Next Level Terraform

With Robert Jordan

Robert Jordan:

LinkedIn
GitHub

```
→  ~ git clone https://github.com/bananalab/Next-Level-Terraform.git
```
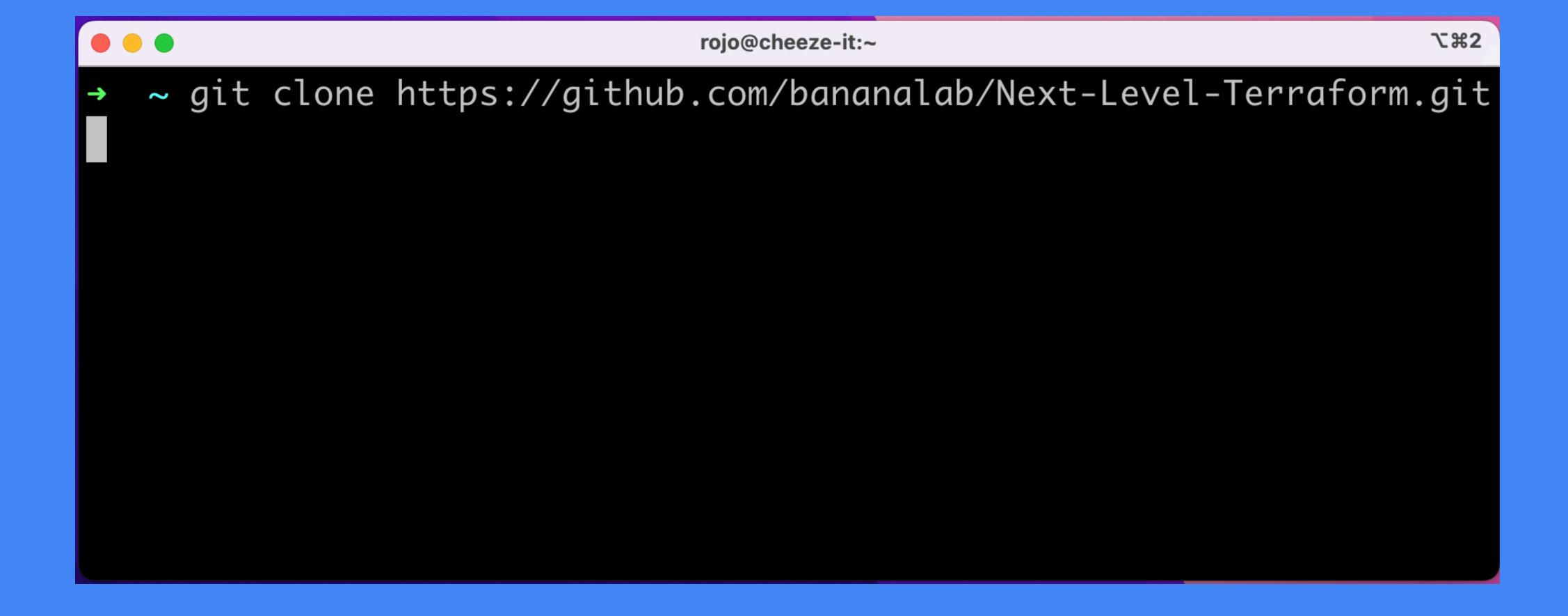
Poll

What is your primary technical function?

1. Software Developer

2. System Architect

3. Operations Engineer (SRE, DevOps, etc.)

4. Supervisor / Technical Management

5. Product / project Management

6. Other (Please post in chat)

Poll

What is your primary cloud platform?

1. AWS

2. Azure

3. GCP

4. On Premises (VMWare, OpenStack, etc.)

5. Other (Please post in chat)

Terraform

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    - Community modules are of varying quality.

    - Community modules tend to be too generalized.

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  - Terraform open source does not include automated deployment.

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  - Terraform open source does not include automated deployment.

  - Commercial tooling is very expensive.

Terraform

Ecosystem

- The open source community has stepped up to fill a lot of the gaps.

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    - pre-commit-terraform - Collection of pre-commit hooks.

Terraform
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  - Unit testing

    - Terratest - Testing framework.

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  - Security and Compliance

    - Checkov

    - TFSec

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  - Cost management

    - Infracost

Terraform Deployments

- Use separate repos for modules and root configs.

Terraform modules

- Layout

  - Monorepo vs per module repo.

Terraform modules

- Testing

  - Static analysis

  - Unit testing

Terraform modules

- Versioning

  - Use semantic versioning

  - Automate releases

Terraform modules

- Demo

  - Create terraform-modules repo.

Terraform Live

- Terraform Live

  - Stores root configs

  - Uses remote state

  - SSoT for infrastructure

  - Continuous Deployment (GitOps)

Terraform Live

- Code walkthrough.

Terraform Live
Continuous Delivery

- Also known as GitOps

Terraform Live
Walkthrough

Break

10 Minutes

Importing

- Terraformer vs. Brute Force

Refactoring

- terraform state mv vs "moved" block.