

Solving the problems of AI in production - how we did it...

#DevConf_CZ 2020
Saturday, 2020-Jan-25

Christoph Görn <goern@redhat.com>
AI Center of Excellence, Office of the CTO



can AI help developers?



goals

The AI Center of Excellence's Project Thoth has three strategic objectives

- Deliver optimized AI stacks as container images to demonstrate the concept
- Prototype AI-backed guidance to delivering value add information on application stacks
- Advanced Analytics and AI-backed automation CI/CD and software maintenance



goals

**Increase developer
velocity**

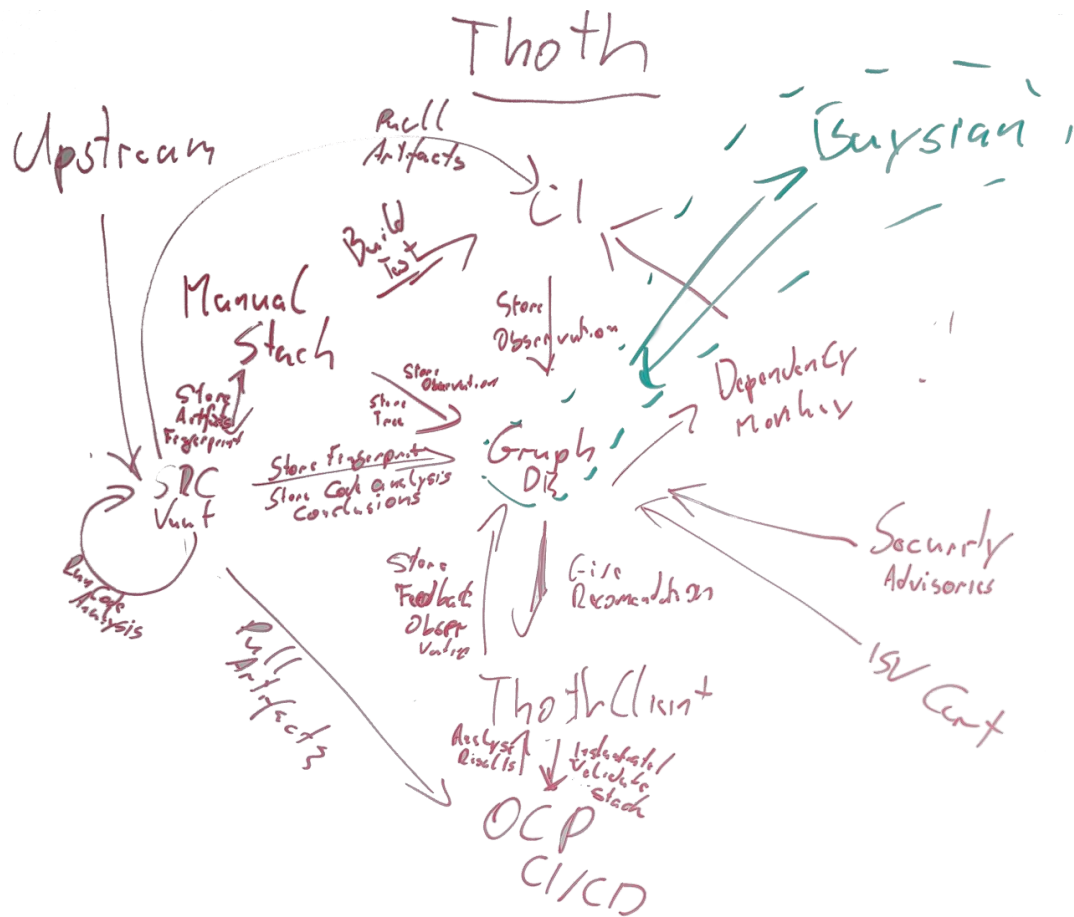
The AI Center of Excellence's Project Thoth has three strategic objectives

- Deliver optimized AI stacks as container images to demonstrate the concept
- Prototype AI-backed guidance to delivering value add information on application stacks
- Advanced Analytics and AI-backed automation CI/CD and software maintenance



How we help Devs

- keep dependencies up to date #cyborg
- maintain App stack secure avoiding CVE
- recommend the most performant software stacks for AI Apps
- Integrate source metadata information to give advice to developers
- Integrate Thoth in day-to-day developers/data scientists tools





What happened?!

- brainstorm and invent Machine Learning model
 - on top of an evolving Graph of dependencies
 - #epic_fail
- experiment with artificial/synthetic data
 - didn't help
- aggregating and cleansing data
 - :thumbs up:
- create experiments on a stable platform
 - now we are talking!

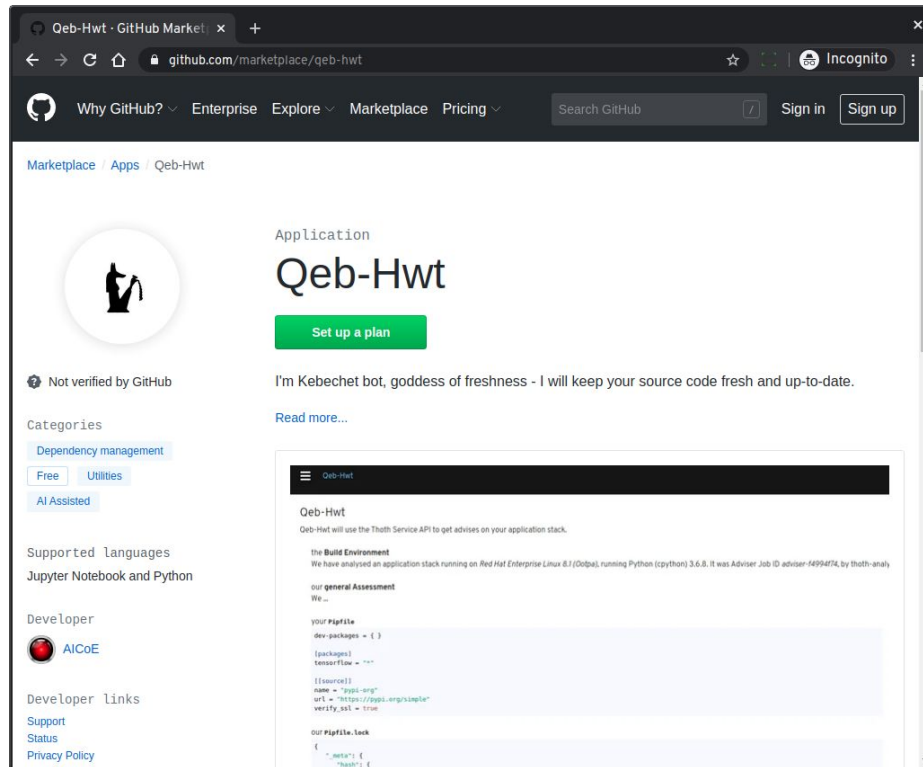


Current status

- Stable Platform
 - Gathering application stacks and observations
 - Reacting on upstream updates
 - Conduct experiments
- Service to resolve software dependencies
 - Based on our observations
- Service to advise on your application stack
 - for Python ecosystem

one more thing...

- GitHub app to give advice on PR!
- Install from <http://bit.ly/a-thoth-bot>
- please use <http://bit.ly/thoth-feedback>



Thank you

Red Hat is the world's leading provider of
enterprise open source software solutions.
Award-winning support, training, and consulting
services make
Red Hat a trusted adviser to the Fortune 500.



linkedin.com/company/red-hat



youtube.com/user/RedHatVideos



facebook.com/redhatinc



twitter.com/RedHat