Heptapod

Georges Racinet

Octobus, https://octobus.net

Mercurial Conference – Paris 2019, Hosting mini track

- This presentation:
  - slides: https://slides.racinet.fr/2019/hg-paris
  - source: https://dev.heptapod.net/slides/2019-hg-paris

- Heptapod:
  - Docker: https://hub.docker.com/r/octobus/heptapod
  - source: https://dev.heptapod.net/heptapod
What is Heptapod?

Heptapod = GitLab CE + Mercurial

A friendly fork
Excellent relationship with GitLab
Featuring modern Mercurial workflows: evolve, topic
One should never have to force-push
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Heptapod history

- First commit: November 2017
- First prototype: December 2017
- February 2018: demo to GitLab developers at FOSDEM
- Blog post: September 2018
- Fully self hosted: April 2019
- Official Docker images: April 2019
Topics in Heptapod

Reminder: *topics*
Topics

- are lightweight short-lived branches
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- disappear upon *publication* of their changesets
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while *named* (classical) Mercurial branches are...
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- disappear upon *publication* of their changesets
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while *named* (classical) Mercurial branches are...

- permanent
- global
- suited for support branches, stable/default etc
From GitLab point of view, both topics and named branches are... just branches.
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GitLab branch mappings:
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GitLab branch mappings:

<table>
<thead>
<tr>
<th>named branch</th>
<th>branch/BRANCH_NAME</th>
</tr>
</thead>
</table>
From GitLab point of view, both topics and named branches are... just branches.

GitLab branch mappings:

- **named branch**: `branch/BRANCH_NAME`
- **topic**: `topic/TARGET_BRANCH_NAME/TOPIC_NAME`
Topics in Heptapod

Topic examples

- branch/default/my-cool-feature
- branch/stable/fix435
- branch/1.0.x/fix435
Topics and Merge Requests

- Creation, diff, review, discussions: just normal GitLab
- Merge: rebase + publish
time for a live demo...
Heptapod now
Don’t call it a prototype any more

Many stabilisation actions in 2019:
- Better concurrency support
- More streamlined Docker deployment
- Yet, still internally based on hg-git

Self hosted
In regular use at Octobus and some of our partners
Support available through Octobus
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Support available through Octobus
Current developments
On the current code base

- Stabilisation/publication of Gitlab CI currently running at Logilab
- Work on importing large projects
- Finer permission control (publication)
- Basic documentation (install instructions)
Caveats

Not a prototype, yet still...

- no SSH support
- forking is disabled
- no Git support (!)
- base GitLab version now quite old

Some of these will be solved on the current code base according to needs, but in the long run we better jump to...
Hg + Gitaly

- Gitaly: abstraction layer for internal Git access
- Development of a Mercurial version
- No more hg-git
- much faster
- catching up onto current GitLab
How you can help

Contributing
- code
- documentation
- bug reports

Sponsoring
- missing features on the current version
- long term developments
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- Sponsoring
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Current sponsors

- Octobus
- Notile
- Logilab https://logilab.fr
- Pythonian https://pythonian.fr
Any questions?