Deploying with Terraform Cloud at the CLI



Ned Bellavance
HashiCorp Ambassador

@ned1313 nedinthecloud.com

Overview



Managing workspaces

Variables and values

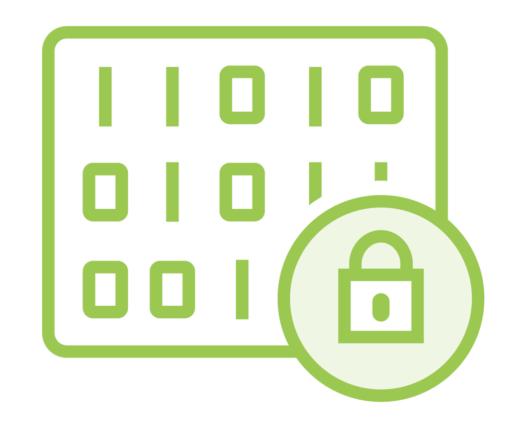
CLI workflow



Managing Workspaces



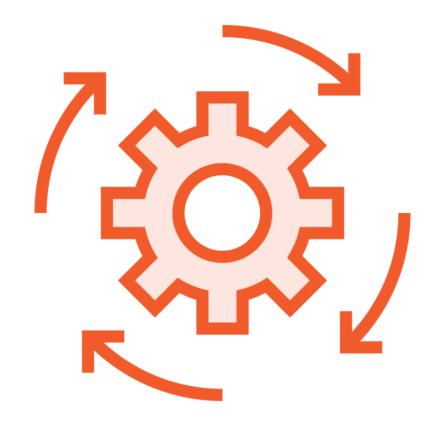
Workspaces







Variables



Operations and logs



Workflows



CLI

Simplest

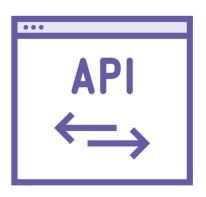
Use standard CLI commands



VCS

Most common

GitOps style workflow



API

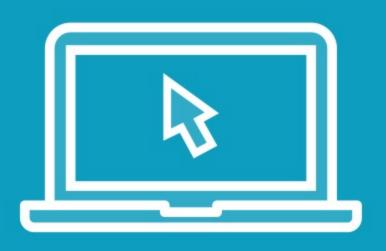
Most complex

Advanced automation

Workspace Naming

<app>-<component>-<region>-<environment>
diamonddogs-app-useast1-dev

Demo



Create a workspace for Diamond Dogs

Explore the settings

Variables and Values



Defining Variable Values



Local values

- Command line arguments
- TF_VAR environment variables

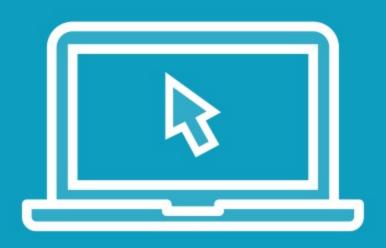
Files named *.auto.tfvars

Workspace-specific values

Variable sets

Precedence

Demo



Review code

Define variable values

CLI Workflow

Terraform Cloud Configuration

Cloud block is preferred

backend.tf

```
# Terraform 1.0 and earlier
terraform {
 backend "remote" {
  hostname = "app.terraform.io"
  organization = "Globomantics"
  workspaces { name | prefix }
```

cloud.tf

```
# Terraform 1.1 and greater
terraform {
 cloud {
  hostname = "app.terraform.io"
  organization = "Globomantics"
  workspaces { name | tags }
```

Terraform Cloud Configuration

Single or multiple workspaces

```
single-workspace.tf
terraform {
 cloud {
 organization = "Globomantics"
  workspaces {
   name = "dd-aws-diamonddogs-dev"
```

multiple-workspaces.tf terraform { cloud {

```
cloud {
  organization = "Globomantics"
  workspaces {
    tags = ["diamonddogs","aws"]
  }
}
```

Terraform Cloud CLI

Initialize Terraform Cloud connection

terraform init

Workspace commands, tagging only

terraform workspace list

terraform workspace new dd-aws-diamonddogs-staging

terraform workspace select dd-aws-diamonddogs-prod

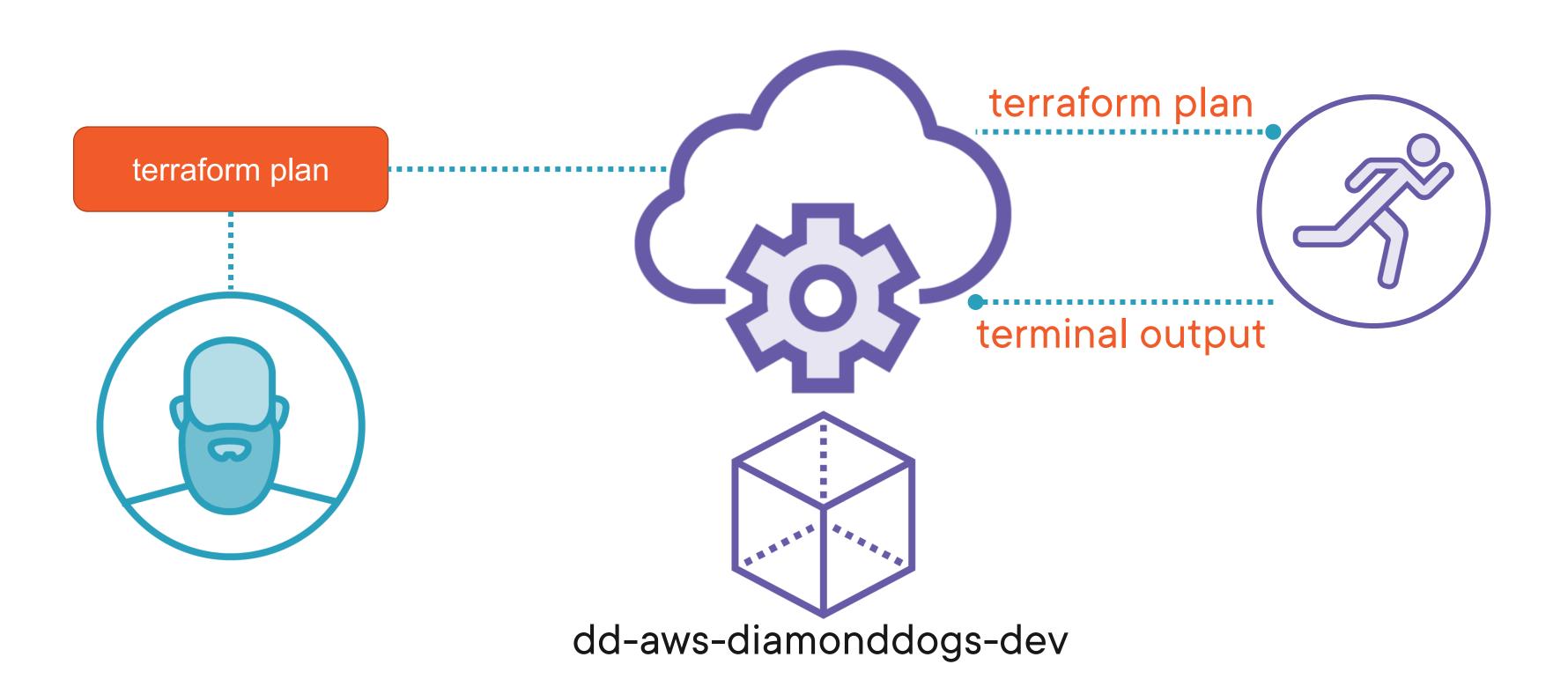
terraform workspace delete dd-aws-diamonddogs-staging

Using the workspace name

\${terraform.workspace}

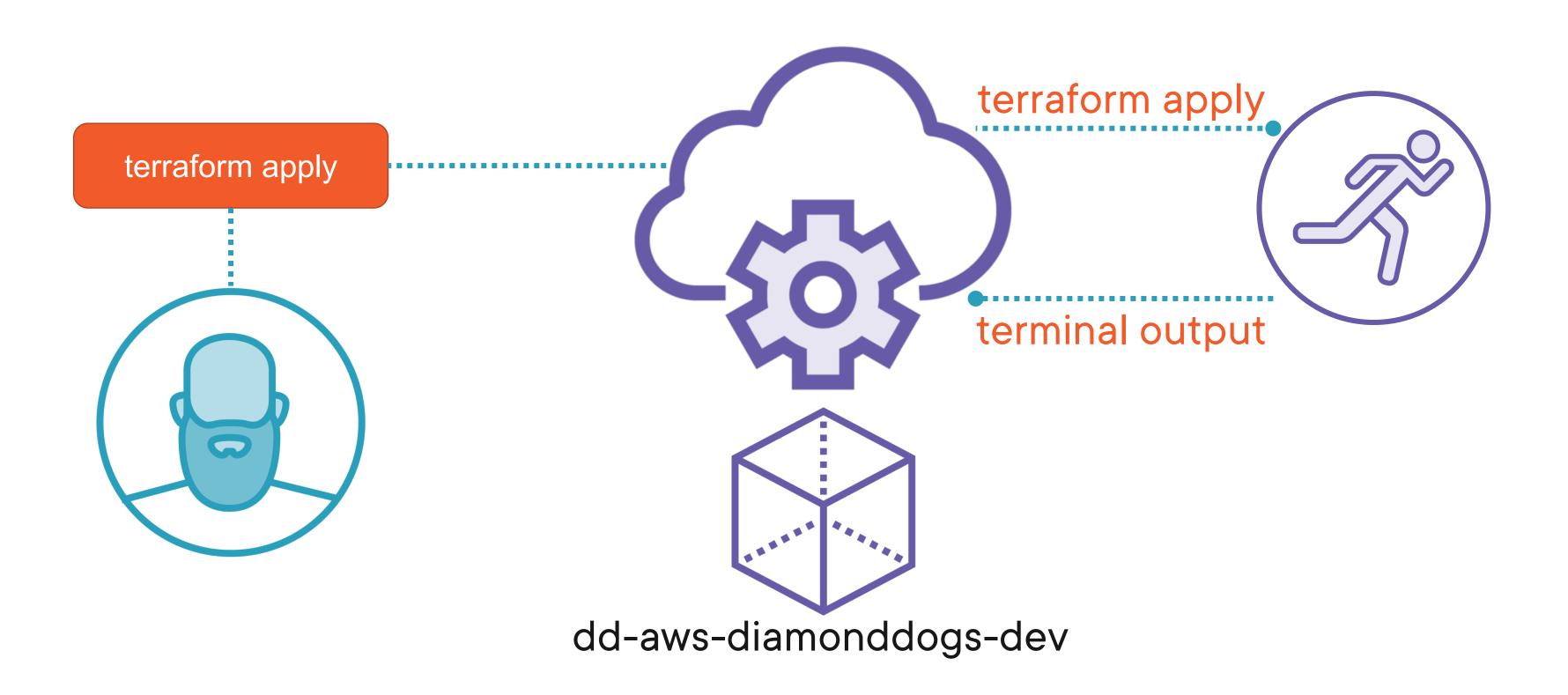


Remote Operations



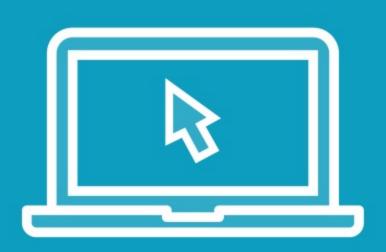


Remote Operations





Demo



Configure cloud block

Provision environment

Summary



Workspaces are the workhorse

Multiple workflow options

manapie werkinew eparene

CLI workflow is familiar



Up Next: Adopting a VCS Workflow