

# The road to 1000 contributors a month and beyond

What GitLab has learned from Drupal and what can Drupal potentially learn from GitLab



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# **Situation**

# Open Source is eating the world\*

\* The long-term benefits of sunscreen have been proven by scientists whereas the rest of my advice has no basis more reliable than my own meandering experience





# **Situation**

- Organizations need Open Source to compete\*
- Those who leverage open source "best" will win\*





<sup>\*</sup> The long-term benefits of sunscreen have been proven by scientists whereas the rest of my advice has no basis more reliable than my own meandering experience

Drupal & GitLab

**₩** GitLab

What are the differences & parallels?



## **About GitLab**

#### **COMPANY**





- As of August 30, 2022, GitLab had approximately 1,951 team members in over 60 countries.



#### **BROAD ADOPTION**

GitLab has an estimated 30 million+ users (both Paid and Free) from startups to global enterprises.



#### **STRONG PROJECT & COMMUNITY**

- First commit in 2011
- Open source core
- GitLab has a Community of 3611 contributors with merged MR's as of Aug 30, 2022



# **About Drupal**

Who Sponsors Drives Buytaert

Who Sponsors Drives

#### **COMPANIES**

- Acquia, founded by the founder of Drupal, but also Amazee, Pantheon etc..
- CI&T, EPAM, TATA, Publicis etc...



#### **BROAD ADOPTION**

Over 1,000,000 websites run on Drupal.

https://www.drupal.com/showcases



#### STRONG PROJECT & COMMUNITY

- Started in 2001
- More than 7,400 contributors & 1100 organizations as of the 25th of October 2021
- More than 48,707 modules to extend the functionalities of Drupal as of 28th of May 2022

https://www.drupal.org/blog/who-sponsors-drupal-development-2020 -2021-edition



# Things you might not know about GitLab



Photo by Kornél Máhl on Unsplash

#### All-remote

GitLab has been a 100% remote workforce since inception.

#### GitLab's Mission

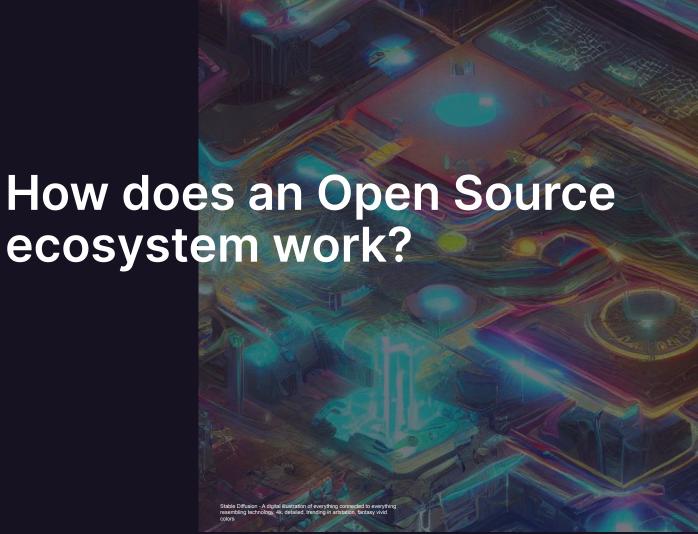
"Everyone Can Contribute" – GitLab encourages its wider community to contribute back to the product through code and feedback.











### As an individual?

"The very elements that made OSS so powerful for accelerating technology innovation and so attractive to developers and "problem-solving" engineers — transparency, rapid iteration, collaborative innovation — were characteristics that often concerned legal teams and went against the grain of traditional technology development strategy"

#### source:

https://linuxfoundation.org/wp-content/uploads/LFResearch\_OSPO\_Rep ort.pdf



Photo by Jametlene Reskp on Unsplash



Drupalcon Portland - Drupal Association - MAGNIFY PHOTO

# Change is the only constant

Incentive & Rewards?

**People** 



# As an organization?



Photo by Michael Afonso on Unsplash



Photo by Gerold Hinzen on Unsplash



Photo by Jen Theodore on Unsplash

Helps retain & attract top talent.

# Net competitive advantage

# Lower total cost of ownership



# Volunteer & Paid Positions

Remember - Free time is a privilege Want to read more?

https://dri.es/the-privilege-of-freetime-in-open-source







**₩** GitLab



# Answer

Move from **Consumers** of Open Source to **Contributors** 





**₩** GitLab

# Hold on! Who/what are we talking about?

# Measurable Actions or "Content & Editorial contributions"

- Developing
- Reviewing
- Merging / Releasing
- Reporting
- Commenting
- Reacting

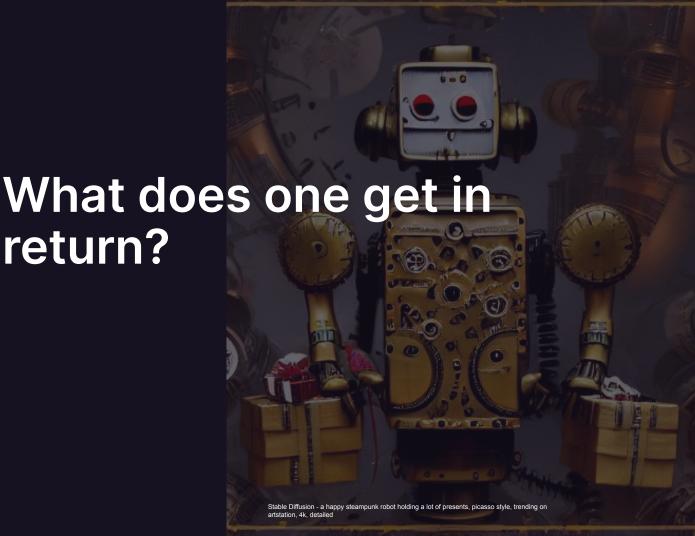
Source: https://link.springer.com/article/10.1007/s10664-021-10061-x

#### Hats to put on

- Event organiser/volunteer
- Community Working Groups
- Speaker
- Developer (all kinds of code)
- UX / Accessibility tester
- Writer
- QA Tester
- Core Developer
- Wider Community Interests?
   (Modules / non-core code)
- ...

GitLab

return?



### Rewards - GitLab







#### **Hackathon Prizes**

https://about.gitlab.com/community/hackath on/#prize

#### **GitLab Heroes program**

https://about.gitlab.com/community/heroes/

#### **Most Valuable Person**

https://about.gitlab.com/handbook/marketing/community-relations/code-contributor-program/#most-valuable-person-mvp



# **Rewards - Drupal**



Photo by Drupal Association by MAGNIFY

Top contributors get mentioned by project lead of Drupal during keynote & mention in blogpost



Organization gets higher in the marketplace ranking

У		Pate	ches 🕶	Files	
Dave Reid		5		none yet	ć
andregp at 0	CI&T	4		2	
✓ naxoc		4			
pratik_spec	bee at Specbee for Drupal India Associat	ion 1	1	1	
🗸 ravi.shanka	r at OpenSense Labs	1	1	1	
🗸 yogeshmpa	war at OPIN, A Converge Company	1	1	1	
marcingy		1	1		
StevenPatz		1	1		
🗸 amitgoyal		1	1		
Johnny Sant	tos at CI&T			2	
andypost					
Dries					

Both the individual, the organization and the client can get attributed & recognized publicly



## Rewards - less measurable

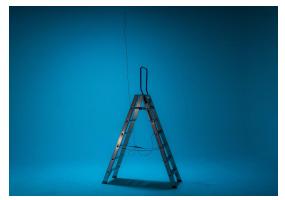


Photo by Jilbert Ebrahimi on Unsplash

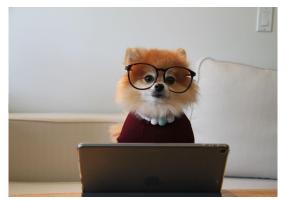


Photo by Cookie the Pom on Unsplash



https://www.drupal.org/project/drupal/issues/124969

Jump the career ladder faster

Learn skills otherwise difficult in your daily routine

More fulfilling



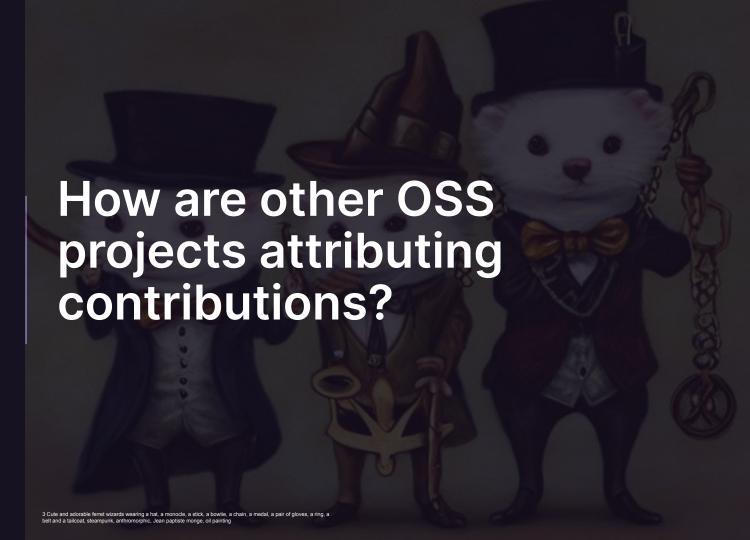
# Let's zoom in a bit

Picture taken by my wife at a Drupal Meetup in Malaysia (2014) during our personal holiday









# Wordpress

Wordpress, among other systems, uses "props" in their commit messages. They are discussing using more standardized commit messages. They derive the employer from profiles.wordpress.org

```
Code Modernization: Remove unused dynamic property in ...ages_Controller'.

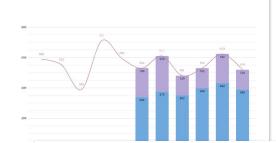
Dynamic (non-explicitly declared) properties are deprecate
In this case, it appears that the dynamically created 'sha
Follow-up (0 [38832], [53557], [53558], [53850], [53851],
Props jrf, antonvlasenko.
See #56033.
git-svn-id: https://develop.svn.wordpress.org/trunk@53945
```

#### **WordPress 6.0 Overall Stats**

519 people from at least 53 countries and 134 identified companies contributed to WordPress 6.0.

Worth noting that 129 people contributed to WordPress Core for the very first time! That's around 25% of the total number of contributors.

The ratio of new contributors is a bit lower than in previous releases, but it still represents quite a good onboarding ratio for an open-source project.



Company ranking by contributions

Automattic is still the most prolific company with employees credited in no less than 1483 contributions (by 70 contributors), and is followed by plugin editor **Yoast** with 596 contributions (by 10 contributors) and **Whodunit** French agency (250 contributions). Next, we have **GoDaddy** (210), international WordPress agencies like **10up** (152) and **XWP** (75), a freelancer (!) **Advies en zo** (58), and **Human Made** (46).

Jean Baptise Audras, WordPress Core Committer. source of overall stats picture & company ranking: https://jeanbaptisteaudras.com/en/2022/05/wp-6-0-arturo-contribution-stats/



Overall

## Linux

Linux uses commit message conventions to attribute reviewers, suggesters, responsible authors & co-authors. They derive employers based on email address domain

net: st	mmac: work around sporadic tx issue on link-up
This is	a follow-up to the discussion in [0]. It seems to me that
at leas	t the IP version used on Amlogic SoC's sometimes has a problem
	ster MAC_CTRL_REG is written whilst the chip is still processing
	ous write. But that's just a guess.
	a delay between two writes to this register helps, but we can
	mply omit the offending second write. This patch uses the second
	h and is based on a suggestion from Qi Duan.
	of this approach is that we can save few register writes, also
on not	affected chip versions.
[0] ht	ps://www.spinics.net/lists/netdev/msg831526.html
Fixes:	bfab27a ("stmmac: add the experimental PCI support")
Suggest	ed-by: Qi Duan <qi.duan@amlogic.com></qi.duan@amlogic.com>
Suggest	ed-by: Jerome Brunet <jbrunet@baylibre.com></jbrunet@baylibre.com>
Signed-	off-by: Heiner Kallweit <hkallweit1@gmail.com></hkallweit1@gmail.com>
Link:	ttps://lore.kernel.org/r/e99857ce-bd90-5093-ca8c-8cd480b5a0a2@gmail.co
Signed-	off-by: Jakub Kicinski <kuba@kernel.org></kuba@kernel.org>

75		active 5	5.16 developers			
By changes	ets		By cna	inged lines		
Michael Straube	286	2.0%	Ping-Ke Shih	91116	11.4%	
Cai Huoqing	232	1.6%	Zhan Liu	34501	4.3%	
Jakub Kicinski	200	1.4%	Nick Terrell	28611	3.6%	
Christoph Hellwig	158	1.1%	Sameer Puiar	15121	1.9%	
Bart Van Assche	157	1.1%	Je	Te	st and review	credits in 5.16
Krzysztof Kozlowski	140	1.0%	Т	Tested-by		Revie

#### Top signoffs in 5.16

122 0.9%

Krzysztof Kozlowski

Pavel Begunkov

Mauro Carvalho Chehab 130 0.9%

David S. Miller	1082	7.8%
Greg Kroah-Hartman	1062	7.6%
Mark Brown	558	4.0%
Alex Deucher	472	3.4%
Jens Axboe	442	3.2%
Andrew Morton	400	2.9%
Martin K. Petersen	353	2.5%
Jakub Kicinski	325	2.3%

Work on 5.16 was supported by 251 employers that we were able to identify. The most active of those were:

202 3.2%

194 3.0%

119 1.9%

100 1.6%

83 1.3%

Reviewed-by

Pierre-Louis Bossart 104 1.6%

Christoph Hellwig

Rob Herring

Hans de Goede

Stephen Boyd

David Howells

David Storba

		st active :	5.16 employers		
By change	sets		By line	es changed	
Intel	1454	10.2%	Realtek	97237	12.2%
(Unknown)	1196	8.4%	Intel	72565	9.1%
Google	932	6.6%	AMD	67076	8.4%
(None)	781	5.5%	Facebook	50894	6.4%
Red Hat	765	5.4%	(Unknown)	43152	5.4%
AMD	682	4.8%	(None)	40389	5.0%
Facebook	641	4.5%	Linaro	39428	4.9%
Linaro	592	4.2%	NVIDIA	38898	4.9%
NVIDIA	463	3.3%	Google	35871	4.5%
Huawei Technologies	422	3.0%	Red Hat	23312	2.9%

source of Linux contribution statistics above, by Jonathan Corbet from https://lwn.net/Articles/880699/

source of Linux commit message on the left https://github.com/torvalds/linux/commit/a3a57bf07de23fe1ff779e0fdf71 0aa581c3ff73

Daniel Wheeler

Tony Brelinski

Gurucharan G

Deren Wu

Sandeep Penigalapati

153 14.8%

34 3.3%

24 2.3%

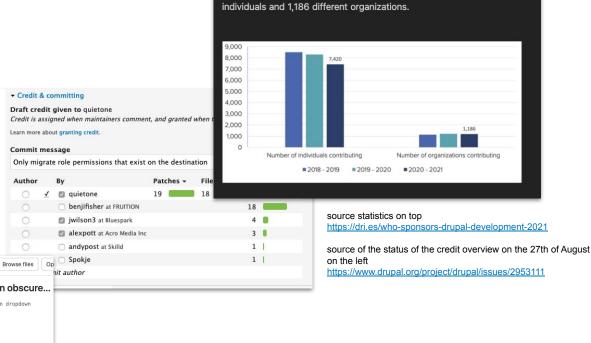
22 2.1%



# **Drupal**

Drupal uses its own credit system, it does not analyze the git commits afterwards as it recognizes resolved non-git committable issues in to the same system (non-code contributions)

Unverified Commit 61e632d3 🛱 authored 6 days ago by 🤷 lauriii



In the 12-month period between July 1, 2020 and June 30, 2021, Drupal.org's credit system received contributions from 7,420 different



source of the Drupal Git Commit on the left

https://git.drupalcode.org/project/drupal/-/commit/61e632d3a1ca3d232c 966aac9c87658c7585d53d



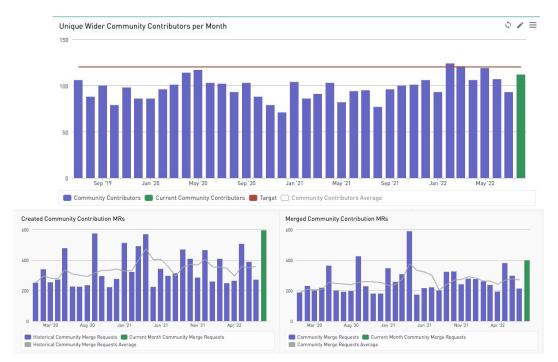
## **GitLab**

GitLab looks at the author of a merged merge request

Commit 4319499f 👸 authored 3 hours ago by 🌑 Max Orefice 🕆 Committed by Grzegorz Bizon 3 hours ago

#### Read stage from ActiveRecord CI::Stage model

This commits is the first step toward dropping ci\_builds.stage column. We are now adding an association to a build a reading through ci\_stages to display build stage data.







# What draws contributors to GitLab?

Creating a best-in-breed Contribution experience

Cute and adorable orange tanuki, wearing coat and suit, steampunk, forest scene, abundant growth and moss, Jean paptiste monge, oil painting

# **Events for Contributors**

- Quarterly Hackathons
- Meetups (Virtual & In-person)
- Community Office Hours
- GitLab Commit & Heroes
   Summit

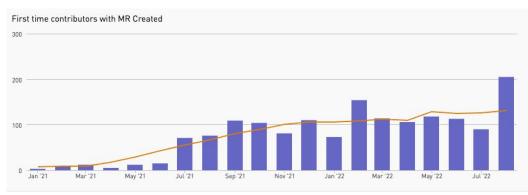


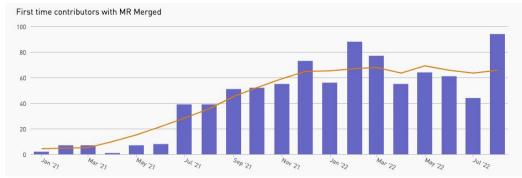


# **Metrics & learnings**

Hackathon in August brought in 396 Merge Requests. 260 of those were merged. 65 unique contributors were attributed to the hackathon, 45 of those got their MR merged in that month.

Only few stay and become recurring contributors. We learned that <u>once people cross</u> the threshold of 10 MRs, they tend to stay







#### **Future initiatives**

#### **Faster innovation**

GitLab launched a new initiative called <u>Leading</u> <u>Organizations</u>. These are recurring contributing organizations or individuals who have more than 20 MRs merged in the last 3 completed trailing months. These people get exclusive access to a review-time SLO of 4 working days.

#### **Faster communication**

Work to expand on existing communications channels, which include GitLab team members using Slack, bridge with Gitter, Community run Discord, ....



## **Contribution Credits System in GitLab**

- Apr 7, 2021 <u>Issue</u> created on Gitlab.com
- Oct 18, 2021 <u>Received broader GitLab interest</u>
- Nov 30, 2021 Opportunity Canvas exercise made major progress
- May 12, 2022 A mockup for a Drupal Credit Bot was <u>created & proposed</u>
- June 22, 2022 Exploration with merge requests templates started for the GitLab project
- June 22, 2022 cbacharakis & myself are the DRI (<u>Directly Responsible Individuals</u>)
- July 18, 2022 We made some <u>scope decisions</u>
- July 27, 2022 <u>Developer Certificate of Origin (DCO) got approval to be worked on</u>

One thing this was not, is an <u>atomic iteration</u>. I'd love to change that.

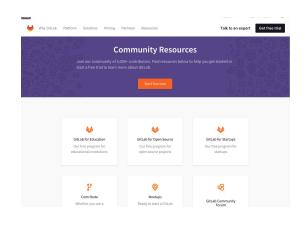


#### What now?

- We have the following subtasks open. You can help!
  - As a user I want the organizational affiliations listed in my profile to be automatically linked to those organizations' namespaces on GitLab
  - Allow to choose email used by merge commit
    - Make committer email be configurable for groups or projects
  - As a user with multiple commit emails I want to add the name of the organization to the emails listed so that we can link attributions to the respective organizations & it's namespace.
  - As a contributor to an OSS project I want to be able to state whether I'm contributing as a volunteer, on behalf of my organization or a client
  - As a user with multiple emails & linked organizations to these emails, I want this list of organizations to appear in my public profile.
  - As an organization attempting to increase collaboration on projects, I want some way to better understand who is contributing to my projects on GitLab so I can work more effectively with those stakeholders



## How to get in touch - GitLab



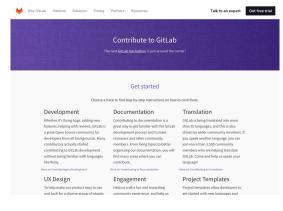




Photo by Volodymyr Hryshchenko on Unsplash

#### **Our community resources**

https://about.gitlab.com/community/

#### How to contribute

https://about.gitlab.com/community/contribute/

#### Community

Join the community at Gitter & (unofficial) Discord https://gitter.im/gitlab/contributors



# Where to get help from? - GitLab

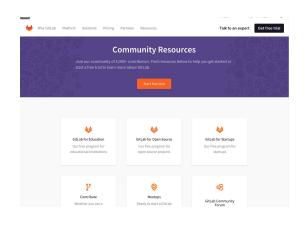






Photo by Juan Davila on Unsplash

#### **Community Relations team**

https://about.gitlab.com/handbook/marketing/community-relations/

#### **Contributor Success team**

https://gitlab.com/gitlab-com/quality/contributor-success

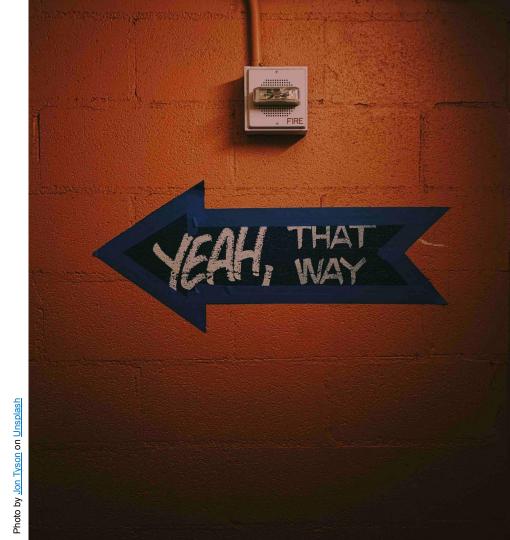
#### **Core Team**

https://about.gitlab.com/community/c
ore-team/



# **MR Coaches**

https://about.gitlab.com/job-familie s/expert/merge-request-coach/







The One DevOps Platform

# Thank you!