**4.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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**Ghost—**

**Main.tf**

terraform {

  required\_providers {

    docker = {

      source = "kreuzwerker/docker"

    }

  }

}

provider "docker" {

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

}

# Download the latest Ghost Image

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

  name = "${var.image\_name}"

}

# Start the Container

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

  name  = "${var.container\_name}"

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

  ports {

    internal = "2368"

    external = "${var.ext\_port}"

  }

}

**Variable.tf**

variable "image\_name" {}

variable "container\_name" {}

variable "ext\_port" {}

**output.tf**

#Output the IP Address of the Container

output "ip" {

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

  description = "The IP for the container."

}

output "container\_name" {

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

  description = "The name of the container."

}

**Root—**

**Main.tf**

terraform {

  required\_providers {

    docker = {

      source = "kreuzwerker/docker"

    }

  }

}

provider "docker" {

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

}

# Download the image

module "ghost" {

  source = "./ghost"

  image\_name  = "${var.image\_name}"

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

  ext\_port   = "${var.ext\_port}"

}

**Variable.tf**

#Define variables

variable "container\_name" {

  description = "Name of the container."

  default     = "blog"

}

variable "image\_name" {

  description = "Image for container."

  default     = "ghost:latest"

}

variable "ext\_port" {

  description = "External port for container."

  default     = "8181"

}

**Output.tf**

#Output the IP Address of the Container

output "ip" {

  value = "${module.ghost.ip}"

}

output "container\_name" {

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

}







