KPLABS Course

HashiCorp Certified: Terraform Associate

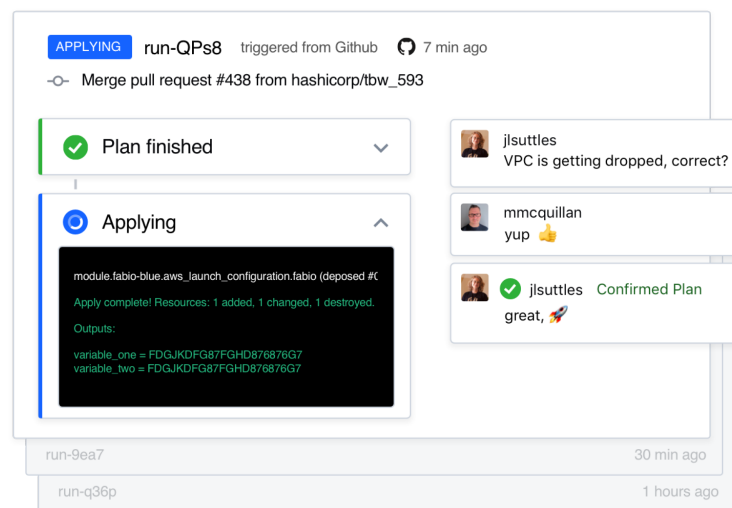## Domain 7

ISSUED BY

Zeal

REPRESENTATIVE

instructors@kplabs.in

Domain 7 - Terraform Cloud & Enterprise Capabilities

Module 1: Overview of Terraform Cloud

Terraform Cloud manages Terraform runs in a consistent and reliable environment with various features like access controls, private registry for sharing modules, policy controls, and others.

Terraform Cloud is available as a hosted service at https://app.terraform.io.

Module 2: Overview of Sentinel

Sentinel is an embedded policy-as-code framework integrated with the HashiCorp Enterprise products.

It enables fine-grained, logic-based policy decisions, and can be extended to use information from external sources.

Note: Sentinel policies are paid feature

Module 3: Remote Backends

Terraform supports various types of remote backends which can be used to store state data.

As of now, we were storing state data in local and GIT repository.

Depending on remote backends that are being used, there can be various features.

- Standard BackEnd Type: State Storage and Locking
- Enhanced BackEnd Type: All features of Standard + Remote Management
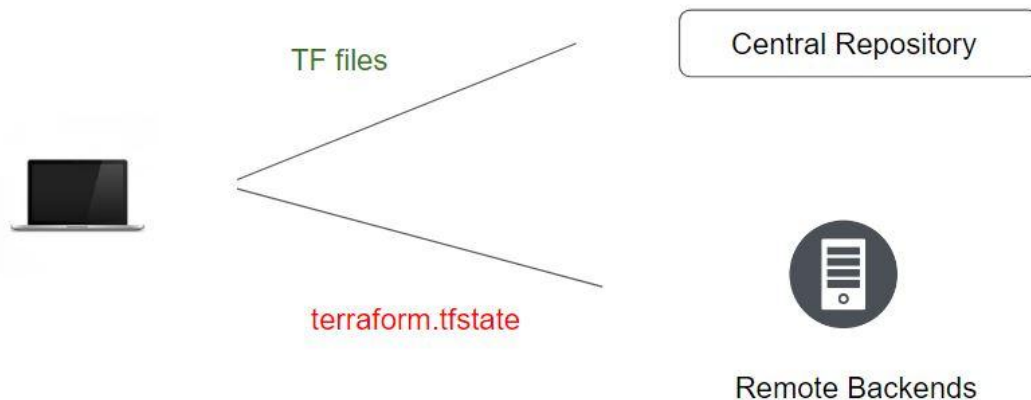
When using full remote operations, operations like terraform plan or terraform apply can be executed in Terraform Cloud's run environment, with log output streaming to the local terminal.

Remote plans and applies use variable values from the associated Terraform Cloud workspace.

Terraform Cloud can also be used with local operations, in which case only state is stored in the Terraform Cloud backend.

.

Module 4: Air Gapped Environments

4.1 Understanding Concept of Air Gap

An air gap is a network security measure employed to ensure that a secure computer network is physically isolated from unsecured networks, such as the public Internet.
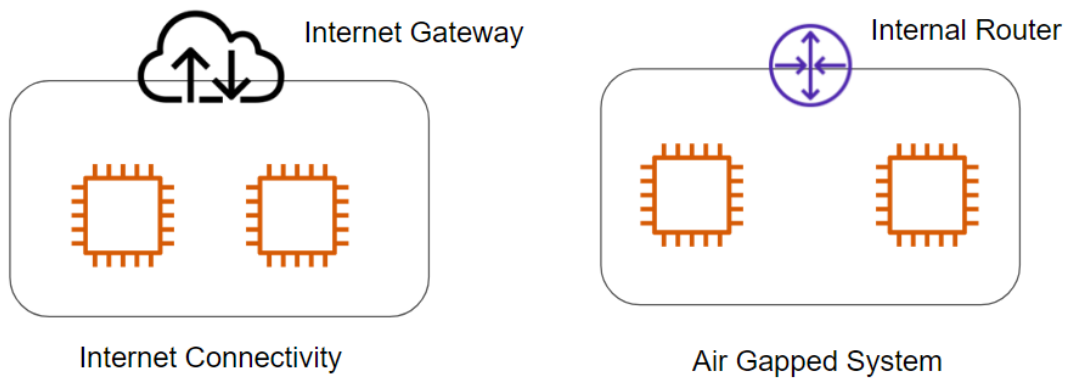
4.2 Usage of Air Gapped Systems

Air Gapped Environments are used in various areas. Some of these include:

- Military/governmental computer networks/systems
- Financial computer systems, such as stock exchanges
- Industrial control systems, such as SCADA in Oil & Gas fields

4.3 Terraform Enterprise Installation Methods

Terraform Enterprise installs using either an online or air gapped method and as the names infer, one requires internet connectivity, the other does not

Terraform Enterprise

Air Gap Install

Isolated Server

Choose your installation type

Online

Airgapped

Please choose an installation type to continue.

Continue »

Provide path or upload airgap bundle

Provide absolute path on this server to archive file

e.g. /mnt/installers/package.airgap

Continue »

Select file for upload

📂 Upload Airgap Bundle

To upload an app bundle, file must have a `.airgap` extension.