Create Ghost module

Create a directory called ghost.

Your modules will be made up of three files: main.tf, variables.tf and outputs.tf.

main.tf

In main.tf you will deploy out two resources docker\_image and docker\_container. The docker\_image resource name will be ghost\_image.

The name will use th image\_name variable.

The docker\_container resource name will be ghost\_container.

The name will be set using a varialbe called container\_name. The image will be set usingdocker\_image.ghost\_image.latest. Set the external port to use the ext\_port variable.

variables.tf

In variables.tf create three varialbes: image\_name, container\_name and ext\_port.

outputs.tf

In outputs.tf create two outputs: ip and container\_name. The ip output the ghost\_container's ip\_address attribute.

The container\_name output the ghost\_container's name attribute.

Create root module

main.tf

In cloud\_user directory create main.tf, variables.tf and outputs.tf. In main.tf will use the ghost module.

Set image\_name using a variable called image\_name.

Set container\_name using a variable called container\_name.

Set ext\_port using a variable called ext\_port.

In variables.tf create three image\_name, container\_name and ext\_port.

variables.tf

The image\_name will have a default value of ghost:latest with a description of Image for container.

The container\_name will have a default value of blogwith a description ofName of the container.

Theext\_portwill have adefaultvalue of 80 with a description of External port for container.

outputs.tf

In outputs.tf create two outputs: ip and container\_name. The ip output the ghost\_container's ip\_address attribute.

The container\_name output the ghost\_container's name attribute.

Deploy the infrastructure

Initialize Terraform.

Generate a Terraform plan and output a plan file.

Deploy the infrastructure using the plan file.

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**Root module**

**main**

module "ghost" {

source = "./ghost"

image\_name = "${var.image\_name}"

container\_name = "${var.container\_name}"

ext\_port = "${var.ext\_port}"

}

**variables**

#Define variables

variable "image\_name" {

default = "ghost:latest"

}

variable "container\_name" {

default = "blog"

}

variable "ext\_port" {

default = "9090"

}

**outputs**

#Output the IP Address of the Container

output "ip" {

value = "${module.ghost.ip}"

}

output "container\_name" {

value = "${module.ghost.container\_name}"

}

**ghost module**

**main**

terraform {

required\_providers {

docker = {

source = "kreuzwerker/docker"

version = "2.12.0"

}

}

}

provider "docker" {

host = "npipe:////.//pipe//docker\_engine"

}

# Download the Ghost Image

resource "docker\_image" "ghost\_image" {

name = "${var.image\_name}"

}

# Start the Ghost Container

resource "docker\_container" "ghost\_container" {

name = "${var.container\_name}"

image = "${docker\_image.ghost\_image.latest}"

ports {

internal = "2368"

external = "${var.ext\_port}"

}

}

**variables**

#Define variables

variable "image\_name" {}

variable "container\_name" {}

variable "ext\_port" {}

**output**

#Output the IP Address of the Container

output "ip" {

value = "${docker\_container.ghost\_container.ip\_address}"

}

output "container\_name" {

value = "${docker\_container.ghost\_container.name}"

}