Hands-On Introduction To Terraform

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Overview

- Provisioning back then
- Drawbacks
- Terraform ?
- Terraform vs Cloudformation
- Code Samples
- Demo

Provisioning in Past

- Manual
- Shell
- Perl etc

Disadvantage

- Extra Knowledge
- Bottleneck
- No track

What is needed today?

- Automation
- Version Control
- Continuous Integration & Deployment

Terraform

- IaaC
- Open Source
- Infra provisioning tool
- Build, Change & Version Control
- Manage resource lifecycle

Terraform vs Cloudformation

- Open Source
- Supports many providers
- Mostly all the resources
 - Compute
 - Storage
 - Network
- Can talk to multiple provider simultaneously
 - Multi-Cloud Deployment

Concept

- Plan
 - Create plan of changes
 - Does nothing

- Apply
 - Applies a plan
 - Make Changes

Concept Continues ...

- State File
 - Current state of infra
 - Stored in a file

- Destroy
 - Delete all resources
 - Resource can be protected as well

Code sample

```
provider "aws" {
    region = "us-east-1"
}

resource "aws_instance" "app-server" {
    ami = "ami-xxxxxxxx"
    instance_type = "t2.micro"
    tags {
        Name = "app-server"
        Owner = "arun"
    }
}
```

Hands-On

