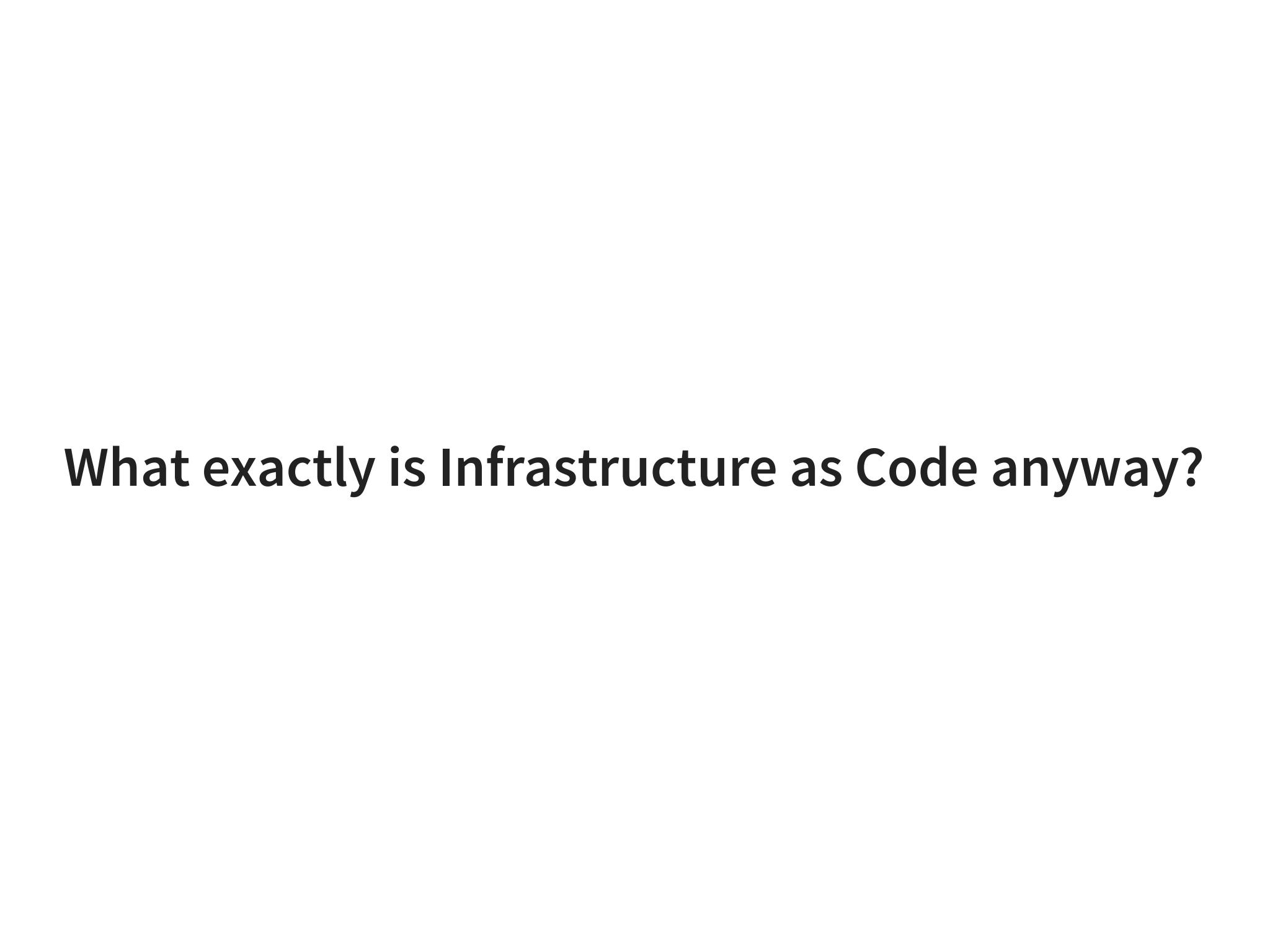
Introduction to Infrastructure as Code (IaC)

Luan Truong



Problem With Manual Management

- Prone to human error
- Time-consuming
- Difficult to track changes and maintain consistency



Why should you care?

- Consistency across environments (dev, staging, prod)
- Faster deployment and scalability
- Cost savings
- Easily version-controlled via Git

IaC Tools



















Here's how it works:

- 1. You write code describing your infrastructure.
- 2. Terraform says, "Cool, here's what I'm gonna do."
- 3. You say "yes", and Terraform makes it happen.

Show me the code!

How do we deploy our Cloud infrastructure?

- Setup everything manually!
 - Does this scale? Clearly no.
- Custom scripts
 - Use your cloud provider's API to create machines
 - Programmatically SSH into the machine to do tasks
 - Does this scale? Maybe... but why reinvent the wheel?
- Infrastructure as Code
 - Declare your infrastructure setup in a specific format
 - Your IaC framework deploys/updates your cloud infrastructure!
 - Does this scale? Yes!

Thank you

Any questions?