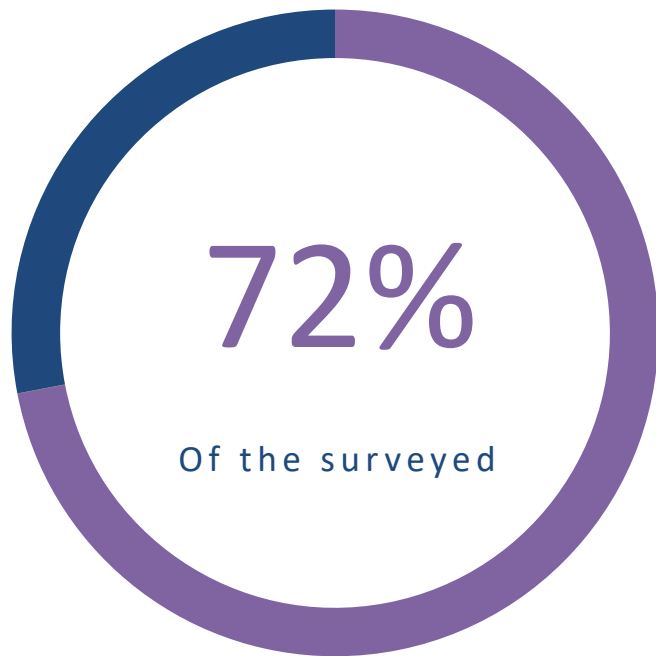


If you can't measure it, you can't manage it" – how to assess project health

Ivana Atanasova & Stefka Dimitrova
VMware Open Source Program Office

#osummit @vmwopensource

Abandoned Open Source Projects



Abandoned or
neglected a project
recently

Out of 1000 developers surveyed by the opensourcesurvey.io

Why?



Photo by [David Kovalenko](#) on [Unsplash](#)




Common Problems

- Key contributors have lost interest
- Not well maintained – Lack of time
- Legal Issues
- Strong competition
- Security concerns
- Conflicts



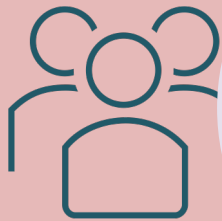
Photo by [Pandu Agus Wismoyo](#) on [Unsplash](#)



*"One thing about open source is
that even the failures contribute
to the next thing that comes up."*

Matt Mullenweg

Common Problems or Key Health Indicators



Governance



Contributor
risk



Diversity
and
Inclusion



Activity



Security

Governance

Key roles
should be
independent



Photo by [Headway](#) on [Unsplash](#)

#osummit #felc

Diversity & Inclusion

It does matter



Photo by [Clay Banks](#) on [Unsplash](#)

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Contributor risk



Activity



Frequency of
PR reviews



Responsiveness



Time to
address
issues



Last updated



Releases

Security

Frequency
matters



Photo by [Micah Williams](#) on [Unsplash](#)

Ready to Take Off...?



Photo by [Thomas Bormans](#) on [Unsplash](#)

...and to Keep the Course?

Health Metrics

- **Specific**
- **Measurable**
- **Attainable**
- **Relevant**
- **Time-based**



Photo by [Caleb Woods](#) on Unsplash

#ossumit #felc

Maintaining a Healthy Project

Balancing it All



Governance



Activity



Contributor
risk



Diversity of
community



Security



Photo by [Peggy Anke](#) on [Unsplash](#)

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On a Large Scale

OSPO Perspective



Photo by [Lubo Minar](#) on [Unsplash](#)

OSPO Perspective

Our survey



of OSPOs assess
health and health
metrics

How important are these project health indicators in assessing the overall health and risk of your projects?

1 (not important) 2 3 4 5 (very important)

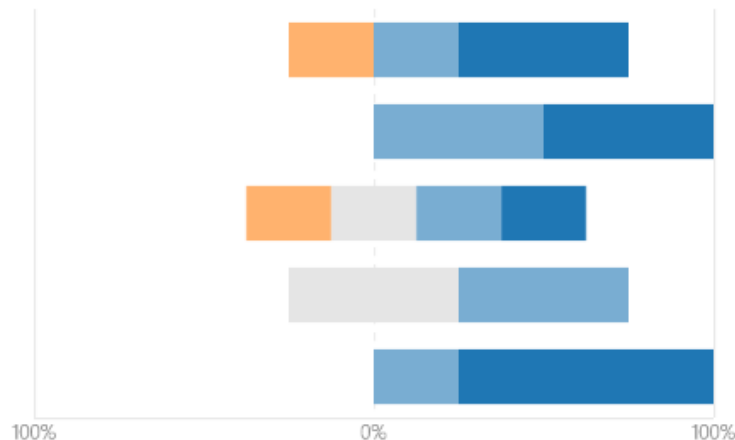
Contributor Risk (aka as "Bus Factor")

Actively Maintained (releases, updates, frequency of PRs)

Governance

Community Diversity and Inclusion

Security



Advisable Approach

Communication is a key

Archive Inactive Projects



Photo by [Brett Jordan](#) on [Unsplash](#)

Group by Common Criteria



Photo by [Vinicius Benedict](#) on [Unsplash](#)

Connect Maintainers

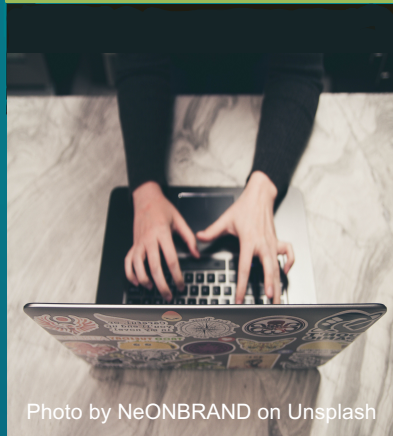


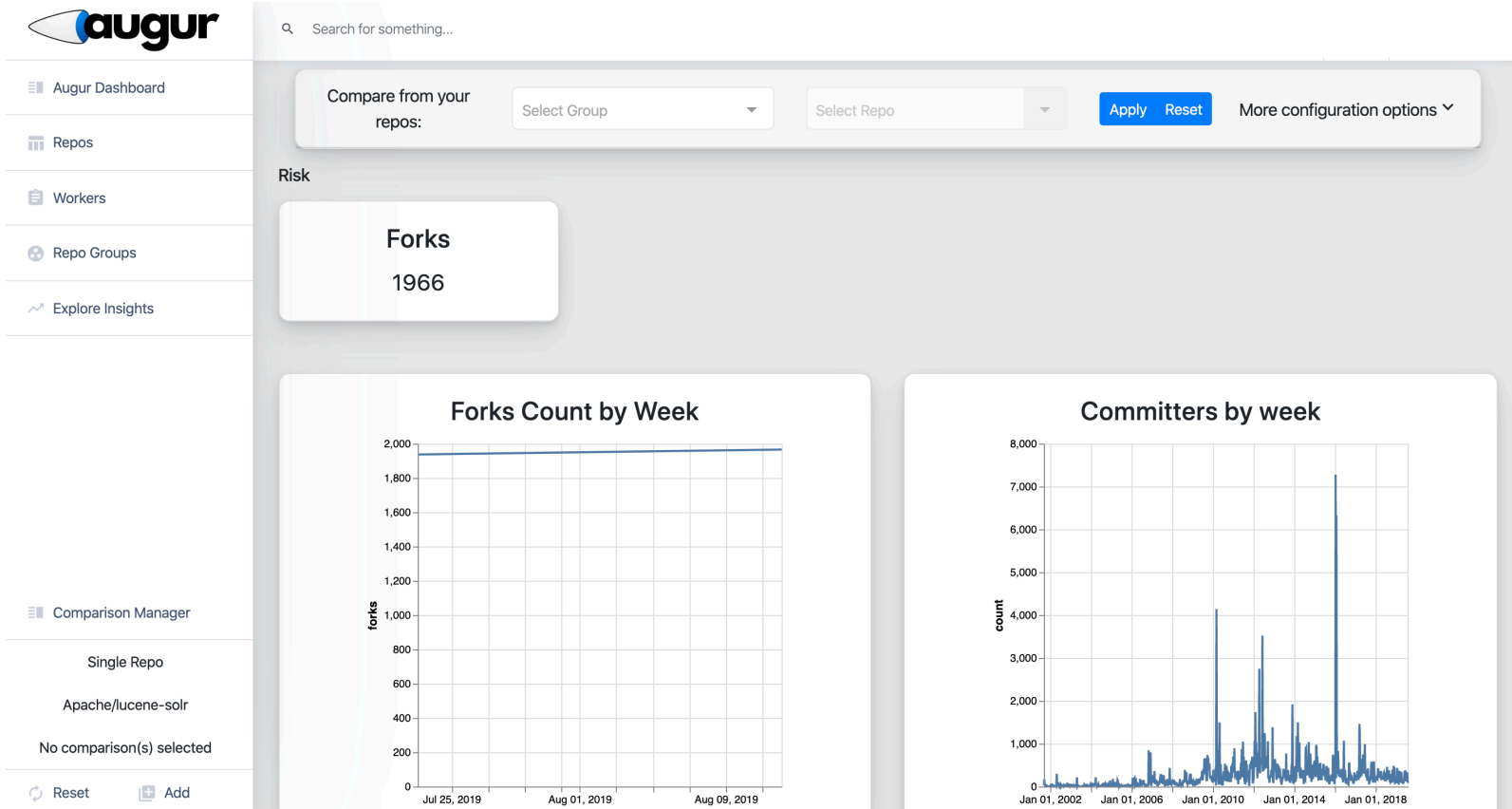
Photo by [NeONBRAND](#) on [Unsplash](#)

Use a Survey



Photo by [Lukas Blazek](#) on [Unsplash](#)

Monitoring - Augur Health Metrics



CHAOS



Other Options

Project Heath Monitoring Tools



GrimoireLab



Bitergia

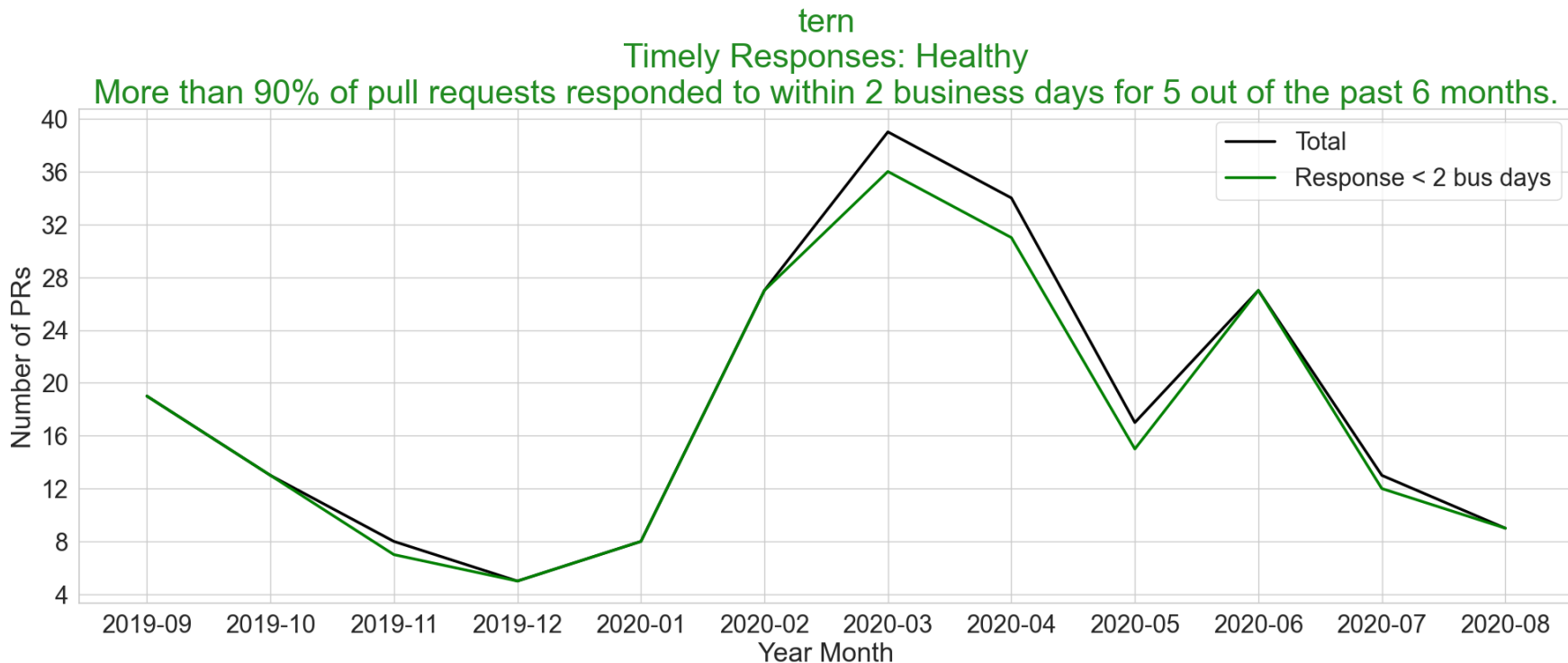


DevStats



Monitoring

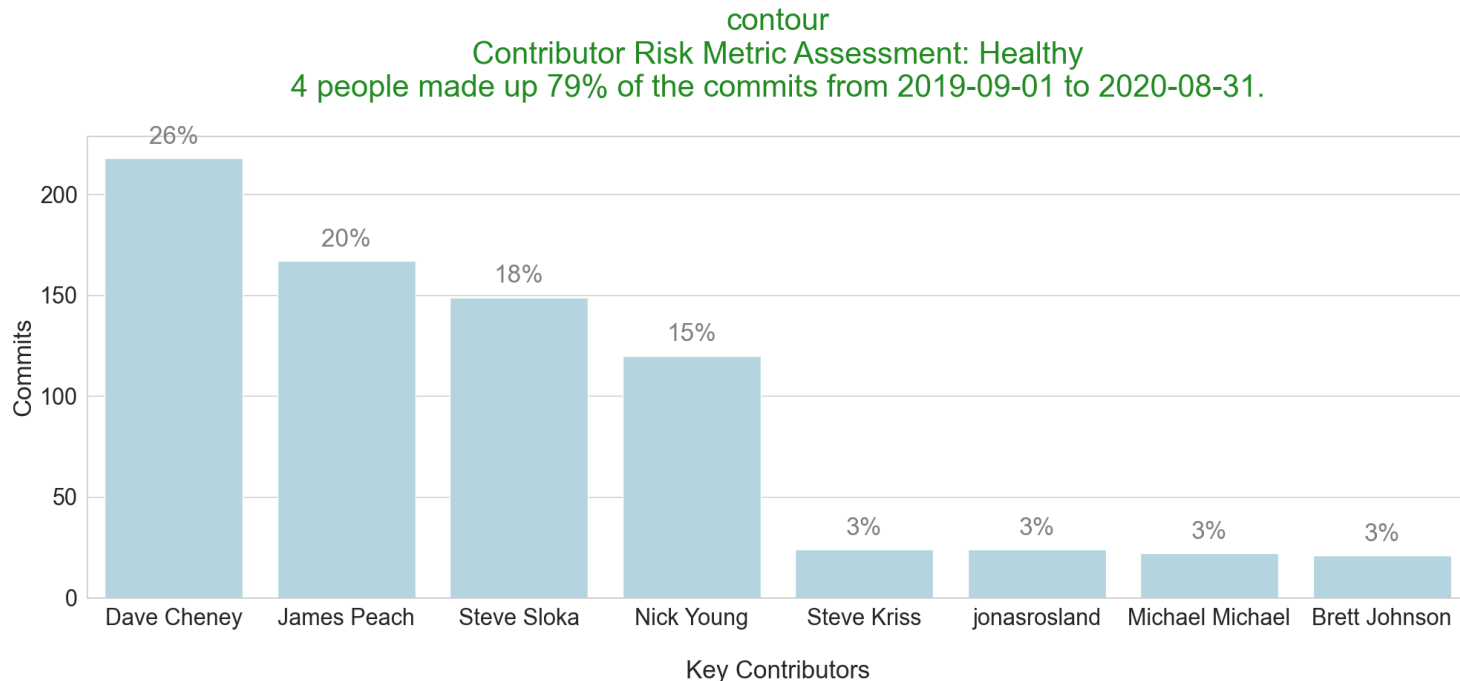
Responsiveness



Interpretation: Healthy projects will have little or no gap. A large or increasing gap requires attention.

Monitoring

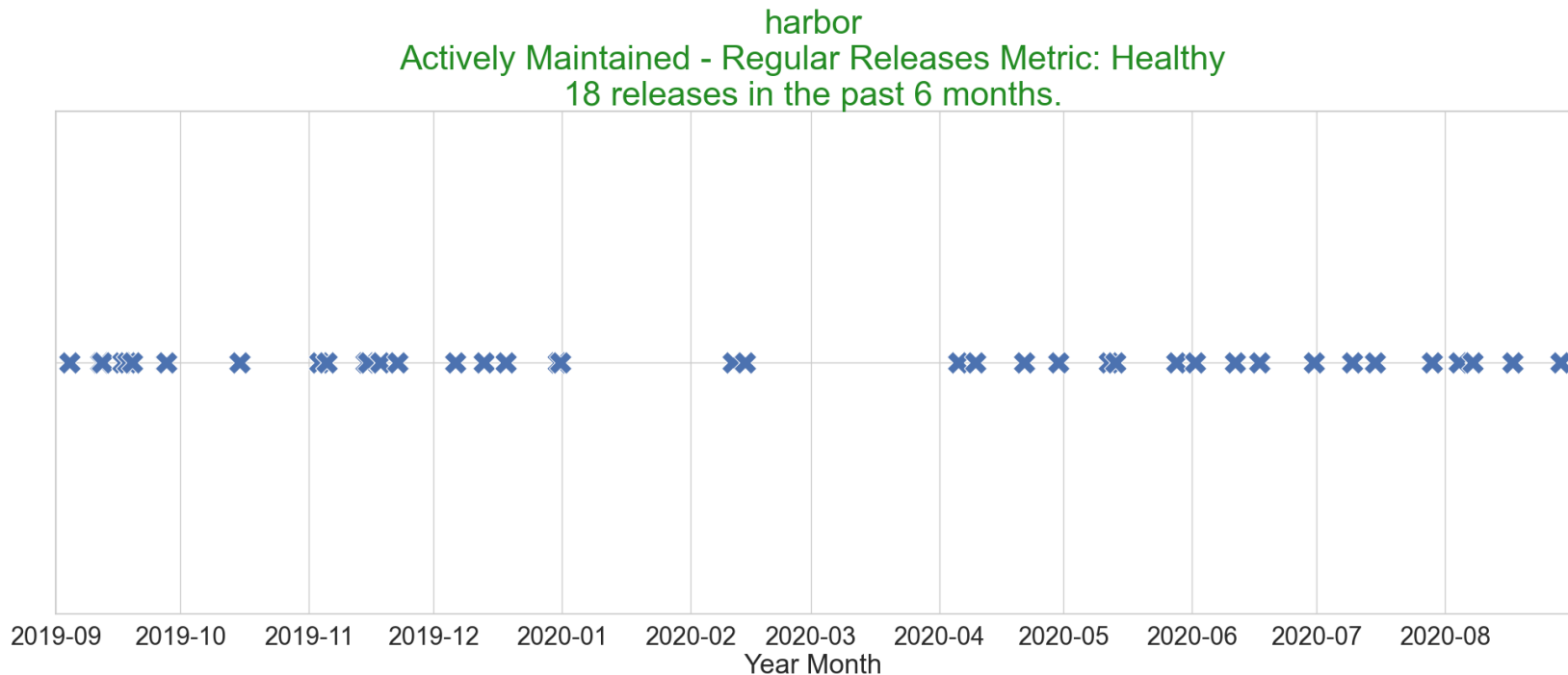
Contributor risk



A healthy project should have at a minimum 3 people who combined account for the majority (>70%) of the commits. The higher this number is, the more likely your project would succeed if a leading contributor suddenly left the project. Red bars indicate when less than 3 people have 70% of commits. Light blue for other contributors.

Monitoring

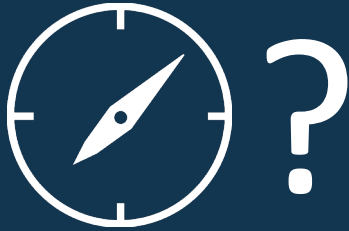
Regular releases



Interpretation: Healthy projects will have at least 5 releases in the past 6 months.

Prevention

Be proactive



Process



Maintaining



Guidelines

Do not over quantify the metrics

It's about people and community

76

74

72

7M

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66

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60

58

56

54

52

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Thank You!



<https://github.com/chaoss/augur>



@augurlabs



@vmwopensource



OPEN SOURCE SUMMIT
EUROPE

THE LINUX FOUNDATION