



From Request to ROI: Tracking your Company's Investment in Open Source & Compliance

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Open FinTech Forum
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Comcast Open Source Program Office

Opened beginning of 2017
4 person team
Support 7k+ developers
Support ~150 project repos on
GitHub

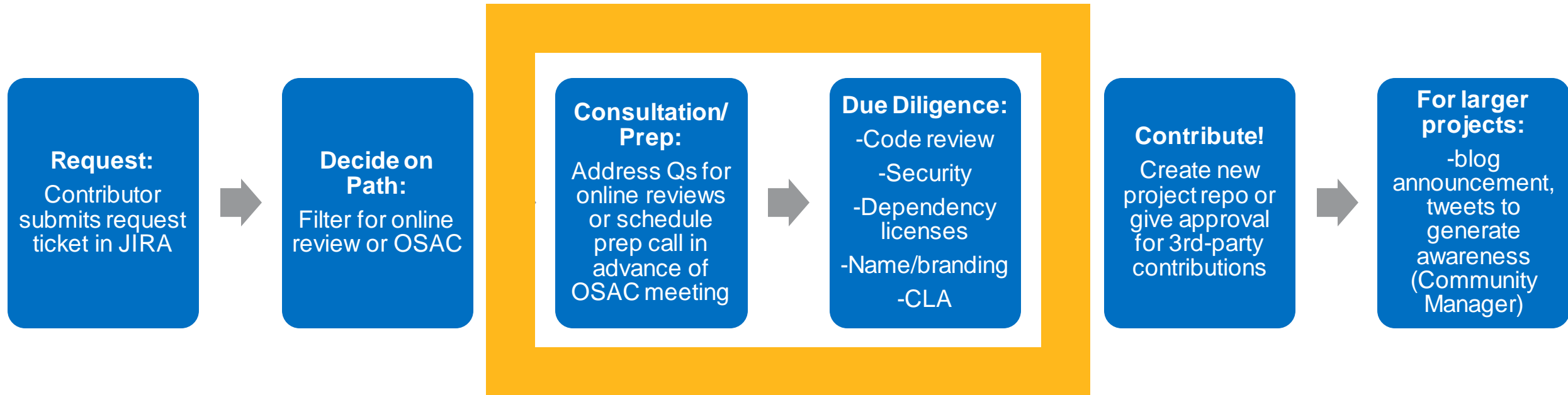


Members of Open Source Advisory Council

- OSPO
- Legal
- Strategic IP/Patents
- Engineering
- Security



Open Source Contribution Request Flow





Pre-Approval Checkpoints

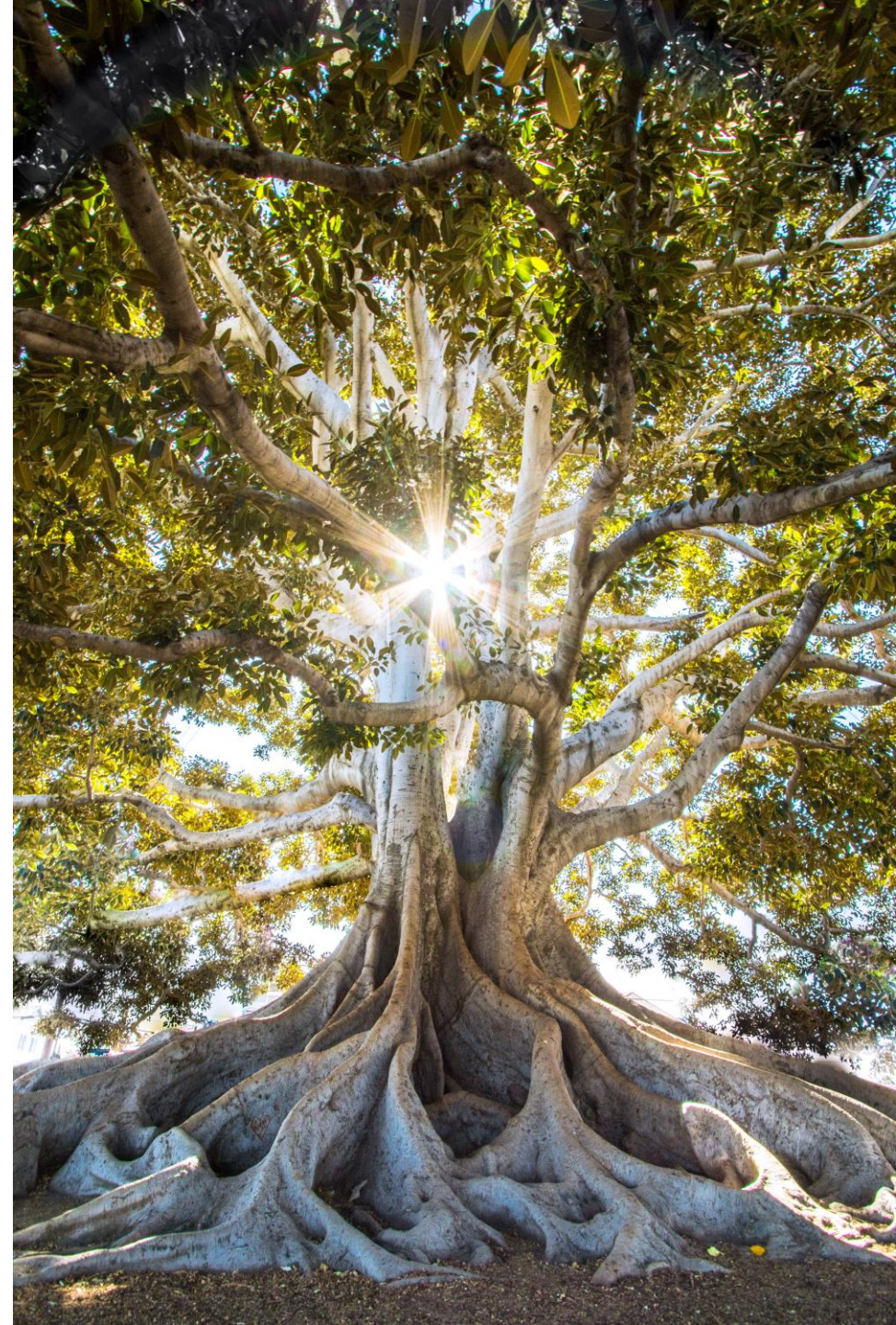
- ✓ Legal, Strategic IP – part of OSAC
- ✓ Security – code review part of OSAC; additional assessments as advised
- ✓ Compliance – dependency check and license scans
- ✓ Naming, branding/logo

Post-Approval Checkpoints

- ✓ Repo creation (Github management)
- ✓ Repo Linter from TODO Group

What's the ROI?

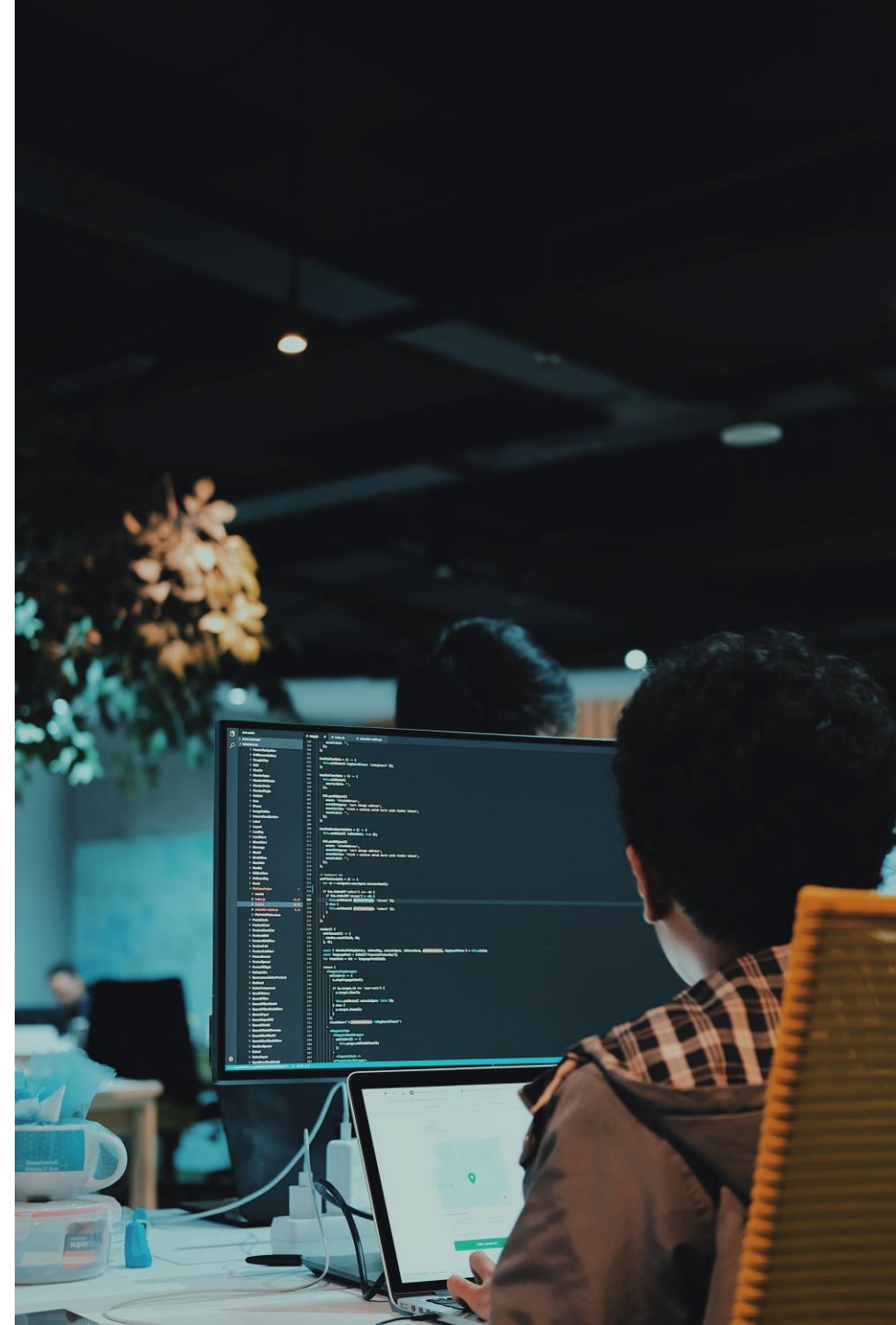
- ✓ Releasing secure code
- ✓ Complying with license obligations
- ✓ Fostering better ecosystem for scanning tools, machine readability for our projects





Where engineers can help...

- Catching projects at the beginning is great, but what about projects that have been out there for years?
- How do we know which projects need attention or need help with attracting contributors?
- Looking at compliance from multiple angles helps us play catch up



Invest in review

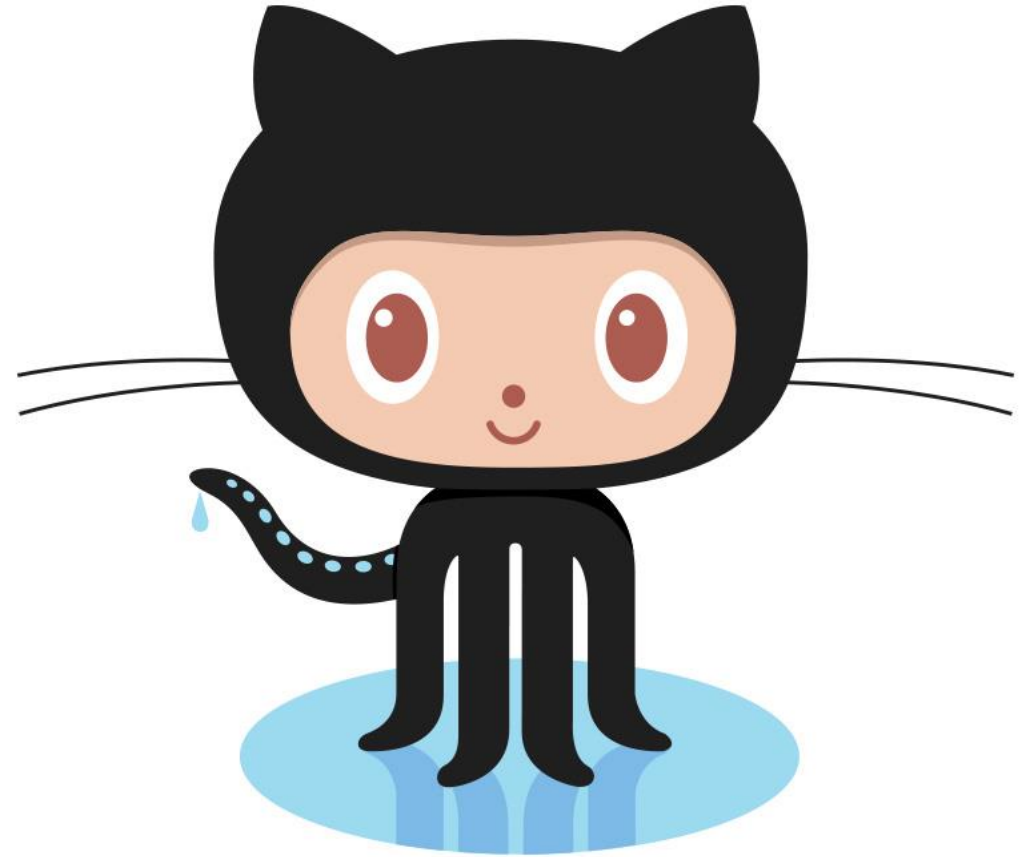
- Invest in review as a way to improve our relationship with the OS community and be a good corporate citizen
- Make sure we have the correct licenses on existing OS projects (code of conduct, etc.)
- Make sure internal projects are using the complying with our open source license policies





Metrics

- Which projects are we contributing to?
- Are people outside of Comcast contributing to our projects?
- Which developers are actively contributing to open source projects?
- Which Comcast projects have an active community?



Metrics

- Use to showcase our work and activity in open source to leadership
- Involvement in CHAOSS community
 - Presented our work at 2nd annual conference in Vancouver (co-located with the Open Source Summit)





Comcast

Comcast brings together the best in media and technology to create the world's best entertainment and online experiences

<https://comcast.github.io>

Repositories 224

People 383

Teams 82

Projects 0

Settings

Type: All ▾

Language: All ▾

Customize pinned repositories

New

parodus2ccsp

● C ★ 1 🍴 13 📄 Apache-2.0 Updated 31 minutes ago



parodus

The XMIDT client.

xmidt xmidt-client

● C ★ 11 🍴 22 📄 Apache-2.0 Updated 7 hours ago



webpa-common

The collection of small common packages for the webpa project.

caduceus scytale webpa talaria petasos xmidt

● Go ★ 20 🍴 12 📄 Apache-2.0 Updated 3 days ago



Bynar

Server remediation as a service

rust protobuf zeromq ceph

● Rust ★ 27 🍴 4 📄 Apache-2.0 1 issue needs help Updated 4 days ago



Top languages

● Go ● Java ● JavaScript ● C
● Python

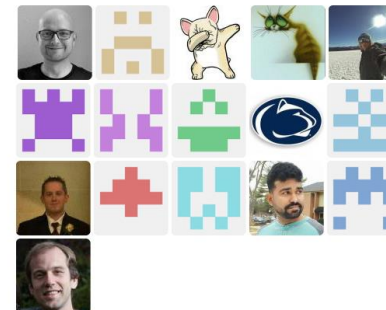
Most used topics

Manage

ospok webpa xmidt
javascript akamai

People

383 >



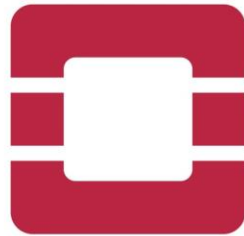
Invite someone



kubernetes



fluentd

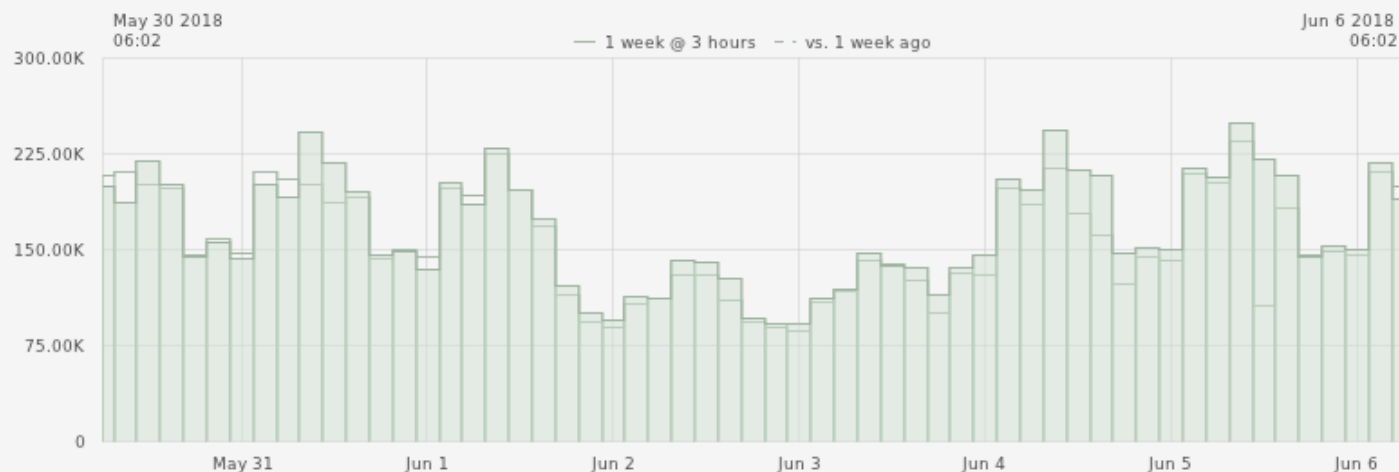


openstack®



Tools





Open-source developers all over the world are working on millions of projects: writing code & documentation, fixing & submitting bugs, and so forth. GH Archive is a project to **record** the public GitHub timeline, **archive it**, and **make it easily accessible** for further analysis.

GitHub provides [20+ event types](#), which range from new commits and fork events, to opening new tickets, commenting, and adding members to a project. These events are aggregated into hourly archives, which you can access with any HTTP client:

Query	Command
Activity for 1/1/2015 @ 3PM UTC	<code>wget http://data.gharchive.org/2015-01-01-15.json.gz</code>
Activity for 1/1/2015	<code>wget http://data.gharchive.org/2015-01-01-{0..23}.json.gz</code>
Activity for all of January 2015	<code>wget http://data.gharchive.org/2015-01-{01..30}-{0..23}.json.gz</code>

GitHub archives, git, GitHub API -> Postgres databases -> Grafana dashboards <https://k8s.devstats.cncf.io/>

githubarchive

postgres

kubernetes

prometheus

opentracing

fluentd

linkerd

grpc

postgres-database

grafana-dashboard

metrics

apache

rkt

cni

envoy

jaeger

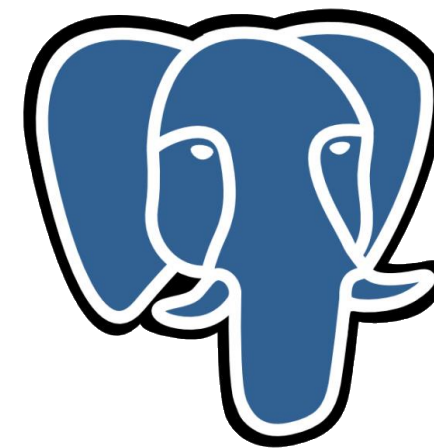
notary

cncf

statistics



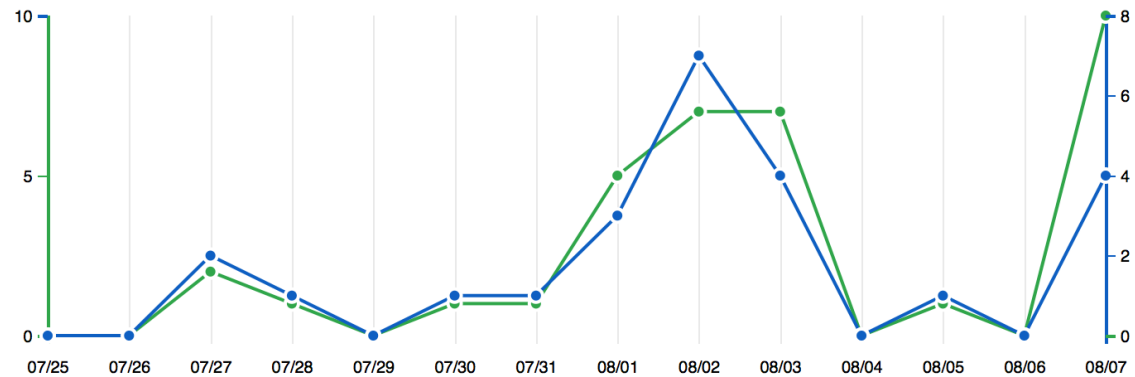
Grafana



PostgreSQL

[Pulse](#)[Contributors](#)[Community](#)[Traffic](#)[Commits](#)[Code frequency](#)[Dependency graph](#)[Network](#)[Forks](#)

Git clones



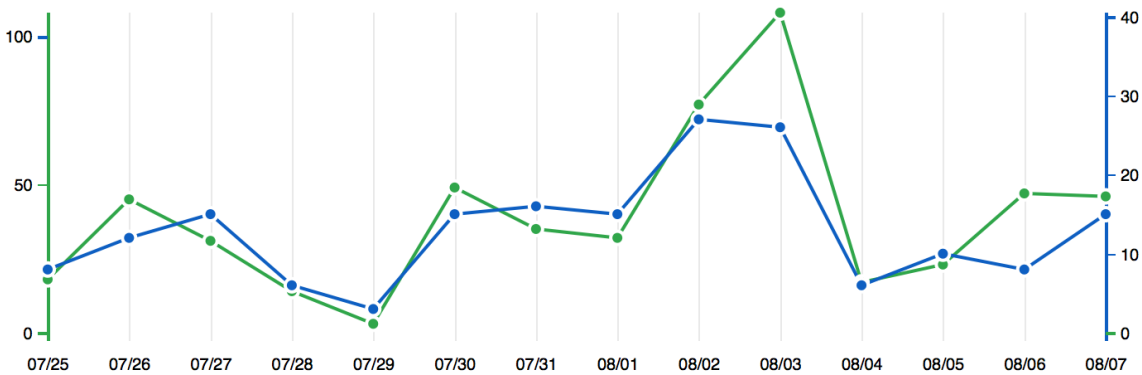
35

Clones

15

Unique cloners

Visitors



545

Views

139

Unique visitors

*influxdb*

 Code

 Issues 6

 Pull requests 1

 Projects 0

 Wiki

 Insights

Prometheus exporter for github metrics

[prometheus-exporter](#)

[metrics](#)

[prometheus](#)

[exporter](#)

[monitoring](#)

[github](#)

 50 commits

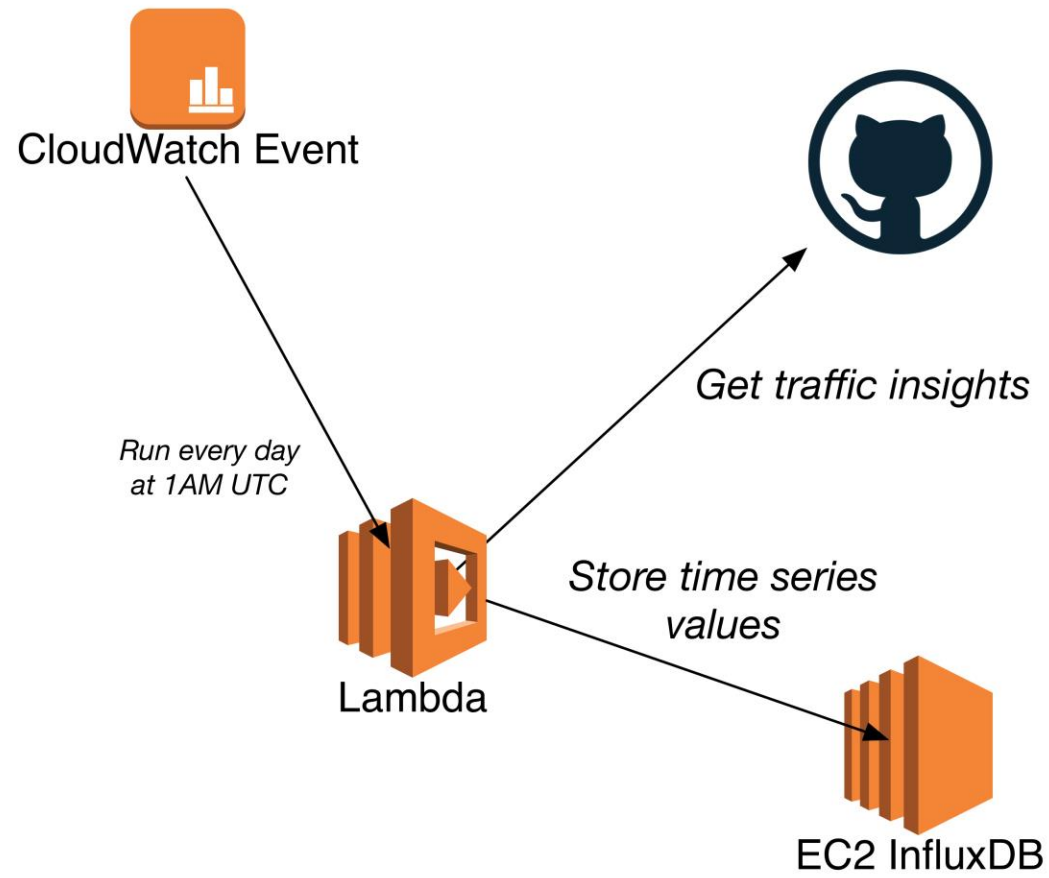
 3 branches

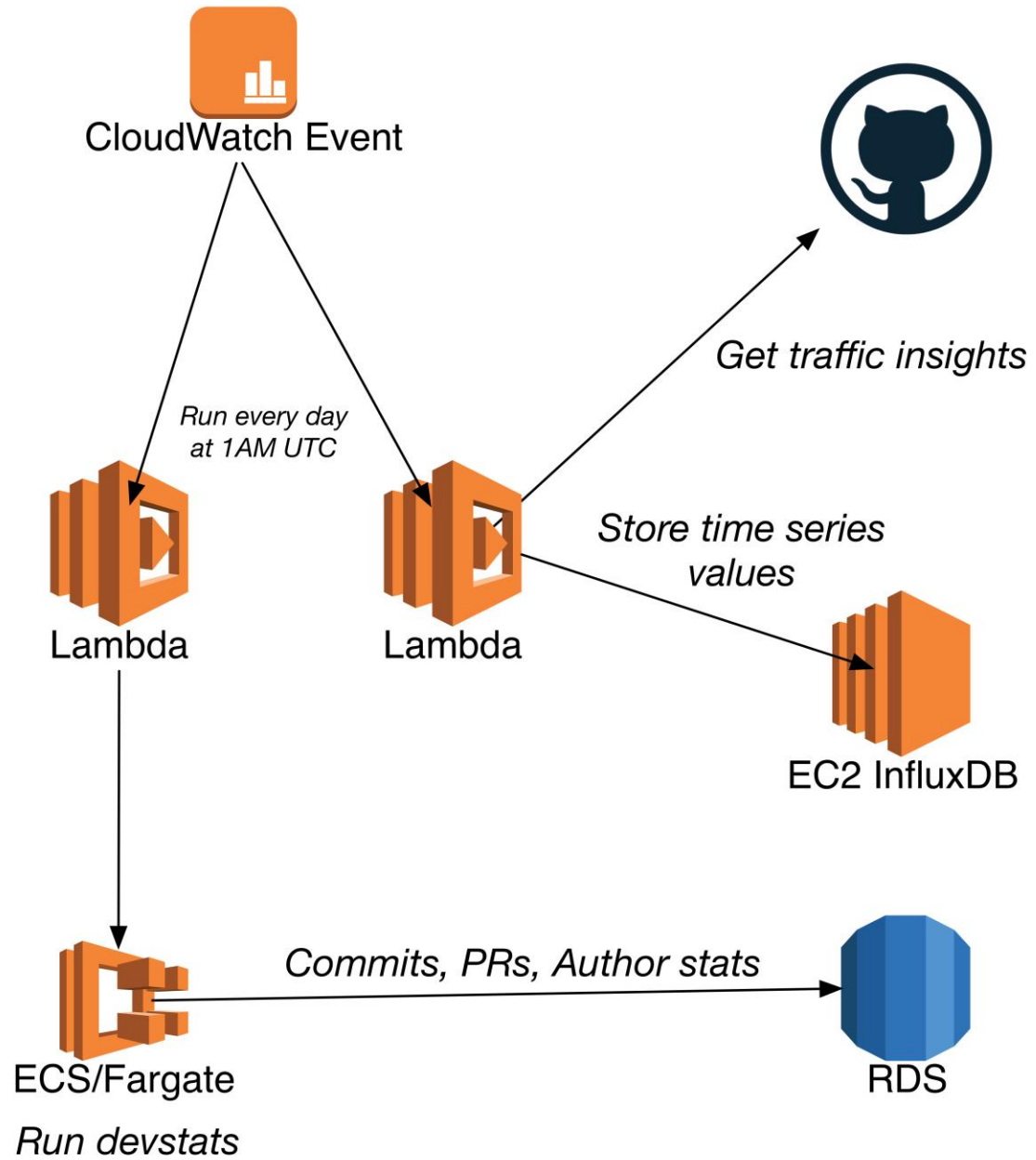
 4 releases

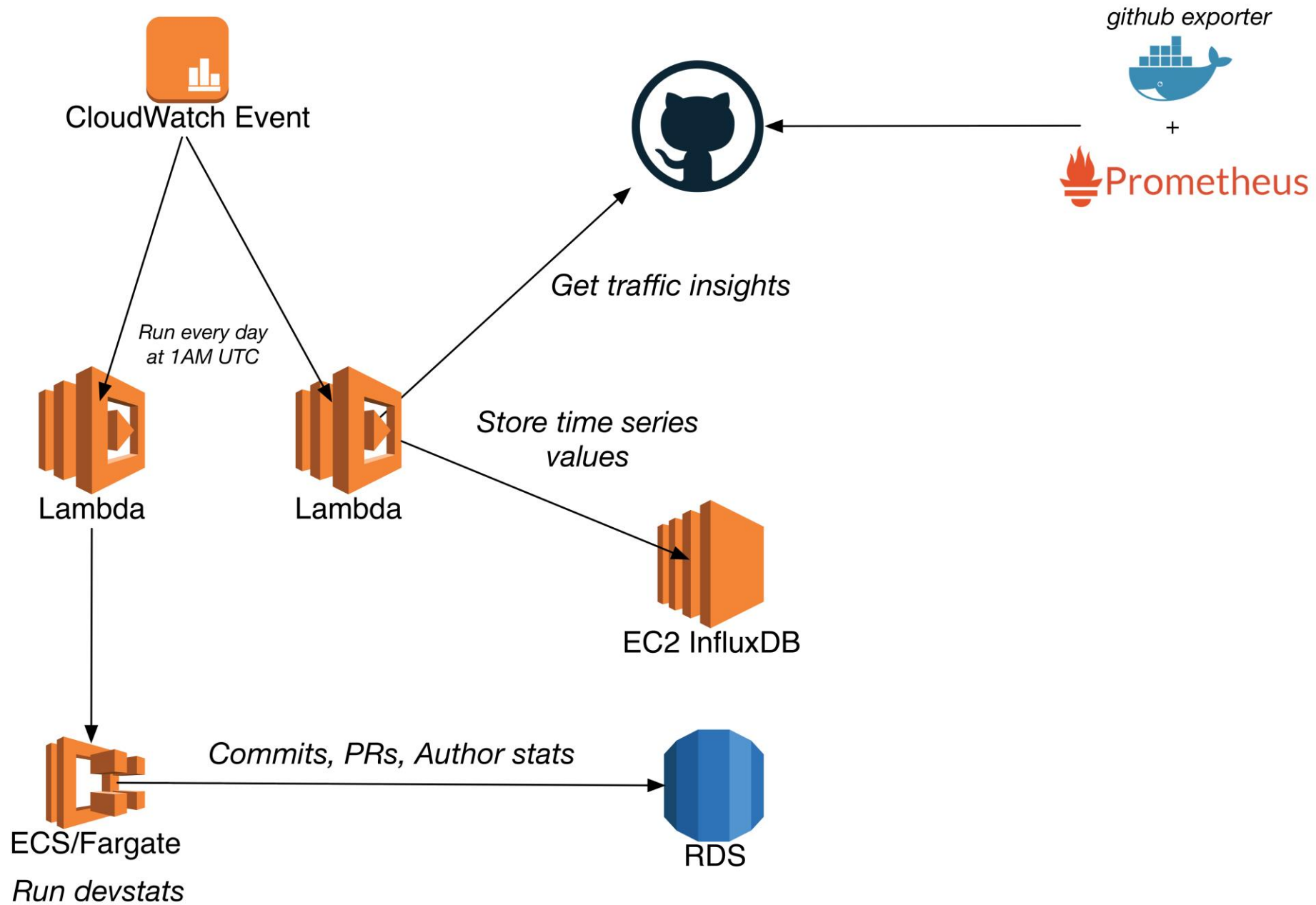
 9 contributors

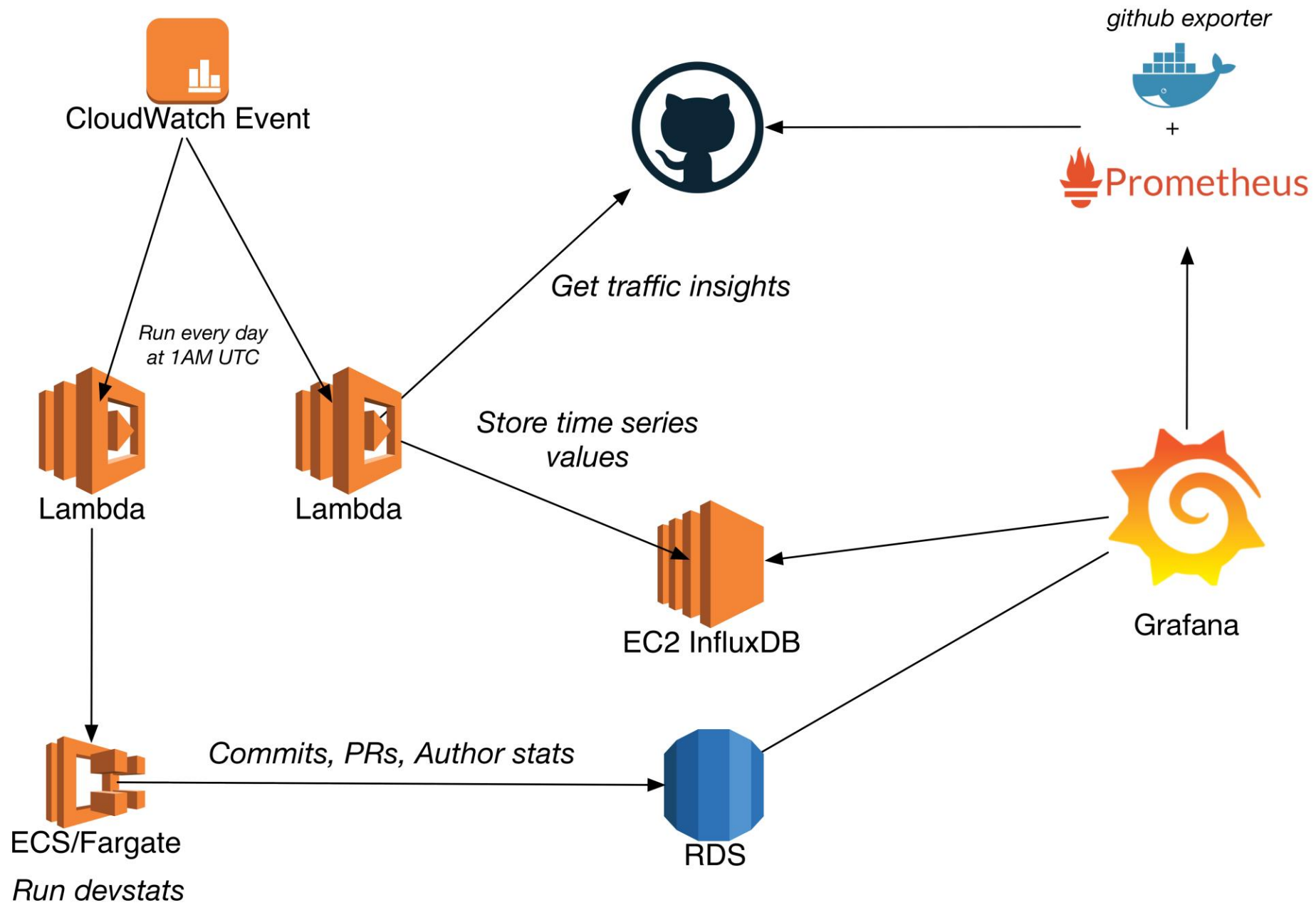
 MIT











Resources

- TODOgroup.org  TODO
- Repo Linter: <https://github.com/todogroup/repolinter>
- CHAOSS Community (Community Health Analytics Open Source Software): <https://chaoss.community>