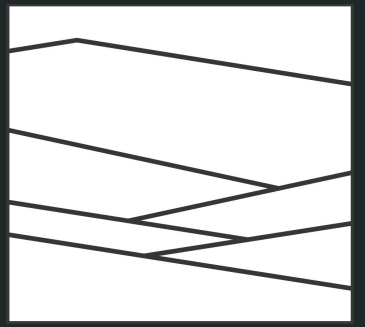

RDKit microservices

Why and how to automate compute-intensive applications

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In an ideal world, how do scientists make decisions?

In an ideal world, how do scientists make decisions?

EXPLORABLE LABS

RDKit

Python

Proprietary software

Lab sensor monitors

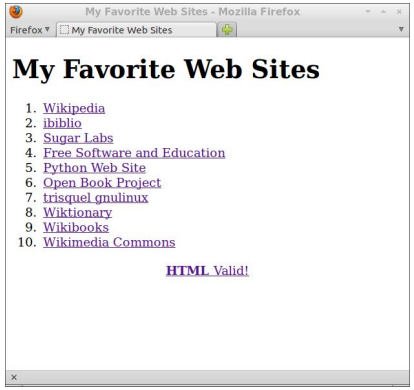
R

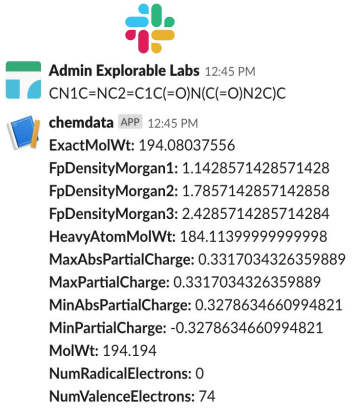
Database

Flexibility is key!

Different teams have different needs.

Frontend trends change quickly.
(Jupyter, Retool… what's next?)





But if your key computational tools exist on cloud API endpoints, they easily integrate into new frontend tools. API = modular.

You can use managed microservices if needed. (E.g. Serverless or Stdlib for lightweight Lambda tasks, Explorable Labs for Fargate!)
Many proprietary tools offer APIs already.

https://github.com/explorablelabs/rdkit_api

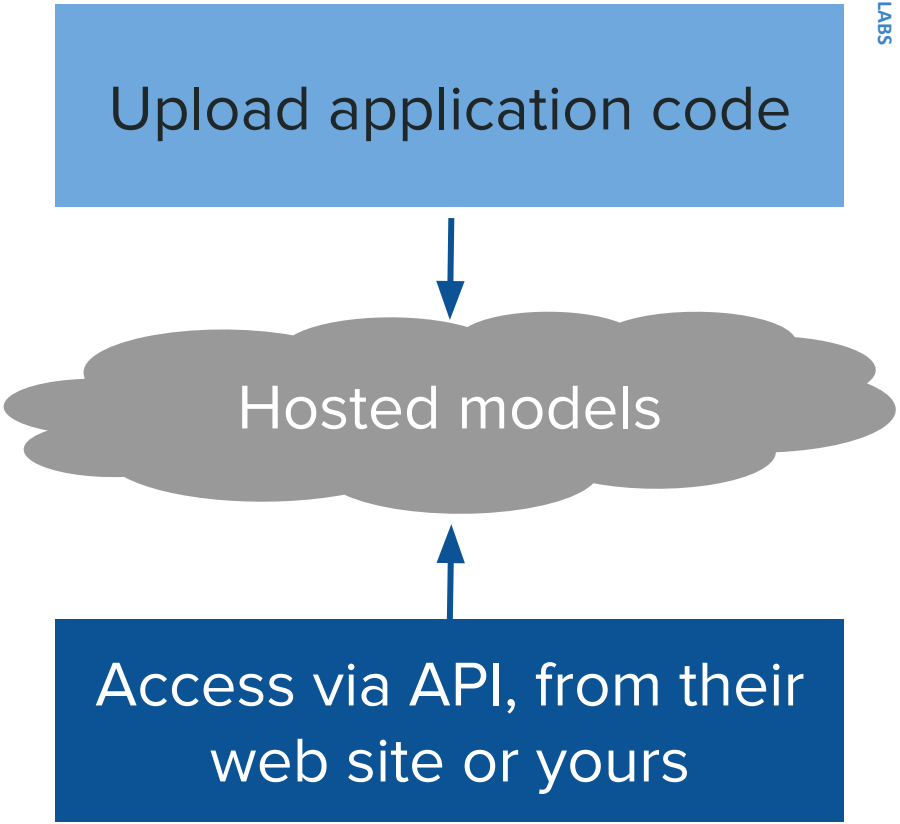
EXPLORABLE LABS

Why use microservices instead of reserved instances or local infrastructure?

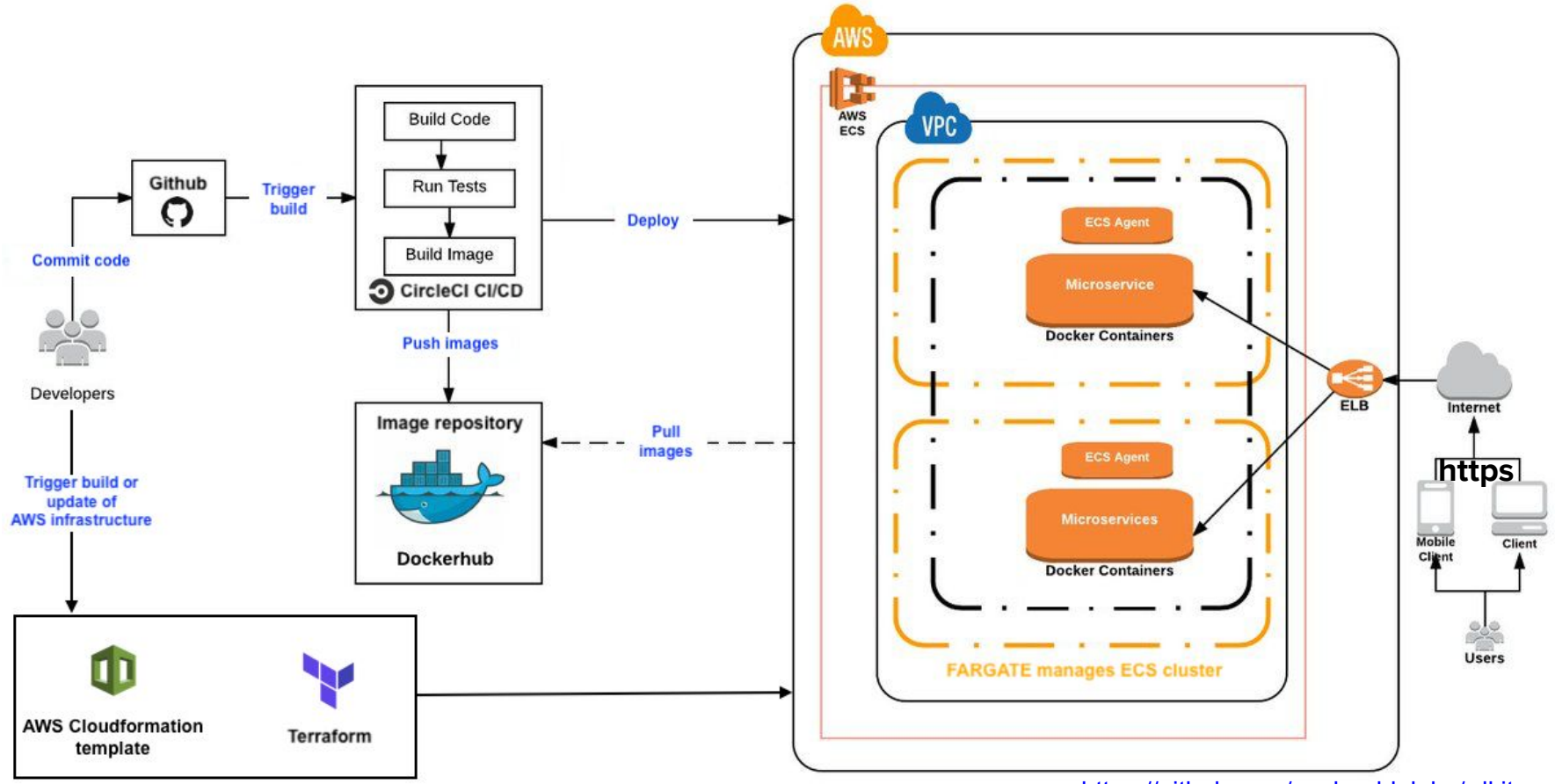
It's cheaper, more reliable, and more secure!

Costs scale with compute time (breakeven is around 70% usage of a reserved instance)

The cloud provider handles server maintenance and patching. If needed, a new microVM is spun up in <125ms (!!)



DIY API Architecture



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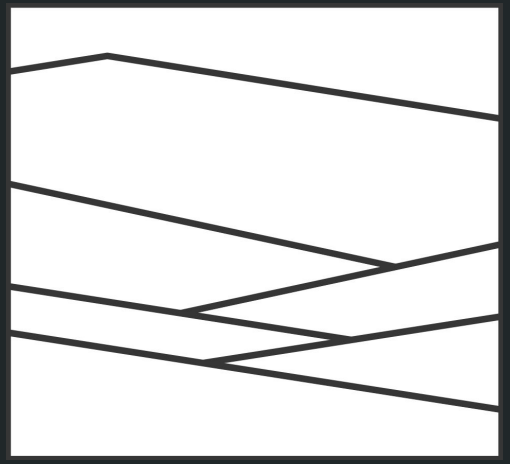
EXPLORABLE LABS



Hosted compute-intensive applications

Explorable Labs

We help computational scientists scale their work in the cloud.

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