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

What is Heptapod ?

Heptapod = GitLab CE + Mercurial

- A friendly fork

What is Heptapod ?

Heptapod = GitLab CE + Mercurial

- A friendly fork
- Excellent relationship with GitLab

What is Heptapod ?

Heptapod = GitLab CE + Mercurial

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

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 in Heptapod

Reminder: *topics*

Topics

- are lightweight short-lived branches

Topics in Heptapod

Reminder: *topics*

Topics

- are lightweight short-lived branches
- disappear upon *publication* of their changesets

Topics in Heptapod

Reminder: *topics*

Topics

- are lightweight short-lived branches
- disappear upon *publication* of their changesets
- suited for features or bugfixes

Topics in Heptapod

Reminder: *topics*

Topics

- are lightweight short-lived branches
- disappear upon *publication* of their changesets
- suited for features or bugfixes

while *named* (classical) Mercurial branches are...

Topics in Heptapod

Reminder: *topics*

Topics

- are lightweight short-lived branches
- disappear upon *publication* of their changesets
- suited for features or bugfixes

while *named* (classical) Mercurial branches are...

- permanent
- global
- suited for support branches, stable/default etc

Topics in Heptapod

Heptapod is meant for topics

From GitLab point of view, both topics and named branches are. . .
just branches.

Topics in Heptapod

Heptapod is meant for topics

From GitLab point of view, both topics and named branches are. . .
just branches.
GitLab branch mappings:

Topics in Heptapod

Heptapod is meant for topics

From GitLab point of view, both topics and named branches are. . .
just branches.
GitLab branch mappings:

named branch `branch/BRANCH_NAME`

Topics in Heptapod

Heptapod is meant for topics

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

Heptapod in action

time for a live demo. . .

Heptapod now

Don't call it a prototype any more

Heptapod now

Don't call it a prototype any more

- Many stabilisation actions in 2019:
  - Better concurrency support
  - More streamlined Docker deployment

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

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

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

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

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. . .

The Next Phase

Starting now!

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

How you can help

- Contributing
  - code
  - documentation
  - bug reports

How you can help

- Contributing
  - code
  - documentation
  - bug reports
- Sponsoring
  - missing features on the current version
  - long term developments

Current sponsors

- Octobus
- Notile
- Logilab `https://logilab.fr`
- Pythonian `https://pythonian.fr`

Thank you

Any questions?