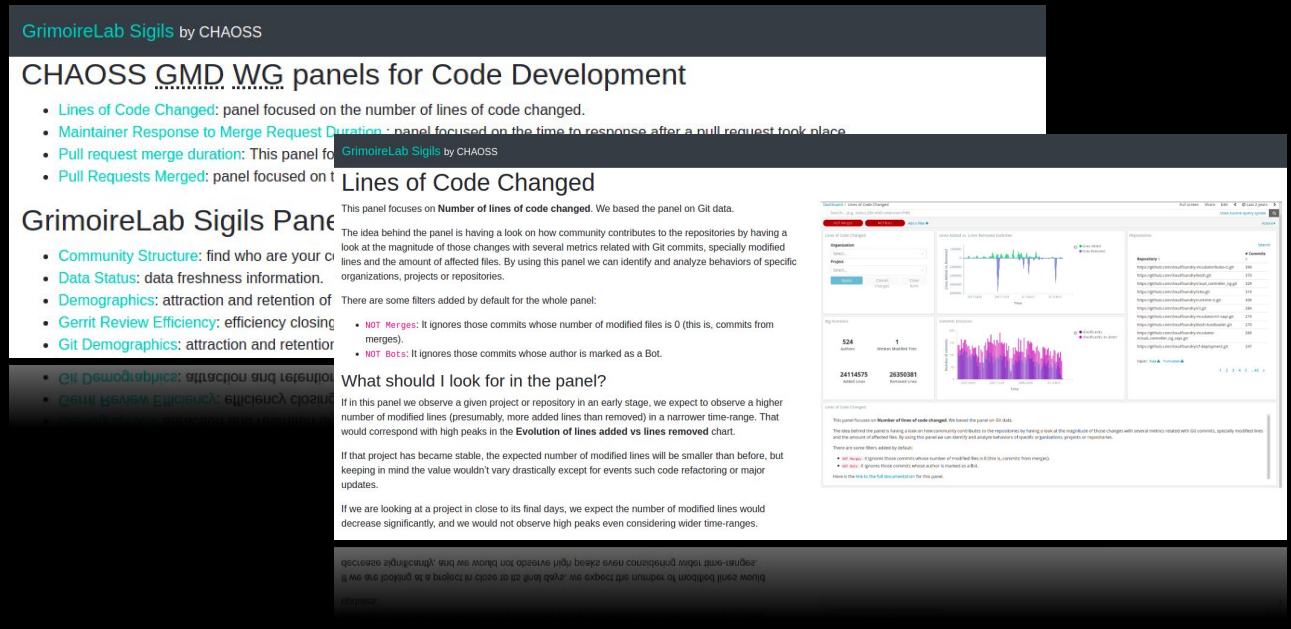
Real world examples

CHAOSS collection

New Bitergia panels

- CHAOSS GMD Code Development Efficiency
  - Available online at GrimoireLab-Sigils
  - Still growing, GSoC

https://chaoss.github.io/grimoirelab-sigils/



Bitergia

/bitergia-panels

- Bitergia Analytics Panels
  - Built out of GrimoireLab-Sigils
  - Still work in progress

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 th

Efficiency: Timing overview: this panel focuses on time

Engagement: Contributions overview: panel focused o

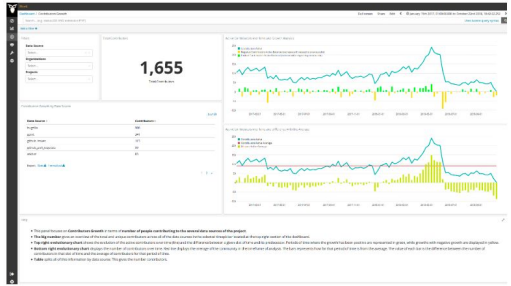
Organizational Diversity: panel focused on organizatio

Organizational Diversity by domains: panel focused on

Bitergia Analytics Panels by Bitergia

Contributors Growth

This panel aims at providing a view of the contributors, their evolution and their growth over time. This information is provided for all of the data sources and gives a glimpse about the differences between the periods of analysis. The information can be filtered by data source, by organization and by project.



Metrics

From left to right and top to bottom, the metrics provided are:

- **Total Contributors**: total number of unique contributors in any data source.
- **Active Contributors over time and Growth Analysis**: evolutionary chart displaying the number of active contributors in all of the data sources and the differences between each timeslot of analysis. The line represents the net number of contributors. The bar charts displays the difference between that timeslot and the previous one. If the difference is positive, so there's a growth in the number of contributors, the bar is green, otherwise the bar is yellow.
- **Contributors Growth by Data Source**: this table displays the several data sources of analysis and the number of contributors in each of them.
- **Active Contributors over time and Difference with the Average**: evolutionary chart displaying the number of active contributors in all of the data sources and the difference between the average of contributors for the analyzed period and how far a timeslot is from that average. The green line represents the net number of contributors. The bar charts displays how far each of the slots of time in number of contributors are from the average. The average is represented as a horizontal line in red color. This displays the average number of contributors for the period of analysis.

In addition to Kibana filters and search box ont top, filtering by `Data Source`, `Organization` and/or `Project` is allowed by using the top left corner widget.

Edit this doc

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Final Remarks

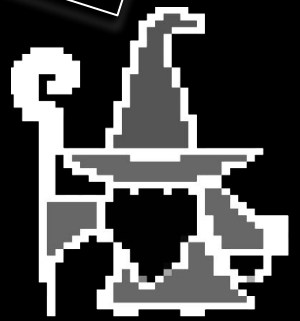
- Building collections out of Sigils doesn't mean they are not going to be part of **GrimoireLab**

- Collections are here to **ease access to the metrics you are really interested in**

- If you already have your panels, please consider **make them a collection** (**ask us for help**)

/thanks

What questions do you have?



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