terraform {

required\_providers {

azurerm = {

source = "hashicorp/azurerm"

version = "3.62.0"

}

}

}

provider "azurerm" {

features {}

subscription\_id = "23e0f9b7-a975-468c-9114-9614d451354a"

tenant\_id = "ac30ec88-8312-4123-b2a5-77dfaa5ef2c4"

}

# RESOURCES STARTS FROM HERE

resource "azurerm\_resource\_group" "TFRG" {

name = "argoid-test-terraform-rg"

location = "Central India"

}

resource "azurerm\_virtual\_network" "TFVN" {

name = "argoid-test-terraform-vn"

address\_space = ["10.1.0.0/16","2001:db8:3c4d:15::/64"]

location = azurerm\_resource\_group.TFRG.location

resource\_group\_name = azurerm\_resource\_group.TFRG.name

}

resource "azurerm\_subnet" "TFsubnet" {

name = "argoid-terraform-subnet"

resource\_group\_name = azurerm\_resource\_group.TFRG.name

virtual\_network\_name = azurerm\_virtual\_network.TFVN.name

address\_prefixes = ["10.1.0.0/24", "2001:db8:3c4d:15::/64"]

}

resource "azurerm\_network\_security\_group" "nsg-terraform" {

name = "argoid-terraform-nsg"

location = azurerm\_resource\_group.TFRG.location

resource\_group\_name = azurerm\_resource\_group.TFRG.name

security\_rule = [

{

access = "Allow"

description = ""

destination\_address\_prefix = "\*"

destination\_address\_prefixes = []

destination\_application\_security\_group\_ids = []

destination\_port\_range = "2223"

destination\_port\_ranges = []

direction = "Inbound"

name = "AllowAnyCustom2223Inbound"

priority = 360

protocol = "Tcp"

source\_address\_prefix = "\*"

source\_address\_prefixes = []

source\_application\_security\_group\_ids = []

source\_port\_range = "\*"

source\_port\_ranges = []

},

{

access = "Allow"

description = ""

destination\_address\_prefix = "\*"

destination\_address\_prefixes = []

destination\_application\_security\_group\_ids = []

destination\_port\_range = "22"

destination\_port\_ranges = []

direction = "Inbound"

name = "ssh"

priority = 2307

protocol = "Tcp"

source\_address\_prefix = "\*"

source\_address\_prefixes = []

source\_application\_security\_group\_ids = []

source\_port\_range = "\*"

source\_port\_ranges = []

},

{

access = "Allow"

description = ""

destination\_address\_prefix = "\*"

destination\_address\_prefixes = []

destination\_application\_security\_group\_ids = []

destination\_port\_range = "8083"

destination\_port\_ranges = []

direction = "Inbound"

name = "console"

priority = 1993

protocol = "Tcp"

source\_address\_prefix = "\*"

source\_address\_prefixes = []

source\_application\_security\_group\_ids = []

source\_port\_range = "\*"

source\_port\_ranges = []

},

{

access = "Allow"

description = ""

destination\_address\_prefix = "\*"

destination\_address\_prefixes = []

destination\_application\_security\_group\_ids = []

destination\_port\_range = "4900"

destination\_port\_ranges = []

direction = "Inbound"

name = "frontend"

priority = 1994

protocol = "Tcp"

source\_address\_prefix = "\*"

source\_address\_prefixes = []

source\_application\_security\_group\_ids = []

source\_port\_range = "\*"

source\_port\_ranges = []

},

{

access = "Allow"

description = ""

destination\_address\_prefix = "\*"

destination\_address\_prefixes = []

destination\_application\_security\_group\_ids = []

destination\_port\_range = "1800-1809"

destination\_port\_ranges = []

direction = "Inbound"

name = "Delivery\_Server"

priority = 1996

protocol = "Tcp"

source\_address\_prefix = "\*"

source\_address\_prefixes = []

source\_application\_security\_group\_ids = []

source\_port\_range = "\*"

source\_port\_ranges = []

},

{

access = "Allow"

description = ""

destination\_address\_prefix = "\*"

destination\_address\_prefixes = []

destination\_application\_security\_group\_ids = []

destination\_port\_range = "12082"

destination\_port\_ranges = []

direction = "Inbound"

name = "deliveryServerUrl"

priority = 1997

protocol = "Tcp"

source\_address\_prefix = "\*"

source\_address\_prefixes = []

source\_application\_security\_group\_ids = []

source\_port\_range = "\*"

source\_port\_ranges = []

},

{

access = "Allow"

description = ""

destination\_address\_prefix = "\*"

destination\_address\_prefixes = []

destination\_application\_security\_group\_ids = []

destination\_port\_range = "12187"

destination\_port\_ranges = []

direction = "Inbound"

name = "demo"

priority = 1943

protocol = "Tcp"

source\_address\_prefix = "\*"

source\_address\_prefixes = []

source\_application\_security\_group\_ids = []

source\_port\_range = "\*"

source\_port\_ranges = []

},

]

}

resource "azurerm\_subnet\_network\_security\_group\_association" "nsg-subnet-terraform-association" {

subnet\_id = azurerm\_subnet.TFsubnet.id

network\_security\_group\_id = azurerm\_network\_security\_group.nsg-terraform.id

}

resource "azurerm\_public\_ip" "ip-argoid-terraform-gateway" {

name = "argoid-terraform-gateway-public-ip"

location = azurerm\_resource\_group.TFRG.location

resource\_group\_name = azurerm\_resource\_group.TFRG.name

allocation\_method = "Static"

ip\_version = "IPv4"

}

resource "azurerm\_network\_interface" "argoid-terraform-gateway-nic" {

name = "argoid-terraform-nic"

location = azurerm\_resource\_group.TFRG.location

resource\_group\_name = azurerm\_resource\_group.TFRG.name

ip\_configuration {

name = "ipconfig-gateway"

subnet\_id = azurerm\_subnet.TFsubnet.id

private\_ip\_address\_allocation = "Dynamic"

public\_ip\_address\_id = azurerm\_public\_ip.ip-argoid-terraform-gateway.id

}

}

resource "azurerm\_linux\_virtual\_machine" "argoid-terraform-gateway-vm" {

location = azurerm\_resource\_group.TFRG.location

resource\_group\_name = azurerm\_resource\_group.TFRG.name

name = "argoid-terraform-gateway"

network\_interface\_ids = [azurerm\_network\_interface.argoid-terraform-gateway-nic.id]

size = "Standard B1s"

admin\_username = "ghalyan"

source\_image\_reference {

offer = "CentOS"

publisher = "OpenLogic"

sku = "7.9"

version = "latest"

}

os\_disk {

caching = "ReadWrite"

disk\_size\_gb = 30

storage\_account\_type = "Standard\_LRS"

name = "argoid-terraform-gateway"

write\_accelerator\_enabled = false

}

admin\_ssh\_key {

username = "ghalyan"

public\_key = file("~/.ssh/id\_rsa.pub")

}

}

resource "azurerm\_public\_ip" "ip-argoid-terraform-client1" {

name = "argoid-terraform-client1-public-ip"

location = azurerm\_resource\_group.TFRG.location

resource\_group\_name = azurerm\_resource\_group.TFRG.name

allocation\_method = "Static"

ip\_version = "IPv4"

}

resource "azurerm\_network\_interface" "argoid-terraform-client1-nic" {

name = "aargoid-terraform-client1-nic"

location = azurerm\_resource\_group.TFRG.location

resource\_group\_name = azurerm\_resource\_group.TFRG.name

ip\_configuration {

name = "ipconfig-client1"

subnet\_id = azurerm\_subnet.TFsubnet.id

private\_ip\_address\_allocation = "Dynamic"

# public\_ip\_address\_id = azurerm\_public\_ip.ip-argoid-terraform-client1.id

}

}

resource "azurerm\_linux\_virtual\_machine" "argoid-terraform-client1-vm" {

location = azurerm\_resource\_group.TFRG.location

resource\_group\_name = azurerm\_resource\_group.TFRG.name

name = "argoid-terraform-client1"

network\_interface\_ids = [azurerm\_network\_interface.argoid-terraform-client1-nic.id]

size = "Standard\_E8as\_v4"

admin\_username = "aman"

source\_image\_reference {

offer = "CentOS"

publisher = "OpenLogic"

sku = "7.9"

version = "latest"

}

os\_disk {

caching = "ReadWrite"

disk\_size\_gb = 128

storage\_account\_type = "Standard\_LRS"

name = "argoid-terraform-client1"

write\_accelerator\_enabled = false

}

admin\_ssh\_key {

username = "aman"

public\_key = "ssh-rsa  aman@admins-MacBook-Pro.local"

}

}

**RESULTS FOR ABOVE TERRAFORM CODE ➖**

**# azurerm\_linux\_virtual\_machine.argoid-terraform-client1-vm** will be created

**# azurerm\_linux\_virtual\_machine.argoid-terraform-gateway-vm** will be created

**# azurerm\_network\_interface.argoid-terraform-client1-nic** will be created

**# azurerm\_network\_interface.argoid-terraform-gateway-nic** will be created

**# azurerm\_network\_security\_group.nsg-terraform** will be created

**# azurerm\_public\_ip.ip-argoid-terraform-client1** will be created

**# azurerm\_public\_ip.ip-argoid-terraform-gateway** will be created

**# azurerm\_resource\_group.TFRG** will be created

**# azurerm\_subnet.TFsubnet** will be created

**# azurerm\_subnet\_network\_security\_group\_association.nsg-subnet-terraform-association** will be created

**# azurerm\_virtual\_network.TFVN** will be created

**WILL UPDATE APPLICATION GATEWAY TERRAFORM CODE BELOW ➖**

# RESOURCES STARTS FROM HERE

resource "azurerm\_resource\_group" "TFRG1" {

name = "argoid-test2-resource-group-1"

location = "Central India"

}

resource "azurerm\_virtual\_network" "TFVN1" {

name = "argoid-test2-vpc-network"

resource\_group\_name = azurerm\_resource\_group.TFRG1.name

location = azurerm\_resource\_group.TFRG1.location

address\_space = ["10.254.0.0/16"]

}

resource "azurerm\_subnet" "frontend1" {

name = "argoid-test2-app-gw-frontend"

resource\_group\_name = azurerm\_resource\_group.TFRG1.name

virtual\_network\_name = azurerm\_virtual\_network.TFVN1.name

address\_prefixes = ["10.254.0.0/24"]

}

resource "azurerm\_subnet" "backend1" {

name = "argoid-test2-app-gw-backend"

resource\_group\_name = azurerm\_resource\_group.TFRG1.name

virtual\_network\_name = azurerm\_virtual\_network.TFVN1.name

address\_prefixes = ["10.254.2.0/24"]

}

resource "azurerm\_public\_ip" "TFPUB1" {

name = "argoid-test2-app-gw-1-public-ip"

resource\_group\_name = azurerm\_resource\_group.TFRG1.name

location = azurerm\_resource\_group.TFRG1.location

allocation\_method = "Dynamic"

}

# since these variables are re-used - a locals block makes this more maintainable

locals {

backend\_address\_pool\_name = "${azurerm\_virtual\_network.TFVN1.name}-stage.qalara.search.argoid.com-pool"

backend\_address\_pool\_ip\_addresses = "${azurerm\_virtual\_network.TFVN1.name}-bap-ipaddr"

frontend\_port\_name = "${azurerm\_virtual\_network.TFVN1.name}-feport"

frontend\_ip\_configuration\_name = "${azurerm\_virtual\_network.TFVN1.name}-appGwPublicFrontendIp"

http\_setting\_name = "${azurerm\_virtual\_network.TFVN1.name}-stage.qalara.search.argoid.com-backend-setting"

listener\_name = "${azurerm\_virtual\_network.TFVN1.name}-stage.qalara.search.argoid.com"

request\_routing\_rule\_name = "${azurerm\_virtual\_network.TFVN1.name}-stage.qalara.search.argoid.com-routing-rule"

redirect\_configuration\_name = "${azurerm\_virtual\_network.TFVN1.name}-rdrcfg"

}

resource "azurerm\_application\_gateway" "network" {

name = "argoid-test2-app-gateway-1"

resource\_group\_name = azurerm\_resource\_group.TFRG1.name

location = azurerm\_resource\_group.TFRG1.location

sku {

name = "Standard\_Small"

tier = "Standard"

capacity = 2

}

gateway\_ip\_configuration {

name = "argoid-test2-gateway-ip-configuration"

subnet\_id = azurerm\_subnet.frontend1.id

}

frontend\_port {

name = local.frontend\_port\_name

port = 443

}

frontend\_ip\_configuration {

name = local.frontend\_ip\_configuration\_name

public\_ip\_address\_id = azurerm\_public\_ip.TFPUB1.id

}

backend\_address\_pool {

name = local.backend\_address\_pool\_name

#ip\_addresses = split(",", local.backend\_address\_pool\_ip\_addresses)

ip\_addresses = ["10.1.0.8"]

}

backend\_http\_settings {

name = local.http\_setting\_name

cookie\_based\_affinity = "Disabled"

path = "/\*"

port = 8092

protocol = "Http"

request\_timeout = 20

}

http\_listener {

name = local.listener\_name

frontend\_ip\_configuration\_name = local.frontend\_ip\_configuration\_name

frontend\_port\_name = local.frontend\_port\_name

protocol = "Https"

}

request\_routing\_rule {

name = local.request\_routing\_rule\_name

rule\_type = "Basic"

http\_listener\_name = local.listener\_name

backend\_address\_pool\_name = local.backend\_address\_pool\_name

backend\_http\_settings\_name = local.http\_setting\_name

}

}

**RESULTS FOR ABOVE TERRAFORM CODE ➖**

**# azurerm\_application\_gateway.network** will be created

**# azurerm\_public\_ip.example** will be created

**# azurerm\_resource\_group.example** will be created

**# azurerm\_subnet.backend** will be created

**# azurerm\_subnet.frontend** will be created

**# azurerm\_virtual\_network.example** will be created