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K&N's

Infrastructure As A Code

IAC

is a modern approach to managing & provisioning infrastructure resources using code & automation.

How IAC work

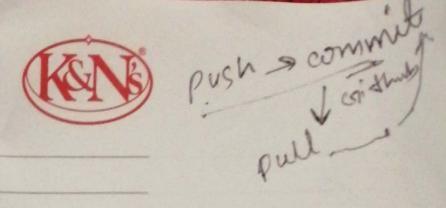Two approach

i) imperative	(ii) Declarative
* Specify step by step process of how to achieve final state.	* Specify the final desired state without specify steps.
	* System determine how to get Dest.

Benefit:

* VC & Collaboration   * Speed & efficiency
* cost Saving   * Reliability * Security

Date:

Terraform

* IAC tool to automate Infrastructure tasks, cloud resources provisioning.
* It is open-source
* Written in Go language
* use declarative approach

Features:

* IAC

allow you to define infrastructure configuration using code.

* Declarative
* State Managment

maintain state file that record current state of infrastructure.

* Parallelism & Efficiency

provision & update resource parallel

How Terraform Work

1) Terraform first read your configuration file These file are written in special lang & have extension .tf & .tf.json. These file describe resources you need (server, storage, network).

2) it will translate them into API calls to cloud provider (Aws, Azure). These API tell the provider to create resource that define in config file.

3) Once resource created, terrafor will maintain state file to track the resources created.

config/code

Terraform

provider

API

Aws/Azure

Resource A

Resource B

Cloud