An introduction to MariaDB contributions

Andrew (LinuxJedi) Hutchings
Chief Contributions Officer
MariaDB Foundation

@LinuxJedi

FOSDEM 2023
All the MariaDBs

- Server
- Corporation
- Foundation
Introduction

● Chief Contributions Officer
● Pillars of MariaDB Foundation
  ○ Openness
  ○ Adoption
  ○ Continuity
Continuity

- Make all kind of contributions easier
  - Reduce open/close PR time
  - Not at cost of quality and communications
Openness

- Create and publish metrics
Adoption

- Work with communities to improve MariaDB for them
Types of Contributions

- Code
- Funding
- Documentation
- Community
- Translations
- Usage / bug reports / feature requests
Non-code contributions

- I am going to be focusing on code contributions, but...
- Intel in particular make some great non-code contributions
- There will always be things you can help with, even if you can’t code
Why Contributions Are Important

- Much more diverse input from a range of life experiences
- Project direction the way users want, not led by one company
- Fixing things that are important to you
- Building a real community around the project
Drizzle Anecdote

Fo’ Drizzle
Drizzle Anecdote

2009: Goal of 50% of contributors outside of Sun
2010: 100% contributors outside Sun

(Oracle acquired it and fired the entire Drizzle development team)
Drizzle Anecdote - The point

- MariaDB Server has more external contributors than internal
- 2022:
  - 36 from MariaDB Corporation
  - 8 from MariaDB Foundation
  - 68 elsewhere
- Similar statistics from 2019
- “Something” happened in 2020 and the statistics dipped
- Although most contributions still come from MariaDB Corporation
## Contribution Stats 2022

<table>
<thead>
<tr>
<th>Entity</th>
<th>Hackers</th>
<th>Commits</th>
<th>Lines Added / Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MariaDB Corporation</td>
<td>36</td>
<td>1810</td>
<td>445906 / 311357</td>
</tr>
<tr>
<td>MariaDB Foundation</td>
<td>8</td>
<td>179</td>
<td>20368 / 15221</td>
</tr>
<tr>
<td>Other</td>
<td>68</td>
<td>206</td>
<td>18381 / 9603</td>
</tr>
</tbody>
</table>
Pull Request Stats 2022

An introduction to MariaDB contributions
@LinuxJedi
Metrics Future

- Breakdown of commit contributions by module / engine
- Average time to merge on pull requests (median and mean)
- Buildbot contribution metrics
- More community metrics
- What do you want to see? Contact us!
How to Contribute Code

- I’ve written a blog post on this which you should check out
- There are some basic steps to follow
  - It helps reduce the round trip time during review
  - Or rejecting things we could never accept
Contributing Code Step 1
Communication

- Talk to us, we can guide you, help you out with every step
- MariaDB team are approachable, via Jira and Zulip preferably
- In particular Vicentiu, Daniel or me at the Foundation
- Tell us what you want to work on
- If you don’t know, take a look at the “beginner-friendly” tag on Jira
  - We can talk you through these
- If there is no Jira ticket yet, open one
Contributing Code Step 2

Hacking

- Write some code
- Against the oldest affected release for bug fixes
- Against the newest development version for features
- Please stick to the same coding standards as the surrounding code
- Make sure to add tests
- Run the mtr test suite locally to make sure nothing is broken
- If it is a feature, write some rough documentation in the Jira ticket
Contributing Code Step 3
Pull Request

● A form will pop up, filling this in will help us triage the pull request and figure out the intention easier
● If this is your first time, the CLA assistant will pop-up
  ○ Alternatively offer it under the 3-Clause BSD license
● Buildbot will report some of the builders directly to GitHub, check for failed ones
Contributing Code Step 4
Code Review

- MariaDB engineers will review the code and give feedback and advice
- If we think the code is ready, we will approve and merge it
- Community members are also welcome to review and comment on code (another way to contribute)
- If we are taking time getting to your pull request or drop the ball, tag me (@LinuxJedi) in it
- We have a large backlog right now and it is easy to miss things
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Twitter</strong></td>
<td>@LinuxJedi</td>
</tr>
<tr>
<td><strong>Mastodon</strong></td>
<td>@<a href="mailto:LinuxJedi@fosstodon.org">LinuxJedi@fosstodon.org</a></td>
</tr>
<tr>
<td><strong>Email</strong></td>
<td><a href="mailto:andrew@mariadb.org">andrew@mariadb.org</a></td>
</tr>
</tbody>
</table>