provider "azurerm" {

    features {}

  subscription\_id             = "f01a49f7-2907-498a-8e9a-c8aa0c22f06a"

  client\_id                   = "e43cb099-c709-49ca-8d63-124252518954"

  client\_secret               = "o9M8Q~H~DsnleEKkHuGyQ1aJeWbGg8PhP0DTLa8S"

  tenant\_id                   = "edf2a979-9c82-4929-8fed-801457af15d0"

}

resource "azurerm\_resource\_group" "example" {

  name     = "db-rg"

  location = "eastasia"

}

resource "azurerm\_network\_security\_group" "example" {

  name                = "mi-nsg"

  location            = azurerm\_resource\_group.example.location

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

}

resource "azurerm\_network\_security\_rule" "allow\_management\_inbound" {

  name                        = "allow\_management\_inbound"

  priority                    = 106

  direction                   = "Inbound"

  access                      = "Allow"

  protocol                    = "Tcp"

  source\_port\_range           = "\*"

  destination\_port\_ranges     = ["9000", "9003", "1438", "1440", "1452"]

  source\_address\_prefix       = "\*"

  destination\_address\_prefix  = "\*"

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

  network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}

resource "azurerm\_network\_security\_rule" "allow\_misubnet\_inbound" {

  name                        = "allow\_misubnet\_inbound"

  priority                    = 200

  direction                   = "Inbound"

  access                      = "Allow"

  protocol                    = "\*"

  source\_port\_range           = "\*"

  destination\_port\_range      = "\*"

  source\_address\_prefix       = "10.128.0.0/24"

  destination\_address\_prefix  = "\*"

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

  network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}

resource "azurerm\_network\_security\_rule" "allow\_health\_probe\_inbound" {

  name                        = "allow\_health\_probe\_inbound"

  priority                    = 300

  direction                   = "Inbound"

  access                      = "Allow"

  protocol                    = "\*"

  source\_port\_range           = "\*"

  destination\_port\_range      = "\*"

  source\_address\_prefix       = "AzureLoadBalancer"

  destination\_address\_prefix  = "\*"

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

  network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}

resource "azurerm\_network\_security\_rule" "allow\_tds\_inbound" {

  name                        = "allow\_tds\_inbound"

  priority                    = 1000

  direction                   = "Inbound"

  access                      = "Allow"

  protocol                    = "Tcp"

  source\_port\_range           = "\*"

  destination\_port\_range      = "1433"

  source\_address\_prefix       = "VirtualNetwork"

  destination\_address\_prefix  = "\*"

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

  network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}

resource "azurerm\_network\_security\_rule" "deny\_all\_inbound" {

  name                        = "deny\_all\_inbound"

  priority                    = 4096

  direction                   = "Inbound"

  access                      = "Deny"

  protocol                    = "\*"

  source\_port\_range           = "\*"

  destination\_port\_range      = "\*"

  source\_address\_prefix       = "\*"

  destination\_address\_prefix  = "\*"

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

  network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}

resource "azurerm\_network\_security\_rule" "allow\_management\_outbound" {

  name                        = "allow\_management\_outbound"

  priority                    = 102

  direction                   = "Outbound"

  access                      = "Allow"

  protocol                    = "Tcp"

  source\_port\_range           = "\*"

  destination\_port\_ranges     = ["80", "443", "12000"]

  source\_address\_prefix       = "\*"

  destination\_address\_prefix  = "\*"

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

  network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}

resource "azurerm\_network\_security\_rule" "allow\_misubnet\_outbound" {

  name                        = "allow\_misubnet\_outbound"

  priority                    = 200

  direction                   = "Outbound"

  access                      = "Allow"

  protocol                    = "\*"

  source\_port\_range           = "\*"

  destination\_port\_range      = "\*"

  source\_address\_prefix       = "10.128.0.0/24"

  destination\_address\_prefix  = "\*"

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

  network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}

resource "azurerm\_network\_security\_rule" "deny\_all\_outbound" {

  name                        = "deny\_all\_outbound"

  priority                    = 4096

  direction                   = "Outbound"

  access                      = "Deny"

  protocol                    = "\*"

  source\_port\_range           = "\*"

  destination\_port\_range      = "\*"

  source\_address\_prefix       = "\*"

  destination\_address\_prefix  = "\*"

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

  network\_security\_group\_name = azurerm\_network\_security\_group.example.name

}

resource "azurerm\_virtual\_network" "example" {

  name                = "vnet-mi"

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

  address\_space       = ["10.128.0.0/16"]

  location            = azurerm\_resource\_group.example.location

}

resource "azurerm\_subnet" "example" {

  name                 = "subnet-mi"

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

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

  address\_prefixes     = ["10.128.0.0/24"]

  delegation {

    name = "managedinstancedelegation"

    service\_delegation {

      name    = "Microsoft.Sql/managedInstances"

      actions = ["Microsoft.Network/virtualNetworks/subnets/join/action", "Microsoft.Network/virtualNetworks/subnets/prepareNetworkPolicies/action", "Microsoft.Network/virtualNetworks/subnets/unprepareNetworkPolicies/action"]

    }

  }

}

resource "azurerm\_subnet\_network\_security\_group\_association" "example" {

  subnet\_id                 = azurerm\_subnet.example.id

  network\_security\_group\_id = azurerm\_network\_security\_group.example.id

}

resource "azurerm\_route\_table" "example" {

  name                          = "routetable-mi"

  location                      = azurerm\_resource\_group.example.location

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

  disable\_bgp\_route\_propagation = false

  depends\_on = [

    azurerm\_subnet.example,

  ]

}

resource "azurerm\_subnet\_route\_table\_association" "example" {

  subnet\_id      = azurerm\_subnet.example.id

  route\_table\_id = azurerm\_route\_table.example.id

}

resource "azurerm\_sql\_managed\_instance" "example" {

  name                         = "sqlmi131a0123"

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

  location                     = azurerm\_resource\_group.example.location

  administrator\_login          = "admin"

  administrator\_login\_password = "M1@dmin"

  license\_type                 = "BasePrice"

  subnet\_id                    = azurerm\_subnet.example.id

  sku\_name                     = "GP\_Gen5"

  vcores                       = 4

  storage\_size\_in\_gb           = 32

  depends\_on = [

    azurerm\_subnet\_network\_security\_group\_association.example,

    azurerm\_subnet\_route\_table\_association.example,

  ]

}