Introduction to Cloud Provisioning with Terraform

# @redmind

#### Introductions

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### A better way?

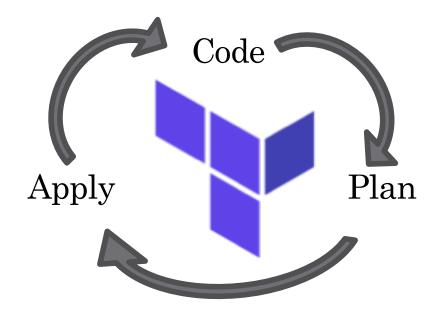
- Terraform released in July 2014
- · Built to make provisioning infrastructure declarable and flexible
  - a universal workflow
  - strong ecosystem of supported integrations
    - · mixing vendors' solutions is possible with the same workflow and tooling
- YAML and JSON... are often frustrating
  - HCL introduced

## aredmind

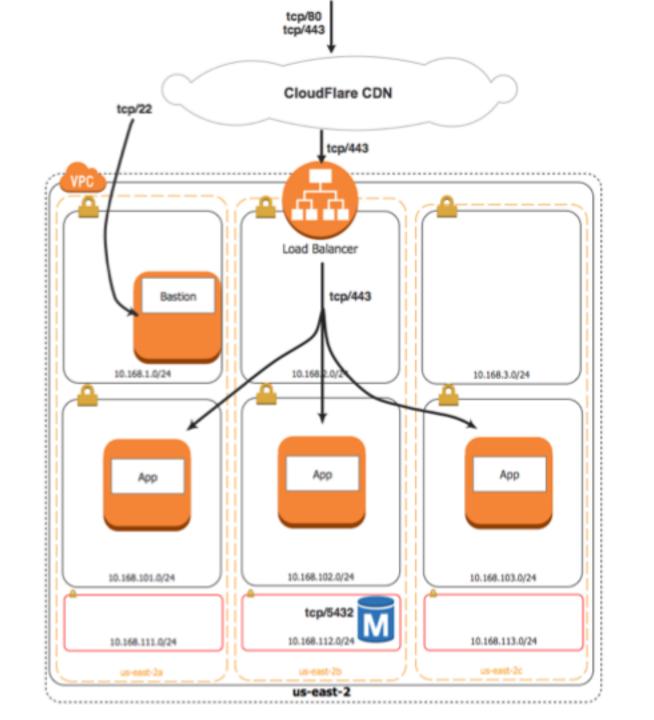
### Terminology: a crash course

- Providers offer technology integrations and functionality
  - largely by wrapping third-party APIs
- <u>Resources</u> and <u>Data Sources</u> are made available via a <u>Provider</u> and are the building blocks used to codify and manage our infrastructure
  - made reusable via <u>Modules</u>
- Terraform has <u>State</u> which is at the heart of it's declarative nature and ability to manage the lifecycle of resources under it's control
- Terraform <u>Variables</u> serve as parameters to resources or modules
  - can be set at runtime, determined by a data source, or be configured on a perenvironment basis to help keep code reusable and flexible

#### Terraform Workflow

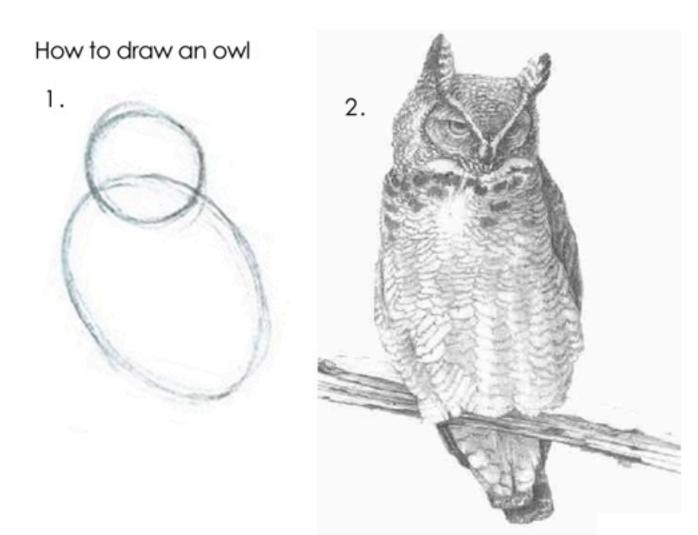


## Scenario



## Okayokay... but

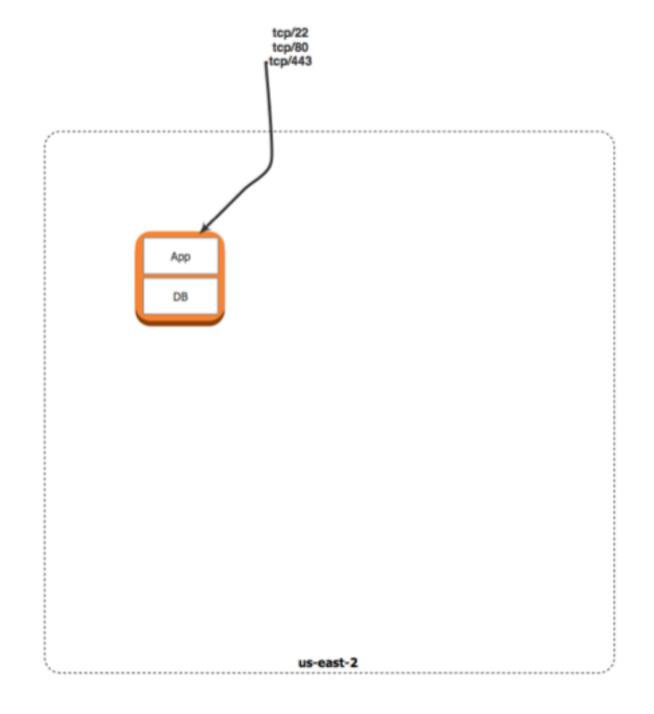
How?



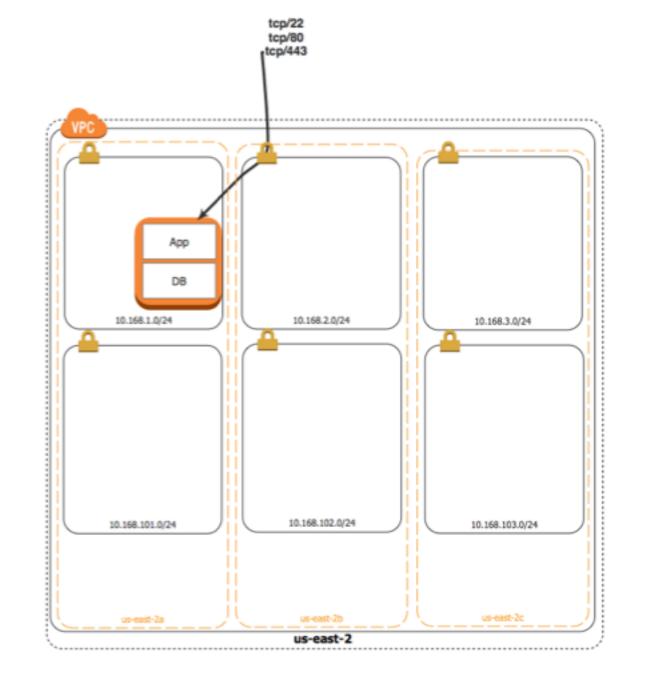
1. Draw some circles

2. Draw the rest of the fucking owl

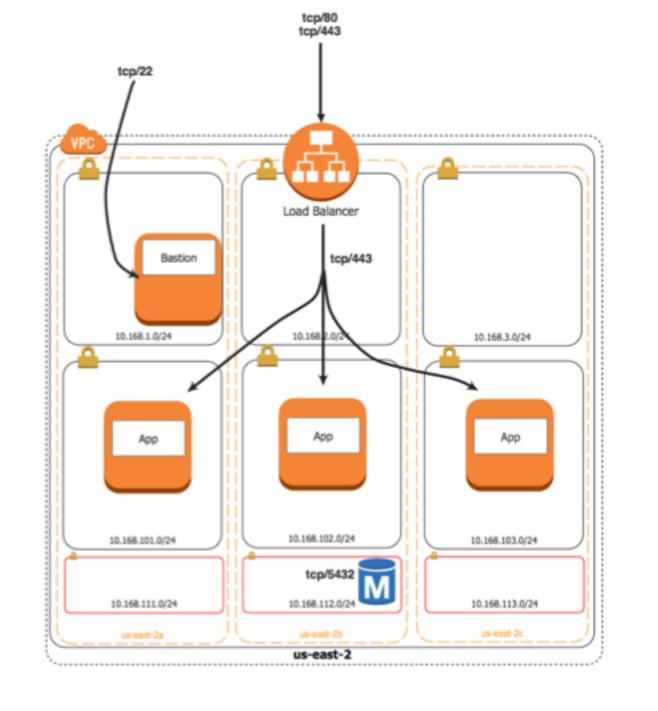
Flag on the Moon



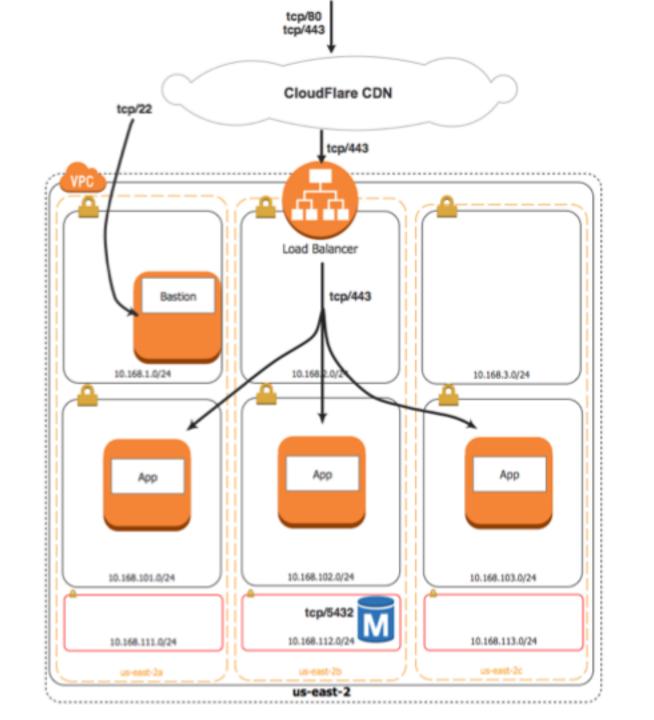
VPCs with a little help from our friends?



Scalin' up, and scalin' out



#goals?



### Next steps

- Browse the documentation for the AWS Provider
  - Or for your cloud platform of choice
- · Read up on Remote State management
  - Essential for working in team!
- · Browse the Public Module Registry at registry.terraform.io
  - Many modules serve as a great starting place for your own code
- · Try writing your own "app" module
- · Have fun!

### Questions?

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