

Buildtime Trend

What's trending in your build process

Dieter Adriaenssens

Buildtime Trend founder & developer - @dcadriaenssens

FOSDEM 2016
January 31st, 2016



This work is licensed under the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](#)



Overview

- What is Buildtime Trend?
- How does it work?
- How to start using it
- Demo



What is Buildtime Trend?

Buildtime Trend is an Open Source application that uses (timing) data to visualise trends in a build process



It started with an itch

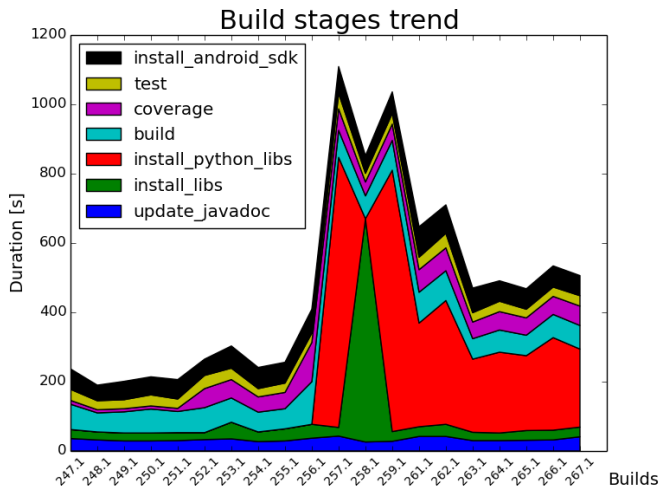
Project with unreliable builds on Travis CI:

- some builds took longer than others
- no timing information was present in the logs
- which stage took longer?



Proof of concept

A script to generate a chart with duration of build stages :



First release - dashboard

38

Total builds

35

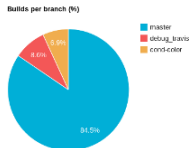
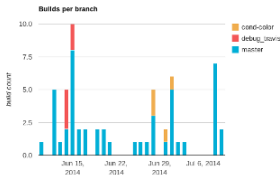
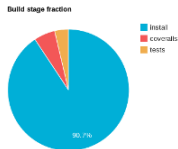
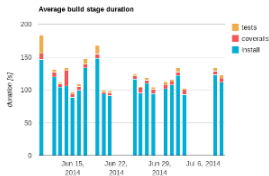
Builds passed

3

Builds failed

119s

Average build time



Powered by [Buildtime trend](#) (0.1).

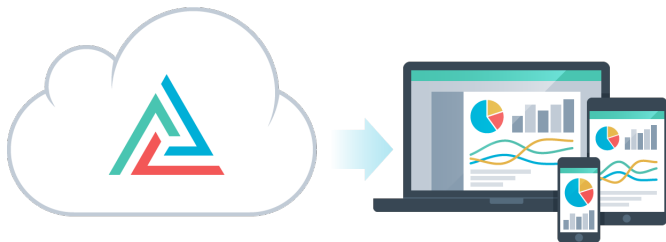


How it works

Webservice is triggered at the end of a build :

- download Travis CI build logfile
- parse the (timing) data
- store data
- visualise using a dashboard with charts





Keen IO's powerful APIs do the heavy lifting for you, so you can gather all the data you want and start getting the answers you need.



Hosting the service

- CherryPy turns scripts into webservice
 - dashboard
 - badges
 - buildlog parser
- service hosted on Heroku :
<https://buildtimetrend.herokuapp.com/>



How to use it

Trigger the service at the end of a Travis CI build in *.travis.yml* :

Example

notifications:

webhooks:

- <https://buildtimetrend.herokuapp.com/travis>



Who can use it

- Webservice : Free for Open Source (for now)
- Keen.io offered to host data for free for Open Source projects. **Thanks, guys!**



Who is using it

- Angular
- RocksDB (Facebook)
- phpMyAdmin
- Weblate
- MuseScore
- Servo
- pyca/cryptography
- Pootle
- ...



- Service : <https://buildtimetrend.herokuapp.com/>
- Badges :
<https://github.com/buildtimetrend/service#badge-examples>



Future development

- more and improved metrics and charts
- improve navigation and searching on dashboard
- support other CI platforms (Jenkins, ...)
- notification on a jumpy build job



Contributions welcome

- use and test the service
- report bugs
- suggest improvements
- clone the project and send pull requests
 - implement a feature
 - fix a bug
 - add a new chart
 - improve dashboard layout
 - ...



Acknowledgements

Big thanks to

- The nice people of Keen.io, for their invaluable support!
- the Open Source projects testdriving the service
- all the services that power the project



Questions

Thanks for your attention!

@dcadriaenssens

Presentation available on

<https://ruleant.github.io/presentations/>

Buildtime Trend

- Website : <https://buildtimetrend.github.io/>
- Service : <https://buildtimetrend.herokuapp.com/>
- Twitter : @buildtime_trend

