## » Data Source: azurerm application security group

Get information about an Application Security Group.

**Note:** Application Security Groups are currently in Public Preview on an optin basis. More information, including how you can register for the Preview, and which regions Application Security Groups are available in are available here

#### » Example Usage

```
data "azurerm_application_security_group" "test" {
  name = "tf-appsecuritygroup"
  resource_group_name = "my-resource-group"
}

output "application_security_group_id" {
  value = "${data.azurerm_application_security_group.test.id}"
}
```

### » Argument Reference

The following arguments are supported:

- name The name of the Application Security Group.
- resource\_group\_name The name of the resource group in which the Application Security Group exists.

#### » Attributes Reference

The following attributes are exported:

- id The ID of the Application Security Group.
- location The supported Azure location where the Application Security Group exists.
- tags A mapping of tags assigned to the resource.

# » Data Source: azurerm\_app\_service

Use this data source to obtain information about an App Service.

### » Example Usage

### » Argument Reference

- name (Required) The name of the App Service.
- resource\_group\_name (Required) The Name of the Resource Group where the App Service exists.

#### » Attributes Reference

- id The ID of the App Service.
- location The Azure location where the App Service exists.
- app\_service\_plan\_id The ID of the App Service Plan within which the App Service exists.
- app\_settings A key-value pair of App Settings for the App Service.
- connection\_string An connection\_string block as defined below.
- client\_affinity\_enabled Does the App Service send session affinity cookies, which route client requests in the same session to the same instance?
- enabled Is the App Service Enabled?
- https\_only Can the App Service only be accessed via HTTPS?
- site\_config A site\_config block as defined below.
- tags A mapping of tags to assign to the resource.

connection\_string supports the following:

- name The name of the Connection String.
- type The type of the Connection String.

• value - The value for the Connection String.

site\_config supports the following:

- always\_on Is the app be loaded at all times?
- default\_documents The ordering of default documents to load, if an address isn't specified.
- dotnet\_framework\_version The version of the .net framework's CLR used in this App Service.
- http2\_enabled Is HTTP2 Enabled on this App Service?
- ip\_restriction One or more ip\_restriction blocks as defined below.
- java\_version The version of Java in use.
- java\_container The Java Container in use.
- java\_container\_version The version of the Java Container in use.
- local\_mysql\_enabled Is "MySQL In App" Enabled? This runs a local MySQL instance with your app and shares resources from the App Service plan.
- managed\_pipeline\_mode The Managed Pipeline Mode used in this App Service.
- php\_version The version of PHP used in this App Service.
- python\_version The version of Python used in this App Service.
- remote\_debugging\_enabled Is Remote Debugging Enabled in this App Service?
- remote\_debugging\_version Which version of Visual Studio is the Remote Debugger compatible with?
- scm\_type The type of Source Control enabled for this App Service.
- use\_32\_bit\_worker\_process Does the App Service run in 32 bit mode, rather than 64 bit mode?
- websockets\_enabled Are WebSockets enabled for this App Service?

ip\_restriction exports the following:

- ip\_address The IP Address used for this IP Restriction.
- subnet\_mask The Subnet mask used for this IP Restriction.

# » Data Source: azurerm\_app\_service\_plan

Use this data source to obtain information about an App Service Plan (formerly known as a Server Farm).

## » Example Usage

### » Argument Reference

- name (Required) The name of the App Service Plan.
- resource\_group\_name (Required) The Name of the Resource Group where the App Service Plan exists.

#### » Attributes Reference

- id The ID of the App Service Plan.
- location The Azure location where the App Service Plan exists
- kind The Operating System type of the App Service Plan
- sku A sku block as documented below.
- properties A properties block as documented below.
- tags A mapping of tags assigned to the resource.
- maximum\_number\_of\_workers The maximum number of workers supported with the App Service Plan's sku.

A sku block supports the following:

- tier Specifies the plan's pricing tier.
- size Specifies the plan's instance size.

capacity - Specifies the number of workers associated with this App Service Plan.

A properties block supports the following:

- app\_service\_environment\_id The ID of the App Service Environment where the App Service Plan is located.
- maximum\_number\_of\_workers Maximum number of instances that can be assigned to this App Service plan.
- reserved Is this App Service Plan Reserved?
- per\_site\_scaling Can Apps assigned to this App Service Plan be scaled independently?

## » Data Source: azurerm builtin role definition

Use this data source to access the properties of a built-in Role Definition. To access information about a custom Role Definition, please see the azurerm\_role\_definition data source instead.

### » Example Usage

```
data "azurerm_builtin_role_definition" "contributor" {
   name = "Contributor"
}

output "contributor_role_definition_id" {
   value = "${data.azurerm_builtin_role_definition.contributor.id}"
}
```

#### » Argument Reference

• name - (Required) Specifies the name of the built-in Role Definition. Possible values are: Contributor, Owner, Reader and VirtualMachineContributor.

#### » Attributes Reference

- id the ID of the built-in Role Definition.
- description the Description of the built-in Role.
- type the Type of the Role.
- permissions a permissions block as documented below.

• assignable\_scopes - One or more assignable scopes for this Role Definition, such as /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333, /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup, or /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup/providers/

A permissions block contains:

- actions a list of actions supported by this role
- not\_actions a list of actions which are denied by this role

## » Data Source: azurerm cdn profile

Use this data source to access information about a CDN Profile.

### » Example Usage

```
data "azurerm_cdn_profile" "test" {
  name = "myfirstcdnprofile"
  resource_group_name = "example-resources"
}

output "cdn_profile_id" {
  value = "${data.azurerm_cdn_profile.test.id}"
}
```

### » Argument Reference

- name (Required) The name of the CDN Profile.
- resource\_group\_name (Required) The name of the resource group in which the CDN Profile exists.

#### » Attributes Reference

- location The Azure Region where the resource exists.
- sku The pricing related information of current CDN profile.
- tags A mapping of tags assigned to the resource.

# » Data Source: azurerm\_client\_config

Use this data source to access the configuration of the Azure Resource Manager provider.

#### » Example Usage

```
data "azurerm_client_config" "current" {}

output "account_id" {
   value = "${data.azurerm_client_config.current.service_principal_application_id}"
}
```

### » Argument Reference

There are no arguments available for this data source.

#### » Attributes Reference

- client\_id is set to the Azure Client ID (Application Object ID).
- tenant\_id is set to the Azure Tenant ID.
- subscription\_id is set to the Azure Subscription ID.

**Note:** the following fields are only available when authenticating via a Service Principal (as opposed to using the Azure CLI):

- service\_principal\_application\_id is the Service Principal Application ID.
- service\_principal\_object\_id is the Service Principal Object ID.

**Note:** To better understand "application" and "service principal", please read Application and service principal objects in Azure Active Directory.

## » Data Source: azurerm\_cosmosdb\_account

Use this data source to access the properties of an Azure CosmosDB (formally DocumentDB) Account.

### » Example Usage

#### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the CosmosDB Account.
- resource\_group\_name (Required) Specifies the name of the resource group in which the CosmosDB Account resides.

#### » Attributes Reference

The following attributes are exported:

- id The ID of the CosmosDB Account.
- location The Azure location where the resource exists.
- tags A mapping of tags assigned to the resource.
- offer\_type The Offer Type to used by this CosmosDB Account.
- kind The Kind of the CosmosDB account.
- ip\_range\_filter The current IP Filter for this CosmosDB account
- enable\_automatic\_failover If automatic failover is enabled for this CosmosDB Account.

consistency\_policy The current consistency Settings for this CosmosDB account with the following properties:

- consistency\_level The Consistency Level used by this CosmosDB Account.
- max\_interval\_in\_seconds The amount of staleness (in seconds) tolerated when the consistency level is Bounded Staleness.
- max\_staleness\_prefix The number of stale requests tolerated when the consistency level is Bounded Staleness.

geo\_location The geographic locations data is replicated to with the following properties:

- id The ID of the location.
- location The name of the Azure region hosting replicated data.
- priority The locations fail over priority.
- endpoint The endpoint used to connect to the CosmosDB account.
- read\_endpoints A list of read endpoints available for this CosmosDB account.
- write\_endpoints A list of write endpoints available for this CosmosDB account.
- primary\_master\_key The Primary master key for the CosmosDB Account.
- secondary\_master\_key The Secondary master key for the CosmosDB Account.
- primary\_readonly\_master\_key The Primary read-only master Key for the CosmosDB Account.
- secondary\_readonly\_master\_key The Secondary read-only master key for the CosmosDB Account.

# » Data Source: azurerm\_dns\_zone

Use this data source to obtain information about a DNS Zone.

### » Example Usage

#### » Argument Reference

• name - (Required) The name of the DNS Zone.

• resource\_group\_name - (Optional) The Name of the Resource Group where the DNS Zone exists. If the Name of the Resource Group is not provided, the first DNS Zone from the list of DNS Zones in your subscription that matches name will be returned.

#### » Attributes Reference

- id The ID of the DNS Zone.
- max\_number\_of\_record\_sets Maximum number of Records in the zone.
- number\_of\_record\_sets The number of records already in the zone.
- name\_servers A list of values that make up the NS record for the zone.
- tags A mapping of tags to assign to the EventHub Namespace.

## » Data Source: azurerm\_data\_lake\_store

Use this data source to obtain information about a Data Lake Store.

### » Example Usage

#### » Argument Reference

- name (Required) The name of the Data Lake Store.
- resource\_group\_name (Required) The Name of the Resource Group where the Data Lake Store exists.

### » Attributes Reference

- id The ID of the Data Lake Store.
- tier Current monthly commitment tier for the account.
- tags A mapping of tags to assign to the Data Lake Store.

## » Data Source: azurerm eventhub namespace

Use this data source to obtain information about an EventHub Namespace.

#### » Example Usage

### » Argument Reference

- name (Required) The name of the EventHub Namespace.
- resource\_group\_name (Required) The Name of the Resource Group where the EventHub Namespace exists.

### » Attributes Reference

- id The ID of the EventHub Namespace.
- location The Azure location where the EventHub Namespace exists
- sku Defines which tier to use.
- capacity The Capacity / Throughput Units for a Standard SKU namespace.
- auto\_inflate\_enabled Is Auto Inflate enabled for the EventHub Namespace?
- maximum\_throughput\_units Specifies the maximum number of throughput units when Auto Inflate is Enabled.
- tags A mapping of tags to assign to the EventHub Namespace.

The following attributes are exported only if there is an authorization rule named RootManageSharedAccessKey which is created automatically by Azure.

• default\_primary\_connection\_string - The primary connection string for the authorization rule RootManageSharedAccessKey.

- default\_secondary\_connection\_string The secondary connection string for the authorization rule RootManageSharedAccessKey.
- default\_primary\_key The primary access key for the authorization rule RootManageSharedAccessKey.
- default\_secondary\_key The secondary access key for the authorization rule RootManageSharedAccessKey.

## » Data Source: azurerm\_image

Use this data source to access information about an Image.

### » Example Usage

#### » Argument Reference

- name (Optional) The name of the Image.
- name\_regex (Optional) Regex pattern of the image to match.
- sort\_descending (Optional) By default when matching by regex, images are sorted by name in ascending order and the first match is chosen, to sort descending, set this flag.
- resource\_group\_name (Required) The Name of the Resource Group where this Image exists.

#### » Attributes Reference

- name the name of the Image.
- location the Azure Location where this Image exists.
- os\_disk a os\_disk block as defined below.
- data\_disk a collection of data\_disk blocks as defined below.
- tags a mapping of tags to assigned to the resource.

os\_disk supports the following:

- blob\_uri the URI in Azure storage of the blob used to create the image.
- caching the caching mode for the OS Disk, such as ReadWrite, ReadOnly, or None.
- managed\_disk\_id the ID of the Managed Disk used as the OS Disk Image.
- os\_state the State of the OS used in the Image, such as Generalized.
- os\_type the type of Operating System used on the OS Disk. such as Linux or Windows.
- size\_gb the size of the OS Disk in GB.

data\_disk supports the following:

- blob\_uri the URI in Azure storage of the blob used to create the image.
- caching the caching mode for the Data Disk, such as ReadWrite, ReadOnly, or None.
- lun the logical unit number of the data disk.
- managed\_disk\_id the ID of the Managed Disk used as the Data Disk Image.
- size\_gb the size of this Data Disk in GB.

# » Data Source: azurerm\_key\_vault

Gets information about a Key Vault.

#### » Example Usage

### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Key Vault.
- resource\_group\_name (Required) The name of the Resource Group in which the Key Vault exists.

The following attributes are exported:

- id The Vault ID.
- vault\_uri The URI of the vault for performing operations on keys and secrets.
- location The Azure Region in which the Key Vault exists.
- sku A sku block as described below.
- tenant\_id The Azure Active Directory Tenant ID used for authenticating requests to the Key Vault.
- access\_policy One or more access\_policy blocks as defined below.
- enabled\_for\_deployment Can Azure Virtual Machines retrieve certificates stored as secrets from the Key Vault?
- enabled\_for\_disk\_encryption Can Azure Disk Encryption retrieve secrets from the Key Vault?
- enabled\_for\_template\_deployment Can Azure Resource Manager retrieve secrets from the Key Vault?
- tags A mapping of tags assigned to the Key Vault.

A sku block exports the following:

• name - The name of the SKU used for this Key Vault.

access\_policy supports the following:

- tenant\_id The Azure Active Directory Tenant ID used to authenticate requests for this Key Vault.
- object\_id An Object ID of a User, Service Principal or Security Group.
- application\_id The Object ID of a Azure Active Directory Application.
- certificate\_permissions A list of certificate permissions applicable to this Access Policy.
- key\_permissions A list of key permissions applicable to this Access Policy.
- secret\_permissions A list of secret permissions applicable to this Access Policy.

# » Data Source: azurerm\_key\_vault\_access\_policy

Use this data source to access information about the permissions from the Management Key Vault Templates.

#### » Example Usage

```
data "azurerm_key_vault_access_policy" "contributor" {
   name = "Key Management"
}

output "access_policy_key_permissions" {
   value = "${data.azurerm_key_vault_access_policy.key_permissions}"
}
```

### » Argument Reference

• name - (Required) Specifies the name of the Management Template.

Possible values are: Key Management, Secret Management, Certificate

Management, Key & Secret Management, Key & Certificate Management,

Secret & Certificate Management,

Management

#### » Attributes Reference

- id the ID of the Key Vault Access Policy
- $\bullet$   ${\tt key\_permissions}$  the key permissions for the access policy
- secret permissions the secret permissions for the access policy
- certificate\_permissions the certificate permissions for the access policy

# » Data Source: azurerm\_key\_vault\_secret

Returns information about the specified Key Vault Secret.

**Note:** All arguments including the secret value will be stored in the raw state as plain-text. Read more about sensitive data in state.

### » Example Usage

### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Key Vault Secret.
- vault\_uri (Required) Specifies the URI used to access the Key Vault instance, available on the azurerm\_key\_vault Data Source / Resource.

#### » Attributes Reference

The following attributes are exported:

- id The Key Vault Secret ID.
- value The value of the Key Vault Secret.
- version The current version of the Key Vault Secret.
- content\_type The content type for the Key Vault Secret.
- tags Any tags assigned to this resource.

# » Data Source: azurerm\_kubernetes\_cluster

Gets information about a managed Kubernetes Cluster (AKS)

**Note:** All arguments including the client secret will be stored in the raw state as plain-text. Read more about sensitive data in state.

#### » Example Usage

The following arguments are supported:

- name (Required) The name of the managed Kubernetes Cluster.
- resource\_group\_name (Required) The name of the Resource Group in which the managed Kubernetes Cluster exists.

#### » Attributes Reference

The following attributes are exported:

- id The Kubernetes Managed Cluster ID.
- fqdn The FQDN of the Azure Kubernetes Managed Cluster.
- kube\_config\_raw Base64 encoded Kubernetes configuration.
- kube\_config A kube\_config block as defined below.
- location The Azure Region in which the managed Kubernetes Cluster exists.
- dns\_prefix The DNS Prefix of the managed Kubernetes cluster.
- kubernetes\_version The version of Kubernetes used on the managed Kubernetes Cluster.
- linux\_profile A linux\_profile block as documented below.
- agent\_pool\_profile One or more agent\_profile\_pool blocks as documented below.
- service\_principal A service\_principal block as documented below.
- tags A mapping of tags assigned to this resource.

kube\_config exports the following:

- client\_key Base64 encoded private key used by clients to authenticate to the Kubernetes cluster.
- client\_certificate Base64 encoded public certificate used by clients to authenticate to the Kubernetes cluster.
- cluster\_ca\_certificate Base64 encoded public CA certificate used as the root of trust for the Kubernetes cluster.
- host The Kubernetes cluster server host.
- username A username used to authenticate to the Kubernetes cluster.

• password - A password or token used to authenticate to the Kubernetes cluster

**NOTE:** It's possible to use these credentials with the Kubernetes Provider like so:

linux profile exports the following:

- admin\_username The username associated with the administrator account of the managed Kubernetes Cluster.
- ssh\_key One or more ssh\_key blocks as defined below.

ssh\_key exports the following:

• key\_data - The Public SSH Key used to access the cluster.

agent\_pool\_profile exports the following:

- name The name assigned to this pool of agents
- count The number of Agents (VM's) in the Pool.
- vm\_size The size of each VM in the Agent Pool (e.g. Standard\_F1).
- os\_disk\_size\_gb The size of the Agent VM's Operating System Disk in GB.
- os\_type The Operating System used for the Agents.
- vnet\_subnet\_id The ID of the Subnet where the Agents in the Pool are provisioned.

service\_principal supports the following:

• client\_id - The Client ID of the Service Principal used by this Managed Kubernetes Cluster.

# » Data Source: azurerm\_managed\_disk

Use this data source to access the properties of an existing Azure Managed Disk.

#### » Example Usage

```
data "azurerm_managed_disk" "datasourcemd" {
```

```
name = "testManagedDisk"
   resource_group_name = "acctestRG"
}
resource "azurerm_virtual_network" "test" {
                     = "acctvn"
                    = ["10.0.0.0/16"]
 address_space
 location = "West US 2"
 resource_group_name = "acctestRG"
}
resource "azurerm_subnet" "test" {
                      = "acctsub"
 name
 resource group name = "acctestRG"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
 address_prefix
                   = "10.0.2.0/24"
}
resource "azurerm_network_interface" "test" {
                     = "acctni"
 name
 location
                     = "West US 2"
 resource_group_name = "acctestRG"
 ip_configuration {
                                 = "testconfiguration1"
   name
   subnet id
                                 = "${azurerm_subnet.test.id}"
   private_ip_address_allocation = "dynamic"
}
resource "azurerm virtual machine" "test" {
 name
                       = "acctvm"
                       = "West US 2"
 location
 resource_group_name = "acctestRG"
 network_interface_ids = ["${azurerm_network_interface.test.id}"]
                       = "Standard_DS1_v2"
 vm_size
 storage_image_reference {
   publisher = "Canonical"
   offer = "UbuntuServer"
           = "16.04-LTS"
   sku
   version = "latest"
  storage_os_disk {
                     = "myosdisk1"
   name
```

```
= "ReadWrite"
    caching
                     = "FromImage"
    create_option
   managed_disk_type = "Standard_LRS"
  storage_data_disk {
                      = "datadisk_new"
   managed_disk_type = "Standard_LRS"
   create_option = "Empty"
   lun
                     = 0
   disk_size_gb
                     = "1023"
 }
  storage_data_disk {
                   = "${data.azurerm_managed_disk.datasourcemd.name}"
   managed_disk_id = "${data.azurerm_managed_disk.datasourcemd.id}"
   create_option = "Attach"
                   = "${data.azurerm_managed_disk.datasourcemd.disk_size_gb}"
    disk_size_gb
  os_profile {
    computer_name = "hostname"
    admin_username = "testadmin"
    admin_password = "Password1234!"
  os_profile_linux_config {
    disable_password_authentication = false
 tags {
    environment = "staging"
}
```

- name (Required) Specifies the name of the Managed Disk.
- resource\_group\_name (Required) Specifies the name of the resource group.

- storage\_account\_type The storage account type for the managed disk.
- source\_uri The source URI for the managed disk
- source\_resource\_id ID of an existing managed disk that the current resource was created from.
- os\_type The operating system for managed disk. Valid values are Linux or Windows
- disk\_size\_gb The size of the managed disk in gigabytes.
- tags A mapping of tags assigned to the resource.
- zones (Optional) A collection containing the availability zone the managed disk is allocated in.

**Please Note**: Availability Zones are in Preview and only supported in several regions at this time - as such you must be opted into the Preview to use this functionality. You can opt into the Availability Zones Preview in the Azure Portal.

## » Data Source: azurerm network interface

Use this data source to access the properties of an Azure Network Interface.

### » Example Usage

#### » Argument Reference

- name (Required) Specifies the name of the Network Interface.
- resource\_group\_name (Required) Specifies the name of the resource group the Network Interface is located in.

- applied\_dns\_servers List of DNS servers applied to the specified network interface.
- dns\_servers The list of DNS servers used by the specified network interface.
- enable\_accelerated\_networking Indicates if accelerated networking is set on the specified network interface.
- enable\_ip\_forwarding Indicate if IP forwarding is set on the specified network interface.
- id The ID of the virtual network that the specified network interface is associated to.
- internal\_dns\_name\_label The internal dns name label of the specified network interface.
- internal\_fqdn The internal FQDN associated to the specified network interface.
- ip\_configuration The list of IP configurations associated to the specified network interface.
- location The location of the specified network interface.
- network\_security\_group\_id The ID of the network security group associated to the specified network interface.
- mac\_address The MAC address used by the specified network interface.
- private\_ip\_address The primary private ip address associated to the specified network interface.
- private\_ip\_addresses The list of private ip addresses associates to the specified network interface.
- tags List the tags assocatied to the specified network interface.
- virtual\_machine\_id The ID of the virtual machine that the specified network interface is attached to.

# » Data Source: azurerm\_network\_security\_group

Use this data source to access the properties of a Network Security Group.

#### » Example Usage

- name (Required) Specifies the Name of the Network Security Group.
- resource\_group\_name (Required) Specifies the Name of the Resource Group within which the Network Security Group exists

### » Attributes Reference

- id The ID of the Network Security Group.
- location The supported Azure location where the resource exists.
- security\_rule One or more security\_rule blocks as defined below.
- tags A mapping of tags assigned to the resource.

#### The security\_rule block supports:

- name The name of the security rule.
- description The description for this rule.
- protocol The network protocol this rule applies to.
- source\_port\_range The Source Port or Range.
- destination\_port\_range The Destination Port or Range.
- source\_address\_prefix CIDR or source IP range or \* to match any IP
- destination\_address\_prefix CIDR or destination IP range or \* to match any IP.
- source\_application\_security\_group\_ids A List of source Application Security Group ID's
- destination\_application\_security\_group\_ids A List of destination Application Security Group ID's
- access Is network traffic is allowed or denied?
- priority The priority of the rule
- direction The direction specifies if rule will be evaluated on incoming or outgoing traffic.

# » Data Source: azurerm\_platform\_image

Use this data source to access the properties of an Azure Platform Image.

#### » Example Usage

```
data "azurerm_platform_image" "test" {
  location = "West Europe"
  publisher = "Canonical"
  offer = "UbuntuServer"
  sku = "16.04-LTS"
}

output "version" {
  value = "${data.azurerm_platform_image.test.version}"
}
```

### » Argument Reference

- location (Required) Specifies the Location to pull information about this Platform Image from.
- publisher (Required) Specifies the Publisher associated with the Platform Image.
- offer (Required) Specifies the Offer associated with the Platform Image.
- sku (Required) Specifies the SKU of the Platform Image.

## » Attributes Reference

- id The ID of the Platform Image.
- version The latest version of the Platform Image.

# » Data Source: azurerm\_public\_ip

Use this data source to access the properties of an existing Azure Public IP Address.

#### » Example Usage (reference an existing)

```
data "azurerm_public_ip" "test" {
  name = "name_of_public_ip"
```

```
resource_group_name = "name_of_resource_group"
output "domain_name_label" {
 value = "${data.azurerm_public_ip.test.domain_name_label}"
output "public_ip_address" {
 value = "${data.azurerm_public_ip.test.ip_address}"
}
» Example Usage (Retrieve the Dynamic Public IP of a
new VM)
resource "azurerm_resource_group" "test" {
       = "test-resources"
  location = "West US 2"
}
resource "azurerm_virtual_network" "test" {
                    = "test-network"
 name
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm subnet" "test" {
                     = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
 address_prefix = "10.0.2.0/24"
}
resource "azurerm_public_ip" "test" {
                              = "test-pip"
 name
 location
                              = "${azurerm_resource_group.test.location}"
                        = "${azurerm_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "Dynamic"
  idle_timeout_in_minutes
                              = 30
 tags {
    environment = "test"
 }
}
```

```
resource "azurerm_network_interface" "test" {
                      = "test-nic"
 name
                      = "${azurerm_resource_group.test.location}"
  location
 resource_group_name = "${azurerm_resource_group.test.name}"
  ip_configuration {
                                  = "testconfiguration1"
   name
                                  = "${azurerm_subnet.test.id}"
    subnet_id
   private_ip_address_allocation = "static"
   private_ip_address
                                 = "10.0.2.5"
   public_ip_address_id
                                  = "${azurerm_public_ip.test.id}"
 }
}
resource "azurerm_virtual_machine" "test" {
                        = "test-vm"
                        = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 network_interface_ids = ["${azurerm_network_interface.test.id}"]
  # ...
}
data "azurerm_public_ip" "test" {
                      = "${azurerm_public_ip.test.name}"
 resource_group_name = "${azurerm_virtual_machine.test.resource_group_name}"
}
output "public_ip_address" {
 value = "${data.azurerm_public_ip.test.ip_address}"
}
```

- name (Required) Specifies the name of the public IP address.
- resource\_group\_name (Required) Specifies the name of the resource group.

### » Attributes Reference

- domain\_name\_label The label for the Domain Name.
- idle\_timeout\_in\_minutes Specifies the timeout for the TCP idle connection.

- fqdn Fully qualified domain name of the A DNS record associated with the public IP. This is the concatenation of the domainNameLabel and the regionalized DNS zone.
- ip\_address The IP address value that was allocated.
- tags A mapping of tags to assigned to the resource.

## » Data Source: azurerm\_public\_ips

Use this data source to access a filtered list of Public IP Addresses

### » Example Usage

```
data "azurerm_public_ips" "test" {
  resource_group_name = "pip-test"
  attached = false
}
```

### » Argument Reference

- resource\_group\_name (Required) Specifies the name of the resource group.
- attached (Optional) Filter to include IP Addresses which are attached to a device, such as a VM/LB (true) or unattached (false).
- name\_prefix (Optional) A prefix match used for the IP Addresses name field, case sensitive.
- allocation\_type (Optional) The Allocation Type for the Public IP Address. Possible values include Static or Dynamic.

#### » Attributes Reference

• public\_ips - A List of public\_ips blocks as defined below filtered by the criteria above.

A public\_ips block contains:

- id The ID of the Public IP Address
- domain\_name\_label The Domain Name Label of the Public IP Address
- fqdn The FQDN of the Public IP Address
- name The Name of the Public IP Address

## » Data Source: azurerm recovery services vault

Use this data source to access the properties of a Recovery Services Vault.

#### » Example Usage

### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Recovery Services Vault.
- resource\_group\_name (Required) The name of the resource group in which the Recovery Services Vault resides.

#### » Attributes Reference

The following attributes are exported:

- id The ID of the Recovery Services Vault.
  - location The Azure location where the resource resides.
  - tags A mapping of tags assigned to the resource.
  - sku The vault's current SKU.

# » Data Source: azurerm\_resource\_group

Use this data source to access the properties of an Azure resource group.

### » Example Usage

```
data "azurerm_resource_group" "test" {
  name = "dsrg_test"
}
resource "azurerm_managed_disk" "test" {
```

```
name = "managed_disk_name"
location = "${data.azurerm_resource_group.test.location}"
resource_group_name = "${data.azurerm_resource_group.test.name}"
storage_account_type = "Standard_LRS"
create_option = "Empty"
disk_size_gb = "1"
}
```

• name - (Required) Specifies the name of the resource group.

**NOTE:** If the specified location doesn't match the actual resource group location, an error message with the actual location value will be shown.

#### » Attributes Reference

- location The location of the resource group.
- tags A mapping of tags assigned to the resource group.

# » Data Source: azurerm\_role\_definition

Use this data source to access the properties of a custom Role Definition. To access information about a built-in Role Definition, please see the azurerm\_builtin\_role\_definition data source instead.

### » Example Usage

```
data "azurerm_subscription" "primary" {}

data "azurerm_role_definition" "custom" {
   role_definition_id = "00000000-0000-0000-0000000000"
   scope = "${data.azurerm_subscription.primary.id}" # /subscriptions/00000000-0
}

output "custom_role_definition_id" {
   value = "${data.azurerm_role_definition.custom.id}"
```

- role\_definition\_id (Required) Specifies the ID of the Role Definition as a UUID/GUID.
- scope (Required) Specifies the Scope at which the Custom Role Definition exists.

#### » Attributes Reference

- id the ID of the built-in Role Definition.
- description the Description of the built-in Role.
- type the Type of the Role.
- permissions a permissions block as documented below.
- assignable\_scopes One or more assignable scopes for this Role Definition, such as /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333,
   /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup,
   or /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup/providers/

A permissions block contains:

- actions a list of actions supported by this role
- not\_actions a list of actions which are denied by this role

# » Data Source: azurerm route table

Gets information about a Route Table

### » Example Usage

### » Argument Reference

The following arguments are supported:

- name (Required) The name of the Route Table.
- resource\_group\_name (Required) The name of the Resource Group in which the Route Table exists.

The following attributes are exported:

- id The Route Table ID.
- location The Azure Region in which the Route Table exists.
- route One or more route blocks as documented below.
- subnets The collection of Subnets associated with this route table.
- tags A mapping of tags assigned to the Route Table.

The route block exports the following:

- name The name of the Route.
- address\_prefix The destination CIDR to which the route applies.
- next\_hop\_type The type of Azure hop the packet should be sent to.
- next\_hop\_in\_ip\_address Contains the IP address packets should be forwarded to.

# » Data Source: azurerm\_scheduler\_job\_collection

Use this data source to access the properties of an Azure scheduler job collection.

### » Example Usage

#### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Scheduler Job Collection.
- resource\_group\_name (Required) Specifies the name of the resource group in which the Scheduler Job Collection resides.

The following attributes are exported:

- id The ID of the Scheduler Job Collection.
- location The Azure location where the resource exists.
- tags A mapping of tags assigned to the resource.
- sku The Job Collection's pricing level's SKU.
- state The Job Collection's state.
- quota The Job collection quotas as documented in the quota block below.

The quota block supports:

- max\_job\_count Sets the maximum number of jobs in the collection.
- max\_recurrence\_frequency The maximum frequency of recurrence.
- max\_retry\_interval The maximum interval between retries.

# » Data Source: azurerm\_storage\_account

Gets information about the specified Storage Account.

### » Example Usage

### » Argument Reference

- name (Required) Specifies the name of the Storage Account
- resource\_group\_name (Required) Specifies the name of the resource group the Storage Account is located in.

- id The ID of the Storage Account.
- location The Azure location where the Storage Account exists
- account\_kind The Kind of account.
- account\_tier The Tier of this storage account.
- account\_replication\_type The type of replication used for this storage account.
- access\_tier The access tier for BlobStorage accounts.
- enable\_blob\_encryption Are Encryption Services are enabled for Blob storage? See here for more information.
- enable\_file\_encryption Are Encryption Services are enabled for File storage? See here for more information.
- enable\_https\_traffic\_only Is traffic only allowed via HTTPS? See here for more information.
- account\_encryption\_source The Encryption Source for this Storage Account.
- custom\_domain A custom\_domain block as documented below.
- tags A mapping of tags to assigned to the resource.
- primary\_location The primary location of the Storage Account.
- secondary\_location The secondary location of the Storage Account.
- primary\_blob\_endpoint The endpoint URL for blob storage in the primary location.
- secondary\_blob\_endpoint The endpoint URL for blob storage in the secondary location.
- primary\_queue\_endpoint The endpoint URL for queue storage in the primary location.
- secondary\_queue\_endpoint The endpoint URL for queue storage in the secondary location.
- primary\_table\_endpoint The endpoint URL for table storage in the primary location.
- secondary\_table\_endpoint The endpoint URL for table storage in the secondary location.
- primary\_file\_endpoint The endpoint URL for file storage in the primary location.

- primary\_access\_key The primary access key for the Storage Account.
- secondary\_access\_key The secondary access key for the Storage Account.
- primary\_connection\_string The connection string associated with the primary location
- secondary\_connection\_string The connection string associated with the secondary location
- primary\_blob\_connection\_string The connection string associated with the primary blob location
- secondary\_blob\_connection\_string The connection string associated with the secondary blob location
- custom\_domain supports the following:
- name The Custom Domain Name used for the Storage Account.

# » Data Source: azurerm\_storage\_account\_sas

Use this data source to create a Shared Access Signature (SAS) for an Azure Storage Account.

Shared access signatures allow fine-grained, ephemeral access control to various aspects of an Azure Storage Account.

Note that this is an Account SAS and not a Service SAS.

### » Example Usage

```
environment = "staging"
 }
}
data "azurerm_storage_account_sas" "test" {
    connection_string = "${azurerm_storage_account.testsa.primary_connection_string}"
   https_only
                      = true
   resource_types {
        service = true
        container = false
               = false
        object
    }
    services {
       blob = true
       queue = false
       table = false
       file = false
    }
    start
           = "2018-03-21"
    expiry = "2020-03-21"
    permissions {
       read
               = true
        write
               = true
        delete = false
       list
               = false
        add
               = true
        create = true
       update = false
        process = false
    }
}
output "sas url query string" {
  value = "${data.azurerm_storage_account_sas.test.sas}"
```

- connection\_string (Required) The connection string for the storage account to which this SAS applies. Typically directly from the primary\_connection\_string attribute of a terraform created azurerm\_storage\_account resource.
- https\_only (Optional) Only permit https access. If false, both http and https are permitted. Defaults to true.
- resouce\_types (Required) A resource\_types block as defined below.

- services (Required) A services block as defined below.
- start (Required) The starting time and date of validity of this SAS.
   Must be a valid ISO-8601 format time/date string.
- expiry (Required) The expiration time and date of this SAS. Must be a valid ISO-8601 format time/date string.
- permissions (Required) A permissions block as defined below.

resource\_types is a set of true/false flags which define the storage account resource types that are granted access by this SAS. This can be thought of as the scope over which the permissions apply. A service will have larger scope (affecting all sub-resources) than object.

A resource\_types block contains:

- service (Required) Should permission be granted to the entire service?
- container (Required) Should permission be granted to the container?
- object (Required) Should permission be granted only to a specific object?

services is a set of true/false flags which define the storage account services that are granted access by this SAS.

#### A services block contains:

- blob (Required) Should permission be granted to blob services within this storage account?
- queue (Required) Should permission be granted to queue services within this storage account?
- table (Required) Should permission be granted to table services within this storage account?
- file (Required) Should permission be granted to file services within this storage account?

A permissions block contains:

- read (Required) Should Read permissions be enabled for this SAS?
- write (Required) Should Write permissions be enabled for this SAS?
- delete (Required) Should Delete permissions be enabled for this SAS?
- list (Required) Should List permissions be enabled for this SAS?
- add (Required) Should Add permissions be enabled for this SAS?
- create (Required) Should Create permissions be enabled for this SAS?
- update (Required) Should Update permissions be enabled for this SAS?
- process (Required) Should Process permissions be enabled for this SAS?

Refer to the SAS creation reference from Azure for additional details on the fields above.

#### » Attributes Reference

• sas - The computed Account Shared Access Signature (SAS).

# » Data Source: azurerm subnet

Use this data source to access the properties of an Azure Subnet located within a Virtual Network.

## » Example Usage

## » Argument Reference

- name (Required) Specifies the name of the Subnet.
- virtual\_network\_name (Required) Specifies the name of the Virtual Network this Subnet is located within.
- resource\_group\_name (Required) Specifies the name of the resource group the Virtual Network is located in.

#### » Attributes Reference

- id The ID of the Subnet.
- address\_prefix The address prefix used for the subnet.
- network\_security\_group\_id The ID of the Network Security Group associated with the subnet.
- route\_table\_id The ID of the Route Table associated with this subnet.
- ip\_configurations The collection of IP Configurations with IPs within this subnet.

# » Data Source: azurerm subscription

Use this data source to access the properties of an Azure subscription.

#### » Example Usage

```
data "azurerm_subscription" "current" {}

output "current_subscription_display_name" {
  value = "${data.azurerm_subscription.current.display_name}"
}
```

## » Argument Reference

• subscription\_id - (Optional) Specifies the ID of the subscription. If this argument is omitted, the subscription ID of the current Azure Resource Manager provider is used.

#### » Attributes Reference

- display\_name The subscription display name.
- state The subscription state. Possible values are Enabled, Warned, PastDue, Disabled, and Deleted.
- location\_placement\_id The subscription location placement ID.
- quota\_id The subscription quota ID.
- spending\_limit The subscription spending limit.

# » Data Source: azurerm\_subscriptions

Use this data source to access a list of all Azure subscriptions currently available.

### » Example Usage

```
data "azurerm_subscriptions" "available" {}

output "available_subscriptions" {
  value = "${data.azurerm_subscriptions.current.subscriptions}"
}

output "first_available_subscription_display_name" {
```

```
value = "${data.azurerm_subscriptions.current.subscriptions.0.display_name}"
}
```

There are no arguments available for this data source.

#### » Attributes Reference

• subscriptions - One or more subscription blocks as defined below.

The subscription block contains:

- display\_name The subscription display name.
- state The subscription state. Possible values are Enabled, Warned, PastDue, Disabled, and Deleted.
- location\_placement\_id The subscription location placement ID.
- quota\_id The subscription quota ID.
- spending\_limit The subscription spending limit.

# » Data Source: azurerm\_traffic\_manager\_geographical\_location

Use this data source to access the ID of a specified Traffic Manager Geographical Location within the Geographical Hierarchy.

# » Example Usage (World)

```
data "azurerm_traffic_manager_geographical_location" "test" {
   name = "World"
}

output "location_code" {
   value = "${data.azurerm_traffic_manager_geographical_location.test.id}"
}
```

#### » Argument Reference

• name - (Required) Specifies the name of the Location, for example World, Europe or Germany.

#### » Attributes Reference

• id - The ID of this Location, also known as the Code of this Location.

## » Data Source: azurerm\_virtual\_network

Use this data source to access the properties of an Azure Virtual Network.

## » Example Usage

## » Argument Reference

- name (Required) Specifies the name of the Virtual Network.
- resource\_group\_name (Required) Specifies the name of the resource group the Virtual Network is located in.

## » Attributes Reference

- id The ID of the virtual network.
- address\_spaces The list of address spaces used by the virtual network.
- dns\_servers The list of DNS servers used by the virtual network.
- subnets The list of name of the subnets that are attached to this virtual network.
- vnet\_peerings A mapping of name virtual network id of the virtual network peerings.

# » Data Source: azurerm\_virtual\_network\_gateway

Use this data source to access the properties of an Azure Virtual Network Gateway.

### » Example Usage

## » Argument Reference

- name (Required) Specifies the name of the Virtual Network Gateway.
- resource\_group\_name (Required) Specifies the name of the resource group the Virtual Network Gateway is located in.

#### » Attributes Reference

- id The ID of the Virtual Network Gateway.
- location The location/region where the Virtual Network Gateway is located.
- type The type of the Virtual Network Gateway.
- vpn\_type The routing type of the Virtual Network Gateway.
- enable\_bgp Will BGP (Border Gateway Protocol) will be enabled for this Virtual Network Gateway.
- active\_active (Optional) Is this an Active-Active Gateway?
- default\_local\_network\_gateway\_id The ID of the local network gateway through which outbound Internet traffic from the virtual network in which the gateway is created will be routed (forced tunneling). Refer to the Azure documentation on forced tunneling.
- sku Configuration of the size and capacity of the Virtual Network Gateway.
- ip\_configuration One or two ip\_configuration blocks documented below.
- vpn\_client\_configuration A vpn\_client\_configuration block which is documented below.
- tags A mapping of tags assigned to the resource.

The ip\_configuration block supports:

- name A user-defined name of the IP configuration.
- private\_ip\_address\_allocation Defines how the private IP address of the gateways virtual interface is assigned.
- subnet\_id The ID of the gateway subnet of a virtual network in which the virtual network gateway will be created. It is mandatory that the associated subnet is named GatewaySubnet. Therefore, each virtual network can contain at most a single Virtual Network Gateway.
- public\_ip\_address\_id The ID of the Public IP Address associated with the Virtual Network Gateway.

The vpn\_client\_configuration block supports:

- address\_space The address space out of which ip addresses for vpn clients will be taken. You can provide more than one address space, e.g. in CIDR notation.
- root\_certificate One or more root\_certificate blocks which are defined below. These root certificates are used to sign the client certificate used by the VPN clients to connect to the gateway.
- revoked\_certificate One or more revoked\_certificate blocks which are defined below.

The bgp\_settings block supports:

- asn The Autonomous System Number (ASN) to use as part of the BGP.
- peering\_address The BGP peer IP address of the virtual network gateway. This address is needed to configure the created gateway as a BGP Peer on the on-premises VPN devices.
- peer\_weight The weight added to routes which have been learned through BGP peering.

The root\_certificate block supports:

- name The user-defined name of the root certificate.
- public\_cert\_data The public certificate of the root certificate authority. The certificate must be provided in Base-64 encoded X.509 format (PEM).

The root\_revoked\_certificate block supports:

- name The user-defined name of the revoked certificate.
- public\_cert\_data The SHA1 thumbprint of the certificate to be revoked.

### » azurerm\_resource\_group

Manages a resource group on Azure.

### » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) The name of the resource group. Must be unique on your Azure subscription.
- location (Required) The location where the resource group should be created. For a list of all Azure locations, please consult this link or run az account list-locations --output table.
- tags (Optional) A mapping of tags to assign to the resource.

## » Attributes Reference

The following attributes are exported:

• id - The resource group ID.

#### » Import

Resource Groups can be imported using the resource id, e.g.

terraform import azurerm\_resource\_group.mygroup /subscriptions/00000000-0000-0000-0000-0000

# » azurerm\_app\_service

Manages an App Service (within an App Service Plan).

Note: When using Slots - the app\_settings, connection\_string and site\_config blocks on the azurerm\_app\_service resource will be overwritten when promoting a Slot using the azurerm\_app\_service\_active\_slot resource.

## » Example Usage (.net 4.x)

```
resource "random_id" "server" {
 keepers = {
   azi_id = 1
 byte_length = 8
}
resource "azurerm_resource_group" "test" {
          = "some-resource-group"
  location = "West Europe"
resource "azurerm_app_service_plan" "test" {
 name
                      = "some-app-service-plan"
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
   tier = "Standard"
    size = "S1"
 }
}
resource "azurerm_app_service" "test" {
                      = "${random_id.server.hex}"
 name
  location
                      = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
 site_config {
    dotnet_framework_version = "v4.0"
                             = "LocalGit"
    scm_type
 }
```

```
app_settings {
    "SOME_KEY" = "some-value"
  connection_string {
    name = "Database"
   type = "SQLServer"
    value = "Server=some-server.mydomain.com; Integrated Security=SSPI"
}
» Example Usage (Java 1.8)
resource "random_id" "server" {
 keepers = {
   azi_id = 1
 byte_length = 8
resource "azurerm_resource_group" "test" {
         = "some-resource-group"
 location = "West Europe"
}
resource "azurerm_app_service_plan" "test" {
                      = "some-app-service-plan"
 name
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
   tier = "Standard"
   size = "S1"
 }
}
resource "azurerm_app_service" "test" {
                      = "${random_id.server.hex}"
 name
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
  site_config {
                           = "1.8"
    java_version
```

```
java_container = "JETTY"
  java_container_version = "9.3"
  scm_type = "LocalGit"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the App Service. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the App Service.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- app\_service\_plan\_id (Required) The ID of the App Service Plan within which to create this App Service. Changing this forces a new resource to be created.
- app\_settings (Optional) A key-value pair of App Settings.
- connection\_string (Optional) An connection\_string block as defined below.
- client\_affinity\_enabled (Optional) Should the App Service send session affinity cookies, which route client requests in the same session to the same instance?
- enabled (Optional) Is the App Service Enabled? Changing this forces a new resource to be created.
- https\_only (Optional) Can the App Service only be accessed via HTTPS? Defaults to false.
- site\_config (Optional) A site\_config block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.
- identity (Optional) A Managed Service Identity block as defined below.

connection\_string supports the following:

- name (Required) The name of the Connection String.
- type (Required) The type of the Connection String. Possible values are APIHub, Custom, DocDb, EventHub, MySQL, NotificationHub, PostgreSQL, RedisCache, ServiceBus, SQLAzure and SQLServer.

• value - (Required) The value for the Connection String.

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#### identity supports the following:

• type - (Required) Specifies the identity type of the App Service. At this time the only allowed value is SystemAssigned.

The assigned principal\_id and tenant\_id can be retrieved after the App Service has been created. More details are available below.

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#### site\_config supports the following:

• always\_on - (Optional) Should the app be loaded at all times? Defaults to false.

- default\_documents (Optional) The ordering of default documents to load, if an address isn't specified.
- dotnet\_framework\_version (Optional) The version of the .net framework's CLR used in this App Service. Possible values are v2.0 (which will use the latest version of the .net framework for the .net CLR v2 currently .net 3.5) and v4.0 (which corresponds to the latest version of the .net CLR v4 which at the time of writing is .net 4.7.1). For more information on which .net CLR version to use based on the .net framework you're targeting please see this table. Defaults to v4.0.
- http2\_enabled (Optional) Is HTTP2 Enabled on this App Service? Defaults to false.
- ip\_restriction (Optional) One or more ip\_restriction blocks as defined below.
- java\_version (Optional) The version of Java to use. If specified java\_container and java\_container\_version must also be specified. Possible values are 1.7 and 1.8.
- java\_container (Optional) The Java Container to use. If specified java\_version and java\_container\_version must also be specified. Possible values are JETTY and TOMCAT.
- java\_container\_version (Optional) The version of the Java Container to use. If specified java\_version and java\_container must also be specified.
- local\_mysql\_enabled (Optional) Is "MySQL In App" Enabled? This runs a local MySQL instance with your app and shares resources from the App Service plan.

**NOTE:** MySQL In App is not intended for production environments and will not scale beyond a single instance. Instead you may wish to use Azure Database for MySQL.

- managed\_pipeline\_mode (Optional) The Managed Pipeline Mode. Possible values are Integrated and Classic. Defaults to Integrated.
- php\_version (Optional) The version of PHP to use in this App Service. Possible values are 5.5, 5.6, 7.0 and 7.1.
- python version (Optional) The version of Python to use in this App Service. Possible values are 2.7 and 3.4.
- remote debugging enabled (Optional) Is Remote Debugging Enabled? Defaults to false.
- remote\_debugging\_version (Optional) Which version of Visual Studio should the Remote Debugger be compatible with? Possible values are VS2012, VS2013, VS2015 and VS2017.
- scm type (Optional) The type of Source Control enabled for this App Service. Possible values include None and LocalGit. Defaults to None.
- use\_32\_bit\_worker\_process (Optional) Should the App Service run in 32 bit mode, rather than 64 bit mode?

NOTE: when using an App Service Plan in the Free or Shared Tiers use\_32\_bit\_worker\_process must be set to true.

• websockets\_enabled - (Optional) Should WebSockets be enabled?

NOTE: Additional Source Control types will be added in the future, once support for them has been added in the Azure SDK for Go.

ip\_restriction supports the following:

- ip\_address (Required) The IP Address used for this IP Restriction.
- subnet\_mask (Optional) The Subnet mask used for this IP Restriction. Defaults to 255.255.255.255.

#### » Attributes Reference

The following attributes are exported:

- id The ID of the App Service.
- default\_site\_hostname The Default Hostname associated with the App Service - such as mysite.azurewebsites.net
- outbound\_ip\_addresses A comma separated list of outbound IP addresses - such as 52.23.25.3,52.143.43.12
- source\_control A source\_control block as defined below, which contains the Source Control information when scm type is set to LocalGit.

- site\_credential A site\_credential block as defined below, which contains the site-level credentials used to publish to this App Service.
- identity An identity block as defined below, which contains the Managed Service Identity information for this App Service.

identity exports the following:

- principal\_id The Principal ID for the Service Principal associated with the Managed Service Identity of this App Service.
- tenant\_id The Tenant ID for the Service Principal associated with the Managed Service Identity of this App Service.

You can access the Principal ID via \${azurerm\_app\_service.test.identity.0.principal\_id} and the Tenant ID via \${azurerm\_app\_service.test.identity.0.principal\_id}

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site\_credential exports the following:

- username The username which can be used to publish to this App Service
- password The password associated with the username, which can be used to publish to this App Service.

NOTE: both username and password for the site\_credential block are only exported when scm\_type is set to LocalGit

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source\_control exports the following:

- repo\_url URL of the Git repository for this App Service.
- branch Branch name of the Git repository for this App Service.

## » Import

App Services can be imported using the resource id, e.g.

# » azurerm\_app\_service\_plan

Create an App Service Plan component.

```
» Example Usage (Dedicated)
```

```
resource "azurerm_resource_group" "test" {
         = "api-rg-pro"
 location = "West Europe"
}
resource "azurerm_app_service_plan" "test" {
                     = "api-appserviceplan-pro"
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
   tier = "Standard"
   size = "S1"
}
» Example Usage (Shared / Consumption Plan)
resource "azurerm_resource_group" "test" {
         = "api-rg-pro"
 location = "West Europe"
resource "azurerm_app_service_plan" "test" {
                     = "api-appserviceplan-pro"
 location
                     = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "FunctionApp"
 kind
 sku {
   tier = "Dynamic"
   size = "Y1"
}
» Example Usage (Linux)
resource "azurerm_resource_group" "test" {
          = "api-rg-pro"
 location = "West Europe"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the App Service Plan component. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the App Service Plan component.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- kind (Optional) The kind of the App Service Plan to create. Possible values are Windows (also available as App), Linux and FunctionApp (for a Consumption Plan). Defaults to Windows. Changing this forces a new resource to be created.

**NOTE:** When creating a Linux App Service Plan, the reserved field must be set to true.

- sku (Required) A sku block as documented below.
- properties (Optional) A properties block as documented below.
- tags (Optional) A mapping of tags to assign to the resource.

sku supports the following:

- tier (Required) Specifies the plan's pricing tier.
- ${\tt size}$  (Required) Specifies the plan's instance size.
- capacity (Optional) Specifies the number of workers associated with this App Service Plan.

properties supports the following:

 app\_service\_environment\_id - (Optional) The ID of the App Service Environment where the App Service Plan should be located. Changing forces a new resource to be created.

**NOTE:** Attaching to an App Service Environment requires the App Service Plan use a Premium SKU (when using an ASEv1) and the Isolated SKU (for an ASEv2).

- maximum\_number\_of\_workers (Optional) Maximum number of instances that can be assigned to this App Service plan.
- reserved (Optional) Is this App Service Plan Reserved. Defaults to false.
- per\_site\_scaling (Optional) Can Apps assigned to this App Service Plan be scaled independently? If set to false apps assigned to this plan will scale to all instances of the plan. Defaults to false.

#### » Attributes Reference

The following attributes are exported:

- id The ID of the App Service Plan component.
- maximum\_number\_of\_workers The maximum number of workers supported with the App Service Plan's sku.

### » Import

App Service Plan instances can be imported using the resource id, e.g.

# » azurerm\_app\_service\_active\_slot

Promotes an App Service Slot to Production within an App Service.

Note: When using Slots - the app\_settings, connection\_string and site\_config blocks on the azurerm\_app\_service resource will be overwritten when promoting a Slot using the azurerm\_app\_service\_active\_slot resource.

## » Example Usage

```
resource "random_id" "server" {
```

```
# ...
}

resource "azurerm_resource_group" "test" {
    # ...
}

resource "azurerm_app_service_plan" "test" {
    # ...
}

resource "azurerm_app_service" "test" {
    # ...
}

resource "azurerm_app_service_slot" "test" {
    # ...
}

resource "azurerm_app_service_slot" "test" {
    # ...
}

resource "azurerm_app_service_active_slot" "test" {
    resource_group_name = "${azurerm_resource_group.test.name}"
    app_service_name = "${azurerm_app_service.test.name}"
    app_service_slot_name = "${azurerm_app_service_slot.test.name}"
}
```

The following arguments are supported:

- resource\_group\_name (Required) The name of the resource group in which the App Service exists. Changing this forces a new resource to be created.
- app\_service\_name (Required) The name of the App Service within which the Slot exists. Changing this forces a new resource to be created.
- app\_service\_slot\_name (Required) The name of the App Service Slot which should be promoted to the Production Slot within the App Service.

# » azurerm\_app\_service\_custom\_hostname\_binding

Manages a Hostname Binding within an App Service.

## » Example Usage

```
resource "random id" "server" {
 keepers = {
   azi_id = 1
 byte_length = 8
resource "azurerm_resource_group" "test" {
         = "some-resource-group"
 location = "West Europe"
}
resource "azurerm_app_service_plan" "test" {
                      = "some-app-service-plan"
 name
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
   tier = "Standard"
    size = "S1"
}
resource "azurerm_app_service" "test" {
                      = "${random_id.server.hex}"
 name
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
}
resource "azurerm_app_service_custom_hostname_binding" "test" {
                     = "www.mywebsite.com"
 hostname
                     = "${azurerm_app_service.test.name}"
  app_service_name
 resource_group_name = "${azurerm_resource_group.test.name}"
}
```

## » Argument Reference

The following arguments are supported:

• hostname - (Required) Specifies the Custom Hostname to use for the App Service, example www.example.com. Changing this forces a new resource to be created.

**NOTE:** A CNAME needs to be configured from this Hostname to the Azure Website - otherwise Azure will reject the Hostname Binding.

- app\_service\_name (Required) The name of the App Service in which to add the Custom Hostname Binding. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the App Service exists. Changing this forces a new resource to be created.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the App Service Custom Hostname Binding

#### » Import

App Service Custom Hostname Bindings can be imported using the resource id, e.g.

terraform import azurerm\_app\_service\_custom\_hostname\_binding.mywebsite /subscriptions/000000

# » azurerm\_app\_service\_slot

Manages an App Service Slot (within an App Service).

Note: When using Slots - the app\_settings, connection\_string and site\_config blocks on the azurerm\_app\_service resource will be overwritten when promoting a Slot using the azurerm\_app\_service\_active\_slot resource.

## » Example Usage (.net 4.x)

```
resource "random_id" "server" {
  keepers = {
    azi_id = 1
  }
  byte_length = 8
}
```

```
resource "azurerm_resource_group" "test" {
          = "some-resource-group"
  location = "West Europe"
}
resource "azurerm_app_service_plan" "test" {
                      = "some-app-service-plan"
                      = "${azurerm_resource_group.test.location}"
  location
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
    tier = "Standard"
    size = "S1"
 }
}
resource "azurerm_app_service" "test" {
                      = "${random_id.server.hex}"
 name
                      = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
  site_config {
    dotnet_framework_version = "v4.0"
  app_settings {
   "SOME_KEY" = "some-value"
 }
  connection_string {
   name = "Database"
    type = "SQLServer"
    value = "Server=some-server.mydomain.com;Integrated Security=SSPI"
 }
}
resource "azurerm_app_service_slot" "test" {
                      = "${random_id.server.hex}"
                      = "${azurerm_app_service.test.name}"
  app_service_name
                      = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
  site_config {
    dotnet_framework_version = "v4.0"
```

```
}
  app_settings {
    "SOME_KEY" = "some-value"
  connection_string {
    name = "Database"
   type = "SQLServer"
   value = "Server=some-server.mydomain.com; Integrated Security=SSPI"
}
» Example Usage (Java 1.8)
resource "random_id" "server" {
 keepers = {
   azi_id = 1
 byte_length = 8
resource "azurerm_resource_group" "test" {
         = "some-resource-group"
 location = "West Europe"
}
resource "azurerm_app_service_plan" "test" {
                     = "some-app-service-plan"
 name
                     = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
   tier = "Standard"
    size = "S1"
 }
}
resource "azurerm_app_service" "test" {
                     = "${random_id.server.hex}"
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
```

```
site_config {
    java_version
                          = "1.8"
                          = "JETTY"
    java_container
    java_container_version = "9.3"
}
resource "azurerm_app_service_slot" "test" {
                     = "${random id.server.hex}"
                     = "${azurerm_app_service.test.name}"
  app_service_name
 location
                    = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
  site_config {
    java_version
                          = "1.8"
                          = "JETTY"
    java_container
    java_container_version = "9.3"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the App Service Slot component. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the App Service Slot component.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- app\_service\_plan\_id (Required) The ID of the App Service Plan within which to create this App Service Slot. Changing this forces a new resource to be created.
- app\_service\_name (Required) The name of the App Service within which to create the App Service Slot. Changing this forces a new resource to be created.
- app\_settings (Optional) A key-value pair of App Settings.
- connection\_string (Optional) An connection\_string block as defined below.
- client\_affinity\_enabled (Optional) Should the App Service Slot send session affinity cookies, which route client requests in the same session to

the same instance? Changing this forces a new resource to be created.

- enabled (Optional) Is the App Service Slot Enabled? Changing this forces a new resource to be created.
- https\_only (Optional) Can the App Service Slot only be accessed via HTTPS? Defaults to false. Changing this forces a new resource to be created.
- site\_config (Optional) A site\_config object as defined below.
- tags (Optional) A mapping of tags to assign to the resource. Changing this forces a new resource to be created.

\_\_\_\_

#### connection string supports the following:

• name - (Required) The name of the Connection String.

• type - (Required) The type of the Connection String. Possible values are APIHub, Custom, DocDb, EventHub, MySQL, NotificationHub, PostgreSQL, RedisCache, ServiceBus, SQLAzure and SQLServer.

• value - (Required) The value for the Connection String.

#### site\_config supports the following:

• always\_on - (Optional) Should the app be loaded at all times? Defaults to false.

- default\_documents (Optional) The ordering of default documents to load, if an address isn't specified.
- dotnet\_framework\_version (Optional) The version of the .net framework's CLR used in this App Service Slot. Possible values are v2.0 (which will use the latest version of the .net framework for the .net CLR v2 currently .net 3.5) and v4.0 (which corresponds to the latest version of the .net CLR v4 which at the time of writing is .net 4.7.1). For more information on which .net CLR version to use based on the .net framework you're targeting please see this table. Defaults to v4.0.
- http2\_enabled (Optional) Is HTTP2 Enabled on this App Service? Defaults to false.
- ip\_restriction (Optional) One or more ip\_restriction blocks as defined below.
- java\_version (Optional) The version of Java to use. If specified java\_container and java\_container\_version must also be specified. Possible values are 1.7 and 1.8.

- java\_container (Optional) The Java Container to use. If specified java\_version and java\_container\_version must also be specified. Possible values are JETTY and TOMCAT.
- java\_container\_version (Optional) The version of the Java Container to use. If specified java\_version and java\_container must also be specified.
- local\_mysql\_enabled (Optional) Is "MySQL In App" Enabled? This runs a local MySQL instance with your app and shares resources from the App Service plan.

**NOTE:** MySQL In App is not intended for production environments and will not scale beyond a single instance. Instead you may wish to use Azure Database for MySQL.

- managed\_pipeline\_mode (Optional) The Managed Pipeline Mode. Possible values are Integrated and Classic. Defaults to Integrated.
- php\_version (Optional) The version of PHP to use in this App Service Slot. Possible values are 5.5, 5.6, 7.0 and 7.1.
- python\_version (Optional) The version of Python to use in this App Service Slot. Possible values are 2.7 and 3.4.
- remote\_debugging\_enabled (Optional) Is Remote Debugging Enabled?
   Defaults to false.
- remote\_debugging\_version (Optional) Which version of Visual Studio should the Remote Debugger be compatible with? Possible values are VS2012, VS2013, VS2015 and VS2017.
- use\_32\_bit\_worker\_process (Optional) Should the App Service Slot run in 32 bit mode, rather than 64 bit mode?

**Note:** Deployment Slots are not supported in the Free, Shared, or Basic App Service Plans.

• websockets\_enabled - (Optional) Should WebSockets be enabled?

ip\_restriction supports the following:

- ip\_address (Required) The IP Address used for this IP Restriction.
- subnet\_mask (Optional) The Subnet mask used for this IP Restriction. Defaults to 255.255.255.255.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the App Service Slot.

• default\_site\_hostname - The Default Hostname associated with the App Service Slot - such as mysite.azurewebsites.net

#### » Import

App Service Slots can be imported using the resource id, e.g.

# » azurerm\_function\_app

Manages a Function App.

## » Example Usage (with App Service Plan)

```
resource "azurerm_resource_group" "test" {
 name = "azure-functions-test-rg"
 location = "westus2"
resource "azurerm_storage_account" "test" {
                         = "functionsapptestsa"
                        = "${azurerm_resource_group.test.name}"
 resource_group_name
                        = "${azurerm_resource_group.test.location}"
 location
                       = "Standard"
 account_tier
  account_replication_type = "LRS"
}
resource "azurerm_app_service_plan" "test" {
 name
                     = "azure-functions-test-service-plan"
                     = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
   tier = "Standard"
   size = "S1"
resource "azurerm_function_app" "test" {
                           = "test-azure-functions"
 location
                           = "${azurerm_resource_group.test.location}"
 resource_group_name
                           = "${azurerm_resource_group.test.name}"
```

```
= "${azurerm_app_service_plan.test.id}"
  app_service_plan_id
  storage_connection_string = "${azurerm_storage_account.test.primary_connection_string}"
}
» Example Usage (in a Consumption Plan)
resource "azurerm_resource_group" "test" {
          = "azure-functions-cptest-rg"
 location = "westus2"
resource "azurerm_storage_account" "test" {
                         = "functionsapptestsa"
 resource_group_name = "${azurerm_resource_group.test.name}"
                           = "${azurerm_resource_group.test.location}"
 location
 account_tier
                          = "Standard"
  account_replication_type = "LRS"
}
resource "azurerm_app_service_plan" "test" {
                      = "azure-functions-test-service-plan"
 name
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 kind
                     = "FunctionApp"
  sku {
   tier = "Dynamic"
    size = "Y1"
 }
}
resource "azurerm_function_app" "test" {
                            = "test-azure-functions"
 name
 location
                            = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
app_service_plan_id = "${azurerm_app_service_plan.test.id}"
  storage_connection_string = "${azurerm_storage_account.test.primary_connection_string}"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the Function App. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Function App.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- app service plan id (Required) The ID of the App Service Plan within which to create this Function App. Changing this forces a new resource to be created.
- storage\_connection\_string (Required) The connection string of the backend storage account which will be used by this Function App (such as the dashboard, logs).
- app settings (Optional) A key-value pair of App Settings.
- connection\_string (Optional) An connection\_string block as defined below.
- client\_affinity\_enabled (Optional) Should the Function App send session affinity cookies, which route client requests in the same session to the same instance?
- enabled (Optional) Is the Function App enabled?
- https\_only (Optional) Can the Function App only be accessed via HTTPS? Defaults to false.
- version (Optional) The runtime version associated with the Function App. Possible values are ~1 and beta. Defaults to ~1.
- site\_config (Optional) A site\_config object as defined below.
- identity (Optional) An identity block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

connection\_string supports the following:

- name (Required) The name of the Connection String.
- type (Required) The type of the Connection String. Possible values are APIHub, Custom, DocDb, EventHub, MySQL, NotificationHub, PostgreSQL, RedisCache, ServiceBus, SQLAzure and SQLServer.
- value (Required) The value for the Connection String.

site\_config supports the following:

- always\_on (Optional) Should the Function App be loaded at all times? Defaults to false.
- use\_32\_bit\_worker\_process (Optional) Should the Function App run in 32 bit mode, rather than 64 bit mode? Defaults to true.

Note: when using an App Service Plan in the Free or Shared Tiers use\_32\_bit\_worker\_process must be set to true.

• websockets\_enabled - (Optional) Should WebSockets be enabled?

identity supports the following:

• type - (Required) Specifies the identity type of the App Service. At this time the only allowed value is SystemAssigned.

#### » Attributes Reference

The following attributes are exported:

- id The ID of the Function App
- default\_hostname The default hostname associated with the Function App such as mysite.azurewebsites.net
- outbound\_ip\_addresses A comma separated list of outbound IP addresses such as 52.23.25.3,52.143.43.12
- identity An identity block as defined below, which contains the Managed Service Identity information for this App Service.

identity exports the following:

- principal\_id The Principal ID for the Service Principal associated with the Managed Service Identity of this App Service.
- tenant\_id The Tenant ID for the Service Principal associated with the Managed Service Identity of this App Service.

#### » Import

Function Apps can be imported using the resource id, e.g.

## » azurerm\_role\_assignment

Assigns a given Principal (User or Application) to a given Role.

## » Example Usage (using a built-in Role)

# » Example Usage (Custom Role & Service Principal)

```
data "azurerm_subscription" "primary" {}
data "azurerm_client_config" "test" {}
resource "azurerm_role_definition" "test" {
  role_definition_id = "00000000-0000-0000-0000-00000000000"
 name
                     = "my-custom-role-definition"
 scope
                     = "${data.azurerm_subscription.primary.id}"
 permissions {
                = ["Microsoft.Resources/subscriptions/resourceGroups/read"]
   actions
    not_actions = []
  assignable_scopes = [
    "${data.azurerm_subscription.primary.id}",
 ]
}
resource "azurerm_role_assignment" "test" {
                     = "00000000-0000-0000-0000-000000000000"
 name
                     = "${data.azurerm_subscription.primary.id}"
  scope
 role_definition_id = "${azurerm_role_definition.test.id}"
                    = "${data.azurerm_client_config.test.service_principal_object_id}"
 principal_id
}
```

## » Example Usage (Custom Role & User)

```
data "azurerm subscription" "primary" {}
data "azurerm client config" "test" {}
resource "azurerm_role_definition" "test" {
 role definition id = "00000000-0000-0000-0000-0000000000"
 name
                   = "my-custom-role-definition"
 scope
                   = "${data.azurerm_subscription.primary.id}"
 permissions {
               = ["Microsoft.Resources/subscriptions/resourceGroups/read"]
   actions
   not_actions = []
 assignable_scopes = [
    "${data.azurerm_subscription.primary.id}",
}
resource "azurerm_role_assignment" "test" {
                   = "${data.azurerm_subscription.primary.id}"
 scope
 role definition id = "${azurerm role definition.test.id}"
                   = "${data.azurerm_client_config.test.client_id}"
 principal_id
}
```

#### » Argument Reference

The following arguments are supported:

- name (Optional) A unique UUID/GUID for this Role Assignment one will be generated if not specified. Changing this forces a new resource to be created.
- scope (Required) The scope at which the Role Assignment applies too, such as /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333, /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup, or/subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup/providers/Changing this forces a new resource to be created.
- role\_definition\_id (Optional) The Scoped-ID of the Role Definition. Changing this forces a new resource to be created. Conflicts with role\_definition\_name.

- role\_definition\_name (Optional) The name of a built-in Role. Changing this forces a new resource to be created. Conflicts with role\_definition\_id.
- principal\_id (Required) The ID of the Principal (User or Application) to assign the Role Definition to. Changing this forces a new resource to be created.

### » Attributes Reference

The following attributes are exported:

• id - The Role Assignment ID.

#### » Import

Role Assignments can be imported using the resource id, e.g.

# » azurerm\_role\_definition

Manages a custom Role Definition, used to assign Roles to Users/Principals.

## » Example Usage

```
data "azurerm_subscription" "primary" {}
resource "azurerm_role_definition" "test" {
                     = "my-custom-role"
 name
  scope
                     = "${data.azurerm_subscription.primary.id}"
                    = "This is a custom role created via Terraform"
 description
 permissions {
               = ["*"]
   actions
    not_actions = []
  assignable_scopes = [
    "${data.azurerm_subscription.primary.id}", # /subscriptions/00000000-0000-0000-0000-0000
 ]
}
```

The following arguments are supported:

- role\_definition\_id (Optional) A unique UUID/GUID which identifies this role one will be generated if not specified. Changing this forces a new resource to be created.
- name (Required) The name of the Role Definition. Changing this forces a new resource to be created.
- scope (Required) The scope at which the Role Definition applies too, such as /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333, /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup, or/subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup/providers/Changing this forces a new resource to be created.
- description (Optional) A description of the Role Definition.
- permissions (Required) A permissions block as defined below.
- assignable\_scopes (Required) One or more assignable scopes for this Role Definition, such as /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333, /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup, or /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup/providers/

A permissions block as the following properties:

- action (Optional) One or more Allowed Actions, such as \*, Microsoft.Resources/subscriptions/resourceGroups/read.
- not\_action (Optional) One or more Disallowed Actions, such as \*, Microsoft.Resources/subscriptions/resourceGroups/read.

#### » Attributes Reference

The following attributes are exported:

• id - The Role Definition ID.

### » Import

Role Definitions can be imported using the resource id, e.g.

terraform import azurerm\_role\_definition.test /subscriptions/00000000-0000-0000-0000-00000-00000

# » azurerm\_automation\_account

Manages a Automation Account.

#### » Example Usage

### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Automation Account. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the Automation Account is created. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Required) A sku block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

sku supports the following:

• name - (Optional) The SKU name of the account - only Basic is supported at this time. Defaults to Basic.

#### » Attributes Reference

The following attributes are exported:

• id - The Automation Account ID.

### » Import

Automation Accounts can be imported using the resource id, e.g.

# » azurerm\_automation\_credential

Manages a Automation Credential.

### » Example Usage

```
resource "azurerm_resource_group" "example" {
name = "resourceGroup1"
location = "West Europe"
resource "azurerm_automation_account" "example" {
                     = "account1"
 name
 location
                      = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
   name = "Basic"
}
resource "azurerm_automation_credential" "example" {
                     = "credential1"
 resource_group_name = "${azurerm_resource_group.example.name}"
 account_name = "${azurerm_automation_account.example.name}"
username = "example_user"
                     = "example_pwd"
 password
                     = "This is an example credential"
  description
```

The following arguments are supported:

- name (Required) Specifies the name of the Credential. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the Credential is created. Changing this forces a new resource to be created.
- account\_name (Required) The name of the automation account in which
  the Credential is created. Changing this forces a new resource to be created.
- username (Required) The username associated with this Automation Credential.
- password (Required) The password associated with this Automation Credential.
- description (Optional) The description associated with this Automation Credential.

#### » Attributes Reference

The following attributes are exported:

• id - The Automation Credential ID.

### » Import

Automation Credentials can be imported using the resource id, e.g.

terraform import azurerm\_automation\_credential.credential1 /subscriptions/00000000-0000-0000

# » azurerm\_automation\_runbook

Manages a Automation Runbook.

#### » Example Usage

```
resource "azurerm_resource_group" "example" {
  name = "resourceGroup1"
  location = "West Europe"
```

```
}
resource "azurerm automation account" "example" {
                      = "account1"
  location
                      = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
    name = "Basic"
}
resource "azurerm_automation_runbook" "example" {
                     = "Get-AzureVMTutorial"
 name
                     = "${azurerm resource group.example.location}"
 location
 resource_group_name = "${azurerm_resource_group.example.name}"
  account name
                     = "${azurerm automation account.example.name}"
                     = "true"
 log_verbose
                     = "true"
  log_progress
                      = "This is an example runbook"
  description
                      = "PowerShellWorkflow"
 runbook_type
 publish_content_link {
    uri = "https://raw.githubusercontent.com/Azure/azure-quickstart-templates/master/101-au-
}
```

The following arguments are supported:

- name (Required) Specifies the name of the Runbook. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the Runbook is created. Changing this forces a new resource to be created
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- account\_name (Required) The name of the automation account in which the Runbook is created. Changing this forces a new resource to be created.
- runbook\_type (Required) The type of the runbook can be either Graph, GraphPowerShell, GraphPowerShellWorkflow, PowerShellWorkflow, PowerShell or Script.
- log\_progress (Required) Progress log option.

- log\_verbose (Required) Verbose log option.
- publish\_content\_link (Required) The published runbook content link.
- description (Optional) A description for this credential.

publish\_content\_link supports the following:

• uri - (Required) The uri of the runbook content.

### » Attributes Reference

The following attributes are exported:

• id - The Automation Runbook ID.

# » Import

Automation Runbooks can be imported using the resource id, e.g.

terraform import azurerm\_automation\_runbook.Get-AzureVMTutorial /subscriptions/00000000-0000

# » azurerm\_automation\_schedule

Manages a Automation Schedule.

## » Example Usage

The following arguments are supported:

- name (Required) Specifies the name of the Schedule. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the Schedule is created. Changing this forces a new resource to be created.
- automation\_account\_name (Required) The name of the automation account in which the Schedule is created. Changing this forces a new resource to be created.
- frequency (Required) The frequency of the schedule. can be either OneTime, Day, Hour, Week, or Month.
- description (Optional) A description for this Schedule.
- interval (Optional) The number of frequencys between runs. Only valid for Day, Hour, Week, or Month and defaults to 1.
- start\_time (Optional) Start time of the schedule. Must be at least five minutes in the future. Defaults to seven minutes in the future from the time the resource is created.
- expiry\_time (Optional) The end time of the schedule.
- timezone (Optional) The timezone of the start time. Defaults to UTC. For possible values see: https://msdn.microsoft.com/en-us/library/ms912391(v=winembedded.11).aspx

## » Attributes Reference

The following attributes are exported:

• id - The Automation Schedule ID.

# » Import

Automation Schedule can be imported using the resource id, e.g.

terraform import azurerm\_automation\_schedule.schedule1 /subscriptions/00000000-0000-0000-0000

# » azurerm\_application\_insights

Create an Application Insights component.

# » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "tf-test"
  location = "West Europe"
resource "azurerm_application_insights" "test" {
                      = "tf-test-appinsights"
 name
                      = "West Europe"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  application_type
                      = "Web"
}
output "instrumentation_key" {
  value = "${azurerm_application_insights.test.instrumentation_key}"
}
output "app_id" {
  value = "${azurerm_application_insights.test.app_id}"
}
```

### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Application Insights component. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Application Insights component.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- application\_type (Required) Specifies the type of Application Insights to create. Valid values are Web and Other.
- tags (Optional) A mapping of tags to assign to the resource.

## » Attributes Reference

The following attributes are exported:

- id The ID of the Application Insights component.
- app\_id The App ID associated with this Application Insights component.
- instrumentation\_key The Instrumentation Key for this Application Insights component.

### » Import

Application Insights instances can be imported using the resource id, e.g.

# » azurerm\_cdn\_profile

Create a CDN Profile to create a collection of CDN Endpoints.

# » Example Usage

The following arguments are supported:

- name (Required) Specifies the name of the CDN Profile. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the CDN Profile.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Required) The pricing related information of current CDN profile. Accepted values are Standard\_Verizon, Standard\_Akamai or Premium\_Verizon.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The CDN Profile ID.

### » Import

CDN Profiles can be imported using the resource id, e.g.

# » azurerm\_cdn\_endpoint

A CDN Endpoint is the entity within a CDN Profile containing configuration information regarding caching behaviors and origins. The CDN Endpoint is exposed using the URL format .azureedge.net by default, but custom domains can also be created.

## » Example Usage

```
resource "random_id" "server" {
  keepers = {
    azi_id = 1
  }
```

```
byte_length = 8
resource "azurerm_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
 location = "West US"
}
resource "azurerm_cdn_profile" "test" {
 name
                    = "exampleCdnProfile"
                    = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "Standard_Verizon"
 sku
}
resource "azurerm_cdn_endpoint" "test" {
                     = "${random_id.server.hex}"
 name
                   = "${azurerm_cdn_profile.test.name}"
 profile_name
                = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 origin {
             = "exampleCdnOrigin"
   name
   host_name = "www.example.com"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the CDN Endpoint. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the CDN Endpoint.
- profile\_name (Required) The CDN Profile to which to attach the CDN Endpoint.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- is\_http\_allowed (Optional) Defaults to true.
- is\_https\_allowed (Optional) Defaults to true.

- content\_types\_to\_compress (Optional) An array of strings that indicates a content types on which compression will be applied. The value for the elements should be MIME types.
- geo\_filter (Optional) A set of Geo Filters for this CDN Endpoint. Each geo\_filter block supports fields documented below.
- is\_compression\_enabled (Optional) Indicates whether compression is to be enabled. Defaults to false.
- querystring\_caching\_behaviour (Optional) Sets query string caching behavior. Allowed values are IgnoreQueryString, BypassCaching and UseQueryString. Defaults to IgnoreQueryString.
- optimization\_type (Optional) What types of optimization should this CDN Endpoint optimize for? Possible values include DynamicSiteAcceleration, GeneralMediaStreaming, GeneralWebDelivery, LargeFileDownload and VideoOnDemandMediaStreaming.
- origin (Optional) The set of origins of the CDN endpoint. When multiple origins exist, the first origin will be used as primary and rest will be used as failover options. Each origin block supports fields documented below.
- origin\_host\_header (Optional) The host header CDN provider will send along with content requests to origins. Defaults to the host name of the origin.
- origin\_path (Optional) The path used at for origin requests.
- probe\_path (Optional) the path to a file hosted on the origin which helps accelerate delivery of the dynamic content and calculate the most optimal routes for the CDN. This is relative to the origin\_path.
- tags (Optional) A mapping of tags to assign to the resource.

#### The origin block supports:

- name (Required) The name of the origin. This is an arbitrary value. However, this value needs to be unique under the endpoint. Changing this forces a new resource to be created.
- host\_name (Required) A string that determines the hostname/IP address of the origin server. This string can be a domain name, Storage Account endpoint, Web App endpoint, IPv4 address or IPv6 address. Changing this forces a new resource to be created.
- http\_port (Optional) The HTTP port of the origin. Defaults to 80. Changing this forces a new resource to be created.
- https\_port (Optional) The HTTPS port of the origin. Defaults to 443. Changing this forces a new resource to be created.

The geo\_filter block supports:

- relative\_path (Required) The relative path applicable to geo filter.
- action (Required) The Action of the Geo Filter. Possible values include Allow and Block.
- country\_codes (Required) A List of two letter country codes (e.g. US, GB) to be associated with this Geo Filter.

## » Attributes Reference

The following attributes are exported:

• id - The CDN Endpoint ID.

### » Import

CDN Endpoints can be imported using the resource id, e.g.

# » azurerm\_availability\_set

Manages an availability set for virtual machines.

## » Example Usage

The following arguments are supported:

- name (Required) Specifies the name of the availability set. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the availability set. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- platform\_update\_domain\_count (Optional) Specifies the number of update domains that are used. Defaults to 5.

**NOTE:** The number of Update Domains varies depending on which Azure Region you're using - a list can be found here.

• platform\_fault\_domain\_count - (Optional) Specifies the number of fault domains that are used. Defaults to 3.

**NOTE:** The number of Fault Domains varies depending on which Azure Region you're using - a list can be found here.

- managed (Optional) Specifies whether the availability set is managed or not. Possible values are true (to specify aligned) or false (to specify classic). Default is false.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The virtual Availability Set ID.

# » Import

Availability Sets can be imported using the resource id, e.g.

terraform import azurerm\_availability\_set.group1 /subscriptions/00000000-0000-0000-0000-0000

# » azurerm\_managed\_disk

Create a managed disk.

# » Example Usage with Create Empty

```
resource "azurerm_resource_group" "test" {
 name = "acctestrg"
 location = "West US 2"
}
resource "azurerm managed disk" "test" {
 name = "acctestmd"
 location = "West US 2"
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_type = "Standard_LRS"
 create_option = "Empty"
 disk_size_gb = "1"
 tags {
    environment = "staging"
}
» Example Usage with Create Copy
resource "azurerm_resource_group" "test" {
 name = "acctestrg"
 location = "West US 2"
resource "azurerm_managed_disk" "source" {
 name = "acctestmd1"
 location = "West US 2"
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_type = "Standard_LRS"
  create_option = "Empty"
 disk_size_gb = "1"
 tags {
    environment = "staging"
}
resource "azurerm_managed_disk" "copy" {
 name = "acctestmd2"
 location = "West US 2"
 resource_group_name = "${azurerm_resource_group.test.name}"
```

storage\_account\_type = "Standard\_LRS"

```
create_option = "Copy"
source_resource_id = "${azurerm_managed_disk.source.id}"
disk_size_gb = "1"

tags {
   environment = "staging"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the managed disk. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the managed disk.
- location (Required) Specified the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- storage\_account\_type (Required) The type of storage to use for the managed disk. Allowable values are Standard\_LRS or Premium\_LRS.
- create\_option (Required) The method to use when creating the managed disk. Possible values include:
  - Import Import a VHD file in to the managed disk (VHD specified with source uri).
  - Empty Create an empty managed disk.
  - Copy Copy an existing managed disk or snapshot (specified with source\_resource\_id).
  - From Image Copy a Platform Image (specified with image\_reference\_id)
- source\_uri (Optional) URI to a valid VHD file to be used when create\_option is Import.
- source\_resource\_id (Optional) ID of an existing managed disk to copy when create\_option is Copy.
- image\_reference\_id (Optional) ID of an existing platform/marketplace disk image to copy when create\_option is FromImage.
- os\_type (Optional) Specify a value when the source of an Import or Copy operation targets a source that contains an operating system. Valid values are Linux or Windows
- disk\_size\_gb (Optional, Required for a new managed disk) Specifies the size of the managed disk to create in gigabytes. If create\_option is

Copy or FromImage, then the value must be equal to or greater than the source's size.

- encryption\_settings (Optional) an encryption\_settings block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.
- zones (Optional) A collection containing the availability zone to allocate the Managed Disk in.

**Please Note**: Availability Zones are in Preview and only supported in several regions at this time - as such you must be opted into the Preview to use this functionality. You can opt into the Availability Zones Preview in the Azure Portal.

For more information on managed disks, such as sizing options and pricing, please check out the azure documentation.

#### encryption\_settings supports:

• enabled - (Required) Is Encryption enabled on this Managed Disk? Changing this forces a new resource to be created.

- disk\_encryption\_key (Optional) A disk\_encryption\_key block as defined below.
- key\_encryption\_key (Optional) A key\_encryption\_key block as defined below.

#### disk\_encryption\_key supports:

- secret\_url (Required) The URL to the Key Vault Secret used as the Disk Encryption Key. This can be found as id on the azurerm\_key\_vault\_secret resource.
- source\_vault\_id (Required) The URL of the Key Vault. This can be found as vault\_uri on the azurerm\_key\_vault resource.

#### key\_encryption\_key supports:

- key\_url (Required) The URL to the Key Vault Key used as the Key Encryption Key. This can be found as id on the azurerm\_key\_vault\_secret resource.
- source\_vault\_id (Required) The URL of the Key Vault. This can be found as vault\_uri on the azurerm\_key\_vault resource.

#### » Attributes Reference

The following attributes are exported:

• id - The managed disk ID.

## » Import

Managed Disks can be imported using the resource id, e.g.

# » azurerm\_snapshot

Manages a Disk Snapshot.

# » Example Usage

```
resource "azurerm_resource_group" "test" {
       = "snapshot-rg"
 location = "West Europe"
}
resource "azurerm_managed_disk" "test" {
 name
                     = "managed-disk"
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_type = "Standard_LRS"
 create_option = "Empty"
                    = "10"
 disk_size_gb
}
resource "azurerm_snapshot" "test" {
 name location
                    = "snapshot"
                    = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 create_option = "Copy"
                    = "${azurerm_managed_disk.test.id}"
 source_uri
}
```

## » Argument Reference

The following arguments are supported:

• name - (Required) Specifies the name of the Snapshot resource. Changing this forces a new resource to be created.

- resource\_group\_name (Required) The name of the resource group in which to create the Snapshot. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- create\_option (Required) Indicates how the snapshot is to be created.
   Possible values are Copy or Import. Changing this forces a new resource to be created.

**Note:** One of source\_uri, source\_resource\_id or storage\_account\_id must be specified.

- source\_uri (Optional) Specifies the URI to a Managed or Unmanaged Disk. Changing this forces a new resource to be created.
- source\_resource\_id (Optional) Specifies a reference to an existing snapshot, when create\_option is Copy. Changing this forces a new resource to be created.
- storage\_account\_id (Optional) Specifies the ID of an storage account. Used with source\_uri to allow authorization during import of unmanaged blobs from a different subscription. Changing this forces a new resource to be created.
- disk\_size\_gb (Optional) The size of the Snapshotted Disk in GB.

### » Attributes Reference

The following attributes are exported:

- id The Snapshot ID.
- disk\_size\_gb The Size of the Snapshotted Disk in GB.

### » Import

Snapshots can be imported using the resource id, e.g.

terraform import azurerm\_snapshot.test /subscriptions/00000000-0000-0000-0000-00000000000/

# » azurerm\_image

Create a custom virtual machine image that can be used to create virtual machines.

# » Example Usage Creating from VHD

```
resource "azurerm_resource_group" "test" {
  name = "acctest"
  location = "West US"
}

resource "azurerm_image" "test" {
  name = "acctest"
  location = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"

  os_disk {
    os_type = "Linux"
    os_state = "Generalized"
    blob_uri = "{blob_uri}"
    size_gb = 30
  }
}
```

# » Example Usage Creating from Virtual Machine (VM must be generalized beforehand)

```
resource "azurerm_resource_group" "test" {
  name = "acctest"
  location = "West US"
}

resource "azurerm_image" "test" {
  name = "acctest"
  location = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"
  source_virtual_machine_id = "{vm_id}"
}
```

### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the image. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the image. Changing this forces a new resource to be created.

- location (Required) Specified the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- source\_virtual\_machine\_id (Optional) The Virtual Machine ID from which to create the image.
- os\_disk (Optional) One or more os\_disk elements as defined below.
- data\_disk (Optional) One or more data\_disk elements as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

#### os\_disk supports the following:

- os\_type (Required) Specifies the type of operating system contained in the the virtual machine image. Possible values are: Windows or Linux.
- os\_state (Required) Specifies the state of the operating system contained in the blob. Currently, the only value is Generalized.
- managed\_disk\_id (Optional) Specifies the ID of the managed disk resource that you want to use to create the image.
- blob\_uri (Optional) Specifies the URI in Azure storage of the blob that you want to use to create the image.
- caching (Optional) Specifies the caching mode as ReadWrite, ReadOnly, or None. The default is None.

#### data\_disk supports the following:

- lun (Required) Specifies the logical unit number of the data disk.
- managed\_disk\_id (Optional) Specifies the ID of the managed disk resource that you want to use to create the image.
- blob\_uri (Optional) Specifies the URI in Azure storage of the blob that you want to use to create the image.
- caching (Optional) Specifies the caching mode as ReadWrite, ReadOnly, or None. The default is None.
- size\_gb (Optional) Specifies the size of the image to be created. The target size can't be smaller than the source size.

### » Attributes Reference

The following attributes are exported:

• id - The managed image ID.

## » Import

Image can be imported using the resource id, e.g.

terraform import azurerm\_image.test /subscriptions/00000000-0000-0000-0000-000000000000/resc

# » azurerm\_virtual\_machine

Create a virtual machine.

# » Example Usage with Managed Disks and Azure Platform Images (Recommended)

```
resource "azurerm_resource_group" "test" {
 name = "acctestrg"
 location = "West US 2"
}
resource "azurerm_virtual_network" "test" {
                    = "acctvn"
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_subnet" "test" {
                      = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.2.0/24"
}
resource "azurerm network interface" "test" {
                     = "acctni"
                     = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  ip_configuration {
                                  = "testconfiguration1"
   name
                                  = "${azurerm_subnet.test.id}"
    subnet_id
    private_ip_address_allocation = "dynamic"
 }
}
resource "azurerm managed disk" "test" {
 name
                     = "datadisk_existing"
 location
                      = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_type = "Standard_LRS"
                     = "Empty"
  create_option
```

```
= "1023"
  disk_size_gb
resource "azurerm_virtual_machine" "test" {
                        = "acctvm"
                        = "${azurerm_resource_group.test.location}"
 location
                       = "${azurerm_resource_group.test.name}"
 resource_group_name
 network_interface_ids = ["${azurerm_network_interface.test.id}"]
                        = "Standard DS1 v2"
 vm size
  # Uncomment this line to delete the OS disk automatically when deleting the VM
  # delete_os_disk_on_termination = true
  # Uncomment this line to delete the data disks automatically when deleting the VM
  # delete_data_disks_on_termination = true
  storage_image_reference {
    publisher = "Canonical"
    offer
             = "UbuntuServer"
             = "16.04-LTS"
   version = "latest"
  storage_os_disk {
                      = "myosdisk1"
   name
    caching
                     = "ReadWrite"
                    = "FromImage"
    create_option
   managed_disk_type = "Standard_LRS"
 }
  # Optional data disks
  storage_data_disk {
                      = "datadisk new"
    managed_disk_type = "Standard_LRS"
                    = "Empty"
    create_option
                     = 0
    lun
    disk_size_gb
                     = "1023"
 }
  storage_data_disk {
                   = "${azurerm_managed_disk.test.name}"
    managed_disk_id = "${azurerm_managed_disk.test.id}"
    create_option = "Attach"
    lun
                   = 1
                   = "${azurerm_managed_disk.test.disk_size_gb}"
    disk_size_gb
```

}

```
os_profile {
   computer_name = "hostname"
   admin_username = "testadmin"
   admin_password = "Password1234!"
}

os_profile_linux_config {
   disable_password_authentication = false
}

tags {
   environment = "staging"
}
```

# » Example Usage with Managed Disks and Custom Images (Recommended)

```
#Assume that custom image has been already created in the 'customimage' resource group
data "azurerm_resource_group" "image" {
 name = "customimage"
data "azurerm_image" "image" {
                     = "myCustomImage"
 resource_group_name = "${data.azurerm_resource_group.image.name}"
}
resource "azurerm_resource_group" "test" {
 name = "acctestrg"
 location = "West US 2"
resource "azurerm_virtual_network" "test" {
                     = "acctvn"
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm subnet" "test" {
                       = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
```

```
address_prefix
                      = "10.0.2.0/24"
resource "azurerm_network_interface" "test" {
                     = "acctni"
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  ip_configuration {
                                 = "testconfiguration1"
   name
                                 = "${azurerm_subnet.test.id}"
    subnet id
   private_ip_address_allocation = "dynamic"
 }
}
resource "azurerm_managed_disk" "test" {
 name
                      = "datadisk_existing"
                      = "${azurerm_resource_group.test.location}"
  location
 resource_group_name = "${azurerm_resource_group.test.name}"
  storage_account_type = "Standard_LRS"
                  = "Empty"
  create_option
  disk_size_gb
                      = "1023"
}
resource "azurerm_virtual_machine" "test" {
 name
                       = "acctvm"
                       = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 network_interface_ids = ["${azurerm_network_interface.test.id}"]
                        = "Standard_DS1_v2"
 vm_size
  # Uncomment this line to delete the OS disk automatically when deleting the VM
  # delete_os_disk_on_termination = true
  # Uncomment this line to delete the data disks automatically when deleting the VM
  # delete_data_disks_on_termination = true
  storage_image_reference {
    id="${data.azurerm_image.image.id}"
  }
  storage_os_disk {
                      = "myosdisk1"
   name
                     = "ReadWrite"
    caching
   create_option = "FromImage"
    managed_disk_type = "Standard_LRS"
```

```
# Optional data disks
 storage_data_disk {
   name
                     = "datadisk_new"
   managed_disk_type = "Standard_LRS"
                    = "Empty"
   create_option
   lun
                     = 0
   disk_size_gb
                    = "1023"
 }
 storage_data_disk {
                   = "${azurerm_managed_disk.test.name}"
   managed_disk_id = "${azurerm_managed_disk.test.id}"
   create_option = "Attach"
                   = "${azurerm_managed_disk.test.disk_size_gb}"
   disk_size_gb
 os_profile {
    computer_name = "hostname"
    admin_username = "testadmin"
   admin_password = "Password1234!"
 os_profile_linux_config {
   disable_password_authentication = false
 tags {
    environment = "staging"
}
» Example Usage with Unmanaged Disks
resource "azurerm_resource_group" "test" {
          = "acctestrg"
 location = "West US"
}
resource "azurerm_virtual_network" "test" {
                     = "acctvn"
 address_space
                     = ["10.0.0.0/16"]
 location
                     = "${azurerm_resource_group.test.location}"
```

}

```
resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "test" {
                       = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
                       = "10.0.2.0/24"
  address_prefix
resource "azurerm_network_interface" "test" {
                      = "acctni"
                     = "${azurerm_resource_group.test.location}"
 location
 resource group name = "${azurerm resource group.test.name}"
  ip_configuration {
                                  = "testconfiguration1"
   name
                                  = "${azurerm_subnet.test.id}"
    subnet_id
   private_ip_address_allocation = "dynamic"
}
resource "azurerm_storage_account" "test" {
                           = "accsa"
                          = "${azurerm_resource_group.test.name}"
 resource_group_name
 location
                          = "${azurerm_resource_group.test.location}"
                          = "Standard"
  account tier
  account_replication_type = "LRS"
 tags {
    environment = "staging"
 }
}
resource "azurerm_storage_container" "test" {
                        = "vhds"
 name
                       = "${azurerm_resource_group.test.name}"
 resource_group_name
  storage_account_name = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}
resource "azurerm_virtual_machine" "test" {
                        = "acctvm"
 name
                        = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  network_interface_ids = ["${azurerm_network_interface.test.id}"]
```

```
= "Standard_F2"
vm_size
# Uncomment this line to delete the OS disk automatically when deleting the VM
# delete_os_disk_on_termination = true
# Uncomment this line to delete the data disks automatically when deleting the VM
# delete_data_disks_on_termination = true
storage_image_reference {
 publisher = "Canonical"
  offer = "UbuntuServer"
          = "16.04-LTS"
  sku
 version = "latest"
}
storage_os_disk {
  name
               = "myosdisk1"
              = "${azurerm_storage_account.test.primary_blob_endpoint}${azurerm_storage_
  vhd_uri
              = "ReadWrite"
  caching
  create_option = "FromImage"
# Optional data disks
storage_data_disk {
          = "datadisk0"
 name
  vhd uri
              = "${azurerm_storage_account.test.primary_blob_endpoint}${azurerm_storage_
  disk_size_gb = "1023"
  create_option = "Empty"
  lun
               = 0
}
os_profile {
  computer_name = "hostname"
  admin_username = "testadmin"
  admin_password = "Password1234!"
}
os_profile_linux_config {
  disable_password_authentication = false
tags {
  environment = "staging"
}
```

}

The following arguments are supported:

- name (Required) Specifies the name of the virtual machine resource. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the virtual machine.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- plan (Optional) A plan block as documented below.
- availability\_set\_id (Optional) The Id of the Availability Set in which
  to create the virtual machine
- boot\_diagnostics (Optional) A boot diagnostics profile block as referenced below.
- vm\_size (Required) Specifies the size of the virtual machine.
- storage\_image\_reference (Optional) A Storage Image Reference block as documented below.
- storage\_os\_disk (Required) A Storage OS Disk block as referenced below.
- delete\_os\_disk\_on\_termination (Optional) Flag to enable deletion of the OS disk VHD blob or managed disk when the VM is deleted, defaults to false
- storage\_data\_disk (Optional) A list of Storage Data disk blocks as referenced below.
- delete\_data\_disks\_on\_termination (Optional) Flag to enable deletion of storage data disk VHD blobs or managed disks when the VM is deleted, defaults to false
- os\_profile (Optional) An OS Profile block as documented below. Required when create\_option in the storage\_os\_disk block is set to FromImage.
- identity (Optional) An identity block as documented below.
- license\_type (Optional, when a Windows machine) Specifies the Windows OS license type. If supplied, the only allowed values are Windows\_Client and Windows\_Server.
- os\_profile\_windows\_config (Required, when a Windows machine) A Windows config block as documented below.

- os\_profile\_linux\_config (Required, when a Linux machine) A Linux config block as documented below.
- os\_profile\_secrets (Optional) A collection of Secret blocks as documented below.
- network\_interface\_ids (Required) Specifies the list of resource IDs for the network interfaces associated with the virtual machine.
- primary\_network\_interface\_id (Optional) Specifies the resource ID for the primary network interface associated with the virtual machine.
- tags (Optional) A mapping of tags to assign to the resource.
- zones (Optional) A collection containing the availability zone to allocate the Virtual Machine in.

**Please Note**: Availability Zones are in Preview and only supported in several regions at this time - as such you must be opted into the Preview to use this functionality. You can opt into the Availability Zones Preview in the Azure Portal.

For more information on the different example configurations, please check out the azure documentation

Plan supports the following:

- name (Required) Specifies the name of the image from the marketplace.
- publisher (Required) Specifies the publisher of the image.
- product (Required) Specifies the product of the image from the marketplace.

boot\_diagnostics supports the following:

- enabled: (Required) Whether to enable boot diagnostics for the virtual machine.
- storage\_uri: (Required) Blob endpoint for the storage account to hold the virtual machine's diagnostic files. This must be the root of a storage account, and not a storage container.

storage\_image\_reference supports the following:

• id - (Optional) Specifies the ID of the (custom) image to use to create the virtual machine, for example:

```
resource "azurerm_image" "test" {
    name = "test"
    ...
}
resource "azurerm_virtual_machine" "test" {
    name = "test"
    ...
```

```
storage_image_reference {
   id = "${azurerm_image.test.id}"
}
```

. . .

- publisher (Required, when not using image resource) Specifies the publisher of the image used to create the virtual machine. Changing this forces a new resource to be created.
- offer (Required, when not using image resource) Specifies the offer of the image used to create the virtual machine. Changing this forces a new resource to be created.
- sku (Required, when not using image resource) Specifies the SKU of the image used to create the virtual machine. Changing this forces a new resource to be created.
- version (Optional) Specifies the version of the image used to create the virtual machine. Changing this forces a new resource to be created.

### storage\_os\_disk supports the following:

- name (Required) Specifies the disk name.
- vhd\_uri (Optional) Specifies the vhd uri. Changing this forces a new resource to be created. Cannot be used with managed disks.
- managed\_disk\_type (Optional) Specifies the type of managed disk to create. Value you must be either Standard\_LRS or Premium\_LRS. Cannot be used when vhd\_uri is specified.
- managed\_disk\_id (Optional) Specifies an existing managed disk to use
  by id. Can only be used when create\_option is Attach. Cannot be used
  when vhd\_uri is specified.
- create\_option (Required) Specifies how the virtual machine should be created. Possible values are Attach (managed disks only) and FromImage.
- caching (Optional) Specifies the caching requirements.
- image\_uri (Optional) Specifies the image\_uri in the form publisher-Name:offer:skus:version. image\_uri can also specify the VHD uri of a custom VM image to clone. When cloning a custom disk image the os\_type documented below becomes required.
- os\_type (Optional) Specifies the operating system Type, valid values are windows, linux.
- disk\_size\_gb (Optional) Specifies the size of the os disk in gigabytes.
- write\_accelerator\_enabled (Optional) Specifies if Write Accelerator is enabled on the disk. This can only be enabled on Premium\_LRS managed disks with no caching and M-Series VMs. Defaults to false.

#### storage\_data\_disk supports the following:

- name (Required) Specifies the name of the data disk.
- vhd\_uri (Optional) Specifies the uri of the location in storage where

- the vhd for the virtual machine should be placed. Cannot be used with managed disks.
- managed\_disk\_type (Optional) Specifies the type of managed disk to create. Value you must be either Standard\_LRS or Premium\_LRS. Cannot be used when vhd\_uri is specified.
- managed\_disk\_id (Optional) Specifies an existing managed disk to use
  by id. Can only be used when create\_option is Attach. Cannot be used
  when vhd\_uri is specified.
- create\_option (Required) Specifies how the data disk should be created. Possible values are Attach, FromImage and Empty.
- disk\_size\_gb (Required) Specifies the size of the data disk in gigabytes.
- caching (Optional) Specifies the caching requirements.
- lun (Required) Specifies the logical unit number of the data disk.
- write\_accelerator\_enabled (Optional) Specifies if Write Accelerator is enabled on the disk. This can only be enabled on Premium\_LRS managed disks with no caching and M-Series VMs. Defaults to false.

os\_profile supports the following:

- computer\_name (Required) Specifies the name of the virtual machine.
- admin\_username (Required) Specifies the name of the administrator account.
- admin\_password (Required for Windows, Optional for Linux) Specifies the password of the administrator account.
- custom\_data (Optional) Specifies custom data to supply to the machine. On linux-based systems, this can be used as a cloud-init script. On other systems, this will be copied as a file on disk. Internally, Terraform will base64 encode this value before sending it to the API. The maximum length of the binary array is 65535 bytes.

**NOTE:** admin\_password must be between 6-72 characters long and must satisfy at least 3 of password complexity requirements from the following: 1. Contains an uppercase character 2. Contains a lowercase character 3. Contains a numeric digit 4. Contains a special character

identity supports the following:

• type - (Required) Specifies the identity type of the virtual machine. The only allowable value is SystemAssigned. To enable Managed Service Identity the virtual machine extension "ManagedIdentityExtensionFor-Windows" or "ManagedIdentityExtensionForLinux" must also be added to the virtual machine. The Principal ID can be retrieved after the virtual machine has been created, e.g.

```
}
}
resource "azurerm virtual machine extension" "test" {
                       = "test"
 resource_group_name = "${azurerm_resource_group.test.name}"
                       = "${azurerm_resource_group.test.location}"
 location
  virtual_machine_name = "${azurerm_virtual_machine.test.name}"
                       = "Microsoft.ManagedIdentity"
  publisher
                       = "ManagedIdentityExtensionForWindows"
  type
  type_handler_version = "1.0"
  settings = <<SETTINGS</pre>
    {
        "port": 50342
    }
SETTINGS
}
output "principal_id" {
  value = "${lookup(azurerm_virtual_machine.test.identity[0], "principal_id")}"
```

os\_profile\_windows\_config supports the following:

- provision\_vm\_agent (Optional) This value defaults to false.
- enable\_automatic\_upgrades (Optional) This value defaults to false.
- winrm (Optional) A collection of WinRM configuration blocks as documented below.
- additional\_unattend\_config (Optional) An Additional Unattended Config block as documented below.

winrm supports the following:

- protocol (Required) Specifies the protocol of listener
- certificate\_url (Optional) Specifies URL of the certificate with which new Virtual Machines is provisioned.

additional\_unattend\_config supports the following:

- pass (Required) Specifies the name of the pass that the content applies to. The only allowable value is oobeSystem.
- component (Required) Specifies the name of the component to configure with the added content. The only allowable value is Microsoft-Windows-Shell-Setup.
- setting\_name (Required) Specifies the name of the setting to which the content applies. Possible values are: FirstLogonCommands and AutoLogon.
- content (Optional) Specifies the base-64 encoded XML formatted content that is added to the unattend.xml file for the specified path and component.

os\_profile\_linux\_config supports the following:

- disable\_password\_authentication (Required) Specifies whether password authentication should be disabled. If set to false, an admin\_password must be specified.
- ssh\_keys (Optional) Specifies a collection of path and key\_data to be placed on the virtual machine. The path attribute sets the path of the destination file on the virtual machine, and the key\_data-attribute sets the content of the destination file. An example of a working configuration (<user> needs to be replaced with the actual username): hcl ssh\_keys { key\_data = "\${file("/home/<user>/.ssh/authorized\_keys")}" path = "/home/<user>/.ssh/authorized\_keys" } ~> Note: Please note that the only allowed path is /home/<username>/.ssh/authorized\_keys due to a limitation of Azure.

os\_profile\_secrets supports the following:

- source\_vault\_id (Required) Specifies the key vault to use.
- vault\_certificates (Required) A collection of Vault Certificates as documented below

vault\_certificates support the following:

• certificate\_url - (Required) Specifies the URI of the key vault secrets in the format of https://<vaultEndpoint>/secrets/<secretName>/<secretVersion>. Stored secret is the Base64 encoding of a JSON Object that which is encoded in UTF-8 of which the contents need to be

```
{
  "data":"<Base64-encoded-certificate>",
  "dataType":"pfx",
  "password":"<pfx-file-password>"
}
```

• certificate\_store - (Required, on windows machines) Specifies the certificate store on the Virtual Machine where the certificate should be added to.

## » Attributes Reference

The following attributes are exported:

• id - The virtual machine ID.

## » Import

Virtual Machines can be imported using the resource id, e.g.

# » azurerm\_virtual\_machine\_extension

Manages a Virtual Machine Extension to provide post deployment configuration and run automated tasks.

Please Note: The CustomScript extensions for Linux & Windows require that the commandToExecute returns a 0 exit code to be classified as successfully deployed. You can achieve this by appending exit 0 to the end of your commandToExecute.

## » Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "acctestrg"
 location = "West US"
}
resource "azurerm_virtual_network" "test" {
 = "acctvn"
address_space = ["10.0.0.0/16"]
location = "West US"
                    = "acctvn"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_subnet" "test" {
                      = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
                 = "10.0.2.0/24"
 address_prefix
resource "azurerm_network_interface" "test" {
         = "acctni"
 location = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
  ip_configuration {
                                 = "testconfiguration1"
   name
    subnet_id
                                 = "${azurerm_subnet.test.id}"
   private_ip_address_allocation = "dynamic"
}
```

```
resource "azurerm_storage_account" "test" {
                          = "accsa"
                          = "${azurerm_resource_group.test.name}"
 resource_group_name
 location
                          = "westus"
                          = "Standard"
 account_tier
 account_replication_type = "LRS"
 tags {
    environment = "staging"
 }
}
resource "azurerm_storage_container" "test" {
                       = "vhds"
 name
                       = "${azurerm_resource_group.test.name}"
 resource_group_name
 storage_account_name = "${azurerm_storage_account.test.name}"
 container_access_type = "private"
}
resource "azurerm_virtual_machine" "test" {
                       = "acctvm"
 name
                       = "West US"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 network_interface_ids = ["${azurerm_network_interface.test.id}"]
 vm_size
                       = "Standard AO"
 storage_image_reference {
   publisher = "Canonical"
   offer = "UbuntuServer"
           = "16.04-LTS"
   sku
   version = "latest"
 }
 storage_os_disk {
                = "myosdisk1"
   name
   vhd_uri
                = "${azurerm_storage_account.test.primary_blob_endpoint}${azurerm_storage_
   caching = "ReadWrite"
   create_option = "FromImage"
 os_profile {
    computer_name = "hostname"
   admin_username = "testadmin"
   admin_password = "Password1234!"
 }
```

```
os_profile_linux_config {
    disable_password_authentication = false
  tags {
    environment = "staging"
resource "azurerm_virtual_machine_extension" "test" {
                       = "hostname"
 name
                       = "West US"
 location
 resource group name = "${azurerm resource group.test.name}"
 virtual_machine_name = "${azurerm_virtual_machine.test.name}"
                       = "Microsoft.Azure.Extensions"
 publisher
 type
                       = "CustomScript"
  type_handler_version = "2.0"
  settings = <<SETTINGS</pre>
    {
        "commandToExecute": "hostname && uptime"
    }
SETTINGS
 tags {
    environment = "Production"
}
```

The following arguments are supported:

- name (Required) The name of the virtual machine extension peering. Changing this forces a new resource to be created.
- location (Required) The location where the extension is created. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the virtual network. Changing this forces a new resource to be created.
- virtual\_machine\_name (Required) The name of the virtual machine. Changing this forces a new resource to be created.

- publisher (Required) The publisher of the extension, available publishers can be found by using the Azure CLI.
- type (Required) The type of extension, available types for a publisher can be found using the Azure CLI.

Note: The Publisher and Type of Virtual Machine Extensions can be found using the Azure CLI, via: shell \$ az vm extension image list --location westus -o table

- type\_handler\_version (Required) Specifies the version of the extension to use, available versions can be found using the Azure CLI.
- auto\_upgrade\_minor\_version (Optional) Specifies if the platform deploys the latest minor version update to the type\_handler\_version specified
- settings (Required) The settings passed to the extension, these are specified as a JSON object in a string.

Please Note: Certain VM Extensions require that the keys in the settings block are case sensitive. If you're seeing unhelpful errors, please ensure the keys are consistent with how Azure is expecting them (for instance, for the JsonADDomainExtension extension, the keys are expected to be in TitleCase.)

• protected\_settings - (Optional) The protected\_settings passed to the extension, like settings, these are specified as a JSON object in a string.

Please Note: Certain VM Extensions require that the keys in the protected\_settings block are case sensitive. If you're seeing unhelpful errors, please ensure the keys are consistent with how Azure is expecting them (for instance, for the JsonADDomainExtension extension, the keys are expected to be in TitleCase.)

#### » Attributes Reference

The following attributes are exported:

• id - The Virtual Machine Extension ID.

### » Import

Virtual Machine Extensions can be imported using the resource id, e.g.

# » azurerm\_virtual\_machine\_scale\_set

Create a virtual machine scale set.

**Note:** All arguments including the administrator login and password will be stored in the raw state as plain-text. Read more about sensitive data in state.

# » Example Usage with Managed Disks (Recommended)

```
resource "azurerm_resource_group" "test" {
          = "acctestrg"
 name
  location = "West US 2"
}
resource "azurerm_virtual_network" "test" {
                    = "acctvn"
 name
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_subnet" "test" {
                      = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix
                 = "10.0.2.0/24"
}
resource "azurerm public ip" "test" {
 name
                               = "test"
                               = "${azurerm_resource_group.test.location}"
 location
                        = "${azurerm_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "static"
 domain name label
                              = "${azurerm_resource_group.test.name}"
 tags {
    environment = "staging"
}
resource "azurerm_lb" "test" {
 name
                      = "${azurerm_resource_group.test.location}"
 location
  resource_group_name = "${azurerm_resource_group.test.name}"
```

```
frontend_ip_configuration {
                        = "PublicIPAddress"
   public_ip_address_id = "${azurerm_public_ip.test.id}"
 }
}
resource "azurerm_lb_backend_address_pool" "bpepool" {
 resource_group_name = "${azurerm_resource_group.test.name}"
 loadbalancer id = "${azurerm lb.test.id}"
 name
                     = "BackEndAddressPool"
}
resource "azurerm_lb_nat_pool" "lbnatpool" {
                                = 3
                                = "${azurerm_resource_group.test.name}"
 resource_group_name
                                = "ssh"
 name
                                = "${azurerm_lb.test.id}"
 loadbalancer_id
                                = "Tcp"
 protocol
                                = 50000
 frontend_port_start
                                = 50119
 frontend_port_end
 backend_port
                                = 22
 frontend_ip_configuration_name = "PublicIPAddress"
}
resource "azurerm_virtual_machine_scale_set" "test" {
                     = "mytestscaleset-1"
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 upgrade_policy_mode = "Manual"
 sku {
   name
            = "Standard AO"
          = "Standard"
   capacity = 2
  storage_profile_image_reference {
   publisher = "Canonical"
   offer = "UbuntuServer"
             = "16.04-LTS"
   sku
   version = "latest"
  storage_profile_os_disk {
   name
                     = "ReadWrite"
    caching
```

```
= "FromImage"
    create_option
   managed_disk_type = "Standard_LRS"
  storage_profile_data_disk {
                  = 0
    caching
                 = "ReadWrite"
    create_option = "Empty"
   disk_size_gb
 }
  os_profile {
    computer_name_prefix = "testvm"
    admin_username = "myadmin"
                        = "Passwword1234"
    admin_password
 }
  os_profile_linux_config {
   disable_password_authentication = true
    ssh_keys {
              = "/home/myadmin/.ssh/authorized_keys"
      key_data = "${file("~/.ssh/demo_key.pub")}"
 }
 network_profile {
   name = "terraformnetworkprofile"
   primary = true
   ip_configuration {
                                             = "TestIPConfiguration"
     name
                                             = "${azurerm_subnet.test.id}"
      subnet_id
      load_balancer_backend_address_pool_ids = ["${azurerm_lb_backend_address_pool.bpepool.
                                             = ["${element(azurerm_lb_nat_pool.lbnatpool.*.:
      load_balancer_inbound_nat_rules_ids
    }
 }
 tags {
    environment = "staging"
}
```

### » Example Usage with Unmanaged Disks

```
resource "azurerm_resource_group" "test" {
         = "acctestrg"
 location = "West US"
}
resource "azurerm virtual network" "test" {
                    = "acctvn"
 name
 address_space = ["10.0.0.0/16"]
location = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_subnet" "test" {
                      = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
 address_prefix = "10.0.2.0/24"
resource "azurerm_storage_account" "test" {
                          = "accsa"
 resource_group_name
                         = "${azurerm_resource_group.test.name}"
 location
                         = "westus"
                         = "Standard"
 account tier
  account_replication_type = "LRS"
 tags {
    environment = "staging"
}
resource "azurerm_storage_container" "test" {
                       = "vhds"
 resource_group_name = "${azurerm_resource_group.test.name}"
  storage_account_name = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
resource "azurerm_virtual_machine_scale_set" "test" {
                     = "mytestscaleset-1"
                     = "West US"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 upgrade_policy_mode = "Manual"
```

```
sku {
             = "Standard_A0"
   name
             = "Standard"
    tier
    capacity = 2
 }
  os_profile {
    computer_name_prefix = "testvm"
                    = "myadmin"
    admin_username
                         = "Passwword1234"
    admin_password
 }
  os_profile_linux_config {
    disable_password_authentication = true
    ssh_keys {
               = "/home/myadmin/.ssh/authorized_keys"
      key_data = "${file("~/.ssh/demo_key.pub")}"
 }
 network_profile {
          = "TestNetworkProfile"
    primary = true
    ip_configuration {
            = "TestIPConfiguration"
      subnet_id = "${azurerm_subnet.test.id}"
   }
 }
  storage_profile_os_disk {
                  = "osDiskProfile"
    name
                  = "ReadWrite"
    caching
    create_option = "FromImage"
    vhd_containers = ["${azurerm_storage_account.test.primary_blob_endpoint}${azurerm_storage_account.test.primary_blob_endpoint}$
 }
  storage_profile_image_reference {
    publisher = "Canonical"
             = "UbuntuServer"
    offer
             = "16.04-LTS"
    version = "latest"
 }
}
```

- name (Required) Specifies the name of the virtual machine scale set resource. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the virtual machine scale set. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Required) A sku block as documented below.
- upgrade\_policy\_mode (Required) Specifies the mode of an upgrade to virtual machines in the scale set. Possible values, Manual or Automatic.
- overprovision (Optional) Specifies whether the virtual machine scale set should be overprovisioned. Defaults to true.
- single\_placement\_group (Optional) Specifies whether the scale set is limited to a single placement group with a maximum size of 100 virtual machines. If set to false, managed disks must be used. Defaults to true. Changing this forces a new resource to be created. See documentation for more information.
- license\_type (Optional, when a Windows machine) Specifies the Windows OS license type. If supplied, the only allowed values are Windows Client and Windows Server.
- os\_profile (Required) A Virtual Machine OS Profile block as documented below.
- os\_profile\_secrets (Optional) A collection of Secret blocks as documented below.
- os\_profile\_windows\_config (Required, when a windows machine) A Windows config block as documented below.
- os\_profile\_linux\_config (Required, when a linux machine) A Linux config block as documented below.
- network\_profile (Required) A collection of network profile block as documented below.
- storage\_profile\_os\_disk (Required) A storage profile os disk block as documented below
- storage\_profile\_data\_disk (Optional) A storage profile data disk block as documented below
- storage\_profile\_image\_reference (Optional) A storage profile image reference block as documented below.
- extension (Optional) Can be specified multiple times to add extension profiles to the scale set. Each extension block supports the fields documented below.
- boot\_diagnostics (Optional) A boot diagnostics profile block as referenced below.
- plan (Optional) A plan block as documented below.

- priority (Optional) Specifies the priority for the virtual machines in the scale set, defaults to Regular. Possible values are Low and Regular.
- tags (Optional) A mapping of tags to assign to the resource.
- zones (Optional) A collection of availability zones to spread the Virtual Machines over.

**Please Note**: Availability Zones are in Preview and only supported in several regions at this time - as such you must be opted into the Preview to use this functionality. You can opt into the Availability Zones Preview in the Azure Portal.

sku supports the following:

- name (Required) Specifies the size of virtual machines in a scale set.
- tier (Optional) Specifies the tier of virtual machines in a scale set. Possible values, standard or basic.
- capacity (Required) Specifies the number of virtual machines in the scale set.

identity supports the following:

• type - (Required) Specifies the identity type to be assigned to the scale set. The only allowable value is SystemAssigned. To enable Managed Service Identity (MSI) on all machines in the scale set, an extension with the type "ManagedIdentityExtensionForWindows" or "ManagedIdentityExtensionForLinux" must also be added. The scale set's Service Principal ID (SPN) can be retrieved after the scale set has been created.

```
resource "azurerm virtual machine scale set" "test" {
                      = "vm-scaleset"
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = "${azurerm_resource_group.test.location}"
 location
  sku {
   name
            = "${var.vm sku}"
            = "Standard"
    capacity = "${var.instance_count}"
 }
  identity {
    type = "systemAssigned"
  extension {
   name
                         = "MSILinuxExtension"
    publisher
                         = "Microsoft.ManagedIdentity"
                         = "ManagedIdentityExtensionForLinux"
    type
    type_handler_version = "1.0"
    settings
                         = "{\"port\": 50342}"
```

```
}
output "principal_id" {
  value = "${lookup(azurerm_virtual_machine.test.identity[0], "principal_id")}"
}
```

#### os\_profile supports the following:

- computer\_name\_prefix (Required) Specifies the computer name prefix for all of the virtual machines in the scale set. Computer name prefixes must be 1 to 9 characters long for windows images and 1 58 for linux. Changing this forces a new resource to be created.
- admin\_username (Required) Specifies the administrator account name to use for all the instances of virtual machines in the scale set.
- admin\_password (Required) Specifies the administrator password to use for all the instances of virtual machines in a scale set.
- custom\_data (Optional) Specifies custom data to supply to the machine. On linux-based systems, this can be used as a cloud-init script. On other systems, this will be copied as a file on disk. Internally, Terraform will base64 encode this value before sending it to the API. The maximum length of the binary array is 65535 bytes.

#### os\_profile\_secrets supports the following:

- source\_vault\_id (Required) Specifies the key vault to use.
- vault\_certificates (Required, on windows machines) A collection of Vault Certificates as documented below

#### vault certificates support the following:

- certificate\_url (Required) It is the Base64 encoding of a JSON Object
  that which is encoded in UTF-8 of which the contents need to be data,
  dataType and password.
- certificate\_store (Required, on windows machines) Specifies the certificate store on the Virtual Machine where the certificate should be added to.

#### os\_profile\_windows\_config supports the following:

- provision\_vm\_agent (Optional) Indicates whether virtual machine agent should be provisioned on the virtual machines in the scale set.
- enable\_automatic\_upgrades (Optional) Indicates whether virtual machines in the scale set are enabled for automatic updates.
- winrm (Optional) A collection of WinRM configuration blocks as documented below.
- additional\_unattend\_config (Optional) An Additional Unattended Config block as documented below.

#### winrm supports the following:

• protocol - (Required) Specifies the protocol of listener

• certificate\_url - (Optional) Specifies URL of the certificate with which new Virtual Machines is provisioned.

additional\_unattend\_config supports the following:

- pass (Required) Specifies the name of the pass that the content applies to. The only allowable value is oobeSystem.
- component (Required) Specifies the name of the component to configure with the added content. The only allowable value is Microsoft-Windows-Shell-Setup.
- setting\_name (Required) Specifies the name of the setting to which the content applies. Possible values are: FirstLogonCommands and AutoLogon.
- content (Optional) Specifies the base-64 encoded XML formatted content that is added to the unattend.xml file for the specified path and component.

os\_profile\_linux\_config supports the following:

- disable\_password\_authentication (Required) Specifies whether password authentication should be disabled. Changing this forces a new resource to be created.
- ssh\_keys (Optional) Specifies a collection of path and key\_data to be placed on the virtual machine.

Note: Please note that the only allowed path is /home/<username>/.ssh/authorized\_keys due to a limitation of Azure

network profile supports the following:

- name (Required) Specifies the name of the network interface configura-
- primary (Required) Indicates whether network interfaces created from the network interface configuration will be the primary NIC of the VM.
- ip\_configuration (Required) An ip\_configuration block as documented below.
- accelerated\_networking (Optional) Specifies whether to enable accelerated networking or not. Defaults to false.
- dns\_settings (Optional) An dns\_settings block as documented below.
- network\_security\_group\_id (Optional) Specifies the identifier for the network security group.

dns\_settings supports the following:

• dns\_servers - (Required) Specifies an array of dns servers.

ip\_configuration supports the following:

- name (Required) Specifies name of the IP configuration.
- subnet\_id (Required) Specifies the identifier of the subnet.

- application\_gateway\_backend\_address\_pool\_ids (Optional) Specifies an array of references to backend address pools of application gateways. A scale set can reference backend address pools of one application gateway. Multiple scale sets cannot use the same application gateway.
- load\_balancer\_backend\_address\_pool\_ids (Optional) Specifies an array of references to backend address pools of load balancers. A scale set can reference backend address pools of one public and one internal load balancer. Multiple scale sets cannot use the same load balancer.
- load\_balancer\_inbound\_nat\_rules\_ids (Optional) Specifies an array of references to inbound NAT rules for load balancers.
- primary (Optional) Specifies if this ip\_configuration is the primary one.
- public\_ip\_address\_configuration (Optional) describes a virtual machines scale set IP Configuration's PublicIPAddress configuration. The public\_ip\_address\_configuration is documented below.

#### public\_ip\_address\_configuration supports the following:

- name (Required) The name of the public ip address configuration
- idle\_timeout (Required) The idle timeout in minutes. This value must be between 4 and 32.
- domain\_name\_label (Required) The domain name label for the dns settings.

### storage\_profile\_os\_disk supports the following:

- name (Optional) Specifies the disk name. Must be specified when using unmanaged disk ('managed disk type' property not set).
- vhd\_containers (Optional) Specifies the vhd uri. Cannot be used when image or managed\_disk\_type is specified.
- managed\_disk\_type (Optional) Specifies the type of managed disk to create. Value you must be either Standard\_LRS or Premium\_LRS. Cannot be used when vhd\_containers or image is specified.
- create\_option (Required) Specifies how the virtual machine should be created. The only possible option is FromImage.
- caching (Optional) Specifies the caching requirements. Possible values include: None (default), ReadOnly, ReadWrite.
- image (Optional) Specifies the blob uri for user image. A virtual machine scale set creates an os disk in the same container as the user image. Updating the osDisk image causes the existing disk to be deleted and a new one created with the new image. If the VM scale set is in Manual upgrade mode then the virtual machines are not updated until they have manual Upgrade applied to them. When setting this field os\_type needs to be specified. Cannot be used when vhd\_containers, managed\_disk\_type or storage\_profile\_image\_reference are specified.
- os\_type (Optional) Specifies the operating system Type, valid values are windows, linux.

storage\_profile\_data\_disk supports the following:

- lun (Required) Specifies the Logical Unit Number of the disk in each virtual machine in the scale set.
- create\_option (Optional) Specifies how the data disk should be created. The only possible options are FromImage and Empty.
- caching (Optional) Specifies the caching requirements. Possible values include: None (default), ReadOnly, ReadWrite.
- disk\_size\_gb (Optional) Specifies the size of the disk in GB. This element is required when creating an empty disk.
- managed\_disk\_type (Optional) Specifies the type of managed disk to create. Value must be either Standard LRS or Premium LRS.

#### storage\_profile\_image\_reference supports the following:

- id (Optional) Specifies the ID of the (custom) image to use to create the virtual machine scale set, as in the example below.
- publisher (Optional) Specifies the publisher of the image used to create the virtual machines.
- offer (Optional) Specifies the offer of the image used to create the virtual machines.
- sku (Optional) Specifies the SKU of the image used to create the virtual machines.
- version (Optional) Specifies the version of the image used to create the virtual machines.

### boot\_diagnostics supports the following:

- enabled: (Required) Whether to enable boot diagnostics for the virtual machine.
- storage\_uri: (Required) Blob endpoint for the storage account to hold the virtual machine's diagnostic files. This must be the root of a storage account, and not a storage container.

### extension supports the following:

- name (Required) Specifies the name of the extension.
- publisher (Required) The publisher of the extension, available publishers can be found by using the Azure CLI.
- type (Required) The type of extension, available types for a publisher can be found using the Azure CLI.
- type\_handler\_version (Required) Specifies the version of the extension to use, available versions can be found using the Azure CLI.
- auto\_upgrade\_minor\_version (Optional) Specifies whether or not to use the latest minor version available.
- settings (Required) The settings passed to the extension, these are specified as a JSON object in a string.
- protected\_settings (Optional) The protected\_settings passed to the extension, like settings, these are specified as a JSON object in a string.

### plan supports the following:

- name (Required) Specifies the name of the image from the marketplace.
- publisher (Required) Specifies the publisher of the image.
- product (Required) Specifies the product of the image from the marketplace.

### » Example of storage\_profile\_image\_reference with id

```
resource "azurerm_image" "test" {
    name = "test"
    ...
}

resource "azurerm_virtual_machine_scale_set" "test" {
    name = "test"
    ...

    storage_profile_image_reference {
        id = "${azurerm_image.test.id}"
    }
}
```

### » Attributes Reference

The following attributes are exported:

• id - The virtual machine scale set ID.

### » Import

Virtual Machine Scale Sets can be imported using the resource id, e.g.

## » azurerm\_container\_group

Create as an Azure Container Group instance.

```
location = "west us"
resource "azurerm_storage_account" "aci-sa" {
                     = "acistorageacct"
 resource_group_name = "${azurerm_resource_group.aci-rg.name}"
                    = "${azurerm_resource_group.aci-rg.location}"
 location
 account_tier = "Standard"
 account_replication_type = "LRS"
resource "azurerm_storage_share" "aci-share" {
 name = "aci-test-share"
 resource_group_name = "${azurerm_resource_group.aci-rg.name}"
 storage_account_name = "${azurerm_storage_account.aci-sa.name}"
 quota = 50
}
resource "azurerm_container_group" "aci-helloworld" {
                     = "aci-hw"
                     = "${azurerm_resource_group.aci-rg.location}"
 location
 resource_group_name = "${azurerm_resource_group.aci-rg.name}"
 ip_address_type = "public"
                   = "aci-label"
 dns_name_label
                     = "linux"
 os_type
  container {
   name = "hw"
   image = "seanmckenna/aci-hellofiles"
   cpu ="0.5"
   memory = "1.5"
   port = "80"
    environment_variables {
      "NODE_ENV" = "testing"
    command = "/bin/bash -c '/path to/myscript.sh'"
   volume {
                = "logs"
     name
     mount_path = "/aci/logs"
     read_only = false
```

```
share_name = "${azurerm_storage_share.aci-share.name}"

storage_account_name = "${azurerm_storage_account.aci-sa.name}"
 storage_account_key = "${azurerm_storage_account.aci-sa.primary_access_key}"
}

container {
 name = "sidecar"
 image = "microsoft/aci-tutorial-sidecar"
 cpu = "0.5"
 memory = "1.5"
}

tags {
 environment = "testing"
}
```

- name (Required) Specifies the name of the Container Group. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Container Group. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- ip\_address\_type (Optional) Specifies the ip address type of the container. Public is the only acceptable value at this time. Changing this forces a new resource to be created.
- dns\_name\_label (Optional) The DNS label/name for the container groups IP.
- os\_type (Required) The OS for the container group. Allowed values are Linux and Windows. Changing this forces a new resource to be created.
- restart\_policy (Optional) Restart policy for the container group. Allowed values are Always, Never, OnFailure. Defaults to Always.
- container (Required) The definition of a container that is part of the group as documented in the container block below. Changing this forces a new resource to be created.

**Note:** if os\_type is set to Windows currently only a single container block is supported.

#### The container block supports:

- name (Required) Specifies the name of the Container. Changing this forces a new resource to be created.
- image (Required) The container image name. Changing this forces a new resource to be created.
- cpu (Required) The required number of CPU cores of the containers. Changing this forces a new resource to be created.
- memory (Required) The required memory of the containers in GB. Changing this forces a new resource to be created.
- port (Optional) A public port for the container. Changing this forces a new resource to be created.
- environment\_variables (Optional) A list of environment variables to be set on the container. Specified as a map of name/value pairs. Changing this forces a new resource to be created.
- command (Optional) A command line to be run on the container. Changing this forces a new resource to be created.
- volume (Optional) The definition of a volume mount for this container as documented in the volume block below. Changing this forces a new resource to be created.

#### The volume block supports:

- name (Required) The name of the volume mount. Changing this forces a new resource to be created.
- mount\_path (Required) The path on which this volume is to be mounted. Changing this forces a new resource to be created.
- read\_only (Optional) Specify if the volume is to be mounted as read only
  or not. The default value is false. Changing this forces a new resource
  to be created.
- storage\_account\_name (Required) The Azure storage account from which the volume is to be mounted. Changing this forces a new resource to be created.
- storage\_account\_key (Required) The access key for the Azure Storage account specified as above. Changing this forces a new resource to be created.
- share\_name (Required) The Azure storage share that is to be mounted as a volume. This must be created on the storage account specified as above. Changing this forces a new resource to be created.

### » Attributes Reference

The following attributes are exported:

- id The container group ID.
- ip\_address The IP address allocated to the container group.
- fqdn The FQDN of the container group derived from dns\_name\_label.

## » azurerm container registry

Manages an Azure Container Registry.

**Note:** All arguments including the access key will be stored in the raw state as plain-text. Read more about sensitive data in state.

### » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "resourceGroup1"
 location = "West US"
}
resource "azurerm_storage_account" "test" {
                        = "storageaccount1"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location
                         = "${azurerm_resource_group.test.location}"
 account tier
                        = "Standard"
 account_replication_type = "GRS"
resource "azurerm_container_registry" "test" {
                    = "containerRegistry1"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
 admin_enabled
                  = true
                    = "Classic"
 sku
  storage_account_id = "${azurerm_storage_account.test.id}"
}
```

### » Argument Reference

- name (Required) Specifies the name of the Container Registry. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Container Registry. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- admin\_enabled (Optional) Specifies whether the admin user is enabled.
   Defaults to false.
- storage\_account\_id (Required for Classic Sku Optional otherwise)
  The ID of a Storage Account which must be located in the same Azure
  Region as the Container Registry.
- sku (Optional) The SKU name of the the container registry. Possible values are Classic (which was previously Basic), Basic, Standard and Premium.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

- id The Container Registry ID.
- login\_server The URL that can be used to log into the container registry.
- admin\_username The Username associated with the Container Registry Admin account if the admin account is enabled.
- admin\_password The Password associated with the Container Registry Admin account - if the admin account is enabled.

### » Import

Container Registries can be imported using the resource id, e.g.

terraform import azurerm\_container\_registry.test /subscriptions/00000000-0000-0000-0000-0000

## » azurerm\_container\_service

Manages an Azure Container Service Instance

**Note:** All arguments including the client secret will be stored in the raw state as plain-text. Read more about sensitive data in state.

## » Example Usage (DCOS)

}

```
resource "azurerm_resource_group" "test" {
          = "acctestRG1"
 location = "West US"
resource "azurerm_container_service" "test" {
                        = "acctestcontservice1"
 name
 location
                        = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 orchestration_platform = "DCOS"
 master_profile {
   count
            = 1
    dns_prefix = "acctestmaster1"
 linux_profile {
    admin_username = "acctestuser1"
    ssh_key {
     key_data = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCqaZoyiz1qbd0Q8xEf6uEu1cCwYowo5FHtsl
    }
 }
  agent_pool_profile {
           = "default"
   name
              = 1
    count
   dns_prefix = "acctestagent1"
             = "Standard_A0"
   vm_size
 }
 diagnostics_profile {
    enabled = false
 tags {
   Environment = "Production"
```

## » Example Usage (Kubernetes)

```
resource "azurerm_resource_group" "test" {
        = "acctestRG1"
 location = "West US"
}
resource "azurerm container service" "test" {
 name
                      = "acctestcontservice1"
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 orchestration_platform = "Kubernetes"
 master_profile {
          = 1
   count
   dns_prefix = "acctestmaster1"
 linux_profile {
   admin_username = "acctestuser1"
   ssh_key {
     key_data = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCqaZoyiz1qbd0Q8xEf6uEu1cCwYowo5FHtsl
 }
 agent_pool_profile {
   name = "default"
          = 1
   count
   dns_prefix = "acctestagent1"
   vm_size = "Standard_A0"
 service_principal {
   client_id = "00000000-0000-0000-00000000000"
   diagnostics_profile {
   enabled = false
 tags {
   Environment = "Production"
```

```
}
```

## » Example Usage (Swarm)

```
resource "azurerm_resource_group" "test" {
          = "acctestRG1"
 location = "West US"
}
resource "azurerm_container_service" "test" {
                       = "acctestcontservice1"
 location
                        = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 orchestration_platform = "Swarm"
 master_profile {
   count
            = 1
   dns_prefix = "acctestmaster1"
 linux_profile {
   admin_username = "acctestuser1"
   ssh_key {
     key_data = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCqaZoyiz1qbd0Q8xEf6uEu1cCwYowo5FHtsl
   }
 }
  agent_pool_profile {
            = "default"
   name
             = 1
   count
   dns_prefix = "acctestagent1"
   vm_size = "Standard_A0"
 diagnostics_profile {
    enabled = false
 }
   Environment = "Production"
 }
}
```

The following arguments are supported:

- name (Required) The name of the Container Service instance to create. Changing this forces a new resource to be created.
- location (Required) The location where the Container Service instance should be created. Changing this forces a new resource to be created.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- orchestration\_platform (Required) Specifies the Container Orchestration Platform to use. Currently can be either DCOS, Kubernetes or Swarm.
   Changing this forces a new resource to be created.
- master\_profile (Required) A Master Profile block as documented below.
- linux\_profile (Required) A Linux Profile block as documented below.
- agent\_pool\_profile (Required) One or more Agent Pool Profile's block as documented below.
- service\_principal (only Required when you're using Kubernetes as an Orchestration Platform) A Service Principal block as documented below.
- diagnostics\_profile (Required) A VM Diagnostics Profile block as documented below.
- tags (Optional) A mapping of tags to assign to the resource.

master\_profile supports the following:

- count (Required) Number of masters (VMs) in the container service cluster. Allowed values are 1, 3, and 5. The default value is 1.
- dns\_prefix (Required) The DNS Prefix to use for the Container Service master nodes.

linux\_profile supports the following:

- admin\_username (Required) The Admin Username for the Cluster.
- ssh\_key (Required) An SSH Key block as documented below.

ssh\_key supports the following:

• key\_data - (Required) The Public SSH Key used to access the cluster.

agent\_pool\_profile supports the following:

• name - (Required) Unique name of the agent pool profile in the context of the subscription and resource group.

- count (Required) Number of agents (VMs) to host docker containers. Allowed values must be in the range of 1 to 100 (inclusive). The default value is 1
- dns\_prefix (Required) The DNS Prefix given to Agents in this Agent Pool.
- vm\_size (Required) The VM Size of each of the Agent Pool VM's (e.g. Standard\_F1 / Standard\_D2v2).

service\_principal supports the following:

- client\_id (Required) The ID for the Service Principal.
- client\_secret (Required) The secret password associated with the service principal.

diagnostics\_profile supports the following:

 enabled - (Required) Should VM Diagnostics be enabled for the Container Service VM's

#### » Attributes Reference

The following attributes are exported:

- id The Container Service ID.
- master\_profile.fqdn FDQN for the master.
- agent\_pool\_profile.fqdn FDQN for the agent pool.
- diagnostics\_profile.storage\_uri The URI of the storage account where diagnostics are stored.

# » azurerm kubernetes cluster

Manages a managed Kubernetes Cluster (AKS)

**Note:** All arguments including the client secret will be stored in the raw state as plain-text. Read more about sensitive data in state.

```
= "acctestaks1"
 name
                    = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
                   = "acctestagent1"
 dns_prefix
 linux_profile {
   admin_username = "acctestuser1"
   ssh key {
     key_data = "ssh-rsa ..."
   }
 }
 agent_pool_profile {
                 = "default"
   name
                 = 1
   count
   vm_size = "Standard_D1_v2"
os_type = "Linux"
   os_disk_size_gb = 30
 service_principal {
              = "00000000-0000-0000-0000-000000000000"
   client_id
   }
 tags {
   Environment = "Production"
 }
}
output "id" {
   value = "${azurerm_kubernetes_cluster.test.id}"
}
output "kube_config" {
 value = "${azurerm_kubernetes_cluster.test.kube_config_raw}"
}
output "client_key" {
 value = "${azurerm_kubernetes_cluster.test.kube_config.0.client_key}"
output "client_certificate" {
 value = "${azurerm_kubernetes_cluster.test.kube_config.0.client_certificate}"
}
```

```
output "cluster_ca_certificate" {
   value = "${azurerm_kubernetes_cluster.test.kube_config.0.cluster_ca_certificate}"
}
output "host" {
   value = "${azurerm_kubernetes_cluster.test.kube_config.0.host}"
}
```

The following arguments are supported:

- name (Required) The name of the AKS Managed Cluster instance to create. Changing this forces a new resource to be created.
- location (Required) The location where the AKS Managed Cluster instance should be created. Changing this forces a new resource to be created.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- dns\_prefix (Required) DNS prefix specified when creating the managed cluster.
- kubernetes\_version (Optional) Version of Kubernetes specified when creating the AKS managed cluster. If not specified, the latest recommended version will be used at provisioning time (but won't auto-upgrade).
- linux\_profile (Required) A Linux Profile block as documented below.
- agent\_pool\_profile (Required) One or more Agent Pool Profile's block as documented below.
- service\_principal (Required) A Service Principal block as documented below.
- tags (Optional) A mapping of tags to assign to the resource.

linux\_profile supports the following:

- admin\_username (Required) The Admin Username for the Cluster. Changing this forces a new resource to be created.
- ssh\_key (Required) An SSH Key block as documented below.

ssh\_key supports the following:

• key\_data - (Required) The Public SSH Key used to access the cluster. Changing this forces a new resource to be created.

agent\_pool\_profile supports the following:

- name (Required) Unique name of the Agent Pool Profile in the context of the Subscription and Resource Group. Changing this forces a new resource to be created.
- count (Required) Number of Agents (VMs) in the Pool. Possible values must be in the range of 1 to 50 (inclusive). Defaults to 1.
- vm\_size (Required) The size of each VM in the Agent Pool (e.g. Standard\_F1). Changing this forces a new resource to be created.
- os\_disk\_size\_gb (Optional) The Agent Operating System disk size in GB. Changing this forces a new resource to be created.
- os\_type (Optional) The Operating System used for the Agents. Possible values are Linux and Windows. Changing this forces a new resource to be created. Defaults to Linux.
- vnet\_subnet\_id (Optional) The ID of the Subnet where the Agents in the Pool should be provisioned. Changing this forces a new resource to be created.

**NOTE:** There's a known issue where Agents connected to an Internal Network (e.g. on a Subnet) have their network routing configured incorrectly; such that Pods cannot communicate across nodes. This is a bug in the Azure API - and will be fixed there in the future.

service\_principal supports the following:

- client\_id (Required) The Client ID for the Service Principal.
- client\_secret (Required) The Client Secret for the Service Principal.

#### » Attributes Reference

The following attributes are exported:

- id The Kubernetes Managed Cluster ID.
- fqdn The FQDN of the Azure Kubernetes Managed Cluster.
- kube\_config\_raw Base64 encoded Kubernetes configuration
- kube\_config Kubernetes configuration, sub-attributes defined below:
  - client\_key Base64 encoded private key used by clients to authenticate to the Kubernetes cluster.
  - client\_certificate Base64 encoded public certificate used by clients to authenticate to the Kubernetes cluster.
  - cluster\_ca\_certificate Base64 encoded public CA certificate used as the root of trust for the Kubernetes cluster.
  - host The Kubernetes cluster server host.
  - username A username used to authenticate to the Kubernetes cluster.

password - A password or token used to authenticate to the Kubernetes cluster.

**NOTE:** It's possible to use these credentials with the Kubernetes Provider like

### » Import

Kubernetes Managed Clusters can be imported using the resource id, e.g.

## » azurerm\_cosmos\_db\_account

Manages a CosmosDB (formally DocumentDB) Account.

```
resource "azurerm_resource_group" "rg" {
         = "${var.resource_group_name}"
   location = "${var.resource_group_location}"
resource "random_integer" "ri" {
   min = 10000
   max = 99999
}
resource "azurerm_cosmosdb_account" "db" {
                       = "tfex-cosmos-db-${random_integer.ri.result}"
   name
   location
                       = "${azurerm_resource_group.rg.location}"
   resource_group_name = "${azurerm_resource_group.rg.name}"
                       = "Standard"
   offer_type
   kind
                       = "GlobalDocumentDB"
```

```
enable_automatic_failover = true
    consistency_policy {
                                = "BoundedStaleness"
        consistency_level
        max_interval_in_seconds = 10
        max_staleness_prefix
                                = 200
    }
    geo_location {
        location
                          = "${var.failover location}"
        failover_priority = 1
    }
    geo location {
        id
                          = "tfex-cosmos-db-${random_integer.ri.result}-customid"
        location
                          = "${azurerm resource group.rg.location}"
        failover_priority = 0
    }
}
```

- name (Required) Specifies the name of the CosmosDB Account. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the CosmosDB Account is created. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.
- offer\_type (Required) Specifies the Offer Type to use for this CosmosDB Account currently this can only be set to Standard.
- kind (Optional) Specifies the Kind of CosmosDB to create possible values are GlobalDocumentDB and MongoDB. Defaults to GlobalDocumentDB. Changing this forces a new resource to be created.
- consistency\_policy (Required) Specifies a consistency\_policy resource, used to define the consistency policy for this CosmosDB account.
- geo\_location (Required) Specifies a geo\_location resource, used to define where data should be replicated with the failover\_priority 0 specifying the primary location.

- ip\_range\_filter (Optional) CosmosDB Firewall Support: This value specifies the set of IP addresses or IP address ranges in CIDR form to be included as the allowed list of client IP's for a given database account. IP addresses/ranges must be comma separated and must not contain any spaces.
- enable\_automatic\_failover (Optional) Enable automatic fail over for this Cosmos DB account.

consistency\_policy Configures the database consistency and supports the following:

- consistency\_level (Required) The Consistency Level to use for this CosmosDB Account - can be either BoundedStaleness, Eventual, Session, Strong or ConsistentPrefix.
- max\_interval\_in\_seconds (Optional) When used with the Bounded Staleness consistency level, this value represents the time amount of staleness (in seconds) tolerated. Accepted range for this value is 5 86400 (1 day). Defaults to 5. Required when consistency\_level is set to BoundedStaleness.
- max\_staleness\_prefix (Optional) When used with the Bounded Staleness consistency level, this value represents the number of stale requests tolerated. Accepted range for this value is 10 2147483647. Defaults to 100. Required when consistency\_level is set to BoundedStaleness.

Note: max\_interval\_in\_seconds and max\_staleness\_prefix can only be set to custom values when consistency\_level is set to BoundedStaleness - otherwise they will return the default values shown above.

geo\_location Configures the geographic locations the data is replicated to and supports the following:

- prefix (Optional) The string used to generate the document endpoints for this region. If not specified it defaults to \${cosmosdb\_account.name}-\${location}. Changing this causes the location to be deleted and re-provisioned and cannot be changed for the location with failover priority 0.
- location (Required) The name of the Azure region to host replicated data.
- failover\_priority (Required) The failover priority of the region. A failover priority of 0 indicates a write region. The maximum value for a failover priority = (total number of regions 1). Failover priority values must be unique for each of the regions in which the database account exists. Changing this causes the location to be re-provisioned and cannot be changed for the location with failover priority 0.

**NOTE:** The prefix and failover\_priority fields of a location cannot be changed for the location with a failover priority of 0.

### » Attributes Reference

The following attributes are exported:

- id The CosmosDB Account ID.
- endpoint The endpoint used to connect to the CosmosDB account.
- read\_endpoints A list of read endpoints available for this CosmosDB account.
- write\_endpoints A list of write endpoints available for this CosmosDB account.
- primary\_master\_key The Primary master key for the CosmosDB Account.
- secondary\_master\_key The Secondary master key for the CosmosDB Account.
- primary\_readonly\_master\_key The Primary read-only master Key for the CosmosDB Account.
- secondary\_readonly\_master\_key The Secondary read-only master key for the CosmosDB Account.
- connection\_strings A list of connection strings available for this CosmosDB account. If the kind is GlobalDocumentDB, this will be empty.

### » Import

CosmosDB Accounts can be imported using the resource id, e.g.

# 

Sets a MySQL Configuration value on a MySQL Server.

```
= "mysql-server-1"
 name
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
   name = "B_Gen4_2"
    capacity = 2
   tier = "Basic"
    family = "Gen4"
 }
  storage_profile {
    storage_mb = 5120
   backup retention days = 7
    geo_redundant_backup = "Disabled"
  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
  version = "5.7"
  ssl_enforcement = "Enabled"
}
resource "azurerm_mysql_configuration" "test" {
                      = "interactive_timeout"
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = "${azurerm_mysql_server.test.name}"
  server_name
                      = "600"
  value
}
```

- name (Required) Specifies the name of the MySQL Configuration, which needs to be a valid MySQL configuration name. Changing this forces a new resource to be created.
- server\_name (Required) Specifies the name of the MySQL Server. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the MySQL Server exists. Changing this forces a new resource to be created.
- value (Required) Specifies the value of the MySQL Configuration. See the MySQL documentation for valid values.

### » Attributes Reference

The following attributes are exported:

• id - The ID of the MySQL Configuration.

## » Import

 $\ensuremath{\mathsf{MySQL}}$  Configurations can be imported using the  $\ensuremath{\mathsf{resource}}$  id, e.g.

terraform import azurerm\_mysql\_configuration.interactive\_timeout /subscriptions/00000000-000

# » azurerm\_mysql\_database

Manages a MySQL Database within a MySQL Server

```
resource "azurerm_resource_group" "test" {
          = "api-rg-pro"
 location = "West Europe"
}
resource "azurerm_mysql_server" "test" {
 name
                     = "mysql-server-1"
                      = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
   name = "B_Gen4_2"
    capacity = 2
   tier = "Basic"
    family = "Gen4"
 storage_profile {
    storage_mb = 5120
    backup_retention_days = 7
    geo_redundant_backup = "Disabled"
  administrator_login = "mysqladminun"
  administrator_login_password = "H@Sh1CoR3!"
```

The following arguments are supported:

- name (Required) Specifies the name of the MySQL Database, which needs to be a valid MySQL identifier. Changing this forces a new resource to be created.
- server\_name (Required) Specifies the name of the MySQL Server. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the MySQL Server exists. Changing this forces a new resource to be created.
- charset (Required) Specifies the Charset for the MySQL Database, which needs to be a valid MySQL Charset. Changing this forces a new resource to be created.
- collation (Required) Specifies the Collation for the MySQL Database, which needs to be a valid MySQL Collation. Changing this forces a new resource to be created.

### » Attributes Reference

The following attributes are exported:

• id - The ID of the MySQL Database.

### » Import

MySQL Database's can be imported using the resource id, e.g.

terraform import azurerm\_mysql\_database.database1 /subscriptions/00000000-0000-0000-0000-000

# » azurerm\_mysql\_firewall\_rule

Manages a Firewall Rule for a MySQL Server

## » Example Usage (Single IP Address)

```
resource "azurerm_resource_group" "test" {
          = "api-rg-pro"
  location = "West Europe"
resource "azurerm_mysql_server" "test" {
resource "azurerm_mysql_firewall_rule" "test" {
                     = "office"
 resource_group_name = "${azurerm_resource_group.test.name}"
 server_name = "${azurerm_mysql_server.test.name}"
 start_ip_address = "40.112.8.12"
                 = "40.112.8.12"
  end_ip_address
}
» Example Usage (IP Range)
resource "azurerm_resource_group" "test" {
          = "api-rg-pro"
  location = "West Europe"
resource "azurerm_mysql_server" "test" {
 # ...
resource "azurerm_mysql_firewall_rule" "test" {
                     = "office"
 resource_group_name = "${azurerm_resource_group.test.name}"
 server_name = "${azurerm_mysql_server.test.name}"
 start_ip_address = "40.112.0.0"
end_ip_address = "40.112.255.255"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the MySQL Firewall Rule. Changing this forces a new resource to be created.
- server\_name (Required) Specifies the name of the MySQL Server. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the MySQL Server exists. Changing this forces a new resource to be created.
- start\_ip\_address (Required) Specifies the Start IP Address associated with this Firewall Rule. Changing this forces a new resource to be created.
- end\_ip\_address (Required) Specifies the End IP Address associated with this Firewall Rule. Changing this forces a new resource to be created.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the MySQL Firewall Rule.

#### » Import

MySQL Firewall Rule's can be imported using the resource id, e.g.

# » azurerm\_mysql\_server

Manages a MySQL Server.

```
= "${azurerm_resource_group.test.location}"
  location
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
    name = "B_Gen4_2"
    capacity = 2
    tier = "Basic"
    family = "Gen4"
  storage_profile {
    storage_mb = 5120
    backup_retention_days = 7
    geo redundant backup = "Disabled"
 }
  administrator_login = "mysqladminun"
  administrator_login_password = "H@Sh1CoR3!"
 version = "5.7"
  ssl_enforcement = "Enabled"
}
```

- name (Required) Specifies the name of the MySQL Server. Changing this forces a new resource to be created. This needs to be globally unique within Azure.
- resource\_group\_name (Required) The name of the resource group in which to create the MySQL Server.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Required) A sku block as defined below.
- storage\_profile (Required) A storage\_profile block as defined below.
- administrator\_login (Required) The Administrator Login for the MySQL Server. Changing this forces a new resource to be created.
- administrator\_login\_password (Required) The Password associated with the administrator\_login for the MySQL Server.
- version (Required) Specifies the version of MySQL to use. Valid values are 5.6 and 5.7. Changing this forces a new resource to be created.

- ssl\_enforcement (Required) Specifies if SSL should be enforced on connections. Possible values are Enforced and Disabled.
- tags (Optional) A mapping of tags to assign to the resource.

sku supports the following:

- name (Required) Specifies the SKU Name for this MySQL Server. The name of the SKU, follows the tier + family + cores pattern (e.g. B\_Gen4\_1, GP\_Gen5\_8). For more information see the product documentation.
- capacity (Required) The scale up/out capacity, representing server's compute units.
- tier (Required) The tier of the particular SKU. Possible values are Basic, GeneralPurpose, and MemoryOptimized. For more information see the product documentation.
- family (Required) The family of hardware Gen4 or Gen5, before selecting your family check the product documentation for availability in your region.

storage\_profile supports the following:

• storage\_mb - (Required) Max storage allowed for a server, possible values are between 5120 MB (5GB) and 1048576 MB (1TB). The step for this value must be in 1024 MB (1GB) increments. For more information see the product documentation.

- backup\_retention\_days (Optional) Backup retention days for the server, supported values are between 7 and 35 days.
- geo\_redundant\_backup (Optional) Enable Geo-redundant or not for server backup. Valid values for this property are Enabled or Disabled, not supported for the basic tier.

#### » Attributes Reference

The following attributes are exported:

- id The ID of the MySQL Server.
- fqdn The FQDN of the MySQL Server.

### » Import

MySQL Server's can be imported using the resource id, e.g.

# » azurerm\_postgresql\_configuration

Sets a PostgreSQL Configuration value on a PostgreSQL Server.

```
resource "azurerm_resource_group" "test" {
          = "api-rg-pro"
  location = "West Europe"
resource "azurerm_postgresql_server" "test" {
                      = "postgresql-server-1"
 name
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
   name = "B_Gen4_2"
   capacity = 2
   tier = "Basic"
    family = "Gen4"
  storage_profile {
    storage_mb = 5120
    backup_retention_days = 7
    geo_redundant_backup = "Disabled"
  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
 version = "9.5"
  ssl_enforcement = "Enabled"
}
resource "azurerm_postgresql_configuration" "test" {
                      = "backslash_quote"
 resource_group_name = "${azurerm_resource_group.test.name}"
```

The following arguments are supported:

- name (Required) Specifies the name of the PostgreSQL Configuration, which needs to be a valid PostgreSQL configuration name. Changing this forces a new resource to be created.
- server\_name (Required) Specifies the name of the PostgreSQL Server. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the PostgreSQL Server exists. Changing this forces a new resource to be created.
- value (Required) Specifies the value of the PostgreSQL Configuration. See the PostgreSQL documentation for valid values.

### » Attributes Reference

The following attributes are exported:

• id - The ID of the PostgreSQL Configuration.

## » Import

PostgreSQL Configurations can be imported using the resource id, e.g.

terraform import azurerm\_postgresql\_configuration.backslash\_quote /subscriptions/00000000-00

# » azurerm\_postgresql\_database

Manages a PostgreSQL Database within a PostgreSQL Server

```
resource "azurerm_postgresql_server" "test" {
 name
                     = "postgresql-server-1"
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
    name = "B_Gen4_2"
    capacity = 2
   tier = "Basic"
    family = "Gen4"
 }
  storage profile {
    storage_mb = 5120
    backup retention days = 7
    geo_redundant_backup = "Disabled"
  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
  version = "9.5"
  ssl_enforcement = "Enabled"
resource "azurerm_postgresql_database" "test" {
                     = "exampledb"
 resource_group_name = "${azurerm_resource_group.test.name}"
 server_name = "${azurerm_postgresql_server.test.name}"
                     = "UTF8"
 charset
  collation
                     = "English_United States.1252"
}
```

- name (Required) Specifies the name of the PostgreSQL Database, which needs to be a valid PostgreSQL identifier. Changing this forces a new resource to be created.
- server\_name (Required) Specifies the name of the PostgreSQL Server. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the PostgreSQL Server exists. Changing this forces a new resource

to be created.

- charset (Required) Specifies the Charset for the PostgreSQL Database, which needs to be a valid PostgreSQL Charset. Changing this forces a new resource to be created.
- collation (Required) Specifies the Collation for the PostgreSQL Database, which needs to be a valid PostgreSQL Collation. Note that Microsoft uses different notation en-US instead of en\_US. Changing this forces a new resource to be created.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the PostgreSQL Database.

#### » Import

PostgreSQL Database's can be imported using the resource id, e.g.

## » azurerm\_postgresql\_firewall\_rule

Manages a Firewall Rule for a PostgreSQL Server

### » Example Usage (Single IP Address)

```
end_ip_address
                     = "40.112.8.12"
» Example Usage (IP Range)
resource "azurerm_resource_group" "test" {
          = "api-rg-pro"
 location = "West Europe"
resource "azurerm_postgresql_server" "test" {
resource "azurerm_postgresql_firewall_rule" "test" {
                     = "office"
 resource_group_name = "${azurerm_resource_group.test.name}"
              = "${azurerm_postgresql_server.test.name}"
 server_name
 start_ip_address = "40.112.0.0"
                     = "40.112.255.255"
  end_ip_address
}
```

The following arguments are supported:

- name (Required) Specifies the name of the PostgreSQL Firewall Rule. Changing this forces a new resource to be created.
- server\_name (Required) Specifies the name of the PostgreSQL Server. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the PostgreSQL Server exists. Changing this forces a new resource to be created.
- start\_ip\_address (Required) Specifies the Charset for the PostgreSQL Database. Changing this forces a new resource to be created.
- end\_ip\_address (Required) Specifies the End IP Address associated with this Firewall Rule. Changing this forces a new resource to be created.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the PostgreSQL Firewall Rule.

### » Import

# » azurerm\_postgresql\_server

Create a PostgreSQL Server.

```
resource "azurerm_resource_group" "test" {
 name = "api-rg-pro"
 location = "West Europe"
}
resource "azurerm_postgresql_server" "test" {
                      = "postgresql-server-1"
 name
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
   name = "B_Gen4_2"
    capacity = 2
   tier = "Basic"
    family = "Gen4"
 storage_profile {
    storage_mb = 5120
   backup_retention_days = 7
    geo_redundant_backup = "Disabled"
 administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
 version = "9.5"
  ssl_enforcement = "Enabled"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the PostgreSQL Server. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the PostgreSQL Server. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Required) A sku block as defined below.
- storage\_profile (Required) A storage\_profile block as defined below.
- administrator\_login (Required) The Administrator Login for the Post-greSQL Server. Changing this forces a new resource to be created.
- administrator\_login\_password (Required) The Password associated with the administrator\_login for the PostgreSQL Server.
- version (Required) Specifies the version of PostgreSQL to use. Valid values are 9.5 and 9.6. Changing this forces a new resource to be created.
- ssl\_enforcement (Required) Specifies if SSL should be enforced on connections. Possible values are Enabled and Disabled.
- tags (Optional) A mapping of tags to assign to the resource.

sku supports the following:

name - (Required) Specifies the SKU Name for this PostgreSQL Server.
 The name of the SKU, follows the tier + family + cores pattern (e.g. B\_Gen4\_1, GP\_Gen5\_8). For more information see the product documentation.

- capacity (Required) The scale up/out capacity, representing server's compute units.
- tier (Required) The tier of the particular SKU. Possible values are Basic, GeneralPurpose, and MemoryOptimized. For more information see the product documentation.
- family (Required) The family of hardware Gen4 or Gen5, before selecting your family check the product documentation for availability in your region.

148

storage\_profile supports the following:

- storage\_mb (Required) Max storage allowed for a server, possible values are between 5120 MB (5GB) and 1048576 MB (1TB). The step for this value must be in 1024 MB (1GB) increments. For more information see the product documentation.
- backup\_retention\_days (Optional) Backup retention days for the server, supported values are between 7 and 35 days.
- geo\_redundant\_backup (Optional) Enable Geo-redundant or not for server backup. Valid values for this property are Enabled or Disabled, not supported for the basic tier.

#### » Attributes Reference

The following attributes are exported:

- id The ID of the PostgreSQL Server.
- fqdn The FQDN of the PostgreSQL Server.

### » Import

PostgreSQL Server's can be imported using the resource id, e.g.

# » azurerm\_sql\_database

Allows you to manage an Azure SQL Database

- name (Required) The name of the database.
- resource\_group\_name (Required) The name of the resource group in which to create the database. This must be the same as Database Server resource group currently.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- server\_name (Required) The name of the SQL Server on which to create the database.
- create\_mode (Optional) Specifies the type of database to create. Defaults to Default. See below for the accepted values/
- source\_database\_id (Optional) The URI of the source database if create\_mode value is not Default.
- restore\_point\_in\_time (Optional) The point in time for the restore. Only applies if create\_mode is PointInTimeRestore e.g. 2013-11-08T22:00:40Z
- edition (Optional) The edition of the database to be created. Applies only if create\_mode is Default. Valid values are: Basic, Standard, Premium, or DataWarehouse. Please see Azure SQL Database Service Tiers.
- collation (Optional) The name of the collation. Applies only if create\_mode is Default. Azure default is SQL\_LATIN1\_GENERAL\_CP1\_CI\_AS. Changing this forces a new resource to be created.

- max\_size\_bytes (Optional) The maximum size that the database can grow to. Applies only if create\_mode is Default. Please see Azure SQL Database Service Tiers.
- requested\_service\_objective\_id (Optional) Use requested\_service\_objective\_id or requested\_service\_objective\_name to set the performance level for the database. Valid values are: S0, S1, S2, S3, P1, P2, P4, P6, P11 and ElasticPool. Please see Azure SQL Database Service Tiers.
- requested\_service\_objective\_name (Optional) Use requested\_service\_objective\_name or requested\_service\_objective\_id to set the performance level for the database. Please see Azure SQL Database Service Tiers.
- source\_database\_deletion\_date (Optional) The deletion date time of the source database. Only applies to deleted databases where create mode is PointInTimeRestore.
- elastic\_pool\_name (Optional) The name of the elastic database pool.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

- id The SQL Database ID.
- creation\_data The creation date of the SQL Database.
- default\_secondary\_location The default secondary location of the SQL Database.

#### » Import

SQL Databases can be imported using the resource id, e.g.

terraform import azurerm\_sql\_database.database1 /subscriptions/00000000-0000-0000-0000-0000

# » azurerm\_sql\_active\_directory\_administrator

Allows you to set a user or group as the AD administrator for an Azure SQL server

### » Example Usage

data "azurerm\_client\_config" "current" {}

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
}
resource "azurerm_sql_server" "test" {
 name = "mysqlserver"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm resource group.test.location}"
  version = "12.0"
  administrator_login = "4dm1n157r470r"
  administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}
resource "azurerm_sql_active_directory_administrator" "test" {
  server name = "${azurerm sql server.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  login = "sqladmin"
  tenant_id = "${data.azurerm_client_config.current.tenant_id}"
  object_id = "${data.azurerm_client_config.current.service_principal_object_id}"
}
```

The following arguments are supported:

- server\_name (Required) The name of the SQL Server on which to set the administrator. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group for the SQL server. Changing this forces a new resource to be created.
- login (Required) The login name of the principal to set as the server administrator
- object\_id (Required) The ID of the principal to set as the server administrator
- tenant\_id (Required) The Azure Tenant ID

#### » Attributes Reference

The following attributes are exported:

• id - The SQL Active Directory Administrator ID.

### » Import

A SQL Active Directory Administrator can be imported using the resource id, e.g.

terraform import azurerm\_sql\_active\_directory\_administrator.administrator /subscriptions/000

# » azurerm\_sql\_elasticpool

Allows you to manage an Azure SQL Elastic Pool.

## » Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "my-resource-group"
  location = "West US"
}
resource "azurerm_sql_server" "test" {
    name = "my-sql-server" # NOTE: needs to be globally unique
    resource_group_name = "${azurerm_resource_group.test.name}"
    location = "${azurerm_resource_group.test.location}"
    version = "12.0"
    administrator login = "4dm1n157r470r"
    administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}
resource "azurerm_sql_elasticpool" "test" {
   name = "test"
    resource_group_name = "${azurerm_resource_group.test.name}"
    location = "${azurerm_resource_group.test.location}"
    server_name = "${azurerm_sql_server.test.name}"
    edition = "Basic"
    dtu = 50
    db_dtu_min = 0
    db_dtu_max = 5
   pool_size = 5000
}
```

NOTE on azurerm\_sql\_elasticpool: - The values of edition, dtu, and pool\_size must be consistent with the Azure SQL Database Service Tiers. Any inconsistent argument configuration will be rejected.

The following arguments are supported:

- name (Required) The name of the elastic pool. This needs to be globally unique. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the elastic pool. This must be the same as the resource group of the underlying SQL server.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- server\_name (Required) The name of the SQL Server on which to create the elastic pool. Changing this forces a new resource to be created.
- edition (Required) The edition of the elastic pool to be created. Valid
  values are Basic, Standard, and Premium. Refer to Azure SQL Database
  Service Tiers for details. Changing this forces a new resource to be created.
- dtu (Required) The total shared DTU for the elastic pool. Valid values depend on the edition which has been defined. Refer to Azure SQL Database Service Tiers for valid combinations.
- db\_dtu\_min (Optional) The minimum DTU which will be guaranteed to all databases in the elastic pool to be created.
- db\_dtu\_max (Optional) The maximum DTU which will be guaranteed to all databases in the elastic pool to be created.
- pool\_size (Optional) The maximum size in MB that all databases in the elastic pool can grow to. The maximum size must be consistent with combination of edition and dtu and the limits documented in Azure SQL Database Service Tiers. If not defined when creating an elastic pool, the value is set to the size implied by edition and dtu.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

- id The SQL Elastic Pool ID.
- creation\_date The creation date of the SQL Elastic Pool.

# » azurerm\_sql\_firewall\_rule

Allows you to manage an Azure SQL Firewall Rule

## » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_sql_server" "test" {
    name = "mysqlserver"
   resource_group_name = "${azurerm_resource_group.test.name}"
   location = "West US"
    version = "12.0"
    administrator login = "4dm1n157r470r"
    administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}
resource "azurerm_sql_firewall_rule" "test" {
                     = "FirewallRule1"
 resource_group_name = "${azurerm_resource_group.test.name}"
                    = "${azurerm_sql_server.test.name}"
 server_name
 start_ip_address = "10.0.17.62"
                     = "10.0.17.62"
  end_ip_address
}
```

#### » Argument Reference

- name (Required) The name of the firewall rule.
- resource\_group\_name (Required) The name of the resource group in which to create the sql server.
- server\_name (Required) The name of the SQL Server on which to create the Firewall Rule.
- start\_ip\_address (Required) The starting IP address to allow through the firewall for this rule.
- end\_ip\_address (Required) The ending IP address to allow through the firewall for this rule.

**NOTE:** The Azure feature Allow access to Azure services can be enabled by setting start\_ip\_address and end\_ip\_address to 0.0.0.0 which (is documented in the Azure API Docs).

#### » Attributes Reference

The following attributes are exported:

• id - The SQL Firewall Rule ID.

#### » Import

SQL Firewall Rules can be imported using the resource id, e.g.

terraform import azurerm\_sql\_firewall\_rule.rule1 /subscriptions/00000000-0000-0000-0000-0000

# » azurerm\_sql\_server

Manages a SQL Azure Database Server.

**Note:** All arguments including the administrator login and password will be stored in the raw state as plain-text. Read more about sensitive data in state.

```
resource "azurerm_resource_group" "test" {
          = "database-rg"
 location = "West US"
}
resource "azurerm_sql_server" "test" {
                               = "mysqlserver"
 name
 resource_group_name
                               = "${azurerm_resource_group.test.name}"
                               = "${azurerm_resource_group.test.location}"
 location
  version
                               = "12.0"
                               = "mradministrator"
 administrator_login
  administrator_login_password = "thisIsDog11"
 tags {
    environment = "production"
}
```

The following arguments are supported:

- name (Required) The name of the SQL Server. This needs to be globally unique within Azure.
- resource\_group\_name (Required) The name of the resource group in which to create the SQL Server.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- version (Required) The version for the new server. Valid values are: 2.0 (for v11 server) and 12.0 (for v12 server).
- administrator\_login (Required) The administrator login name for the new server. Changing this forces a new resource to be created.
- administrator\_login\_password (Required) The password associated with the administrator\_login user. Needs to comply with Azure's Password Policy
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

- id The SQL Server ID.
- fully\_qualified\_domain\_name The fully qualified domain name of the Azure SQL Server (e.g. myServerName.database.windows.net)

#### » Import

SQL Servers can be imported using the resource id, e.g.

## » azurerm sql virtual network rule

Allows you to add, update, or remove an Azure SQL server to a subnet of a virtual network.

### » Example Usage

```
resource "azurerm resource group" "example" {
          = "example-sql-server-vnet-rule"
  location = "West US"
}
resource "azurerm virtual network" "vnet" {
 name = "example-vnet"
address_space = ["10.7.29.0/29"]
location = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
}
resource "azurerm_subnet" "subnet" {
                        = "example-subnet"
  resource_group_name = "${azurerm_resource_group.example.name}"
  virtual_network_name = "${azurerm_virtual_network.vnet.name}"
  address_prefix = "10.7.29.0/29"
  service endpoints = ["Microsoft.Sql"]
}
resource "azurerm_sql_server" "sqlserver" {
                                   = "unqiueazuresqlserver"
    name
    resource group name
                                   = "${azurerm resource group.example.name}"
    location
                                  = "${azurerm_resource_group.example.location}"
                                   = "12.0"
    version
    administrator_login
                                   = "4dm1n157r470r"
    administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}
resource "azurerm_sql_virtual_network_rule" "sqlvnetrule" {
                      = "sql-vnet-rule"
  resource_group_name = "${azurerm_resource_group.example.name}"
  server_name = "${azurerm_sql_server.sqlserver.name}"
subnet_id = "${azurerm_subnet.subnet.id}"
}
```

### » Argument Reference

The following arguments are supported:

• name - (Required) The name of the SQL virtual network rule. Changing this forces a new resource to be created. Cannot be empty and must only contain alphanumeric characters and hyphens. Cannot start with a

number, and cannot start or end with a hyphen.

**NOTE:** name must be between 1-128 characters long and must satisfy all of the requirements below: 1. Contains only alphanumeric and hyphen characters 2. Cannot start with a number or hyphen 3. Cannot end with a hyphen

- resource\_group\_name (Required) The name of the resource group where the SQL server resides. Changing this forces a new resource to be created.
- server\_name (Required) The name of the SQL Server to which this SQL virtual network rule will be applied to. Changing this forces a new resource to be created.
- subnet\_id (Required) The ID of the subnet that the SQL server will be connected to.
- ignore\_missing\_vnet\_service\_endpoint (Optional) Create the virtual network rule before the subnet has the virtual network service endpoint enabled. The default value is false.

**NOTE:** If ignore\_missing\_vnet\_service\_endpoint is false, and the target subnet does not contain the Microsoft.SQL endpoint in the service\_endpoints array, the deployment will fail when it tries to create the SQL virtual network rule.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the SQL virtual network rule.

#### » Import

SQL Virtual Network Rules can be imported using the resource id, e.g.

## » azurerm data lake store

Manage an Azure Data Lake Store.

```
# Pay As You Go
resource "azurerm_resource_group" "test" {
```

```
= "test"
 location = "northeurope"
resource "azurerm_data_lake_store" "consumption" {
                     = "consumptiondatalake"
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "northeurope"
 location
# Monthly Commitment Tier
resource "azurerm_resource_group" "test" {
         = "test"
 name
 location = "westeurope"
}
resource "azurerm_data_lake_store" "monthly" {
                     = "monthlydatalake"
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "westeurope"
 location
                     = "Commitment_1TB"
 tier
}
```

The following arguments are supported:

- name (Required) Specifies the name of the Data Lake Store. Changing this forces a new resource to be created. Has to be between 3 to 24 characters.
- resource\_group\_name (Required) The name of the resource group in which to create the Data Lake Store.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- tier (Optional) The monthly commitment tier for Data Lake Store.

  Accepted values are Consumption, Commitment\_1TB, Commitment\_10TB,

  Commitment\_100TB, Commitment\_500TB, Commitment\_1PB or Commitment\_5PB.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The Date Lake Store ID.

### » Import

Date Lake Store can be imported using the resource id, e.g.

# » azurerm\_dns\_a\_record

Enables you to manage DNS A Records within Azure DNS.

## » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
}
resource "azurerm_dns_zone" "test" {
                     = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_dns_a_record" "test" {
 name
                     = "test"
 zone_name
                     = "${azurerm_dns_zone.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 ttl
                     = 300
                     = ["10.0.180.17"]
 records
}
```

#### » Argument Reference

- name (Required) The name of the DNS A Record.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- zone\_name (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.

- TTL (Required) The Time To Live (TTL) of the DNS record.
- records (Required) List of IPv4 Addresses.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The DNS A Record ID.

### » Import

A records can be imported using the resource id, e.g.

## » azurerm dns aaaa record

Enables you to manage DNS AAAA Records within Azure DNS.

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_dns_zone" "test" {
                    = "mydomain.com"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_dns_aaaa_record" "test" {
                     = "test"
 name
 zone_name
                     = "${azurerm_dns_zone.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  ttl
                     = ["2607:f8b0:4009:1803::1005"]
 records
}
```

The following arguments are supported:

- name (Required) The name of the DNS AAAA Record.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- zone\_name (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.
- TTL (Required) The Time To Live (TTL) of the DNS record.
- records (Required) List of IPv6 Addresses.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The DNS AAAA Record ID.

#### » Import

AAAA records can be imported using the resource id, e.g.

# » azurerm\_dns\_cname\_record

Enables you to manage DNS CNAME Records within Azure DNS.

The following arguments are supported:

- name (Required) The name of the DNS CNAME Record.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- zone\_name (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.
- TTL (Required) The Time To Live (TTL) of the DNS record.
- record (Required) The target of the CNAME.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The DNS CName Record ID.

#### » Import

CNAME records can be imported using the resource id, e.g.

# » azurerm\_dns\_mx\_record

Enables you to manage DNS MX Records within Azure DNS.

## » Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
 location = "West US"
}
resource "azurerm dns zone" "test" {
                     = "mydomain.com"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_dns_mx_record" "test" {
                     = "test"
            = "${azurerm_dns_zone.test.name}"
 zone_name
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = 300
 record {
   preference = 10
   exchange = "mail1.contoso.com"
 record {
   preference = 20
   exchange = "mail2.contoso.com"
 tags {
   Environment = "Production"
}
```

### » Argument Reference

- name (Required) The name of the DNS MX Record.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- zone\_name (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.
- ttl (Required) The Time To Live (TTL) of the DNS record.

- record (Required) A list of values that make up the SRV record. Each record block supports fields documented below.
- tags (Optional) A mapping of tags to assign to the resource.

The record block supports:

- preference (Required) String representing the "preference" value of the MX records. Records with lower preference value take priority.
- exchange (Required) The mail server responsible for the domain covered by the MX record.

#### » Attributes Reference

The following attributes are exported:

• id - The DNS MX Record ID.

#### » Import

MX records can be imported using the resource id, e.g.

# » azurerm dns ns record

Enables you to manage DNS NS Records within Azure DNS.

The following arguments are supported:

- name (Required) The name of the DNS NS Record.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- zone\_name (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.
- ttl (Required) The Time To Live (TTL) of the DNS record.
- records (Optional) A list of values that make up the NS record. WARN-ING: Either records or record is required.
- record (Optional) A list of values that make up the NS record. Each record block supports fields documented below. This field has been deprecated and will be removed in a future release.
- tags (Optional) A mapping of tags to assign to the resource.

The record block supports:

• nsdname - (Required) The value of the record.

#### » Attributes Reference

The following attributes are exported:

• id - The DNS NS Record ID.

#### » Import

NS records can be imported using the resource id, e.g.

## » azurerm\_dns\_ptr\_record

Enables you to manage DNS PTR Records within Azure DNS.

#### » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
}
resource "azurerm dns zone" "test" {
                     = "mydomain.com"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm dns ptr record" "test" {
                     = "test"
 name
                     = "${azurerm_dns_zone.test.name}"
 zone_name
 resource_group_name = "${azurerm_resource_group.test.name}"
 ttl
                      = 300
                     = ["yourdomain.com"]
 records
```

### » Argument Reference

The following arguments are supported:

- name (Required) The name of the DNS PTR Record.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- zone\_name (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.
- ttl (Required) The Time To Live (TTL) of the DNS record.
- records (Required) List of Fully Qualified Domain Names.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The DNS PTR Record ID.

### » Import

PTR records can be imported using the resource id, e.g.

# » azurerm\_dns\_srv\_record

Enables you to manage DNS SRV Records within Azure DNS.

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
 location = "West US"
}
resource "azurerm_dns_zone" "test" {
                     = "mydomain.com"
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_dns_srv_record" "test" {
 name
                     = "test"
                     = "${azurerm_dns_zone.test.name}"
 zone_name
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = 300
 ttl
 record {
   priority = 1
   weight = 5
   port
            = 8080
    target = "target1.contoso.com"
 tags {
    Environment = "Production"
}
```

The following arguments are supported:

- name (Required) The name of the DNS SRV Record.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- zone\_name (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.
- ttl (Required) The Time To Live (TTL) of the DNS record.
- record (Required) A list of values that make up the SRV record. Each record block supports fields documented below.
- tags (Optional) A mapping of tags to assign to the resource.

The record block supports:

- priority (Required) Priority of the SRV record.
- weight (Required) Weight of the SRV record.
- port (Required) Port the service is listening on.
- target (Required) FQDN of the service.

#### » Attributes Reference

The following attributes are exported:

• id - The DNS SRV Record ID.

#### » Import

SRV records can be imported using the resource id, e.g.

## » azurerm dns txt record

Enables you to manage DNS TXT Records within Azure DNS.

### » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
 location = "West US"
}
resource "azurerm dns zone" "test" {
                      = "mydomain.com"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_dns_txt_record" "test" {
                      = "test"
                      = "${azurerm_dns_zone.test.name}"
 zone_name
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = 300
 ttl
 record {
   value = "google-site-authenticator"
 record {
   value = "more site information here"
   Environment = "Production"
}
```

#### » Argument Reference

- name (Required) The name of the DNS TXT Record.
- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- zone\_name (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.
- ttl (Required) The Time To Live (TTL) of the DNS record.
- record (Required) A list of values that make up the txt record. Each record block supports fields documented below.

• tags - (Optional) A mapping of tags to assign to the resource.

The record block supports:

• value - (Required) The value of the record.

#### » Attributes Reference

The following attributes are exported:

• id - The DNS TXT Record ID.

### » Import

TXT records can be imported using the resource id, e.g.

## » azurerm dns zone

Enables you to manage DNS zones within Azure DNS. These zones are hosted on Azure's name servers to which you can delegate the zone from the parent domain.

### » Example Usage

## » Argument Reference

The following arguments are supported:

• name - (Required) The name of the DNS Zone. Must be a valid domain name.

- resource\_group\_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

- id The DNS Zone ID.
- max\_number\_of\_record\_sets (Optional) Maximum number of Records in the zone. Defaults to 1000.
- number\_of\_record\_sets (Optional) The number of records already in the zone.
- name\_servers (Optional) A list of values that make up the NS record for the zone.

#### » Import

DNS Zones can be imported using the resource id, e.g.

# » azurerm\_key\_vault

Manages a Key Vault.

```
tenant_id = "d6e396d0-5584-41dc-9fc0-268df99bc610"
access_policy {
   tenant_id = "d6e396d0-5584-41dc-9fc0-268df99bc610"
   object_id = "d746815a-0433-4a21-b95d-fc437d2d475b"
   key_permissions = [
        "get",
   ]
   secret_permissions = [
        "get",
   ]
}
enabled_for_disk_encryption = true

tags {
   environment = "Production"
}
```

- name (Required) Specifies the name of the Key Vault. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Key Vault. Changing this forces a new resource to be created.
- sku (Required) An SKU block as described below.
- tenant\_id (Required) The Azure Active Directory tenant ID that should be used for authenticating requests to the key vault.
- access\_policy (Required) An access policy block as described below. At least one policy is required up to a maximum of 16.
- enabled\_for\_deployment (Optional) Boolean flag to specify whether Azure Virtual Machines are permitted to retrieve certificates stored as secrets from the key vault. Defaults to false.

- enabled\_for\_disk\_encryption (Optional) Boolean flag to specify whether Azure Disk Encryption is permitted to retrieve secrets from the vault and unwrap keys. Defaults to false.
- enabled\_for\_template\_deployment (Optional) Boolean flag to specify whether Azure Resource Manager is permitted to retrieve secrets from the key vault. Defaults to false.
- tags (Optional) A mapping of tags to assign to the resource.

sku supports the following:

• name - (Required) SKU name to specify whether the key vault is a standard or premium vault.

access\_policy supports the following:

- tenant\_id (Required) The Azure Active Directory tenant ID that should be used for authenticating requests to the key vault. Must match the tenant\_id used above.
- object\_id (Required) The object ID of a user, service principal or security group in the Azure Active Directory tenant for the vault. The object ID must be unique for the list of access policies.
- application\_id (Optional) The object ID of an Application in Azure Active Directory.
- certificate\_permissions (Optional) List of certificate permissions, must be one or more from the following: create, delete, deleteissuers, get, getissuers, import, list, listissuers, managecontacts, manageissuers, purge, recover, setissuers and update.
- key\_permissions (Required) List of key permissions, must be one or more from the following: backup, create, decrypt, delete, encrypt, get, import, list, purge, recover, restore, sign, unwrapKey, update, verify and wrapKey.
- secret\_permissions (Required) List of secret permissions, must be one or more from the following: backup, delete, get, list, purge, recover, restore and set.

#### » Attributes Reference

The following attributes are exported:

- id The Vault ID.
- vault\_uri The URI of the vault for performing operations on keys and secrets.

### » Import

Key Vault's can be imported using the resource id, e.g.

# » azurerm\_key\_vault\_certificate

Manages a Key Vault Certificate.

## » Example Usage (Importing a PFX)

**Note:** this example assumed the PFX file is located in the same directory at certificate-to-import.pfx.

```
data "azurerm_client_config" "current" {}
resource "azurerm_resource_group" "test" {
           = "key-vault-certificate-example"
  location = "West Europe"
}
resource "azurerm_key_vault" "test" {
 name
                      = "keyvaultcertexample"
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 tenant_id
                     = "${data.azurerm_client_config.current.tenant_id}"
  sku {
   name = "standard"
  access_policy {
    tenant_id = "${data.azurerm_client_config.current.tenant_id}"
    object_id = "${data.azurerm_client_config.current.service_principal_object_id}"
    certificate_permissions = [
      "create", "delete", "deleteissuers",
      "get", "getissuers", "import", "list",
      "listissuers", "managecontacts", "manageissuers",
      "setissuers", "update",
    1
   key_permissions = [
```

```
"backup", "create", "decrypt", "delete", "encrypt", "get",
      "import", "list", "purge", "recover", "restore", "sign",
      "unwrapKey", "update", "verify", "wrapKey",
    ]
    secret_permissions = [
      "backup", "delete", "get", "list", "purge", "recover", "restore", "set",
    ]
  }
  tags {
    environment = "Production"
  }
}
resource "azurerm_key_vault_certificate" "test" {
            = "imported-cert"
  vault_uri = "${azurerm_key_vault.test.vault_uri}"
  certificate {
    contents = "${base64encode(file("certificate-to-import.pfx"))}"
    password = ""
  certificate_policy {
    issuer_parameters {
      name = "Self"
    }
    key_properties {
      exportable = true
      key_size = 2048
      key_type = "RSA"
      reuse_key = false
    }
    secret_properties {
      content_type = "application/x-pkcs12"
    }
 }
}
```

## » Example Usage (Generating a new certificate)

```
data "azurerm_client_config" "current" {}
resource "azurerm_resource_group" "test" {
          = "key-vault-certificate-example"
 location = "West Europe"
}
resource "azurerm_key_vault" "test" {
                     = "keyvaultcertexample"
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 tenant_id
                     = "${data.azurerm_client_config.current.tenant_id}"
  sku {
   name = "standard"
  access_policy {
   tenant_id = "${data.azurerm_client_config.current.tenant_id}"
    object_id = "${data.azurerm_client_config.current.service_principal_object_id}"
    certificate_permissions = [
      "all",
    1
   key_permissions = [
      "all",
    secret_permissions = [
     "all",
   ]
 }
 tags {
    environment = "Production"
}
resource "azurerm_key_vault_certificate" "test" {
            = "generated-cert"
 name
 vault_uri = "${azurerm_key_vault.test.vault_uri}"
```

```
certificate_policy {
    issuer_parameters {
     name = "Self"
    }
    key_properties {
      exportable = true
     key_size = 2048
     key_type = "RSA"
     reuse_key = true
    lifetime_action {
      action {
        action_type = "AutoRenew"
      trigger {
        days_before_expiry = 30
    }
    secret_properties {
      content_type = "application/x-pkcs12"
    }
    x509_certificate_properties {
      key_usage = [
        "cRLSign",
        "dataEncipherment",
        "digitalSignature",
        "keyAgreement",
        "keyCertSign",
        "keyEncipherment",
      ]
      subject
                         = "CN=hello-world"
      validity_in_months = 12
 }
}
```

- name (Required) Specifies the name of the Key Vault Certificate. Changing this forces a new resource to be created.
- vault\_uri (Required) Specifies the URI used to access the Key Vault instance, available on the azurerm\_key\_vault resource.
- certificate (Optional) A certificate block as defined below, used to Import an existing certificate.
- certificate\_policy (Required) A certificate\_policy block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

### \_\_\_\_

#### certificate supports the following:

- contents (Required) The base64-encoded certificate contents. Changing this forces a new resource to be created.
- password (Optional) The password associated with the certificate. Changing this forces a new resource to be created.

#### certificate\_policy supports the following:

- issuer\_parameters (Required) A issuer\_parameters block as defined below.
- key\_properties (Required) A key\_properties block as defined below.
- lifetime\_action (Optional) A lifetime\_action block as defined below.
- secret\_properties (Required) A secret\_properties block as defined below.
- x509\_certificate\_properties (Optional) A x509\_certificate\_properties block as defined below.

#### issuer\_parameters supports the following:

• name - (Required) The name of the Certificate Issuer. Possible values include Self, or the name of a certificate issuing authority supported by Azure. Changing this forces a new resource to be created.

#### key\_properties supports the following:

- exportable (Required) Is this Certificate Exportable? Changing this forces a new resource to be created.
- key\_size (Required) The size of the Key used in the Certificate. Possible values include 2048 and 4096. Changing this forces a new resource to be created.
- key\_type (Required) Specifies the Type of Key, such as RSA. Changing this forces a new resource to be created.
- reuse\_key (Required) Is the key reusable? Changing this forces a new resource to be created.

lifetime\_action supports the following:

- action (Required) A action block as defined below.
- trigger (Required) A trigger block as defined below.

action supports the following:

• action\_type - (Required) The Type of action to be performed when the lifetime trigger is triggerec. Possible values include AutoRenew and EmailContacts. Changing this forces a new resource to be created.

trigger supports the following:

- days\_before\_expiry (Optional) The number of days before the Certificate expires that the action associated with this Trigger should run. Changing this forces a new resource to be created. Conflicts with lifetime\_percentage.
- lifetime\_percentage (Optional) The percentage at which during the Certificates Lifetime the action associated with this Trigger should run. Changing this forces a new resource to be created. Conflicts with days\_before\_expiry.

secret\_properties supports the following:

• content\_type - (Required) The Content-Type of the Certificate, such as application/x-pkcs12 for a PFX or application/x-pem-file for a PEM. Changing this forces a new resource to be created.

x509\_certificate\_properties supports the following:

- key\_usage (Required) A list of uses associated with this Key. Possible values include cRLSign, dataEncipherment, decipherOnly, digitalSignature, encipherOnly, keyAgreement, keyCertSign, keyEncipherment and nonRepudiation and are case-sensitive. Changing this forces a new resource to be created.
- subject (Required) The Certificate's Subject. Changing this forces a new resource to be created.
- validity\_in\_months (Required) The Certificates Validity Period in Months. Changing this forces a new resource to be created.

#### » Attributes Reference

The following attributes are exported:

- id The Key Vault Certificate ID.
- secret\_id The ID of the associated Key Vault Secret.
- $\bullet\,$  version The current version of the Key Vault Certificate.
- certificate\_data The raw Key Vault Certificate

### » Import

Key Vault Certificates can be imported using the resource id, e.g.

terraform import azurerm\_key\_vault\_certificate.test https://example-keyvault.vault.azure.ne

# » azurerm\_key\_vault\_key

Manages a Key Vault Key.

```
data "azurerm_client_config" "current" {}
resource "azurerm_resource_group" "test" {
           = "my-resource-group"
  location = "West US"
}
resource "random_id" "server" {
 keepers = {
    ami_id = 1
 byte_length = 8
}
resource "azurerm_key_vault" "test" {
                      = "${format("%s%s", "kv", random_id.server.hex)}"
 name
 location
                      = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = "${data.azurerm_client_config.current.tenant_id}"
 sku {
    name = "premium"
  access_policy {
    tenant_id = "${data.azurerm_client_config.current.tenant_id}"
    object_id = "${data.azurerm_client_config.current.service_principal_object_id}"
   key_permissions = [
      "create",
      "get",
    ]
```

```
secret_permissions = [
      "set",
    ]
 }
 tags {
    environment = "Production"
}
resource "azurerm_key_vault_key" "generated" {
            = "generated-certificate"
 vault_uri = "${azurerm_key_vault.test.vault_uri}"
 key_type = "RSA"
 key_size = 2048
 key_opts = [
    "decrypt",
    "encrypt",
    "sign",
    "unwrapKey",
    "verify",
    "wrapKey"
 ]
}
```

- name (Required) Specifies the name of the Key Vault Key. Changing this forces a new resource to be created.
- vault\_uri (Required) Specifies the URI used to access the Key Vault instance, available on the azurerm\_key\_vault resource.
- key\_type (Required) Specifies the Key Type to use for this Key Vault Key. Possible values are EC (Elliptic Curve), Oct (Octet), RSA and RSA-HSM. Changing this forces a new resource to be created.
- key\_size (Required) Specifies the Size of the Key to create in bytes. For example, 1024 or 2048. Changing this forces a new resource to be created.
- key\_opts (Required) A list of JSON web key operations. Possible values include: decrypt, encrypt, sign, unwrapKey, verify and wrapKey.
   Please note these values are case sensitive.

• tags - (Optional) A mapping of tags to assign to the resource.

### » Attributes Reference

The following attributes are exported:

- id The Key Vault Key ID.
- version The current version of the Key Vault Key.
- n The RSA modulus of this Key Vault Key.
- e The RSA public exponent of this Key Vault Key.

### » Import

Key Vault Key which is Enabled can be imported using the resource id, e.g.

terraform import azurerm\_key\_vault\_key.test https://example-keyvault.vault.azure.net/keys/example-keyvault.azure.net/keys/example-keyvault.azu

## » azurerm key vault secret

Manages a Key Vault Secret.

**Note:** All arguments including the secret value will be stored in the raw state as plain-text. Read more about sensitive data in state.

```
resource_group_name = "${azurerm_resource_group.test.name}"
                      = "${data.azurerm_client_config.current.tenant_id}"
 tenant_id
 sku {
   name = "premium"
  access_policy {
    tenant_id = "${data.azurerm_client_config.current.tenant_id}"
    object_id = "${data.azurerm_client_config.current.service_principal_object_id}"
   key_permissions = [
      "create",
      "get",
   1
    secret_permissions = [
      "set",
      "get",
      "delete",
   ]
 }
 tags {
    environment = "Production"
}
resource "azurerm_key_vault_secret" "test" {
          = "secret-sauce"
          = "szechuan"
 value
 vault_uri = "${azurerm_key_vault.test.vault_uri}"
 tags {
    environment = "Production"
}
```

- name (Required) Specifies the name of the Key Vault Secret. Changing this forces a new resource to be created.
- value (Required) Specifies the value of the Key Vault Secret.

- vault\_uri (Required) Specifies the URI used to access the Key Vault instance, available on the azurerm\_key\_vault resource.
- content\_type (Optional) Specifies the content type for the Key Vault Secret.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

- id The Key Vault Secret ID.
- version The current version of the Key Vault Secret.

## » Import

Key Vault Secrets which are Enabled can be imported using the resource id, e.g.

terraform import azurerm\_key\_vault\_secret.test https://example-keyvault.vault.azure.net/sec

# » azurerm\_lb

Create a LoadBalancer Resource.

```
resource "azurerm_resource_group" "test" {
         = "LoadBalancerRG"
 location = "West US"
}
resource "azurerm_public_ip" "test" {
                              = "PublicIPForLB"
 name
 location
                              = "West US"
 resource_group_name
                            = "${azurerm_resource_group.test.name}"
 public_ip_address_allocation = "static"
resource "azurerm_lb" "test" {
 name
                     = "TestLoadBalancer"
 location
                     = "West US"
```

```
resource_group_name = "${azurerm_resource_group.test.name}"

frontend_ip_configuration {
    name = "PublicIPAddress"
    public_ip_address_id = "${azurerm_public_ip.test.id}"
  }
}
```

The following arguments are supported:

- name (Required) Specifies the name of the LoadBalancer.
- resource\_group\_name (Required) The name of the resource group in which to create the LoadBalancer.
- location (Required) Specifies the supported Azure location where the resource exists.
- frontend\_ip\_configuration (Optional) A frontend ip configuration block as documented below.
- sku (Optional) The SKU of the Azure Load Balancer. Accepted values are Basic and Standard. Defaults to Basic.
- tags (Optional) A mapping of tags to assign to the resource.

frontend\_ip\_configuration supports the following:

- name (Required) Specifies the name of the frontend ip configuration.
- subnet\_id (Optional) Reference to subnet associated with the IP Configuration.
- private\_ip\_address (Optional) Private IP Address to assign to the Load Balancer. The last one and first four IPs in any range are reserved and cannot be manually assigned.
- private\_ip\_address\_allocation (Optional) Defines how a private IP address is assigned. Options are Static or Dynamic.
- public\_ip\_address\_id (Optional) Reference to Public IP address to be associated with the Load Balancer.
- zones (Optional) A collection containing the availability zone to allocate the IP in.

**Please Note**: Availability Zones are in Preview and only supported in several regions at this time - as such you must be opted into the Preview to use this functionality. You can opt into the Availability Zones Preview in the Azure Portal.

#### » Attributes Reference

The following attributes are exported:

- id The LoadBalancer ID.
- private\_ip\_address The first private IP address assigned to the load balancer in frontend\_ip\_configuration blocks, if any.
- private\_ip\_addresses The list of private IP address assigned to the load balancer in frontend\_ip\_configuration blocks, if any.

#### » Import

Load Balancers can be imported using the resource id, e.g.

terraform import azurerm\_lb.test /subscriptions/0000000-0000-0000-0000-00000000000/resource

# » azurerm\_lb\_backend\_address\_pool

Create a LoadBalancer Backend Address Pool.

**NOTE:** When using this resource, the LoadBalancer needs to have a FrontEnd IP Configuration Attached

```
resource "azurerm_resource_group" "test" {
          = "LoadBalancerRG"
 location = "West US"
}
resource "azurerm_public_ip" "test" {
                              = "PublicIPForLB"
 name
                              = "West US"
 location
                              = "${azurerm_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "static"
}
resource "azurerm lb" "test" {
                     = "TestLoadBalancer"
 name
                     = "West US"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  frontend_ip_configuration {
                         = "PublicIPAddress"
   name
```

```
public_ip_address_id = "${azurerm_public_ip.test.id}"
}

resource "azurerm_lb_backend_address_pool" "test" {
  resource_group_name = "${azurerm_resource_group.test.name}"
  loadbalancer_id = "${azurerm_lb.test.id}"
  name = "BackEndAddressPool"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the Backend Address Pool.
- resource\_group\_name (Required) The name of the resource group in which to create the resource.
- loadbalancer\_id (Required) The ID of the LoadBalancer in which to create the Backend Address Pool.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the LoadBalancer to which the resource is attached.

### » Import

Load Balancer Backend Address Pools can be imported using the resource id, e.g.

terraform import azurerm\_lb\_backend\_address\_pool.test /subscriptions/00000000-0000-0000-0000

# » azurerm\_lb\_rule

Create a LoadBalancer Rule.

**NOTE** When using this resource, the LoadBalancer needs to have a FrontEnd IP Configuration Attached

## » Example Usage

```
resource "azurerm resource group" "test" {
         = "LoadBalancerRG"
 location = "West US"
}
resource "azurerm public ip" "test" {
 name
                               = "PublicIPForLB"
                              = "West US"
 location
                             = "${azurerm_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "static"
resource "azurerm_lb" "test" {
                     = "TestLoadBalancer"
                     = "West US"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 frontend_ip_configuration {
                         = "PublicIPAddress"
   name
   public_ip_address_id = "${azurerm_public_ip.test.id}"
}
resource "azurerm_lb_rule" "test" {
                                = "${azurerm_resource_group.test.name}"
  resource_group_name
                                = "${azurerm_lb.test.id}"
 loadbalancer_id
                                 = "LBRule"
 name
                                 = "Tcp"
 protocol
 frontend_port
                                 = 3389
 {\tt backend\_port}
                                 = 3389
  frontend_ip_configuration_name = "PublicIPAddress"
}
```

### » Argument Reference

- name (Required) Specifies the name of the LB Rule.
- resource\_group\_name (Required) The name of the resource group in which to create the resource.
- loadbalancer\_id (Required) The ID of the LoadBalancer in which to create the Rule.

- frontend\_ip\_configuration\_name (Required) The name of the frontend IP configuration to which the rule is associated.
- protocol (Required) The transport protocol for the external endpoint. Possible values are Udp or Tcp.
- frontend\_port (Required) The port for the external endpoint. Port numbers for each Rule must be unique within the Load Balancer. Possible values range between 1 and 65534, inclusive.
- backend\_port (Required) The port used for internal connections on the endpoint. Possible values range between 1 and 65535, inclusive.
- backend\_address\_pool\_id (Optional) A reference to a Backend Address
   Pool over which this Load Balancing Rule operates.
- probe\_id (Optional) A reference to a Probe used by this Load Balancing Rule.
- enable\_floating\_ip (Optional) Floating IP is pertinent to failover scenarios: a "floating" IP is reassigned to a secondary server in case the primary server fails. Floating IP is required for SQL AlwaysOn.
- idle\_timeout\_in\_minutes (Optional) Specifies the timeout for the Tcp idle connection. The value can be set between 4 and 30 minutes. The default value is 4 minutes. This element is only used when the protocol is set to Tcp.
- load\_distribution (Optional) Specifies the load balancing distribution type to be used by the Load Balancer. Possible values are: Default The load balancer is configured to use a 5 tuple hash to map traffic to available servers. SourceIP The load balancer is configured to use a 2 tuple hash to map traffic to available servers. SourceIPProtocol The load balancer is configured to use a 3 tuple hash to map traffic to available servers. Also known as Session Persistence, where the options are called None, Client IP and Client IP and Protocol respectively.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the LoadBalancer to which the resource is attached.

#### » Import

Load Balancer Rules can be imported using the resource id, e.g.

terraform import azurerm lb rule.test /subscriptions/00000000-0000-0000-0000-00000000000/re

# » azurerm\_lb\_nat\_rule

Create a LoadBalancer NAT Rule.

**NOTE** When using this resource, the LoadBalancer needs to have a FrontEnd IP Configuration Attached

```
resource "azurerm_resource_group" "test" {
          = "LoadBalancerRG"
 name
 location = "West US"
}
resource "azurerm_public_ip" "test" {
 name
                              = "PublicIPForLB"
                              = "West US"
 location
                         = "${azurerm_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "static"
resource "azurerm_lb" "test" {
                    = "TestLoadBalancer"
 name
                     = "West US"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 frontend_ip_configuration {
                       = "PublicIPAddress"
   public_ip_address_id = "${azurerm_public_ip.test.id}"
 }
}
resource "azurerm_lb_nat_rule" "test" {
 resource_group_name
                               = "${azurerm_resource_group.test.name}"
 loadbalancer id
                               = "${azurerm lb.test.id}"
                                = "RDPAccess"
 name
                                = "Tcp"
 protocol
                                = 3389
 frontend_port
                                = 3389
 backend_port
 frontend_ip_configuration_name = "PublicIPAddress"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the NAT Rule.
- resource\_group\_name (Required) The name of the resource group in which to create the resource.
- loadbalancer\_id (Required) The ID of the LoadBalancer in which to create the NAT Rule.
- frontend\_ip\_configuration\_name (Required) The name of the frontend IP configuration exposing this rule.
- protocol (Required) The transport protocol for the external endpoint. Possible values are Udp or Tcp.
- frontend\_port (Required) The port for the external endpoint. Port numbers for each Rule must be unique within the Load Balancer. Possible values range between 1 and 65534, inclusive.
- backend\_port (Required) The port used for internal connections on the endpoint. Possible values range between 1 and 65535, inclusive.
- enable\_floating\_ip (Optional) Enables the Floating IP Capacity, required to configure a SQL AlwaysOn Availability Group.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the LoadBalancer to which the resource is attached.

#### » Import

Load Balancer NAT Rules can be imported using the resource id, e.g.

# » azurerm\_lb\_nat\_pool

Create a LoadBalancer NAT pool.

**NOTE** When using this resource, the LoadBalancer needs to have a FrontEnd IP Configuration Attached

```
resource "azurerm_resource_group" "test" {
```

```
= "LoadBalancerRG"
  location = "West US"
}
resource "azurerm_public_ip" "test" {
                              = "PublicIPForLB"
  name
                              = "West US"
 location
                         = "${azurerm_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "static"
}
resource "azurerm_lb" "test" {
                     = "TestLoadBalancer"
 name
                     = "West US"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  frontend_ip_configuration {
                         = "PublicIPAddress"
    public_ip_address_id = "${azurerm_public_ip.test.id}"
}
resource "azurerm_lb_nat_pool" "test" {
                                = "${azurerm_resource_group.test.name}"
  resource_group_name
                                = "${azurerm_lb.test.id}"
 loadbalancer_id
 name
                                 = "SampleApplicationPool"
                                 = "Tcp"
 protocol
  frontend_port_start
 frontend_port_end
                                 = 81
 backend_port
                                 = 8080
  frontend_ip_configuration_name = "PublicIPAddress"
}
```

- name (Required) Specifies the name of the NAT pool.
- resource\_group\_name (Required) The name of the resource group in which to create the resource.
- loadbalancer\_id (Required) The ID of the LoadBalancer in which to create the NAT pool.
- frontend\_ip\_configuration\_name (Required) The name of the frontend IP configuration exposing this rule.
- protocol (Required) The transport protocol for the external endpoint.

Possible values are Udp or Tcp.

- frontend\_port\_start (Required) The first port number in the range of external ports that will be used to provide Inbound Nat to NICs associated with this Load Balancer. Possible values range between 1 and 65534, inclusive.
- frontend\_port\_end (Required) The last port number in the range of external ports that will be used to provide Inbound Nat to NICs associated with this Load Balancer. Possible values range between 1 and 65534, inclusive.
- backend\_port (Required) The port used for the internal endpoint. Possible values range between 1 and 65535, inclusive.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the LoadBalancer to which the resource is attached.

#### » Import

Load Balancer NAT Pools can be imported using the resource id, e.g.

# » azurerm\_lb\_probe

Create a LoadBalancer Probe Resource.

 ${\bf NOTE}$  When using this resource, the LoadBalancer needs to have a FrontEnd IP Configuration Attached

```
}
resource "azurerm lb" "test" {
                      = "TestLoadBalancer"
  name
  location
                      = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
  frontend_ip_configuration {
                         = "PublicIPAddress"
   public_ip_address_id = "${azurerm_public_ip.test.id}"
 }
}
resource "azurerm lb probe" "test" {
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = "${azurerm_lb.test.id}"
  loadbalancer id
 name
                      = "ssh-running-probe"
                      = 22
 port
}
```

- name (Required) Specifies the name of the Probe.
- resource\_group\_name (Required) The name of the resource group in which to create the resource.
- loadbalancer\_id (Required) The ID of the LoadBalancer in which to create the NAT Rule.
- protocol (Optional) Specifies the protocol of the end point. Possible values are Http or Tcp. If Tcp is specified, a received ACK is required for the probe to be successful. If Http is specified, a 200 OK response from the specified URI is required for the probe to be successful.
- port (Required) Port on which the Probe queries the backend endpoint. Possible values range from 1 to 65535, inclusive.
- request\_path (Optional) The URI used for requesting health status from the backend endpoint. Required if protocol is set to Http. Otherwise, it is not allowed.
- interval\_in\_seconds (Optional) The interval, in seconds between probes to the backend endpoint for health status. The default value is 15, the minimum value is 5.
- number\_of\_probes (Optional) The number of failed probe attempts after which the backend endpoint is removed from rotation. The default value is 2. NumberOfProbes multiplied by intervalInSeconds value must be greater or equal to 10.Endpoints are returned to rotation when at least one probe

is successful.

### » Attributes Reference

The following attributes are exported:

• id - The ID of the LoadBalancer to which the resource is attached.

### » Import

Load Balancer Probes can be imported using the resource id, e.g.

# » azurerm\_management\_lock

Manages a Management Lock which is scoped to a Subscription, Resource Group or Resource.

# » Example Usage (Subscription Level Lock)

### » Example Usage (Resource Group Level Lock)

}

### » Example Usage (Resource Level Lock)

```
resource "azurerm_resource_group" "test" {
           = "locked-resource-group"
  location = "West Europe"
}
resource "azurerm_public_ip" "test" {
 name = "locked-publicip"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 public_ip_address_allocation = "static"
  idle_timeout_in_minutes = 30
}
resource "azurerm_management_lock" "public-ip" {
             = "resource-ip"
             = "${azurerm_public_ip.test.id}"
  scope
 lock_level = "CanNotDelete"
             = "Locked because it's needed by a third-party"
}
```

### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Management Lock. Changing this forces a new resource to be created.
- scope (Required) Specifies the scope at which the Management Lock should be created. Changing this forces a new resource to be created.
- lock\_level (Required) Specifies the Level to be used for this Lock. Possible values are CanNotDelete and ReadOnly. Changing this forces a new resource to be created.

Note: CanNotDelete means authorized users are able to read and modify the resources, but not delete. ReadOnly means authorized users can only read from a resource, but they can't modify or delete it.

• note - (Optional) Specifies some notes about the lock. Maximum of 512 characters. Changing this forces a new resource to be created.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the Management Lock

## » Import

Management Locks can be imported using the resource id, e.g.

terraform import azurerm\_management\_lock.lock1 /subscriptions/00000000-0000-0000-0000-00000

# » azurerm\_eventgrid\_topic

Manages an EventGrid Topic

**Note:** at this time EventGrid Topic's are only available in a limited number of regions.

## » Example Usage

## » Argument Reference

The following arguments are supported:

• name - (Required) Specifies the name of the EventGrid Topic resource. Changing this forces a new resource to be created.

- resource\_group\_name (Required) The name of the resource group in which the EventGrid Topic exists. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

- id The EventGrid Topic ID.
- endpoint The Endpoint associated with the EventGrid Topic.
- primary\_access\_key The Primary Shared Access Key associated with the EventGrid Topic.
- secondary\_access\_key The Secondary Shared Access Key associated with the EventGrid Topic.

## » Import

EventGrid Topic's can be imported using the resource id, e.g.

terraform import azurerm\_eventgrid\_topic.topic1 /subscriptions/00000000-0000-0000-0000-0000

## » azurerm eventhub

Manages a Event Hubs as a nested resource within a Event Hubs namespace.

The following arguments are supported:

- name (Required) Specifies the name of the EventHub Namespace resource. Changing this forces a new resource to be created.
- namespace\_name (Required) Specifies the name of the EventHub Namespace. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the EventHub's parent Namespace exists. Changing this forces a new resource to be created.
- partition\_count (Required) Specifies the current number of shards on the Event Hub.
- message\_retention (Required) Specifies the number of days to retain the events for this Event Hub. Needs to be between 1 and 7 days; or 1 day when using a Basic SKU for the parent EventHub Namespace.
- capture\_description (Optional) A capture\_description block as defined below.

A capture\_description block supports the following:

- enabled (Required) Specifies if the Capture Description is Enabled.
- encoding (Required) Specifies the Encoding used for the Capture Description. Possible values are Avro and AvroDeflate.
- interval\_in\_seconds (Optional) Specifies the time interval in seconds at which the capture will happen. Values can be between 60 and 900

seconds. Defaults to 300 seconds.

- size\_limit\_in\_bytes (Optional) Specifies the amount of data built up in your EventHub before a Capture Operation occurs. Value should be between 10485760 and 524288000 bytes. Defaults to 314572800 bytes.
- destination (Required) A destination block as defined below.

A destination block supports the following:

• name - (Required) The Name of the Destination where the capture should take place. At this time the only supported value is EventHubArchive.AzureBlockBlob.

At this time it's only possible to Capture EventHub messages to Blob Storage. There's a Feature Request for the Azure SDK to add support for Capturing messages to Azure Data Lake here.

- archive\_name\_format The Blob naming convention for archiving. e.g. {Namespace}/{EventHub}/{PartitionId}/{Year}/{Month}/{Day}/{Hour}/{Minute}/{Second}. Here all the parameters (Namespace,EventHub .. etc) are mandatory irrespective of order
- blob\_container\_name (Required) The name of the Container within the Blob Storage Account where messages should be archived.
- storage\_account\_id (Required) The ID of the Blob Storage Account where messages should be archived.

#### » Attributes Reference

The following attributes are exported:

- id The EventHub ID.
- partition\_ids The identifiers for partitions created for Event Hubs.

## » Import

EventHubs can be imported using the resource id, e.g.

## » azurerm\_eventhub\_authorization\_rule

Manages a Event Hubs authorization Rule within an Event Hub.

## » Example Usage

```
resource "azurerm resource group" "test" {
          = "resourceGroup1"
 location = "West US"
}
resource "azurerm eventhub namespace" "test" {
                      = "acceptanceTestEventHubNamespace"
 name
 location
                      = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = "Basic"
 capacity
                      = 2
 tags {
    environment = "Production"
}
resource "azurerm_eventhub" "test" {
                     = "acceptanceTestEventHub"
 name
 namespace_name = "${azurerm_eventhub_namespace.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 partition_count
                    = 2
 message retention
}
resource "azurerm_eventhub_authorization_rule" "test" {
                     = "navi"
 name
                      = "${azurerm_eventhub_namespace.test.name}"
 namespace_name
 namespace_name = "${azurerm_eventhub_namespace.t
eventhub_name = "${azurerm_eventhub.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = true
 listen
  send
                      = false
 manage
                      = false
}
```

### » Argument Reference

- name (Required) Specifies the name of the EventHub Authorization Rule resource. Changing this forces a new resource to be created.
- namespace\_name (Required) Specifies the name of the grandparent EventHub Namespace. Changing this forces a new resource to be created.

- eventhub\_name (Required) Specifies the name of the EventHub. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the EventHub Namespace exists. Changing this forces a new resource to be created.

**NOTE** At least one of the 3 permissions below needs to be set.

- listen (Optional) Does this Authorization Rule have permissions to Listen to the Event Hub? Defaults to false.
- send (Optional) Does this Authorization Rule have permissions to Send to the Event Hub? Defaults to false.
- manage (Optional) Does this Authorization Rule have permissions to Manage to the Event Hub? When this property is true - both listen and send must be too. Defaults to false.

#### » Attributes Reference

The following attributes are exported:

- id The EventHub ID.
- primary\_key The Primary Key for the Event Hubs authorization Rule.
- primary\_connection\_string The Primary Connection String for the Event Hubs authorization Rule.
- secondary\_key The Secondary Key for the Event Hubs authorization Rule.
- secondary\_connection\_string The Secondary Connection String for the Event Hubs authorization Rule.

#### » Import

EventHubs can be imported using the resource id, e.g.

terraform import azurerm\_eventhub\_authorization\_rule.rule1 /subscriptions/00000000-0000-0000

# » azurerm\_eventhub\_consumer\_group

Manages a Event Hubs Consumer Group as a nested resource within an Event Hub.

## » Example Usage

```
resource "azurerm_resource_group" "test" {
         = "resourceGroup1"
 location = "West US"
}
resource "azurerm eventhub namespace" "test" {
 name
                     = "acceptanceTestEventHubNamespace"
 location
                     = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "Basic"
 capacity
                     = 2
 tags {
   environment = "Production"
}
resource "azurerm_eventhub" "test" {
                    = "acceptanceTestEventHub"
 name
 namespace_name = "${azurerm_eventhub_namespace.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 partition_count
 message retention
}
resource "azurerm_eventhub_consumer_group" "test" {
 name
                    = "acceptanceTestEventHubConsumerGroup"
                     = "${azurerm_eventhub_namespace.test.name}"
 namespace_name
 eventhub_name = "${azurerm_eventhub.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 user_metadata
                    = "some-meta-data"
}
```

### » Argument Reference

- name (Required) Specifies the name of the EventHub Consumer Group resource. Changing this forces a new resource to be created.
- namespace\_name (Required) Specifies the name of the grandparent EventHub Namespace. Changing this forces a new resource to be created.

- eventhub\_name (Required) Specifies the name of the EventHub. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the EventHub Consumer Group's grandparent Namespace exists. Changing this forces a new resource to be created.
- user\_metadata (Optional) Specifies the user metadata.

#### » Attributes Reference

The following attributes are exported:

• id - The EventHub Consumer Group ID.

## » Import

EventHub Consumer Groups can be imported using the resource id, e.g.

# » azurerm\_eventhub\_namespace

Create an EventHub Namespace.

The following arguments are supported:

- name (Required) Specifies the name of the EventHub Namespace resource. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the namespace. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Required) Defines which tier to use. Valid options are Basic and Standard.
- capacity (Optional) Specifies the Capacity / Throughput Units for a Standard SKU namespace. Valid values range from 1 20.
- auto\_inflate\_enabled (Optional) Is Auto Inflate enabled for the EventHub Namespace?
- maximum\_throughput\_units (Optional) Specifies the maximum number of throughput units when Auto Inflate is Enabled. Valid values range from 1 - 20.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The EventHub Namespace ID.

The following attributes are exported only if there is an authorization rule named RootManageSharedAccessKey which is created automatically by Azure.

- default\_primary\_connection\_string The primary connection string for the authorization rule RootManageSharedAccessKey.
- default\_secondary\_connection\_string The secondary connection string for the authorization rule RootManageSharedAccessKey.
- default\_primary\_key The primary access key for the authorization rule RootManageSharedAccessKey.
- default\_secondary\_key The secondary access key for the authorization rule RootManageSharedAccessKey.

## » Import

EventHub Namespaces can be imported using the resource id, e.g.

terraform import azurerm\_eventhub\_namespace.namespace1 /subscriptions/00000000-0000-0000-0000

# » azurerm iothub

Manages a IotHub

## » Example Usage

## » Argument Reference

- name (Required) Specifies the name of the IotHub resource. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group under which the IotHub resource has to be created. Changing this forces a new resource to be created.

- location (Required) Specifies the supported Azure location where the resource has to be createc. Changing this forces a new resource to be created.
- sku (Required) A sku block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

A sku block supports the following:

- name (Required) The name of the sku. Possible values are F1, S1, S2, and S3.
- tier (Required) The billing tier for the IoT Hub. Possible values are Free or Standard.
- capacity (Required) The number of provisioned IoT Hub units.

#### » Attributes Reference

The following attributes are exported:

- id The IotHub ID.
- hostname The hostname of the IotHub Resource.
- shared\_access\_policy A list of shared\_access\_policy blocks as defined below.

A shared access policy block contains the following:

- key\_name The name of the shared access policy.
- primary\_key The primary key.
- secondary\_key The secondary key.
- permissions The permissions assigned to the shared access policy.

#### » Import

IoTHubs can be imported using the resource id, e.g.

terraform import azurerm\_iothub.hub1 /subscriptions/00000000-0000-0000-0000-00000000000/rea

# » azurerm\_relay\_namespace

Manages an Azure Relay Namespace.

### » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Azure Relay Namespace. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Azure Relay Namespace.
- location (Required) Specifies the supported Azure location where the Azure Relay Namespace exists. Changing this forces a new resource to be created.
- sku (Required) A sku block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

A sku block contains:

• name - (Required) The name of the SKU to use. At this time the only supported value is Standard.

#### » Attributes Reference

The following attributes are exported:

• id - The Azure Relay Namespace ID.

The following attributes are exported only if there is an authorization rule named RootManageSharedAccessKey which is created automatically by Azure.

- primary\_connection\_string The primary connection string for the authorization rule RootManageSharedAccessKey.
- secondary\_connection\_string The secondary connection string for the authorization rule RootManageSharedAccessKey.
- primary\_key The primary access key for the authorization rule RootManageSharedAccessKey.
- secondary\_key The secondary access key for the authorization rule RootManageSharedAccessKey.
- metric\_id The Identifier for Azure Insights metrics.

## » Import

Azure Relay Namespace's can be imported using the resource id, e.g.

terraform import azurerm\_relay\_namespace.relay1 /subscriptions/00000000-0000-0000-0000-0000

# » azurerm\_servicebus\_namespace

Create a ServiceBus Namespace.

```
variable "location" {
   description = "Azure datacenter to deploy to."
   default = "West US"
}

variable "servicebus_name" {
   description = "Input your unique Azure service bus name"
}

resource "azurerm_resource_group" "test" {
   name = "terraform-servicebus"
```

The following arguments are supported:

- name (Required) Specifies the name of the ServiceBus Namespace resource . Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the namespace.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Required) Defines which tier to use. Options are basic, standard or premium.
- capacity (Optional) Specifies the capacity, can only be set when sku is Premium namespace. Can be 1, 2 or 4.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The ServiceBus Namespace ID.

The following attributes are exported only if there is an authorization rule named RootManageSharedAccessKey which is created automatically by Azure.

- default\_primary\_connection\_string The primary connection string for the authorization rule RootManageSharedAccessKey.
- default\_secondary\_connection\_string The secondary connection string for the authorization rule RootManageSharedAccessKey.

- default\_primary\_key The primary access key for the authorization rule RootManageSharedAccessKey.
- default\_secondary\_key The secondary access key for the authorization rule RootManageSharedAccessKey.

### » Import

Service Bus Namespace can be imported using the resource id, e.g.

# » azurerm\_servicebus\_queue

Create and manage a ServiceBus Queue.

```
variable "location" {
 description = "Azure datacenter to deploy to."
 default = "West US"
}
variable "servicebus_name" {
 description = "Input your unique Azure service bus name"
resource "azurerm_resource_group" "test" {
 name = "terraform-servicebus"
 location = "${var.location}"
resource "azurerm_servicebus_namespace" "test" {
 name
                    = "${var.servicebus name}"
 location
                     = "${var.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "standard"
 sku
 tags {
   source = "terraform"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the ServiceBus Queue resource. Changing this forces a new resource to be created.
- namespace\_name (Required) The name of the ServiceBus Namespace to create this queue in. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the namespace. Changing this forces a new resource to be created
- auto\_delete\_on\_idle (Optional) The idle interval after which the Queue is automatically deleted, minimum of 5 minutes. Provided in the TimeSpan format.
- default\_message\_ttl (Optional) The TTL of messages sent to this queue. This is the default value used when TTL is not set on message itself. Provided in the TimeSpan format.
- duplicate\_detection\_history\_time\_window (Optional) The duration during which duplicates can be detected. Default value is 10 minutes. Provided in the TimeSpan format.
- enable\_express (Optional) Boolean flag which controls whether Express Entities are enabled. An express queue holds a message in memory temporarily before writing it to persistent storage. Defaults to false for Basic and Standard. For Premium, it MUST be set to false.

**NOTE:** Service Bus Premium namespaces do not support Express Entities, so enable\_express MUST be set to false.

• enable\_partitioning - (Optional) Boolean flag which controls whether to enable the queue to be partitioned across multiple message brokers. Changing this forces a new resource to be created. Defaults to false for Basic and Standard. For Premium, it MUST be set to true.

**NOTE:** Service Bus Premium namespaces are always partitioned, so enable\_partitioning MUST be set to true.

- lock\_duration (Optional) The ISO 8601 timespan duration of a peek-lock; that is, the amount of time that the message is locked for other receivers. Maximum value is 5 minutes. Defaults to 1 minute. (PT1M)
- max\_size\_in\_megabytes (Optional) Integer value which controls the size of memory allocated for the queue. For supported values see the "Queue/topic size" section of this document.
- requires\_duplicate\_detection (Optional) Boolean flag which controls whether the Queue requires duplicate detection. Changing this forces a new resource to be created. Defaults to false.
- requires\_session (Optional) Boolean flag which controls whether the Queue requires sessions. This will allow ordered handling of unbounded sequences of related messages. With sessions enabled a queue can guarantee first-in-first-out delivery of messages. Changing this forces a new resource to be created. Defaults to false.
- dead\_lettering\_on\_message\_expiration (Optional) Boolean flag which controls whether the Queue has dead letter support when a message expires. Defaults to false.

#### » TimeSpan Format

Some arguments for this resource are required in the TimeSpan format which is used to represent a length of time. The supported format is documented here

#### » Attributes Reference

The following attributes are exported:

• id - The ServiceBus Queue ID.

## » Import

Service Bus Queue can be imported using the resource id, e.g.

# » azurerm\_servicebus\_subscription

Create a ServiceBus Subscription.

```
variable "location" {
  description = "Azure datacenter to deploy to."
 default = "West US"
}
variable "servicebus name" {
  description = "Input your unique Azure service bus name"
}
resource "azurerm_resource_group" "test" {
          = "terraform-servicebus"
  location = "${var.location}"
}
resource "azurerm_servicebus_namespace" "test" {
                     = "${var.servicebus_name}"
                     = "${var.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "standard"
 tags {
    source = "terraform"
 }
}
resource "azurerm_servicebus_topic" "test" {
                     = "testTopic"
 resource_group_name = "${azurerm_resource_group.test.name}"
 namespace_name
                     = "${azurerm_servicebus_namespace.test.name}"
  enable_partitioning = true
}
resource "azurerm_servicebus_subscription" "test" {
                     = "testSubscription"
 resource_group_name = "${azurerm_resource_group.test.name}"
 namespace_name = "${azurerm_servicebus_namespace.test.name}"
                     = "${azurerm_servicebus_topic.test.name}"
 topic_name
 max_delivery_count = 1
}
```

- name (Required) Specifies the name of the ServiceBus Subscription resource. Changing this forces a new resource to be created.
- namespace\_name (Required) The name of the ServiceBus Namespace to create this Subscription in. Changing this forces a new resource to be created.
- topic\_name (Required) The name of the ServiceBus Topic to create this Subscription in. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the namespace. Changing this forces a new resource to be created.
- max\_delivery\_count (Required) The maximum number of deliveries.
- auto\_delete\_on\_idle (Optional) The idle interval after which the Subscription is automatically deleted, minimum of 5 minutes. Provided in the TimeSpan format.
- default\_message\_ttl (Optional) The TTL of messages sent to this Subscription if no TTL value is set on the message itself. Provided in the TimeSpan format.
- lock\_duration (Optional) The lock duration for the subscription, maximum supported value is 5 minutes. Defaults to 1 minute.
- dead\_lettering\_on\_message\_expiration (Optional) Boolean flag which controls whether the Subscription has dead letter support when a message expires. Defaults to false.
- enable\_batched\_operations (Optional) Boolean flag which controls whether the Subscription supports batched operations. Defaults to false.
- requires\_session (Optional) Boolean flag which controls whether this Subscription supports the concept of a session. Defaults to false. Changing this forces a new resource to be created.
- forward\_to (Optional) The name of a Queue or Topic to automatically forward messages to.

### » TimeSpan Format

Some arguments for this resource are required in the TimeSpan format which is used to represent a length of time. The supported format is documented here

### » Attributes Reference

The following attributes are exported:

• id - The ServiceBus Subscription ID.

### » Import

Service Bus Subscriptions can be imported using the resource id, e.g.

terraform import azurerm\_servicebus\_subscription.test /subscriptions/00000000-0000-0000-0000

## » azurerm servicebus subscription rule

Create a ServiceBus Subscription Rule.

## » Example Usage (SQL Filter)

```
variable "location" {
  description = "Azure datacenter to deploy to."
  default = "West US"
}
variable "servicebus_name" {
  description = "Input your unique Azure service bus name"
}
resource "azurerm_resource_group" "test" {
          = "terraform-servicebus"
  location = "${var.location}"
resource "azurerm_servicebus_namespace" "test" {
                    = "${var.servicebus_name}"
 name
 location
                  = "${var.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = "standard"
```

```
tags {
    source = "terraform"
 }
}
resource "azurerm_servicebus_topic" "test" {
                      = "testTopic"
 resource_group_name = "${azurerm_resource_group.test.name}"
                    = "${azurerm_servicebus_namespace.test.name}"
 namespace_name
  enable_partitioning = true
resource "azurerm_servicebus_subscription" "test" {
                      = "testSubscription"
 resource_group_name = "${azurerm_resource_group.test.name}"
 namespace_name = "${azurerm_servicebus_namespace.test.name}"
                   = "${azurerm_servicebus_topic.test.name}"
 topic_name
 max_delivery_count = 1
}
resource "azurerm_servicebus_subscription_rule" "test" {
                      = "testSubscriptionRule"
 resource_group_name = "${azurerm_resource_group.test.name}"
 namespace_name = "${azurerm_servicebus_namespace.test.name}"
topic_name = "${azurerm_servicebus_topic.test.name}"
  subscription_name = "${azurerm_servicebus_subscription.test.name}"
 filter_type = "SqlFilter"
sql_filter = "color = 'red'"
}
» Example Usage (Correlation Filter)
variable "location" {
  description = "Azure datacenter to deploy to."
  default = "West US"
}
variable "servicebus_name" {
  description = "Input your unique Azure service bus name"
}
resource "azurerm_resource_group" "test" {
 name = "terraform-servicebus"
```

```
location = "${var.location}"
resource "azurerm_servicebus_namespace" "test" {
                     = "${var.servicebus_name}"
                     = "${var.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "standard"
 tags {
   source = "terraform"
 }
}
resource "azurerm_servicebus_topic" "test" {
                     = "testTopic"
 resource_group_name = "${azurerm_resource_group.test.name}"
                  = "${azurerm_servicebus_namespace.test.name}"
 namespace_name
  enable_partitioning = true
}
resource "azurerm_servicebus_subscription" "test" {
                     = "testSubscription"
 resource_group_name = "${azurerm_resource_group.test.name}"
 namespace_name
                   = "${azurerm servicebus namespace.test.name}"
                    = "${azurerm_servicebus_topic.test.name}"
 topic_name
 max_delivery_count = 1
}
resource "azurerm_servicebus_subscription_rule" "test" {
                     = "testSubscriptionRule"
 resource_group_name = "${azurerm_resource_group.test.name}"
 namespace_name = "${azurerm_servicebus_namespace.test.name}"
                   = "${azurerm_servicebus_topic.test.name}"
 topic_name
  subscription_name = "${azurerm_servicebus_subscription.test.name}"
 filter_type
                     = "CorrelationFilter"
  correlation_filter = {
    correlation_id = "high"
                  = "red"
   label
 }
}
```

The following arguments are supported:

- name (Required) Specifies the name of the ServiceBus Subscription Rule. Changing this forces a new resource to be created.
- namespace\_name (Required) The name of the ServiceBus Namespace in which the ServiceBus Topic exists. Changing this forces a new resource to be created.
- topic\_name (Required) The name of the ServiceBus Topic in which the ServiceBus Subscription exists. Changing this forces a new resource to be created.
- subscription\_name (Required) The name of the ServiceBus Subscription in which this Rule should be created. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in the ServiceBus Namespace exists. Changing this forces a new resource to be created.
- filter\_type (Required) Type of filter to be applied to a BrokeredMessage. Possible values are SqlFilter and CorrelationFilter.
- sql\_filter (Optional) Represents a filter written in SQL languagebased syntax that to be evaluated against a BrokeredMessage. Required when filter type is set to SqlFilter.
- correlation\_filter (Optional) A correlation\_filter block as documented below to be evaluated against a BrokeredMessage. Required when filter\_type is set to CorrelationFilter.
- action (Optional) Represents set of actions written in SQL languagebased syntax that is performed against a BrokeredMessage.

### correlation\_filter supports the following:

- content\_type (Optional) Content type of the message.
- correlation\_id (Optional) Identifier of the correlation.
- label (Optional) Application specific label.
- message id (Optional) Identifier of the message.
- reply\_to (Optional) Address of the queue to reply to.
- reply\_to\_session\_id (Optional) Session identifier to reply to.
- session\_id (Optional) Session identifier.
- to (Optional) Address to send to.

**NOTE:** When creating a subscription rule of type CorrelationFilter at least one property must be set in the correlation\_filter block.

#### » Attributes Reference

The following attributes are exported:

• id - The ServiceBus Subscription Rule ID.

### » Import

Service Bus Subscription Rule can be imported using the resource id, e.g.

terraform import azurerm\_servicebus\_subscription.test /subscriptions/00000000-0000-0000-0000

# $\ \ \, \text{``azurerm\_servicebus\_topic}$

Create a ServiceBus Topic.

**Note** Topics can only be created in Namespaces with an SKU of standard or higher.

## » Example Usage

```
variable "location" {
 description = "Azure datacenter to deploy to."
 default = "West US"
}
resource "azurerm_resource_group" "test" {
         = "terraform-servicebus"
 location = "${var.location}"
resource "azurerm_servicebus_namespace" "test" {
                    = "${var.servicebus_name}"
 name
 location = "${var.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku
                     = "standard"
 tags {
   source = "terraform"
```

- name (Required) Specifies the name of the ServiceBus Topic resource. Changing this forces a new resource to be created.
- namespace\_name (Required) The name of the ServiceBus Namespace to create this topic in. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the namespace. Changing this forces a new resource to be created.
- status (Optional) The Status of the Service Bus Topic. Acceptable values are Active or Disabled. Defaults to Active.
- auto\_delete\_on\_idle (Optional) The idle interval after which the Topic is automatically deleted, minimum of 5 minutes. Provided in the TimeSpan format.
- default\_message\_ttl (Optional) The TTL of messages sent to this topic if no TTL value is set on the message itself. Provided in the TimeSpan format.
- duplicate\_detection\_history\_time\_window (Optional) The duration during which duplicates can be detected. Provided in the TimeSpan format. Defaults to 10 minutes (00:10:00)
- enable\_batched\_operations (Optional) Boolean flag which controls if server-side batched operations are enabled. Defaults to false.
- enable\_express (Optional) Boolean flag which controls whether Express Entities are enabled. An express topic holds a message in memory temporarily before writing it to persistent storage. Defaults to false.

- enable\_partitioning (Optional) Boolean flag which controls whether to enable the topic to be partitioned across multiple message brokers. Defaults to false. Changing this forces a new resource to be created.
- max\_size\_in\_megabytes (Optional) Integer value which controls the size of memory allocated for the topic. For supported values see the "Queue/topic size" section of this document.
- requires\_duplicate\_detection (Optional) Boolean flag which controls whether the Topic requires duplicate detection. Defaults to false. Changing this forces a new resource to be created.
- support\_ordering (Optional) Boolean flag which controls whether the Topic supports ordering. Defaults to false.

#### » TimeSpan Format

Some arguments for this resource are required in the TimeSpan format which is used to represent a length of time. The supported format is documented here

#### » Attributes Reference

The following attributes are exported:

• id - The ServiceBus Topic ID.

### » Import

Service Bus Topics can be imported using the resource id, e.g.

terraform import azurerm\_servicebus\_topic.test /subscriptions/00000000-0000-0000-0000-0000-00000

# $\begin{tabular}{ll} \verb+** azurerm\_servicebus\_topic\_authorization\_rule \\ \end{tabular}$

Manages a ServiceBus Topic authorization Rule within a ServiceBus Topic.

### » Example Usage

```
variable "location" {
  description = "Azure datacenter to deploy to."
  default = "West US"
}
```

```
resource "azurerm_resource_group" "test" {
           = "terraform-servicebus"
  location = "${var.location}"
}
resource "azurerm_servicebus_namespace" "test" {
                       = "${var.servicebus_name}"
                       = "${var.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
                       = "standard"
  tags {
    source = "terraform"
  }
}
resource "azurerm_servicebus_topic" "test" {
                       = "testTopic"
  resource_group_name = "${azurerm_resource_group.test.name}"
                       = "${azurerm_servicebus_namespace.test.name}"
  namespace_name
}
resource "azurerm_servicebus_topic_authorization_rule" "test" {
                       = "examplerule"
  name
  namespace_name = "${azurerm_servicebus_namespace.test.name}"
topic_name = "${azurerm_servicebus_topic.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  listen
                       = true
  send
                       = false
  manage
                       = false
}
```

- name (Required) Specifies the name of the erviceBus Topic Authorization Rule resource. Changing this forces a new resource to be created.
- namespace\_name (Required) Specifies the name of the ServiceBus Namespace. Changing this forces a new resource to be created.
- topic\_name (Required) Specifies the name of the ServiceBus Topic. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in

which the ServiceBus Namespace exists. Changing this forces a new resource to be created.

**NOTE** At least one of the 3 permissions below needs to be set.

- listen (Optional) Does this Authorization Rule have permissions to Listen to the ServiceBus Topic? Defaults to false.
- send (Optional) Does this Authorization Rule have permissions to Send to the ServiceBus Topic? Defaults to false.
- manage (Optional) Does this Authorization Rule have permissions to Manage to the ServiceBus Topic? When this property is true both listen and send must be too. Defaults to false.

#### » Attributes Reference

The following attributes are exported:

- id The ServiceBus Topic ID.
- primary\_key The Primary Key for the ServiceBus Topic authorization Rule.
- primary\_connection\_string The Primary Connection String for the ServiceBus Topic authorization Rule.
- secondary\_key The Secondary Key for the ServiceBus Topic authorization Rule.
- secondary\_connection\_string The Secondary Connection String for the ServiceBus Topic authorization Rule.

### » Import

ServiceBus Topic authorization rules can be imported using the resource id, e.g.

terraform import azurerm\_servicebus\_topic\_authorization\_rule.rule1 /subscriptions/00000000-

## » azurerm\_metric\_alertrule

Manages a metric-based alert rule in Azure Monitor.

## » Example Usage (CPU Percentage of a virtual machine)

```
resource "azurerm_metric_alertrule" "test" {
 name = "${azurerm_virtual_machine.test.name}-cpu"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
  description = "An alert rule to watch the metric Percentage CPU"
  enabled = true
  resource_id = "${azurerm_virtual_machine.test.id}"
 metric_name = "Percentage CPU"
  operator = "GreaterThan"
  threshold = 75
  aggregation = "Average"
 period = "PT5M"
  email_action {
    send_to_service_owners = false
    custom_emails = [
      "some.user@example.com",
 webhook_action {
    service_uri = "https://example.com/some-url"
     properties = {
        severity = "incredible"
        acceptance_test = "true"
 }
}
» Example Usage (Storage usage of a SQL Database)
resource "azurerm_metric_alertrule" "test" {
 name = "${azurerm_sql_database.test.name}-storage"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
  description = "An alert rule to watch the metric Storage"
  enabled = true
```

```
resource_id = "${azurerm_sql_database.test.id}"
 metric_name = "storage"
  operator = "GreaterThan"
  threshold = 1073741824
  aggregation = "Maximum"
 period = "PT10M"
  email_action {
    send_to_service_owners = false
    custom_emails = [
      "some.user@example.com",
 }
 webhook_action {
    service_uri = "https://example.com/some-url"
      properties = {
        severity = "incredible"
        acceptance_test = "true"
 }
}
```

- name (Required) Specifies the name of the alert rule. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the alert rule. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- description (Optional) A verbose description of the alert rule that will be included in the alert email.
- enabled (Optional) If true, the alert rule is enabled. Defaults to true.

<sup>•</sup> resource\_id - (Required) The ID of the resource monitored by the alert rule.

<sup>•</sup> metric\_name - (Required) The metric that defines what the rule monitors.

For a comprehensive reference of supported metric\_name values for types of resource refer to Supported metrics with Azure Monitor in the Azure documentation. In the referred table, the column "Metric" corresponds to supported values for metric\_name.

- operator (Required) The operator used to compare the metric data and the threshold. Possible values are GreaterThan, GreaterThanOrEqual, LessThan, and LessThanOrEqual.
- threshold (Required) The threshold value that activates the alert.
- period (Required) The period of time formatted in ISO 8601 duration format that is used to monitor the alert activity based on the threshold. The period must be between 5 minutes and 1 day.
- aggregation (Required) Defines how the metric data is combined over time. Possible values are Average, Minimum, Maximum, Total, and Last.
- email\_action (Optional) A email\_action block as defined below.
- webhook\_action (Optional) A webhook\_action block as defined below.
- tags (Optional) A mapping of tags to assign to the resource. Changing this forces a new resource to be created.

email\_action supports the following:

- send\_to\_service\_owners (Optional) If true, the administrators (service and co-administrators) of the subscription are notified when the alert is triggered. Defaults to false.
- custom\_emails (Optional) A list of email addresses to be notified when the alert is triggered.

webhook\_action supports the following:

- service\_uri (Required) The service uri of the webhook to POST the notification when the alert is triggered.
- properties (Optional) A dictionary of custom properties to include with the webhook POST operation payload.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the alert rule.

### » Import

Metric Alert Rules can be imported using the resource id, e.g.

terraform import azurerm\_metric\_alertrule.alertrule1 /subscriptions/00000000-0000-0000-0000-0000-

## » azurerm\_application\_gateway

Manages a application gateway based on a previously created virtual network with configured subnets.

## » Example Usage

```
# Create a resource group
resource "azurerm_resource_group" "rg" {
          = "my-rg-application-gateway-12345"
 location = "West US"
}
# Create a application gateway in the web_servers resource group
resource "azurerm_virtual_network" "vnet" {
                     = "my-vnet-12345"
 resource_group_name = "${azurerm_resource_group.rg.name}"
 address_space = ["10.254.0.0/16"]
                    = "${azurerm_resource_group.rg.location}"
 location
resource "azurerm_subnet" "sub1" {
 name
         = "my-subnet-1"
 resource_group_name = "${azurerm_resource_group.rg.name}"
 virtual_network_name = "${azurerm_virtual_network.vnet.name}"
                = "10.254.0.0/24"
 address_prefix
}
resource "azurerm_subnet" "sub2" {
                      = "my-subnet-2"
 name
 resource_group_name = "${azurerm_resource_group.rg.name}"
 virtual_network_name = "${azurerm_virtual_network.vnet.name}"
 address_prefix = "10.254.2.0/24"
}
resource "azurerm_public_ip" "pip" {
 name
                              = "my-pip-12345"
 location
                              = "${azurerm_resource_group.rg.location}"
```

```
= "${azurerm_resource_group.rg.name}"
  resource_group_name
 public_ip_address_allocation = "dynamic"
}
# Create an application gateway
resource "azurerm_application_gateway" "network" {
                     = "my-application-gateway-12345"
 resource_group_name = "${azurerm_resource_group.rg.name}"
                     = "West US"
 location
  sku {
                  = "Standard_Small"
   name
                  = "Standard"
   tier
    capacity
                  = 2
  gateway_ip_configuration {
                 = "my-gateway-ip-configuration"
      subnet_id = "${azurerm_virtual_network.vnet.id}/subnets/${azurerm_subnet.sub1.name
  frontend_port {
                  = "${azurerm_virtual_network.vnet.name}-feport"
      name
     port
                  = 80
 }
  frontend_ip_configuration {
                  = "${azurerm_virtual_network.vnet.name}-feip"
      public_ip_address_id = "${azurerm_public_ip.pip.id}"
 backend_address_pool {
     name = "${azurerm_virtual_network.vnet.name}-beap"
  backend_http_settings {
                           = "${azurerm_virtual_network.vnet.name}-be-htst"
      cookie_based_affinity = "Disabled"
                           = 80
     port
                           = "Http"
     protocol
                           = 1
     request_timeout
 http_listener {
                                              = "${azurerm_virtual_network.vnet.name}-httpl:
       name
                                              = "${azurerm_virtual_network.vnet.name}-feip"
        frontend_ip_configuration_name
```

- name (Required) The name of the application gateway. Changing this
  forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the application gateway.
- location (Required) The location/region where the application gateway is created. Changing this forces a new resource to be created.
- sku (Required) Specifies size, tier and capacity of the application gateway. Must be specified once. The sku block fields documented below.
- gateway\_ip\_configuration (Required) List of subnets that the application gateway is deployed into. The application gateway must be deployed into an existing virtual network/subnet. No other resource can be deployed in a subnet where application gateway is deployed. The gateway\_ip\_configuration block supports fields documented below.
- frontend\_port (Required) Front-end port for the application gateway. The frontend\_port block supports fields documented below.
- frontend\_ip\_configuration (Required) Specifies lists of frontend IP configurations. Currently only one Public and/or one Private IP address can be specified. Also one frontendIpConfiguration element can specify either Public or Private IP address, not both. The frontend\_ip\_configuration block supports fields documented below.
- backend\_address\_pool (Required) Backend pools can be composed of NICs, virtual machine scale sets, public IPs, internal IPs, fully qualified domain names (FQDN), and multi-tenant back-ends like Azure Web Apps. Application Gateway backend pool members are not tied to an availability set. Members of backend pools can be across clusters, data

- centers, or outside of Azure as long as they have IP connectivity. The backend\_address\_pool block supports fields documented below.
- backend\_http\_settings (Required) Related group of backend http and/or https features to be applied when routing to backend address pools. The backend\_http\_settings block supports fields documented below.
- http\_listener (Required) 1 or more listeners specifying port, http or https and SSL certificate (if configuring SSL offload) Each http\_listener is attached to a frontend\_ip\_configuration. The http\_listener block supports fields documented below.
- probe (Optional) Specifies list of URL probes. The probe block supports fields documented below.
- request\_routing\_rule (Required) Request routing rules can be either Basic or Path Based. Request routing rules are order sensitive. The request\_routing\_rule block supports fields documented below.
- url\_path\_map (Optional) UrlPathMaps give url Path to backend mapping information for PathBasedRouting specified in request\_routing\_rule. The url\_path\_map block supports fields documented below.
- authentication\_certificate (Optional) List of authentication certificates. The authentication\_certificate block supports fields documented below.
- ssl\_certificate (Optional) List of ssl certificates. The ssl\_certificate block supports fields documented below.
- waf\_configuration (Optional) Web Application Firewall configuration settings. The waf\_configuration block supports fields documented below
- disabled\_ssl\_protocols TODO based on "sslPolicy": {"disabledSsl-Protocols": []}

The sku block supports:

- name (Required) Supported values are:
  - Standard\_Small
  - Standard\_Medium
  - Standard\_Large
  - WAF\_Medium
  - WAF\_Large
- tier (Required) Supported values are:
  - Standard
  - WAF

• capacity - (Required) Specifies instance count. Can be 1 to 10.

The gateway\_ip\_configuration block supports:

- name (Required) User defined name of the gateway ip configuration.
- subnet\_id (Required) Reference to a Subnet. Application Gateway is deployed in this subnet. No other resource can be deployed in a subnet where Application Gateway is deployed.

The frontend\_port block supports:

- name (Required) User defined name for frontend Port.
- port (Required) Port number.

The frontend\_ip\_configuration block supports:

- name (Required) User defined name for a frontend IP configuration.
- subnet\_id (Optional) Reference to a Subnet.
- private\_ip\_address (Optional) Private IP Address.
- public\_ip\_address\_id- (Optional) Specifies resource Id of a Public Ip Address resource. IPAllocationMethod should be Dynamic.
- private\_ip\_address\_allocation (Optional) Valid values are:
  - Dynamic
  - Static

The backend address pool block supports:

- name (Required) User defined name for a backend address pool.
- ip\_address\_list (Optional) List of public IPAdresses, or internal IP addresses in a backend address pool.
- fgdn list (Optional) List of FQDNs in a backend address pool.

The backend http settings block supports:

- name (Required) User defined name for a backend http setting.
- port (Required) Backend port for backend address pool.
- protocol (Required) Valid values are:
  - Http
  - Https
- cookie\_based\_affinity (Required) Valid values are:
  - Enabled
  - Disabled

- request\_timeout (Required) RequestTimeout in second. Application Gateway fails the request if response is not received within RequestTimeout. Minimum 1 second and Maximum 86400 secs.
- probe\_name (Optional) Reference to URL probe.
- authentication\_certificate (Optional) A list of authentication\_certificate references for the backend\_http\_setting to use. Each element consists of:
  - name (Required)id (Calculated)

The http\_listener block supports:

- name (Required) User defined name for a backend http setting.
- frontend\_ip\_configuration\_name (Required) Reference to frontend Ip configuration.
- frontend\_port\_name (Required) Reference to frontend port.
- protocol (Required) Valid values are:
  - Http
  - Https
- host\_name (Optional) HostName for http\_listener. It has to be a valid DNS name.
- ssl\_certificate\_name (Optional) Reference to ssl certificate. Valid only if protocol is https.
- require\_sni (Optional) Applicable only if protocol is https. Enables SNI for multi-hosting. Valid values are:
- true
- false

The probe block supports:

- name (Required) User defined name for a probe.
- protocol (Required) Protocol used to send probe. Valid values are:
  - Http
  - Https
- path (Required) Relative path of probe. Valid path starts from '/'. Probe is sent to {Protocol}://{host}:{port}{path}. The port used will be the same port as defined in the backend\_http\_settings.
- host (Required) Host name to send probe to. If Application Gateway is configured for a single site, by default the Host name should be specified as '127.0.0.1', unless otherwise configured in custom probe.

- interval (Required) Probe interval in seconds. This is the time interval between two consecutive probes. Minimum 1 second and Maximum 86,400 secs.
- timeout (Required) Probe timeout in seconds. Probe marked as failed if valid response is not received with this timeout period. Minimum 1 second and Maximum 86,400 secs.
- unhealthy\_threshold (Required) Probe retry count. Backend server is marked down after consecutive probe failure count reaches UnhealthyThreshold. Minimum 1 second and Maximum 20.

#### The request\_routing\_rule block supports:

- name (Required) User defined name for a request routing rule.
- 'rule\_type' (Required) Routing rule type. Valid values are:
  - Basic
  - PathBasedRouting
- http\_listener\_name (Required) Reference to http\_listener.
- backend\_address\_pool\_name (Optional) Reference to backend\_address\_pool\_name. Valid for Basic Rule only.
- backend\_http\_settings\_name (Optional) Reference to backend\_http\_settings. Valid for Basic Rule only.
- url\_path\_map\_name (Optional) Reference to url\_path\_map. Valid for PathBasedRouting Rule only.

#### The url\_path\_map block supports:

- name (Required) User defined name for a url path map.
- default\_backend\_address\_pool\_name (Required) Reference to backend\_address\_pool\_name.
- default\_backend\_http\_settings\_name (Required) Reference to backend\_http\_settings.
- path\_rule (Required) List of pathRules. pathRules are order sensitive. Are applied in order they are specified.

### The path\_rule block supports:

- name (Required) User defined name for a path rule.
- paths (Required) The list of path patterns to match. Each must start with / and the only place a \* is allowed is at the end following a /. The string fed to the path matcher does not include any text after the first ? or #, and those chars are not allowed here.
- backend\_address\_pool\_name (Required) Reference to backend\_address\_pool\_name.

• backend\_http\_settings\_name - (Required) Reference to backend\_http\_settings.

The authentication\_certificate block supports:

- name (Required) User defined name for an authentication certificate.
- data (Required) Base-64 encoded cer certificate. Only applicable in PUT Request.

The ssl\_certificate block supports:

- name (Required) User defined name for an SSL certificate.
- data (Required) Base-64 encoded Public cert data corresponding to pfx specified in data. Only applicable in GET request.
- password (Required) Password for the pfx file specified in data. Only applicable in PUT request.

The waf\_configuration block supports:

- firewall\_mode (Required) Firewall mode. Valid values are:
  - Detection
  - Prevention
- rule\_set\_type (Required) Rule set type. Must be set to OWASP
- rule\_set\_version (Required) Ruleset version. Supported values:
  - -2.2.9
  - -3.0
- enabled (Required) Is the Web Application Firewall enabled?

### » Attributes Reference

The following attributes are exported:

- id The application gatewayConfiguration ID.
- name The name of the application gateway.
- resource\_group\_name The name of the resource group in which to create the application gateway.
- location The location/region where the application gateway is created

### » Import

application gateways can be imported using the resource id, e.g.

terraform import azurerm\_application\_gateway.testApplicationGateway /subscriptions/000000000-

## » azurerm\_application\_security\_group

Create an Application Security Group.

**Note:** Application Security Groups are currently in Public Preview on an optin basis. More information, including how you can register for the Preview, and which regions Application Security Groups are available in are available here

## » Example Usage

### » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Application Security Group. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Application Security Group.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the Application Security Group.

### » Import

Application Security Groups can be imported using the resource id, e.g.

terraform import azurerm\_application\_security\_group.securitygroup1 /subscriptions/00000000-

## » azurerm\_express\_route\_circuit

Manages an ExpressRoute circuit.

## » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "exprtTest"
  location = "West US"
}
resource "azurerm_express_route_circuit" "test" {
                          = "expressRoute1"
                           = "${azurerm_resource_group.test.name}"
 resource_group_name
                           = "${azurerm_resource_group.test.location}"
 location
                          = "Equinix"
 service_provider_name
                           = "Silicon Valley"
 peering_location
 bandwidth_in_mbps
                           = 50
  sku {
          = "Standard"
   tier
    family = "MeteredData"
 tags {
    environment = "Production"
}
```

### » Argument Reference

- name (Required) The name of the ExpressRoute circuit. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the ExpressRoute circuit. Changing this forces a new resource to be created.

- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- service\_provider\_name (Required) The name of the ExpressRoute Service Provider.
- peering\_location (Required) The name of the peering location and **not** the Azure resource location.
- bandwidth\_in\_mbps (Required) The bandwidth in Mbps of the circuit being created.

**NOTE:** Once you increase your bandwidth, you will not be able to decrease it to it's previous value.

- sku (Required) A sku block for the ExpressRoute circuit as documented below.
- allow\_classic\_operations (Optional) Allow the circuit to interact with classic (RDFE) resources. The default value is false.
- tags (Optional) A mapping of tags to assign to the resource.

sku supports the following:

- tier (Required) The service tier. Possible values are Standard or Premium.
- family (Required) The billing mode for bandwidth. Possible values are MeteredData or UnlimitedData.

**NOTE:** You can migrate from MeteredData to UnlimitedData, but not the other way around.

#### » Attributes Reference

The following attributes are exported:

- id The Resource ID of the ExpressRoute circuit.
- service\_provider\_provisioning\_state The ExpressRoute circuit provisioning state from your chosen service provider. Possible values are "NotProvisioned", "Provisioning", "Provisioned", and "Deprovisioning".
- service\_key The string needed by the service provider to provision the ExpressRoute circuit.

### » Import

ExpressRoute circuits can be imported using the resource id, e.g.

## » azurerm\_express\_route\_circuit\_authorization

Manages an ExpressRoute Circuit Authorization.

### » Example Usage

```
resource "azurerm_resource_group" "test" {
         = "exprtTest"
 location = "West US"
resource "azurerm_express_route_circuit" "test" {
                        = "expressRoute1"
 resource_group_name = "${azurerm_resource_group.test.name}"
                         = "${azurerm_resource_group.test.location}"
 location
 service_provider_name = "Equinix"
                       = "Silicon Valley"
 peering_location
 bandwidth_in_mbps
                        = 50
 sku {
   tier
         = "Standard"
   family = "MeteredData"
 allow_classic_operations = false
 tags {
   environment = "Production"
}
resource "azurerm_express_route_circuit_authorization" "test" {
                            = "exampleERCAuth"
 express_route_circuit_name = "${azurerm_express_route_circuit.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
```

### » Argument Reference

The following arguments are supported:

• name - (Required) The name of the ExpressRoute circuit. Changing this forces a new resource to be created.

- resource\_group\_name (Required) The name of the resource group in which to create the ExpressRoute circuit. Changing this forces a new resource to be created.
- express\_route\_circuit\_name (Required) The name of the Express Route Circuit in which to create the Authorization.

### » Attributes Reference

The following attributes are exported:

- id The Resource ID of the ExpressRoute Circuit Authorization.
- authorization\_key The Authorization Key.
- authorization\_use\_status The authorization use status.

### » Import

ExpressRoute Circuit Authorizations can be imported using the resource id, e.g.

terraform import azurerm\_express\_route\_circuit\_authorization.auth1 /subscriptions/00000000-

## » azurerm\_express\_route\_circuit\_peering

Manages an ExpressRoute Circuit Peering.

### » Example Usage (Creating a Microsoft Peering)

```
resource "azurerm_resource_group" "test" {
          = "exprtTest"
 location = "West US"
resource "azurerm_express_route_circuit" "test" {
                          = "expressRoute1"
 resource_group_name
                          = "${azurerm_resource_group.test.name}"
                          = "${azurerm_resource_group.test.location}"
  location
 service_provider_name
                          = "Equinix"
                          = "Silicon Valley"
 peering_location
                          = 50
 bandwidth_in_mbps
  sku {
          = "Standard"
   tier
```

```
family = "MeteredData"
  allow_classic_operations = false
 tags {
    environment = "Production"
}
resource "azurerm_express_route_circuit_peering" "test" {
                                = "MicrosoftPeering"
 peering_type
                                = "${azurerm_express_route_circuit.test.name}"
  express_route_circuit_name
 resource_group_name
                                = "${azurerm_resource_group.test.name}"
 peer asn
                                = 100
 primary_peer_address_prefix = "123.0.0.0/30"
  secondary peer address prefix = "123.0.0.4/30"
 vlan_id
 microsoft_peering_config {
    advertised_public_prefixes = ["123.1.0.0/24"]
}
```

The following arguments are supported:

peering\_type - (Required) The type of the ExpressRoute Circuit Peering.
 Acceptable values include AzurePrivatePeering, AzurePublicPeering and MicrosoftPeering. Changing this forces a new resource to be created.

**NOTE:** only one Peering of each Type can be created. Attempting to create multiple peerings of the same type will overwrite the original peering.

- express\_route\_circuit\_name (Required) The name of the Express-Route Circuit in which to create the Peering.
- resource\_group\_name (Required) The name of the resource group in which to create the Express Route Circuit Peering. Changing this forces a new resource to be created.
- primary\_peer\_address\_prefix (Optional) A /30 subnet for the primary link.
- secondary\_peer\_address\_prefix (Optional) A /30 subnet for the secondary link.

- vlan\_id (Optional) A valid VLAN ID to establish this peering on.
- shared\_key (Optional) The shared key. Can be a maximum of 25 characters
- peer\_asn (Optional) The Either a 16-bit or a 32-bit ASN. Can either be public or private..
- microsoft\_peering\_config (Optional) A microsoft\_peering\_config block as defined below. Required when peering\_type is set to MicrosoftPeering.

A microsoft\_peering\_config block contains:

 advertised\_public\_prefixes - (Required) A list of Advertised Public Prefixes

#### » Attributes Reference

The following attributes are exported:

- id The Resource ID of the ExpressRoute Circuit Peering.
- azure\_asn The ASN used by Azure.
- primary\_azure\_port The Primary Port used by Azure for this Peering.
- secondary\_azure\_port The Secondary Port used by Azure for this Peering.

## » Import

ExpressRoute Circuit Peerings can be imported using the resource id, e.g. terraform import azurerm\_express\_route\_circuit\_peering.peering1 /subscriptions/00000000-0000

# » azurerm\_local\_network\_gateway

Manages a local network gateway connection over which specific connections can be configured.

### » Example Usage

```
resource "azurerm_resource_group" "test" {
  name = "localNetworkGWTest"
```

The following arguments are supported:

- name (Required) The name of the local network gateway. Changing this
  forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the local network gateway.
- location (Required) The location/region where the local network gateway is created. Changing this forces a new resource to be created.
- gateway\_address (Required) The IP address of the gateway to which to connect.
- address\_space (Required) The list of string CIDRs representing the address spaces the gateway exposes.
- bgp\_settings (Optional) A bgp\_settings block as defined below containing the Local Network Gateway's BGP speaker settings.
- tags (Optional) A mapping of tags to assign to the resource.

bgp\_settings supports the following:

- asn (Required) The BGP speaker's ASN.
- bgp\_peering\_address (Required) The BGP peering address and BGP identifier of this BGP speaker.
- peer\_weight (Optional) The weight added to routes learned from this BGP speaker.

#### » Attributes Reference

The following attributes are exported:

• id - The local network gateway unique ID within Azure.

### » Import

Local Network Gateways can be imported using the resource id, e.g.

## » azurerm network interface

Manages a Network Interface located in a Virtual Network, usually attached to a Virtual Machine.

### » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_virtual_network" "test" {
 name = "acceptanceTestVirtualNetwork1"
address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm subnet" "test" {
                        = "testsubnet"
  resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
                   = "10.0.2.0/24"
  address_prefix
}
resource "azurerm_network_interface" "test" {
                       = "acceptanceTestNetworkInterface1"
  name
                       = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  ip_configuration {
                                    = "testconfiguration1"
    name
    subnet_id
                                    = "${azurerm_subnet.test.id}"
    private_ip_address_allocation = "dynamic"
```

```
tags {
    environment = "staging"
}
```

The following arguments are supported:

- name (Required) The name of the network interface. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the network interface. Changing this forces a new resource to be created.
- location (Required) The location/region where the network interface is created. Changing this forces a new resource to be created.
- network\_security\_group\_id (Optional) The ID of the Network Security Group to associate with the network interface.
- internal\_dns\_name\_label (Optional) Relative DNS name for this NIC used for internal communications between VMs in the same VNet
- enable\_ip\_forwarding (Optional) Enables IP Forwarding on the NIC. Defaults to false.
- enable\_accelerated\_networking (Optional) Enables Azure Accelerated Networking using SR-IOV. Only certain VM instance sizes are supported. Refer to Create a Virtual Machine with Accelerated Networking. Defaults to false.

**NOTE:** when using Accelerated Networking in an Availability Set - the Availability Set must be deployed on an Accelerated Networking enabled cluster.

- dns\_servers (Optional) List of DNS servers IP addresses to use for this NIC, overrides the VNet-level server list
- ip\_configuration (Required) One or more ip\_configuration associated with this NIC as documented below.
- tags (Optional) A mapping of tags to assign to the resource.

The ip\_configuration block supports:

- name (Required) User-defined name of the IP.
- subnet\_id (Required) Reference to a subnet in which this NIC has been created.

- private\_ip\_address (Optional) Static IP Address.
- private\_ip\_address\_allocation (Required) Defines how a private IP address is assigned. Options are Static or Dynamic.
- public\_ip\_address\_id (Optional) Reference to a Public IP Address to associate with this NIC
- application\_gateway\_backend\_address\_pools\_ids (Optional) List of Application Gateway Backend Address Pool IDs references to which this NIC belongs
- load\_balancer\_backend\_address\_pools\_ids (Optional) List of Load Balancer Backend Address Pool IDs references to which this NIC belongs
- load\_balancer\_inbound\_nat\_rules\_ids (Optional) List of Load Balancer Inbound Nat Rules IDs involving this NIC
- application\_security\_group\_ids (Optional) List of Application Security Group IDs which should be attached to this NIC

**Note:** Application Security Groups are currently in Public Preview on an optin basis. More information, including how you can register for the Preview, and which regions Application Security Groups are available in are available here

• primary - (Optional) Is this the Primary Network Interface? If set to true this should be the first ip\_configuration in the array.

#### » Attributes Reference

The following attributes are exported:

- id The Virtual Network Interface ID.
- $\bullet$   ${\tt mac\_address}$  The media access control (MAC) address of the network interface.
- private\_ip\_address The private ip address of the network interface.
- virtual\_machine\_id Reference to a VM with which this NIC has been associated.
- applied\_dns\_servers If the VM that uses this NIC is part of an Availability Set, then this list will have the union of all DNS servers from all NICs that are part of the Availability Set
- internal\_fqdn Fully qualified DNS name supporting internal communications between VMs in the same VNet

### » Import

Network Interfaces can be imported using the resource id, e.g.

terraform import azurerm network interface.test /subscriptions/00000000-0000-0000-0000-0000

## » azurerm\_network\_security\_group

Manages a network security group that contains a list of network security rules. Network security groups enable inbound or outbound traffic to be enabled or denied.

NOTE on Network Security Groups and Network Security Rules: Terraform currently provides both a standalone Network Security Rule resource, and allows for Network Security Rules to be defined in-line within the Network Security Group resource. At this time you cannot use a Network Security Group with in-line Network Security Rules in conjunction with any Network Security Rule resources. Doing so will cause a conflict of rule settings and will overwrite rules.

### » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
 location = "West US"
resource "azurerm_network_security_group" "test" {
                      = "acceptanceTestSecurityGroup1"
 name
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
  security_rule {
                               = "test123"
   name
   priority
                               = 100
    direction
                               = "Inbound"
    access
                               = "Allow"
                               = "Tcp"
    protocol
   source_port_range
                               = "*"
   destination_port_range
   source_address_prefix
   destination_address_prefix = "*"
 tags {
    environment = "Production"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the network security group. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the network security group. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- security\_rule (Optional) One or more security\_rule blocks as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

The security\_rule block supports:

- name (Required) The name of the security rule.
- description (Optional) A description for this rule. Restricted to 140 characters.
- protocol (Required) Network protocol this rule applies to. Can be Tcp, Udp or \* to match both.
- source\_port\_range (Optional) Source Port or Range. Integer or range between 0 and 65535 or \* to match any. This is required if source\_port\_ranges is not specified.
- source\_port\_ranges (Optional) List of source ports or port ranges. This is required if source\_port\_range is not specified.
- destination\_port\_range (Optional) Destination Port or Range. Integer or range between 0 and 65535 or \* to match any. This is required if destination\_port\_ranges is not specified.
- destination\_port\_ranges (Optional) List of destination ports or port ranges. This is required if destination\_port\_range is not specified.
- source\_address\_prefix (Optional) CIDR or source IP range or \* to match any IP. Tags such as 'VirtualNetwork', 'AzureLoadBalancer' and 'Internet' can also be used. This is required if source\_address\_prefixes is not specified.
- source\_address\_prefixes (Optional) List of source address prefixes. Tags may not be used. This is required if source\_address\_prefix is not specified.

- source\_application\_security\_group\_ids (Optional) A List of source Application Security Group ID's
- destination\_address\_prefix (Optional) CIDR or destination IP range or \* to match any IP. Tags such as 'VirtualNetwork', 'AzureLoadBalancer' and 'Internet' can also be used. This is required if destination\_address\_prefixes is not specified.
- destination\_address\_prefixes (Optional) List of destination address prefixes. Tags may not be used. This is required if destination\_address\_prefix is not specified.
- destination\_application\_security\_group\_ids (Optional) A List of destination Application Security Group ID's
- access (Required) Specifies whether network traffic is allowed or denied.
   Possible values are Allow and Deny.
- priority (Required) Specifies the priority of the rule. The value can be between 100 and 4096. The priority number must be unique for each rule in the collection. The lower the priority number, the higher the priority of the rule.
- direction (Required) The direction specifies if rule will be evaluated on incoming or outgoing traffic. Possible values are Inbound and Outbound.

#### » Attributes Reference

The following attributes are exported:

• id - The Network Security Group ID.

### » Import

Network Security Groups can be imported using the resource id, e.g.

terraform import azurerm\_network\_security\_group.group1 /subscriptions/00000000-0000-0000-000

## » azurerm network security rule

Manages a Network Security Rule.

NOTE on Network Security Groups and Network Security Rules: Terraform currently provides both a standalone Network Security Rule resource, and allows for Network Security Rules to be defined in-line within the Network Security Group resource. At this time you cannot use a Network Security Group with in-line Network Security Rules in conjunction with any Network Security Rule resources. Doing so will cause a conflict of rule settings and will overwrite rules.

### » Example Usage

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_network_security_group" "test" {
                     = "acceptanceTestSecurityGroup1"
 name
 location
                      = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_network_security_rule" "test" {
                              = "test123"
                              = 100
 priority
 direction
                              = "Outbound"
                              = "Allow"
  access
                              = "Tcp"
 protocol
                              = "*"
  source_port_range
                              = "*"
  destination_port_range
                              = "*"
  source_address_prefix
 destination_address_prefix = "*"
                              = "${azurerm_resource_group.test.name}"
 resource group name
  network_security_group_name = "${azurerm_network_security_group.test.name}"
}
```

### » Argument Reference

- name (Required) The name of the security rule. This needs to be unique across all Rules in the Network Security Group. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Network Security Rule. Changing this forces a new resource to be created.
- network\_security\_group\_name (Required) The name of the Network Security Group that we want to attach the rule to. Changing this forces a new resource to be created.

- description (Optional) A description for this rule. Restricted to 140 characters.
- protocol (Required) Network protocol this rule applies to. Possible values include Tcp, Udp or \* (which matches both).
- source\_port\_range (Optional) Source Port or Range. Integer or range between 0 and 65535 or \* to match any. This is required if source\_port\_ranges is not specified.
- source\_port\_ranges (Optional) List of source ports or port ranges. This is required if source port range is not specified.
- destination\_port\_range (Optional) Destination Port or Range. Integer or range between 0 and 65535 or \* to match any. This is required if destination\_port\_ranges is not specified.
- destination\_port\_ranges (Optional) List of destination ports or port ranges. This is required if destination\_port\_range is not specified.
- source\_address\_prefix (Optional) CIDR or source IP range or \* to match any IP. Tags such as 'VirtualNetwork', 'AzureLoadBalancer' and 'Internet' can also be used. This is required if source\_address\_prefixes is not specified.
- source\_address\_prefixes (Optional) List of source address prefixes. Tags may not be used. This is required if source\_address\_prefix is not specified.
- source\_application\_security\_group\_ids (Optional) A List of source Application Security Group ID's
- destination\_address\_prefix (Optional) CIDR or destination IP range or \* to match any IP. Tags such as 'VirtualNetwork', 'AzureLoadBalancer' and 'Internet' can also be used. This is required if destination\_address\_prefixes is not specified.
- destination\_address\_prefixes (Optional) List of destination address prefixes. Tags may not be used. This is required if destination\_address\_prefix is not specified.
- destination\_application\_security\_group\_ids (Optional) A List of destination Application Security Group ID's
- access (Required) Specifies whether network traffic is allowed or denied. Possible values are Allow and Deny.
- priority (Required) Specifies the priority of the rule. The value can be between 100 and 4096. The priority number must be unique for each rule in the collection. The lower the priority number, the higher the priority of the rule.

• direction - (Required) The direction specifies if rule will be evaluated on incoming or outgoing traffic. Possible values are Inbound and Outbound.

#### » Attributes Reference

The following attributes are exported:

• id - The Network Security Rule ID.

## » Import

Network Security Rules can be imported using the resource id, e.g.

terraform import azurerm\_network\_security\_rule.rule1 /subscriptions/00000000-0000-0000-0000-0000-

# » azurerm\_network\_watcher

Manages a Network Watcher.

## » Example Usage

### » Argument Reference

- name (Required) The name of the Network Watcher. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Network Watcher. Changing this forces a new resource to be created.

- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.

The following attributes are exported:

• id - The Network Watcher ID.

## » Import

Network Watchers can be imported using the resource id, e.g.

terraform import azurerm\_network\_watcher.watcher1 /subscriptions/00000000-0000-0000-0000-0000

# » azurerm\_packet\_capture

Configures Packet Capturing against a Virtual Machine using a Network Watcher.

```
resource "azurerm_resource_group" "test" {
 name = "packet-capture-rg"
  location = "West Europe"
}
resource "azurerm_network_watcher" "test" {
                     = "network-watcher"
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_virtual_network" "test" {
 name = "production-network"
 address_space = ["10.0.0.0/16"]
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_subnet" "test" {
```

```
name = "internal"
 resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.2.0/24"
}
resource "azurerm_network_interface" "test" {
  name = "pctest-nic"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  ip_configuration {
   name = "testconfiguration1"
    subnet_id = "${azurerm_subnet.test.id}"
   private_ip_address_allocation = "dynamic"
}
resource "azurerm_virtual_machine" "test" {
 name = "pctest-vm"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  network_interface_ids = ["${azurerm_network_interface.test.id}"]
  vm_size = "Standard_F2"
  storage_image_reference {
    publisher = "Canonical"
    offer = "UbuntuServer"
    sku = "16.04-LTS"
   version = "latest"
 }
  storage_os_disk {
   name = "osdisk"
    caching = "ReadWrite"
    create_option = "FromImage"
   managed_disk_type = "Standard_LRS"
 }
  os_profile {
    computer_name = "pctest-vm"
    admin_username = "testadmin"
   admin_password = "Password1234!"
  os_profile_linux_config {
```

```
disable_password_authentication = false
 }
}
resource "azurerm_virtual_machine_extension" "test" {
                             = "network-watcher"
  name
                             = "${azurerm_resource_group.test.location}"
 location
                             = "${azurerm_resource_group.test.name}"
 resource_group_name
                             = "${azurerm virtual machine.test.name}"
 virtual machine name
 publisher
                             = "Microsoft.Azure.NetworkWatcher"
  type
                             = "NetworkWatcherAgentLinux"
  type_handler_version
                             = "1.4"
  auto_upgrade_minor_version = true
}
resource "azurerm_storage_account" "test" {
 name = "pctestsa"
 resource_group_name = "${azurerm_resource_group.test.name}"
  location = "${azurerm_resource_group.test.location}"
  account_tier = "Standard"
  account_replication_type = "LRS"
}
resource "azurerm_packet_capture" "test" {
                       = "pctestcapture"
 network_watcher_name = "${azurerm_network_watcher.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 target_resource_id = "${azurerm_virtual_machine.test.id}"
  storage_location {
    storage_account_id = "${azurerm_storage_account.test.id}"
  depends_on = ["azurerm_virtual_machine_extension.test"]
}
```

**NOTE:** This Resource requires that the Network Watcher Virtual Machine Extension is installed on the Virtual Machine before capturing can be enabled which can be installed via the azurerm\_virtual\_machine\_extension resource.

### » Argument Reference

The following arguments are supported:

• name - (Required) The name to use for this Packet Capture. Changing

this forces a new resource to be created.

- network\_watcher\_name (Required) The name of the Network Watcher.
   Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the Network Watcher exists. Changing this forces a new resource to be created.
- target\_resource\_id (Required) The ID of the Resource to capture packets from. Changing this forces a new resource to be created.

**NOTE:** Currently only Virtual Machines ID's are supported.

- maximum\_bytes\_per\_packet (Optional) The number of bytes captured per packet. The remaining bytes are truncated. Defaults to 0 (Entire Packet Captured). Changing this forces a new resource to be created.
- maximum\_bytes\_per\_session (Optional) Maximum size of the capture in Bytes. Defaults to 1073741824 (1GB). Changing this forces a new resource to be created.
- maximum\_capture\_duration (Optional) The maximum duration of the capture session in seconds. Defaults to 18000 (5 hours). Changing this forces a new resource to be created.
- storage\_location (Required) A storage\_location block as defined below. Changing this forces a new resource to be created.
- filter (Optional) One or more filter blocks as defined below. Changing this forces a new resource to be created.

#### A storage\_location block contains:

- file\_path (Optional) A valid local path on the targeting VM. Must include the name of the capture file (\*.cap). For linux virtual machine it must start with /var/captures.
- storage\_account\_id (Optional) The ID of the storage account to save the packet capture session

**NOTE:** At least one of file\_path or storage\_account\_id must be specified.

#### A filter block contains:

• local\_ip\_address - (Optional) The local IP Address to be filtered on. Notation: "127.0.0.1" for single address entry. "127.0.0.1-127.0.0.255" for range. "127.0.0.1;127.0.0.5" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported. Changing this forces a new resource to be created.

- local\_port (Optional) The local port to be filtered on. Notation: "80" for single port entry."80-85" for range. "80;443;" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported. Changing this forces a new resource to be created.
- protocol (Required) The Protocol to be filtered on. Possible values include Any, TCP and UDP. Changing this forces a new resource to be created.
- remote\_ip\_address (Optional) The remote IP Address to be filtered on. Notation: "127.0.0.1" for single address entry. "127.0.0.1-127.0.0.255" for range. "127.0.0.1;127.0.0.5;" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported.. Changing this forces a new resource to be created.
- remote\_port (Optional) The remote port to be filtered on. Notation: "80" for single port entry."80-85" for range. "80;443;" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported. Changing this forces a new resource to be created.

The following attributes are exported:

- id The Packet Capture ID.
- storage\_location (Required) A storage\_location block as defined below.

\_\_\_\_\_

A storage\_location block contains:

• storage\_path - The URI of the storage path to save the packet capture.

#### » Import

Packet Captures can be imported using the resource id, e.g.

terraform import azurerm\_packet\_capture.capture1 /subscriptions/00000000-0000-0000-0000-0000

# » azurerm\_public\_ip

Create a Public IP Address.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Public IP resource. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the public ip.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Optional) The SKU of the Public IP. Accepted values are Basic and Standard. Defaults to Basic.

Note Public IP Standard SKUs require public\_ip\_address\_allocation to be set to static.

**Note:** The Standard SKU is currently in Public Preview on an opt-in basis. More information, including how you can register for the Preview, and which regions Standard SKU's are available in are available here

• public\_ip\_address\_allocation - (Required) Defines whether the IP address is static or dynamic. Options are Static or Dynamic.

**Note** Dynamic Public IP Addresses aren't allocated until they're assigned to a resource (such as a Virtual Machine or a Load Balancer) by design within Azure - more information is available below.

- idle\_timeout\_in\_minutes (Optional) Specifies the timeout for the TCP idle connection. The value can be set between 4 and 30 minutes.
- domain\_name\_label (Optional) Label for the Domain Name. Will be used to make up the FQDN. If a domain name label is specified, an A DNS record is created for the public IP in the Microsoft Azure DNS system.
- reverse\_fqdn (Optional) A fully qualified domain name that resolves to this public IP address. If the reverseFqdn is specified, then a PTR DNS record is created pointing from the IP address in the in-addr.arpa domain to the reverse FQDN.
- tags (Optional) A mapping of tags to assign to the resource.
- zones (Optional) A collection containing the availability zone to allocate the Public IP in.

**Please Note**: Availability Zones are in Preview and only supported in several regions at this time - as such you must be opted into the Preview to use this functionality. You can opt into the Availability Zones Preview in the Azure Portal.

### » Attributes Reference

The following attributes are exported:

- id The Public IP ID.
- ip\_address The IP address value that was allocated.

Note Dynamic Public IP Addresses aren't allocated until they're attached to a device (e.g. a Virtual Machine/Load Balancer). Instead you can obtain the IP Address once the Public IP has been assigned via the azurerm\_public\_ip Data Source.

• fqdn - Fully qualified domain name of the A DNS record associated with the public IP. This is the concatenation of the domainNameLabel and the regionalized DNS zone

### » Import

Public IPs can be imported using the resource id, e.g.

terraform import azurerm\_public\_ip.myPublicIp /subscriptions/00000000-0000-0000-0000-00000-00000

### » azurerm\_route

Manages a Route within a Route Table.

## » Example Usage

```
resource "azurerm resource group" "test" {
          = "acceptanceTestResourceGroup1"
 location = "West US"
}
resource "azurerm route table" "test" {
 name
                     = "acceptanceTestRouteTable1"
 location
                     = "${azurerm resource group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm route" "test" {
                     = "acceptanceTestRoute1"
 name
 resource_group_name = "${azurerm_resource_group.test.name}"
 route_table_name = "${azurerm_route_table.test.name}"
                    = "10.1.0.0/16"
 address_prefix
                     = "vnetlocal"
 next_hop_type
}
```

## » Argument Reference

- name (Required) The name of the route. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the route. Changing this forces a new resource to be created.
- route\_table\_name (Required) The name of the route table within which create the route. Changing this forces a new resource to be created.
- address\_prefix (Required) The destination CIDR to which the route applies, such as 10.1.0.0/16
- next\_hop\_type (Required) The type of Azure hop the packet should be sent to. Possible values are VirtualNetworkGateway, VnetLocal, Internet, VirtualAppliance and None
- next\_hop\_in\_ip\_address (Optional) Contains the IP address packets should be forwarded to. Next hop values are only allowed in routes where the next hop type is VirtualAppliance.

The following attributes are exported:

• id - The Route ID.

## » Import

Routes can be imported using the resource id, e.g.

# » azurerm\_route\_table

Manages a Route Table

## » Example Usage

## » Argument Reference

- name (Required) The name of the route table. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the route table. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- route (Optional) Can be specified multiple times to define multiple routes. Each route block supports fields documented below.
- tags (Optional) A mapping of tags to assign to the resource.

The route block supports:

- name (Required) The name of the route.
- address\_prefix (Required) The destination CIDR to which the route applies, such as 10.1.0.0/16
- next\_hop\_type (Required) The type of Azure hop the packet should be sent to. Possible values are VirtualNetworkGateway, VnetLocal, Internet, VirtualAppliance and None.
- next\_hop\_in\_ip\_address (Optional) Contains the IP address packets should be forwarded to. Next hop values are only allowed in routes where the next hop type is VirtualAppliance.

### » Attributes Reference

The following attributes are exported:

- id The Route Table ID.
- subnets The collection of Subnets associated with this route table.

## » Import

Route Tables can be imported using the resource id, e.g.

# » azurerm\_subnet

Manages a subnet. Subnets represent network segments within the IP space defined by the virtual network.

NOTE on Virtual Networks and Subnet's: Terraform currently provides both a standalone Subnet resource, and allows for Subnets to be defined in-line within the Virtual Network resource. At this time you cannot use a Virtual Network with in-line Subnets in conjunction with any Subnet resources. Doing so will cause a conflict of Subnet configurations and will overwrite Subnet's.

## » Example Usage

```
resource "azurerm resource group" "test" {
          = "acceptanceTestResourceGroup1"
 location = "West US"
}
resource "azurerm_virtual_network" "test" {
                     = "acceptanceTestVirtualNetwork1"
                 = ["10.0.0.0/16"]
  address_space
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
}
resource "azurerm_subnet" "test" {
                      = "testsubnet"
 resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
                     = "10.0.1.0/24"
  address_prefix
```

#### » Argument Reference

- name (Required) The name of the subnet. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the subnet. Changing this forces a new resource to be created.
- virtual\_network\_name (Required) The name of the virtual network to which to attach the subnet. Changing this forces a new resource to be created.
- address\_prefix (Required) The address prefix to use for the subnet.
- network\_security\_group\_id (Optional) The ID of the Network Security Group to associate with the subnet.

- route\_table\_id (Optional) The ID of the Route Table to associate with the subnet.
- service\_endpoints (Optional) The list of Service endpoints to associate with the subnet. Possible values include: Microsoft.Storage, Microsoft.Sql.

The following attributes are exported:

- id The subnet ID.
- ip\_configurations The collection of IP Configurations with IPs within this subnet.
- name The name of the subnet.
- resource\_group\_name The name of the resource group in which the subnet is created in.
- virtual\_network\_name The name of the virtual network in which the subnet is created in
- address\_prefix The address prefix for the subnet

## » Import

Subnets can be imported using the resource id, e.g.

# » azurerm traffic manager endpoint

Manages a Traffic Manager Endpoint.

```
resource "random_id" "server" {
  keepers = {
    azi_id = 1
  }
  byte_length = 8
}

resource "azurerm_resource_group" "test" {
  name = "trafficmanagerendpointTest"
  location = "West US"
```

```
}
resource "azurerm_traffic_manager_profile" "test" {
                     = "${random_id.server.hex}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 traffic_routing_method = "Weighted"
 dns config {
   relative_name = "${random_id.server.hex}"
                 = 100
   ttl
 }
 monitor_config {
   protocol = "http"
            = 80
   port
   path
            = "/"
 tags {
    environment = "Production"
}
resource "azurerm_traffic_manager_endpoint" "test" {
                     = "${random_id.server.hex}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 profile_name = "${azurerm_traffic_manager_profile.test.name}"
                     = "terraform.io"
 target
                     = "externalEndpoints"
  type
  weight
                      = 100
}
```

- name (Required) The name of the Traffic Manager endpoint. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Traffic Manager endpoint.
- profile\_name (Required) The name of the Traffic Manager Profile to attach create the Traffic Manager endpoint.

- endpoint\_status (Optional) The status of the Endpoint, can be set to either Enabled or Disabled. Defaults to Enabled.
- type (Required) The Endpoint type, must be one of:
  - azureEndpoints
  - externalEndpoints
  - nestedEndpoints
- target (Optional) The FQDN DNS name of the target. This argument must be provided for an endpoint of type externalEndpoints, for other types it will be computed.
- target\_resource\_id (Optional) The resource id of an Azure resource to target. This argument must be provided for an endpoint of type azureEndpoints or nestedEndpoints.
- weight (Optional) Specifies how much traffic should be distributed to this endpoint, this must be specified for Profiles using the Weighted traffic routing method. Supports values between 1 and 1000.
- priority (Optional) Specifies the priority of this Endpoint, this must be specified for Profiles using the Priority traffic routing method. Supports values between 1 and 1000, with no Endpoints sharing the same value. If omitted the value will be computed in order of creation.
- endpoint\_location (Optional) Specifies the Azure location of the Endpoint, this must be specified for Profiles using the Performance routing method if the Endpoint is of either type nestedEndpoints or externalEndpoints. For Endpoints of type azureEndpoints the value will be taken from the location of the Azure target resource.
- min\_child\_endpoints (Optional) This argument specifies the minimum number of endpoints that must be 'online' in the child profile in order for the parent profile to direct traffic to any of the endpoints in that child profile. This argument only applies to Endpoints of type nestedEndpoints and defaults to 1.
- geo\_mappings (Optional) A list of Geographic Regions used to distribute traffic, such as WORLD, UK or DE. The same location can't be specified in two endpoints. See the Geographic Hierarchies documentation for more information.

The following attributes are exported:

• id - The Traffic Manager Endpoint id.

## » Import

Traffic Manager Endpoints can be imported using the resource id, e.g.

terraform import azurerm\_traffic\_manager\_endpoint.testEndpoints /subscriptions/00000000-0000

# » azurerm\_traffic\_manager\_profile

Manages a Traffic Manager Profile to which multiple endpoints can be attached.

```
resource "random_id" "server" {
 keepers = {
    azi_id = 1
 byte_length = 8
resource "azurerm_resource_group" "test" {
         = "trafficmanagerProfile"
  location = "West US"
resource "azurerm_traffic_manager_profile" "test" {
                        = "${random id.server.hex}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 traffic_routing_method = "Weighted"
 dns_config {
   relative_name = "${random_id.server.hex}"
    ttl
             = 100
 }
 monitor_config {
   protocol = "http"
           = 80
   port
   path
            = "/"
   environment = "Production"
}
```

The following arguments are supported:

- name (Required) The name of the virtual network. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the virtual network.
- profile\_status (Optional) The status of the profile, can be set to either Enabled or Disabled. Defaults to Enabled.
- traffic\_routing\_method (Required) Specifies the algorithm used to route traffic, possible values are:
  - Geographic Traffic is routed based on Geographic regions specified in the Endpoint.
  - Performance Traffic is routed via the User's closest Endpoint
  - Weighted Traffic is spread across Endpoints proportional to their weight value.
  - Priority Traffic is routed to the Endpoint with the lowest priority value.
- dns\_config (Required) This block specifies the DNS configuration of the Profile, it supports the fields documented below.
- monitor\_config (Required) This block specifies the Endpoint monitoring configuration for the Profile, it supports the fields documented below.
- tags (Optional) A mapping of tags to assign to the resource.

The dns\_config block supports:

- relative\_name (Required) The relative domain name, this is combined with the domain name used by Traffic Manager to form the FQDN which is exported as documented below. Changing this forces a new resource to be created.
- ttl (Required) The TTL value of the Profile used by Local DNS resolvers and clients.

The monitor\_config block supports:

- protocol (Required) The protocol used by the monitoring checks, supported values are HTTP, HTTPS and TCP.
- $\bullet\,$  port (Required) The port number used by the monitoring checks.
- path (Optional) The path used by the monitoring checks. Required when protocol is set to HTTP or HTTPS cannot be set when protocol is set to TCP.

The following attributes are exported:

- id The Traffic Manager Profile id.
- fqdn The FQDN of the created Profile.

#### » Notes

The Traffic Manager is created with the location global.

## » Import

Traffic Manager Profiles can be imported using the resource id, e.g.

## » azurerm virtual network

Manages a virtual network including any configured subnets. Each subnet can optionally be configured with a security group to be associated with the subnet.

NOTE on Virtual Networks and Subnet's: Terraform currently provides both a standalone Subnet resource, and allows for Subnets to be defined in-line within the Virtual Network resource. At this time you cannot use a Virtual Network with in-line Subnets in conjunction with any Subnet resources. Doing so will cause a conflict of Subnet configurations and will overwrite Subnet's.

```
resource_group_name = "${azurerm_resource_group.test.name}"
  address_space = ["10.0.0.0/16"]
                     = "West US"
 location
                     = ["10.0.0.4", "10.0.0.5"]
  dns_servers
  subnet {
                   = "subnet1"
   name
    address_prefix = "10.0.1.0/24"
 subnet {
                  = "subnet2"
   name
    address_prefix = "10.0.2.0/24"
 }
  subnet {
   name
                  = "subnet3"
    address_prefix = "10.0.3.0/24"
    security_group = "${azurerm_network_security_group.test.id}"
 }
 tags {
    environment = "Production"
}
```

- name (Required) The name of the virtual network. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the virtual network.
- address\_space (Required) The address space that is used the virtual network. You can supply more than one address space. Changing this forces a new resource to be created.
- location (Required) The location/region where the virtual network is created. Changing this forces a new resource to be created.
- dns\_servers (Optional) List of IP addresses of DNS servers
- subnet (Optional) Can be specified multiple times to define multiple subnets. Each subnet block supports fields documented below.

• tags - (Optional) A mapping of tags to assign to the resource.

The subnet block supports:

- name (Required) The name of the subnet.
- address\_prefix (Required) The address prefix to use for the subnet.
- security\_group (Optional) The Network Security Group to associate with the subnet. (Referenced by id, ie. azurerm\_network\_security\_group.test.id)

### » Attributes Reference

The following attributes are exported:

- id The virtual NetworkConfiguration ID.
- name The name of the virtual network.
- resource\_group\_name The name of the resource group in which to create the virtual network.
- location The location/region where the virtual network is created
- address\_space The address space that is used the virtual network.

### » Import

Virtual Networks can be imported using the resource id, e.g.

terraform import azurerm\_virtual\_network.testNetwork /subscriptions/00000000-0000-0000-0000-0000-

# » azurerm\_virtual\_network\_gateway

Manages a Virtual Network Gateway to establish secure, cross-premises connectivity.

**Note:** Please be aware that provisioning a Virtual Network Gateway takes a long time (between 30 minutes and 1 hour)

```
resource "azurerm_resource_group" "test" {
  name = "test"
  location = "West US"
}
```

```
resource "azurerm_virtual_network" "test" {
 name = "test"
  location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  address_space = ["10.0.0.0/16"]
}
resource "azurerm_subnet" "test" {
 name = "GatewaySubnet"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.1.0/24"
}
resource "azurerm_public_ip" "test" {
 name = "test"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 public_ip_address_allocation = "Dynamic"
}
resource "azurerm_virtual_network_gateway" "test" {
  name = "test"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  type = "Vpn"
  vpn_type = "RouteBased"
  active_active = false
  enable_bgp = false
   sku = "Basic"
  ip_configuration {
   name = "vnetGatewayConfig"
    public_ip_address_id = "${azurerm_public_ip.test.id}"
   private_ip_address_allocation = "Dynamic"
   subnet_id = "${azurerm_subnet.test.id}"
  vpn_client_configuration {
    address_space = [ "10.2.0.0/24" ]
    root_certificate {
      name = "DigiCert-Federated-ID-Root-CA"
      public_cert_data = <<EOF</pre>
```

MIIDuzCCAqOgAwIBAgIQCHTZWCM+IlfFIRXIvyKSrjANBgkqhkiG9w0BAQsFADBn  ${\tt MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3}$ d3cuZGlnaWNlcnQuY29tMSYwJAYDVQQDEx1EaWdpQ2VydCBGZWRlcmF0ZWQgSUQg Um9vdCBDQTAeFw0xMzAxMTUxMjAwMDBaFw0zMzAxMTUxMjAwMDBaMGcxCzAJBgNV BAYTA1VTMRUwEwYDVQQKEwxEaWdpQ2VydCBJbmMxGTAXBgNVBAsTEHd3dy5kaWdp Y2VydC5jb20xJjAkBgNVBAMTHURpZ21DZXJ0IEZ1ZGVyYXR1ZCBJRCBSb290IENB MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAvAEB4pcCqnNNOWE6Ur5j QPUH+1y1F9KdHTRSza6k5iD1Xq1kGS1qAkuKtw9JsiNRrjltmFnzMZRBbX8Tlf18 zAhBmb6dDduDGED01kBsTkgywYPxXVTKec0WxYEEF0oMn4wSYN101t2eJAKHXjNf GTwiibdP8CUR2ghSM2sUTI8Nt10mfc4SMHhGhYD64uJMbX98THQ/4LMGuYegou+d GTiahfHtjn7AboSEknwAMJHCh5R1YZZ6B1O4QbKJ+34Q0eKgnI3X6Vc9u0zf6DH8 Dk+4zQDYRRTqTnV03VT8jzqDlCRuNtq6Yvry0WN74/dq8LQhUnXHvFyrsdMaE1X2 DwIDAQABo2MwYTAPBgNVHRMBAf8EBTADAQH/MA4GA1UdDwEB/wQEAwIBhjAdBgNV HQ4EFgQUGRdkFnbGt1EWjKwbUne+50aZvRYwHwYDVR0jBBgwFoAUGRdkFnbGt1EW jKwbUne+50aZvRYwDQYJKoZIhvcNAQELBQADggEBAHcqsHkrjpESqfuVTRiptJfP 9JbdtWqRTm0f6uJi2c8YVqI6X1KXsD8C1dUUaaHKLUJzvKiazibVuBwMIT84AyqR QELn3eOBtgEymEygMU569bO1ZPxoFSnNXc7qDZBDef8WfqAV/sxkTi8L9BkmFYfL uGLOhRJOFprPdoDIUBB+tmCl3oDcBy3vnUeOEioz8zAkprcb3GHwHAK+vHmmfgcn WsfMLH4JCLa/tRYL+Rw/N3ybCkDp00s0WUZ+AoDywS10Q/ZEnNY0MsFiw6LyIdbq M/s/1JRtO3bDSzD9TazRVzn2oBqzSa8VgIo5C1nOnoAKJT1sC1JKvIhnRlaLQqk= EOF

```
revoked_certificate {
   name = "Verizon-Global-Root-CA"
   thumbprint = "912198EEF23DCAC40939312FEE97DD560BAE49B1"
}
}
```

## » Argument Reference

- name (Required) The name of the Virtual Network Gateway. Changing the name forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Virtual Network Gateway. Changing the resource group name forces a new resource to be created.
- location (Required) The location/region where the Virtual Network Gateway is located. Changing the location/region forces a new resource to be created.
- type (Required) The type of the Virtual Network Gateway. Valid options are Vpn or ExpressRoute. Changing the type forces a new resource to be

created.

- vpn\_type (Optional) The routing type of the Virtual Network Gateway.
   Valid options are RouteBased or PolicyBased. Defaults to RouteBased.
- enable\_bgp (Optional) If true, BGP (Border Gateway Protocol) will be enabled for this Virtual Network Gateway. Defaults to false.
- active\_active (Optional) If true, an active-active Virtual Network Gateway will be created. An active-active gateway requires a
  HighPerformance or an UltraPerformance sku. If false, an activestandby gateway will be created. Defaults to false.
- default\_local\_network\_gateway\_id (Optional) The ID of the local network gateway through which outbound Internet traffic from the virtual network in which the gateway is created will be routed (*forced tunneling*). Refer to the Azure documentation on forced tunneling. If not specified, forced tunneling is disabled.
- sku (Required) Configuration of the size and capacity of the virtual network gateway. Valid options are Basic, Standard, HighPerformance, UltraPerformance, VpnGw1, VpnGw2 and VpnGw3 and depend on the type and vpn\_type arguments. A PolicyBased gateway only supports the Basic sku. Further, the UltraPerformance sku is only supported by an ExpressRoute gateway.
- ip\_configuration (Required) One or two ip\_configuration blocks documented below. An active-standby gateway requires exactly one ip\_configuration block whereas an active-active gateway requires exactly two ip\_configuration blocks.
- vpn\_client\_configuration (Optional) A vpn\_client\_configuration block which is documented below. In this block the Virtual Network Gateway can be configured to accept IPSec point-to-site connections.
- tags (Optional) A mapping of tags to assign to the resource.

The ip\_configuration block supports:

- name (Optional) A user-defined name of the IP configuration. Defaults to vnetGatewayConfig.
- private\_ip\_address\_allocation (Optional) Defines how the private IP address of the gateways virtual interface is assigned. Valid options are Static or Dynamic. Defaults to Dynamic.
- subnet\_id-(Required) The ID of the gateway subnet of a virtual network in which the virtual network gateway will be created. It is mandatory that the associated subnet is named GatewaySubnet. Therefore, each virtual network can contain at most a single Virtual Network Gateway.

• public\_ip\_address\_id - (Optional) The ID of the public ip address to associate with the Virtual Network Gateway.

#### The vpn\_client\_configuration block supports:

- address\_space (Required) The address space out of which ip addresses for vpn clients will be taken. You can provide more than one address space, e.g. in CIDR notation.
- vpn\_client\_protocol (Optional) List of the protocols supported by the vpn client. The supported values are "SSTP" and "IkeV2".
- root\_certificate (Optional) One or more root\_certificate blocks which are defined below. These root certificates are used to sign the client certificate used by the VPN clients to connect to the gateway. This setting is incompatible with the use of radius\_server\_address and radius\_server\_secret.
- revoked\_certificate (Optional) One or more revoked\_certificate blocks which are defined below. This setting is incompatible with the use of radius\_server\_address and radius\_server\_secret.
- radius\_server\_address (Optional) The address of the Radius server. This setting is incompatible with the use of root\_certificate and revoked\_certificate.
- radius\_server\_secret (Optional) The secret used by the Radius server. This setting is incompatible with the use of root\_certificate and revoked\_certificate.

#### The bgp\_settings block supports:

- asn (Optional) The Autonomous System Number (ASN) to use as part of the BGP.
- peering\_address (Optional) The BGP peer IP address of the virtual network gateway. This address is needed to configure the created gateway as a BGP Peer on the on-premises VPN devices. The IP address must be part of the subnet of the Virtual Network Gateway. Changing this forces a new resource to be created.
- peer\_weight (Optional) The weight added to routes which have been learned through BGP peering. Valid values can be between 0 and 100.

#### The root\_certificate block supports:

- name (Required) A user-defined name of the root certificate.
- public\_cert\_data (Required) The public certificate of the root certificate authority. The certificate must be provided in Base-64 encoded X.509 format (PEM). In particular, this argument *must not* include the ----BEGIN CERTIFICATE---- or ----END CERTIFICATE---- markers.

The root\_revoked\_certificate block supports:

- name (Required) A user-defined name of the revoked certificate.
- public\_cert\_data (Required) The SHA1 thumbprint of the certificate to be revoked.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the Virtual Network Gateway.

### » Import

Virtual Network Gateways can be imported using the resource id, e.g.

# » azurerm\_virtual\_network\_gateway\_connection

Manages a connection in an existing Virtual Network Gateway.

## » Example Usage

#### » Site-to-Site connection

The following example shows a connection between an Azure virtual network and an on-premises VPN device and network.

```
resource "azurerm_resource_group" "test" {
  name = "test"
  location = "West US"
}

resource "azurerm_virtual_network" "test" {
  name = "test"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  address_space = ["10.0.0.0/16"]
}

resource "azurerm_subnet" "test" {
  name = "GatewaySubnet"
```

```
resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.1.0/24"
}
resource "azurerm_local_network_gateway" "onpremise" {
  name = "onpremise"
  location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  gateway_address = "168.62.225.23"
 address_space = ["10.1.1.0/24"]
}
resource "azurerm_public_ip" "test" {
 name = "test"
  location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 public_ip_address_allocation = "Dynamic"
}
resource "azurerm_virtual_network_gateway" "test" {
 name = "test"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  type = "Vpn"
  vpn_type = "RouteBased"
  active_active = false
  enable_bgp = false
    sku = "Basic"
  ip_configuration {
    public_ip_address_id = "${azurerm_public_ip.test.id}"
    private_ip_address_allocation = "Dynamic"
   subnet_id = "${azurerm_subnet.test.id}"
 }
}
resource "azurerm_virtual_network_gateway_connection" "onpremise" {
  name = "onpremise"
  location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  type = "IPsec"
  virtual_network_gateway_id = "${azurerm_virtual_network_gateway.test.id}"
```

```
local_network_gateway_id = "${azurerm_local_network_gateway.onpremise.id}"
shared_key = "4-v3ry-53cr37-1p53c-5h4r3d-k3y"
}
```

#### » VNet-to-VNet connection

The following example shows a connection between two Azure virtual network in different locations/regions.

```
resource "azurerm_resource_group" "us" {
   name = "us"
    location = "East US"
}
resource "azurerm_virtual_network" "us" {
 name = "us"
  location = "${azurerm resource group.us.location}"
 resource_group_name = "${azurerm_resource_group.us.name}"
  address_space = ["10.0.0.0/16"]
}
resource "azurerm_subnet" "us_gateway" {
 name = "GatewaySubnet"
 resource_group_name = "${azurerm_resource_group.us.name}"
 virtual_network_name = "${azurerm_virtual_network.us.name}"
  address_prefix = "10.0.1.0/24"
}
resource "azurerm_public_ip" "us" {
 name = "us"
 location = "${azurerm_resource_group.us.location}"
 resource_group_name = "${azurerm_resource_group.us.name}"
 public_ip_address_allocation = "Dynamic"
}
resource "azurerm_virtual_network_gateway" "us" {
 name = "us-gateway"
  location = "${azurerm_resource_group.us.location}"
 resource_group_name = "${azurerm_resource_group.us.name}"
  type = "Vpn"
  vpn_type = "RouteBased"
    sku = "Basic"
```

```
ip_configuration {
    public_ip_address_id = "${azurerm_public_ip.us.id}"
    private_ip_address_allocation = "Dynamic"
    subnet_id = "${azurerm_subnet.us_gateway.id}"
 }
}
resource "azurerm_resource_group" "europe" {
 name = "europe"
 location = "West Europe"
resource "azurerm_virtual_network" "europe" {
 name = "europe"
 location = "${azurerm_resource_group.europe.location}"
 resource_group_name = "${azurerm_resource_group.europe.name}"
  address_space = ["10.1.0.0/16"]
}
resource "azurerm_subnet" "europe_gateway" {
 name = "GatewaySubnet"
 resource_group_name = "${azurerm_resource_group.europe.name}"
  virtual_network_name = "${azurerm_virtual_network.europe.name}"
  address_prefix = "10.1.1.0/24"
}
resource "azurerm_public_ip" "europe" {
 name = "europe"
  location = "${azurerm_resource_group.europe.location}"
 resource_group_name = "${azurerm_resource_group.europe.name}"
 public_ip_address_allocation = "Dynamic"
resource "azurerm_virtual_network_gateway" "europe" {
  name = "europe-gateway"
  location = "${azurerm_resource_group.europe.location}"
 resource_group_name = "${azurerm_resource_group.europe.name}"
  type = "Vpn"
  vpn_type = "RouteBased"
   sku = "Basic"
  ip configuration {
   public_ip_address_id = "${azurerm_public_ip.europe.id}"
   private_ip_address_allocation = "Dynamic"
    subnet_id = "${azurerm_subnet.europe_gateway.id}"
```

```
}
resource "azurerm_virtual_network_gateway_connection" "us_to_europe" {
 name = "us-to-europe"
 location = "${azurerm_resource_group.us.location}"
 resource_group_name = "${azurerm_resource_group.us.name}"
 type = "Vnet2Vnet"
 virtual_network_gateway_id = "${azurerm_virtual_network_gateway.us.id}"
 peer_virtual_network_gateway_id = "${azurerm_virtual_network_gateway.europe.id}"
  shared_key = "4-v3ry-53cr37-1p53c-5h4r3d-k3y"
}
resource "azurerm virtual network gateway connection" "europe to us" {
 name = "europe-to-us"
  location = "${azurerm_resource_group.europe.location}"
 resource_group_name = "${azurerm_resource_group.europe.name}"
  type = "Vnet2Vnet"
  virtual_network_gateway_id = "${azurerm_virtual_network_gateway.europe.id}"
  peer_virtual_network_gateway_id = "${azurerm_virtual_network_gateway.us.id}"
  shared_key = "4-v3ry-53cr37-1p53c-5h4r3d-k3y"
}
```

- name (Required) The name of the connection. Changing the name forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the connection Changing the name forces a new resource to be created.
- location (Required) The location/region where the connection is located. Changing this forces a new resource to be created.
- type (Required) The type of connection. Valid options are IPsec (Siteto-Site), ExpressRoute (ExpressRoute), and Vnet2Vnet (VNet-to-VNet). Each connection type requires different mandatory arguments (refer to the examples above). Changing the connection type will force a new connection to be created.

- virtual\_network\_gateway\_id (Required) The ID of the Virtual Network Gateway in which the connection will be created. Changing the gateway forces a new resource to be created.
- authorization\_key (Optional) The authorization key associated with the Express Route Circuit. This field is required only if the type is an ExpressRoute connection.
- express\_route\_circuit\_id (Optional) The ID of the Express Route Circuit when creating an ExpressRoute connection (i.e. when type is ExpressRoute). The Express Route Circuit can be in the same or in a different subscription.
- peer\_virtual\_network\_gateway\_id (Optional) The ID of the peer virtual network gateway when creating a VNet-to-VNet connection (i.e. when type is Vnet2Vnet). The peer Virtual Network Gateway can be in the same or in a different subscription.
- local\_network\_gateway\_id (Optional) The ID of the local network gateway when creating Site-to-Site connection (i.e. when type is IPsec).
- routing\_weight (Optional) The routing weight. Defaults to 10.
- shared\_key (Optional) The shared IPSec key. A key must be provided if a Site-to-Site or VNet-to-VNet connection is created whereas Express-Route connections do not need a shared key.
- enable\_bgp (Optional) If true, BGP (Border Gateway Protocol) is enabled for this connection. Defaults to false.
- use\_policy\_based\_traffic\_selectors (Optional) If true, policy-based traffic selectors are enabled for this connection. Enabling policy-based traffic selectors requires an ipsec\_policy block. Defaults to false.
- ipsec\_policy (Optional) A ipsec\_policy block which is documented below. Only a single policy can be defined for a connection. For details on custom policies refer to the relevant section in the Azure documentation.
- tags (Optional) A mapping of tags to assign to the resource.

#### The ipsec\_policy block supports:

- dh\_group (Required) The DH group used in IKE phase 1 for initial SA. Valid options are DHGroup1, DHGroup14, DHGroup2, DHGroup2048, DHGroup24, ECP256, ECP384, or None.
- ike\_encryption (Required) The IKE encryption algorithm. Valid options are AES128, AES192, AES256, DES, or DES3.
- ike\_integrity (Required) The IKE integrity algorithm. Valid options are MD5. SHA1. SHA256, or SHA384.

- ipsec\_encryption (Required) The IPSec encryption algorithm. Valid options are AES128, AES192, AES256, DES, DES3, GCMAES128, GCMAES192, GCMAES256, or None.
- ipsec\_integrity (Required) The IPSec integrity algorithm. Valid options are GCMAES128, GCMAES192, GCMAES256, MD5, SHA1, or SHA256.
- pfs\_group (Required) The DH group used in IKE phase 2 for new child SA. Valid options are ECP256, ECP384, PFS1, PFS2, PFS2048, PFS24, or None
- sa\_datasize (Optional) The IPSec SA payload size in KB. Must be at least 1024 KB. Defaults to 102400000 KB.
- sa\_lifetime (Optional) The IPSec SA lifetime in seconds. Must be at least 300 seconds. Defaults to 27000 seconds.

The following attributes are exported:

• id - The connection ID.

### » Import

Virtual Network Gateway Connections can be imported using their resource id, e.g.

terraform import azurerm\_virtual\_network\_gateway\_connection.testConnection /subscriptions/00

# » azurerm\_virtual\_network\_peering

Manages a virtual network peering which allows resources to access other resources in the linked virtual network.

```
resource_group_name = "${azurerm_resource_group.test.name}"
  address_space = ["10.0.1.0/24"]
                        = "West US"
  location
}
resource "azurerm_virtual_network" "test2" {
                        = "peternetwork2"
  resource_group_name = "${azurerm_resource_group.test.name}"
  address_space = ["10.0.2.0/24"]
                        = "West US"
  location
}
resource "azurerm_virtual_network_peering" "test1" {
                               = "peer1to2"
  resource_group_name = "${azurerm_resource_group.test.name}"
virtual_network_name = "${azurerm_virtual_network.test1.name}"
  remote_virtual_network_id = "${azurerm_virtual_network.test2.id}"
resource "azurerm_virtual_network_peering" "test2" {
                               = "peer2to1"
  resource_group_name = "${azurerm_resource_group.test.name}"
virtual_network_name = "${azurerm_virtual_network.test2.name}"
  remote_virtual_network_id = "${azurerm_virtual_network.test1.id}"
}
```

- name (Required) The name of the virtual network peering. Changing this forces a new resource to be created.
- virtual\_network\_name (Required) The name of the virtual network. Changing this forces a new resource to be created.
- remote\_virtual\_network\_id (Required) The full Azure resource ID of the remote virtual network. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the virtual network. Changing this forces a new resource to be created.
- allow\_virtual\_network\_access (Optional) Controls if the VMs in the remote virtual network can access VMs in the local virtual network. Defaults to false.

- allow\_forwarded\_traffic (Optional) Controls if forwarded traffic from VMs in the remote virtual network is allowed. Defaults to false.
- allow\_gateway\_transit (Optional) Controls gatewayLinks can be used in the remote virtual network's link to the local virtual network.
- use\_remote\_gateways (Optional) Controls if remote gateways can be used on the local virtual network. If the flag is set to true, and allow-GatewayTransit on the remote peering is also true, virtual network will use gateways of remote virtual network for transit. Only one peering can have this flag set to true. This flag cannot be set if virtual network already has a gateway. Defaults to false.

The following attributes are exported:

• id - The Virtual Network Peering resource ID.

### » Note

Virtual Network peerings cannot be created, updated or deleted concurrently.

### » Import

Virtual Network Peerings can be imported using the resource id, e.g.

terraform import azurerm\_virtual\_network\_peering.testPeering /subscriptions/00000000-0000-00

# » azurerm\_policy\_assignment

Configured the specified Policy Definition at the specified Scope.

```
"not": {
        "field": "location",
        "in": "[parameters('allowedLocations')]"
      }
    },
    "then": {
      "effect": "audit"
    }
POLICY_RULE
  parameters = <<PARAMETERS</pre>
    "allowedLocations": {
      "type": "Array",
      "metadata": {
        "description": "The list of allowed locations for resources.",
        "displayName": "Allowed locations",
        "strongType": "location"
    }
  }
PARAMETERS
resource "azurerm_resource_group" "test" {
  name = "test-resources"
  location = "West Europe"
}
resource "azurerm_policy_assignment" "test" {
                       = "example-policy-assignment"
  name
                       = "${azurerm_resource_group.test.id}"
  scope
  policy_definition_id = "${azurerm_policy_definition.test.id}"
                       = "Policy Assignment created via an Acceptance Test"
  description
                       = "Acceptance Test Run %d"
  display_name
  parameters = <<PARAMETERS</pre>
{
  "allowedLocations": {
    "value": [ "West Europe" ]
  }
}
PARAMETERS
}
```

The following arguments are supported:

- name (Required) The name of the Policy Assignment. Changing this forces a new resource to be created.
- scope- (Required) The Scope at which the Policy Assignment should be applied. This can either be the Subscription (e.g. /subscriptions/00000000-0000-0000-0000000000) or a Resource Group (e.g./subscriptions/00000000-0000-0000-000000000000/resourceGroups/myResourceGroup Changing this forces a new resource to be created.
- policy\_definition\_id (Required) The ID of the Policy Definition to be applied at the specified Scope.
- description (Optional) A description to use for this Policy Assignment. Changing this forces a new resource to be created.
- display\_name (Optional) A friendly display name to use for this Policy Assignment. Changing this forces a new resource to be created.
- parameters (Optional) Parameters for the policy definition. This field is a JSON object that maps to the Parameters field from the Policy Definition. Changing this forces a new resource to be created.

**NOTE:** This value is required when the specified Policy Definition contains the parameters field.

#### » Attributes Reference

The following attributes are exported:

• id - The Policy Assignment id.

## » Import

Policy Assignments can be imported using the policy name, e.g.

# » azurerm\_policy\_definition

Manages a policy for all of the resource groups under the subscription.

## » Example Usage

```
resource "azurerm_policy_definition" "policy" {
               = "accTestPolicy"
 policy_type = "BuiltIn"
               = "Indexed"
 display_name = "acceptance test policy definition"
 policy_rule = <<POLICY_RULE</pre>
    "if": {
      "not": {
        "field": "location",
        "in": "[parameters('allowedLocations')]"
      }
    },
    "then": {
      "effect": "audit"
 }
POLICY RULE
 parameters = <<PARAMETERS
    "allowedLocations": {
      "type": "Array",
      "metadata": {
        "description": "The list of allowed locations for resources.",
        "displayName": "Allowed locations",
        "strongType": "location"
      }
    }
 }
PARAMETERS
}
```

## » Argument Reference

The following arguments are supported:

- name (Required) The name of the policy definition. Changing this forces a new resource to be created.
- policy\_type (Required) The policy type. The value can be "BuiltIn", "Custom" or "NotSpecified". Changing this forces a new resource to be created.

- mode (Required) The policy mode that allows you to specify which resource types will be evaluated. The value can be "All", "Indexed" or "NotSpecified". Changing this resource forces a new resource to be created.
- display\_name (Required) The display name of the policy definition.
- description (Optional) The description of the policy definition.
- policy\_rule (Optional) The policy rule for the policy definition. This is a json object representing the rule that contains an if and a then block.
- metadata (Optional) The metadata for the policy definition. This is a json object representing the rule that contains an if and a then block.
- parameters (Optional) Parameters for the policy definition. This field is a json object that allows you to parameterize your policy definition.

#### » Attributes Reference

The following attributes are exported:

• id - The policy definition id.

#### » Import

Policy Definitions can be imported using the policy name, e.g.

terraform import azurerm\_policy\_definition.testPolicy /subscriptions/<SUBSCRIPTION\_ID>/prov

# $\ \ \, \text{ azurerm\_log\_analytics\_solution}$

Manages a Log Analytics (formally Operational Insights) Solution.

```
}
 byte_length = 8
resource "azurerm_log_analytics_workspace" "test" {
                      = "k8s-workspace-${random_id.workspace.hex}"
                      = "${azurerm_resource_group.test.location}"
  location
 resource group name = "${azurerm resource group.test.name}"
  sku
                      = "Free"
}
resource "azurerm_log_analytics_solution" "test" {
                       = "Containers"
  solution name
 location
                        = "${azurerm_resource_group.test.location}"
  resource group name = "${azurerm resource group.test.name}"
 workspace_resource_id = "${azurerm_log_analytics_workspace.test.id}"
                        = "${azurerm_log_analytics_workspace.test.name}"
  workspace_name
 plan {
    publisher = "Microsoft"
              = "OMSGallery/Containers"
}
```

The following arguments are supported:

- solution\_name (Required) Specifies the name of the solution to be deployed. See here for options. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the Log Analytics solution is created. Changing this forces a new resource to be created. Note: The solution and it's related workspace can only exist in the same resource group.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- workspace\_resource\_id (Required) The full resource ID of the Log Analytics workspace with which the solution will be linked. Changing this forces a new resource to be created.
- workspace\_resource\_name (Required) The full name of the Log Analytics workspace with which the solution will be linked. Changing this forces

a new resource to be created.

• plan - A plan block as documented below.

A plan block includes:

- publisher (Required) The publisher of the solution. For example Microsoft. Changing this forces a new resource to be created.
- product (Required) The product name of the solution. For example OMSGallery/Containers. Changing this forces a new resource to be created.
- promotion\_code (Optional) A promotion code to be used with the solution.

#### » Import

Log Analytics Solutions can be imported using the resource id, e.g.

## » azurerm\_log\_analytics\_workspace

Manages a Log Analytics (formally Operational Insights) Workspace.

The following arguments are supported:

- name (Required) Specifies the name of the Log Analytics Workspace. Workspace name should include 4-63 letters, digits or '-'. The '-' shouldn't be the first or the last symbol. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which the Log Analytics workspace is created. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Required) Specifies the Sku of the Log Analytics Workspace. Possible values are Free, PerNode, Premium, Standard, Standalone and Unlimited.
- retention\_in\_days (Optional) The workspace data retention in days. Possible values range between 30 and 730.
- tags (Optional) A mapping of tags to assign to the resource.

#### » Attributes Reference

The following attributes are exported:

- id The Log Analytics Workspace ID.
- primary\_shared\_key The Primary shared key for the Log Analytics Workspace.
- secondary\_shared\_key The Secondary shared key for the Log Analytics Workspace.
- workspace\_id The Workspace (or Customer) ID for the Log Analytics Workspace.
- portal\_url The Portal URL for the Log Analytics Workspace.

## » Import

Log Analytics Workspaces can be imported using the resource id, e.g.

terraform import azurerm\_log\_analytics\_workspace.workspace1 /subscriptions/00000000-0000-000

## » azurerm\_recovery\_services\_vault

Create an Recovery Services Vault.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Recovery Services Vault. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Recovery Services Vault. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.
- sku (Required) Sets the vault's SKU. Possible values include: Standard, RSO.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the Recovery Services Vault.

## » Import

Recovery Services Vaults can be imported using the resource id, e.g.

## » azurerm redis cache

Manages a Redis Cache.

## » Example Usage (Basic)

```
resource "azurerm_resource_group" "test" {
          = "redis-resources"
  location = "West US"
# NOTE: the Name used for Redis needs to be globally unique
resource "azurerm_redis_cache" "test" {
 name
                     = "tf-redis-basic"
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 capacity
                     = 0
                     = "C"
 family
                     = "Basic"
 sku_name
  enable_non_ssl_port = false
}
```

## » Example Usage (Standard)

```
resource "azurerm_resource_group" "test" {
          = "redis-resources"
  location = "West US"
}
# NOTE: the Name used for Redis needs to be globally unique
resource "azurerm_redis_cache" "test" {
                      = "tf-redis-standard"
 name
 location
                      = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  capacity
                     = 2
                     = "C"
 family
                     = "Standard"
  sku_name
```

```
enable_non_ssl_port = false
» Example Usage (Premium with Clustering)
resource "azurerm_resource_group" "test" {
         = "redis-resources"
 location = "West US"
}
# NOTE: the Name used for Redis needs to be globally unique
resource "azurerm_redis_cache" "test" {
                    = "tf-redis-premium"
 name
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 capacity
                   = 1
                    = "P"
 family
                   = "Premium"
 sku_name
  enable_non_ssl_port = false
  shard_count
 redis_configuration {
   maxmemory_reserved = 2
   maxmemory_delta
   maxmemory_policy = "allkeys-lru"
}
» Example Usage (Premium with Backup)
resource "azurerm_resource_group" "test" {
          = "redis-resources"
 location = "West US"
resource "azurerm_storage_account" "test" {
                         = "redissa"
                        = "${azurerm_resource_group.test.name}"
 resource_group_name
 location
                         = "${azurerm resource group.test.location}"
 account_tier
                         = "Standard"
 account_replication_type = "GRS"
}
# NOTE: the Name used for Redis needs to be globally unique
```

```
resource "azurerm_redis_cache" "test" {
                      = "tf-redis-pbkup"
 name
  location
                      = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  capacity
                      = "P"
  family
                      = "Premium"
  sku_name
  enable_non_ssl_port = false
 redis_configuration {
   rdb_backup_enabled
                                  = true
   rdb_backup_frequency
    rdb_backup_max_snapshot_count = 1
    rdb_storage_connection_string = "DefaultEndpointsProtocol=https;BlobEndpoint=${azurerm_:
}
```

The following arguments are supported:

- name (Required) The name of the Redis instance. Changing this forces a new resource to be created.
- location (Required) The location of the resource group.
- resource\_group\_name (Required) The name of the resource group in which to create the Redis instance.
- capacity (Required) The size of the Redis cache to deploy. Valid values for a SKU family of C (Basic/Standard) are 0, 1, 2, 3, 4, 5, 6, and for P (Premium) family are 1, 2, 3, 4.
- family (Required) The SKU family to use. Valid values are  $\tt C$  and  $\tt P$ , where  $\tt C = Basic/Standard, P = Premium.$

The pricing group for the Redis Family - either "C" or "P" at present.

- sku\_name (Required) The SKU of Redis to use can be either Basic, Standard or Premium.
- enable\_non\_ssl\_port (Optional) Enable the non-SSL port (6789) disabled by default.
- patch\_schedule (Optional) A list of patch\_schedule blocks as defined below only available for Premium SKU's.
- private\_static\_ip\_address (Optional) The Static IP Address to assign to the Redis Cache when hosted inside the Virtual Network. Changing this forces a new resource to be created.

- redis\_configuration (Required) A redis\_configuration as defined below with some limitations by SKU defaults/details are shown below.
- shard\_count (Optional) Only available when using the Premium SKU The number of Shards to create on the Redis Cluster.
- subnet\_id (Optional) The ID of the Subnet within which the Redis Cache should be deployed. Changing this forces a new resource to be created.
- redis\_configuration supports the following:
- maxmemory\_reserved (Optional) Value in megabytes reserved for non-cache usage e.g. failover. Defaults are shown below.
- maxmemory\_delta (Optional) The max-memory delta for this Redis instance. Defaults are shown below.
- maxmemory\_policy (Optional) How Redis will select what to remove when maxmemory is reached. Defaults are shown below.
- rdb\_backup\_enabled (Optional) Is Backup Enabled? Only supported on Premium SKU's.
- rdb\_backup\_frequency (Optional) The Backup Frequency in Minutes. Only supported on Premium SKU's. Possible values are: 15, 30, 60, 360, 720 and 1440.
- rdb\_backup\_max\_snapshot\_count (Optional) The maximum number of snapshots to create as a backup. Only supported for Premium SKU's.
- rdb\_storage\_connection\_string (Optional) The Connection String to the Storage Account. Only supported for Premium SKU's. In the format:

  DefaultEndpointsProtocol=https;BlobEndpoint=\${azurerm\_storage\_account.test.primary\_blob}

**NOTE:** There's a bug in the Redis API where the original storage connection string isn't being returned, which is being tracked in this issue. In the interim you can use the <code>ignore\_changes</code> attribute to ignore changes to this field e.g.:

```
resource "azurerm_redis_cache" "test" {
    # ...
    ignore_changes = ["redis_configuration.0.rdb_storage_connection_string"]
}
```

• notify\_keyspace\_events - (Optional) Keyspace notifications allows clients to subscribe to Pub/Sub channels in order to receive events affecting the Redis data set in some way. Reference

```
redis_configuration {
  maxmemory_reserve = 10
  maxmemory_delta = 2
```

```
maxmemory_policy = "allkeys-lru"
}
```

## » Default Redis Configuration Values

Redis Value	Basic	Standard	Premium
maxmemory_reserved	2	50	200
$maxmemory\_delta$	2	50	200
$maxmemory\_policy$	volatile-lru	volatile-lru	volatile-lru

Important: The maxmemory\_reserved and maxmemory\_delta settings are only available for Standard and Premium caches. More details are available in the Relevant Links section below.

- patch\_schedule supports the following:
- day\_of\_week (Required) the Weekday name possible values include Monday, Tuesday, Wednesday etc.
- start\_hour\_utc (Optional) the Start Hour for maintenance in UTC possible values range from 0 23.

Note: The Patch Window lasts for 5 hours from the start\_hour\_utc.

## » Attributes Reference

The following attributes are exported:

- id The Route ID.
- hostname The Hostname of the Redis Instance
- ssl\_port The SSL Port of the Redis Instance
- port The non-SSL Port of the Redis Instance
- primary\_access\_key The Primary Access Key for the Redis Instance
- secondary\_access\_key The Secondary Access Key for the Redis Instance
- redis\_configuration A redis\_configuration block as defined below:

A redis\_configuration block exports the following:

• maxclients - Returns the max number of connected clients at the same time.

#### » Relevant Links

- Azure Redis Cache: SKU specific configuration limitations
- Redis: Available Configuration Settings

## » Import

Redis Cache's can be imported using the resource id, e.g.

## » azurerm\_redis\_firewall\_rule

Manages a Firewall Rule associated with a Premium Redis Cache.

 ${f Note:}$  Redis Firewall Rules can only be assigned to a Redis Cache with a Premium SKU.

```
resource "random_id" "server" {
 keepers = {
    azi_id = 1
 byte_length = 8
resource "azurerm_resource_group" "test" {
          = "redis-resourcegroup"
 location = "West Europe"
}
resource "azurerm_redis_cache" "test" {
                      = "redis${random_id.server.hex}"
 name
                      = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 capacity
                      = 1
                      = "P"
 family
  sku_name
                      = "Premium"
  enable_non_ssl_port = false
 redis_configuration {
```

```
maxclients = 256
maxmemory_reserved = 2
maxmemory_delta = 2
maxmemory_policy = "allkeys-lru"
}

resource "azurerm_redis_firewall_rule" "test" {
name = "someIPrange"
redis_cache_name = "${azurerm_redis_cache.test.name}"
resource_group_name = "${azurerm_resource_group.test.name}"
start_ip = "1.2.3.4"
end_ip = "2.3.4.5"
}
```

The following arguments are supported:

- name (Required) The name of the Firewall Rule. Changing this forces a new resource to be created.
- redis\_cache\_name (Required) The name of the Redis Cache. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which this Redis Cache exists.
- start\_ip (Required) The lowest IP address included in the range
- end\_ip (Required) The highest IP address included in the range.

#### » Attributes Reference

The following attributes are exported:

• id - The Redis Firewall Rule ID.

### » Import

Redis Firewall Rules can be imported using the resource id, e.g.

## » azurerm search service

Allows you to manage an Azure Search Service

#### » Example Usage

```
resource "azurerm_resource_group" "test" {
           = "acceptanceTestResourceGroup1"
  location = "West US"
}
resource "azurerm search service" "test" {
                      = "acceptanceTestSearchService1"
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "${azurerm_resource_group.test.location}"
 location
  sku
                      = "standard"
 tags {
    environment = "staging"
               = "test"
    database
}
```

#### » Argument Reference

The following arguments are supported:

- name (Required) The name of the Search Service. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Search Service. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Required) Valid values are free and standard. standard2 and standard3 are also valid, but can only be used when it's enabled on the backend by Microsoft support. free provisions the service in shared clusters. standard provisions the service in dedicated clusters. Changing this forces a new resource to be created.
- replica\_count (Optional) Default is 1. Valid values include 1 through 12. Valid only when sku is standard. Changing this forces a new resource to be created.

- partition\_count (Optional) Default is 1. Valid values include 1, 2, 3, 4, 6, or 12. Valid only when sku is standard. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource. Changing this forces a new resource to be created.

#### » Attributes Reference

The following attributes are exported:

• id - The Search Service ID.

### » Import

Search Services can be imported using the resource id, e.g.

terraform import azurerm\_search\_service.service1 /subscriptions/00000000-0000-0000-0000-0000

# » azurerm\_scheduler\_job\_collection

Create an Scheduler Job Collection.

```
resource "azurerm_resource_group" "rg" {
         = "tfex-job collection"
 location = "West US"
resource "azurerm_scheduler_job_collection" "jobs" {
                       = "example_job_collection"
   name
   location
                       = "${azurerm_resource_group.rg.location}"
   resource_group_name = "${azurerm_resource_group.rg.name}"
    sku
                       = "free"
                       = "enabled"
    state
    quota {
       max_job_count
       max_recurrence_interval = 24
       max_recurrence_frequency = "hour"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the Scheduler Job Collection. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the Scheduler Job Collection. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.
- sku (Required) Sets the Job Collection's pricing level's SKU. Possible values include: Standard, Free, P10Premium, P20Premium.
- state (Optional) Sets Job Collection's state. Possible values include: Enabled, Disabled, Suspended.
- quota (Optional) Configures the Job collection quotas as documented in the quota block below.

The quota block supports:

- max\_job\_count (Optional) Sets the maximum number of jobs in the collection.
- max\_recurrence\_frequency (Required) The maximum frequency of recurrence. Possible values include: Minute, Hour, Day, Week, Month
- max\_recurrence\_interval (Optional) The maximum interval between recurrence.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the Scheduler Job Collection.

## » Import

Scheduler Job Collections can be imported using the resource id, e.g.

terraform import azurerm\_scheduler\_job\_collection.jobcollection1 /subscriptions/00000000-000

## » azurerm\_storage\_account

Create an Azure Storage Account.

## » Example Usage

### » Example Usage with Network Rules

```
resource "azurerm_resource_group" "testrg" {
 name = "resourceGroupName"
 location = "westus"
}
resource "azurerm virtual network" "test" {
   name = "virtnetname"
   address_space = ["10.0.0.0/16"]
   location = "${azurerm_resource_group.testrg.location}"
   resource_group_name = "${azurerm_resource_group.testrg.name}"
}
resource "azurerm_subnet" "test" {
                        = "subnetname"
   resource_group_name = "${azurerm_resource_group.testrg.name}"
   virtual_network_name = "${azurerm_virtual_network.test.name}"
   address_prefix = "10.0.2.0/24"
   service_endpoints = ["Microsoft.Sql","Microsoft.Storage"]
 }
```

```
resource "azurerm_storage_account" "testsa" {
    name = "storageaccountname"
    resource_group_name = "${azurerm_resource_group.testrg.name}"

location = "${azurerm_resource_group.testrg.location}"
    account_tier = "Standard"
    account_replication_type = "LRS"

network_rules {
    ip_rules = ["127.0.0.1"]
    virtual_network_subnet_ids = ["${azurerm_subnet.test.id}"]
}

tags {
    environment = "staging"
}
```

The following arguments are supported:

- name (Required) Specifies the name of the storage account. Changing this forces a new resource to be created. This must be unique across the entire Azure service, not just within the resource group.
- resource\_group\_name (Required) The name of the resource group in which to create the storage account. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- account\_kind (Optional) Defines the Kind of account. Valid options are Storage, StorageV2 and BlobStorage. Changing this forces a new resource to be created. Defaults to Storage.
- account\_tier (Required) Defines the Tier to use for this storage account.
   Valid options are Standard and Premium. Changing this forces a new resource to be created
- account\_replication\_type (Required) Defines the type of replication to use for this storage account. Valid options are LRS, GRS, RAGRS and ZRS.
- access\_tier (Optional) Defines the access tier for BlobStorage and StorageV2 accounts. Valid options are Hot and Cool, defaults to Hot.

- enable\_blob\_encryption (Optional) Boolean flag which controls if Encryption Services are enabled for Blob storage, see here for more information. Defaults to true.
- enable\_file\_encryption (Optional) Boolean flag which controls if Encryption Services are enabled for File storage, see here for more information. Defaults to true.
- enable\_https\_traffic\_only (Optional) Boolean flag which forces HTTPS if enabled, see here for more information.
- account\_encryption\_source (Optional) The Encryption Source for this Storage Account. Possible values are Microsoft.Keyvault and Microsoft.Storage. Defaults to Microsoft.Storage.
- custom\_domain (Optional) A custom\_domain block as documented below.
- network\_rules (Optional) A network\_rules block as documented below.
- tags (Optional) A mapping of tags to assign to the resource.
- identity (Optional) A Managed Service Identity block as defined below.
  - custom\_domain supports the following:
- name (Optional) The Custom Domain Name to use for the Storage Account, which will be validated by Azure.
- use\_subdomain (Optional) Should the Custom Domain Name be validated by using indirect CNAME validation?
- network rules supports the following:
- bypass (Optional) Specifies whether traffic is bypassed for Logging/Metrics/AzureServices. Valid options are any combination of Logging, Metrics, AzureServices, or None.
- ip\_rules (Optional) List of IP or IP ranges in CIDR Format. Only IPV4 addresses are allowed.
- virtual\_network\_subnet\_ids (Optional) A list of resource ids for subnets.

Note: 1	More	informa	ation on	Validation	is available h	ere
		_				
identit	ty sur	ports t	he follo	wing:		

• type - (Required) Specifies the identity type of the Storage Account. At this time the only allowed value is SystemAssigned.

The assigned principal\_id and tenant\_id can be retrieved after the identity type has been set to SystemAssigned and Storage Account has been created. More details are available below.

#### » Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- id The storage account Resource ID.
- primary\_location The primary location of the storage account.
- secondary\_location The secondary location of the storage account.
- primary\_blob\_endpoint The endpoint URL for blob storage in the primary location.
- secondary\_blob\_endpoint The endpoint URL for blob storage in the secondary location.
- primary\_queue\_endpoint The endpoint URL for queue storage in the primary location.
- secondary\_queue\_endpoint The endpoint URL for queue storage in the secondary location.
- primary\_table\_endpoint The endpoint URL for table storage in the primary location.
- secondary\_table\_endpoint The endpoint URL for table storage in the secondary location.
- primary file endpoint The endpoint URL for file storage in the primary location.
- primary access key The primary access key for the storage account
- secondary\_access\_key The secondary access key for the storage account
- primary\_connection\_string The connection string associated with the primary location
- secondary\_connection\_string The connection string associated with the secondary location
- primary\_blob\_connection\_string The connection string associated with the primary blob location
- secondary\_blob\_connection\_string The connection string associated with the secondary blob location
- identity An identity block as defined below, which contains the Identity information for this Storage Account.

identity exports tl	L _ f _ 11i	
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- principal\_id The Principal ID for the Service Principal associated with the Identity of this Storage Account.
- tenant\_id The Tenant ID for the Service Principal associated with the Identity of this Storage Account.

You can access the Principal ID via \${azurerm\_storage\_account.test.identity.0.principal\_id} and the Tenant ID via \${azurerm\_storage\_account.test.identity.0.tenant\_id}

#### » Import

Storage Accounts can be imported using the resource id, e.g.

terraform import azurerm\_storage\_account.storageAcc1 /subscriptions/00000000-0000-0000-0000-

## » azurerm\_storage\_container

Create an Azure Storage Container.

```
resource "azurerm_resource_group" "test" {
          = "acctestrg"
  location = "westus"
resource "azurerm_storage_account" "test" {
                          = "accteststorageaccount"
 resource_group_name = "${azurerm_resource_group.test.name}"
                          = "westus"
 location
 account_tier
                          = "Standard"
 account_replication_type = "LRS"
  tags {
    environment = "staging"
  }
resource "azurerm_storage_container" "test" {
                       = "vhds"
 resource_group_name = "${azurerm_resource_group.test.name}"
  storage_account_name = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}
```

The following arguments are supported:

- name (Required) The name of the storage container. Must be unique within the storage service the container is located.
- resource\_group\_name (Required) The name of the resource group in which to create the storage container. Changing this forces a new resource to be created.
- storage\_account\_name (Required) Specifies the storage account in which to create the storage container. Changing this forces a new resource to be created.
- container\_access\_type (Optional) The 'interface' for access the container provides. Can be either blob, container or private. Defaults to private. Changing this forces a new resource to be created.

#### » Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- id The storage container Resource ID.
- properties Key-value definition of additional properties associated to the storage container

# » azurerm\_storage\_blob

Create an Azure Storage Blob.

```
resource "azurerm_storage_container" "test" {
                        = "vhds"
 name
                       = "${azurerm_resource_group.test.name}"
 resource_group_name
  storage_account_name = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}
resource "azurerm storage blob" "testsb" {
 name = "sample.vhd"
                         = "${azurerm_resource_group.test.name}"
 resource_group_name
  storage_account_name
                         = "${azurerm_storage_account.test.name}"
  storage container name = "${azurerm storage container.test.name}"
  type = "page"
  size = 5120
}
```

The following arguments are supported:

- name (Required) The name of the storage blob. Must be unique within the storage container the blob is located.
- resource\_group\_name (Required) The name of the resource group in which to create the storage container. Changing this forces a new resource to be created.
- storage\_account\_name (Required) Specifies the storage account in which to create the storage container. Changing this forces a new resource to be created.
- storage\_container\_name (Required) The name of the storage container in which this blob should be created.
- type (Optional) The type of the storage blob to be created. One of either block or page. When not copying from an existing blob, this becomes required.
- size (Optional) Used only for page blobs to specify the size in bytes of the blob to be created. Must be a multiple of 512. Defaults to 0.
- content\_type (Optional) The content type of the storage blob. Cannot be defined if source\_uri is defined. Defaults to application/octet-stream.
- source (Optional) An absolute path to a file on the local system. Cannot be defined if source\_uri is defined.

- source\_uri (Optional) The URI of an existing blob, or a file in the Azure File service, to use as the source contents for the blob to be created. Changing this forces a new resource to be created. Cannot be defined if source is defined.
- parallelism (Optional) The number of workers per CPU core to run for concurrent uploads. Defaults to 8.
- attempts (Optional) The number of attempts to make per page or block when uploading. Defaults to 1.

#### » Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- id The storage blob Resource ID.
- url The URL of the blob

## » azurerm\_storage\_queue

Create an Azure Storage Queue.

```
resource "azurerm_resource_group" "test" {
          = "acctestrg-%d"
  location = "westus"
}
resource "azurerm_storage_account" "test" {
                          = "acctestacc%s"
 resource_group_name
                           = "${azurerm_resource_group.test.name}"
 location
                           = "westus"
                           = "Standard"
 account_tier
  account_replication_type = "LRS"
}
resource "azurerm_storage_queue" "test" {
                       = "mysamplequeue"
 resource_group_name = "${azurerm_resource_group.test.name}"
  storage_account_name = "${azurerm_storage_account.test.name}"
}
```

The following arguments are supported:

- name (Required) The name of the storage queue. Must be unique within the storage account the queue is located.
- resource\_group\_name (Required) The name of the resource group in which to create the storage queue. Changing this forces a new resource to be created.
- storage\_account\_name (Required) Specifies the storage account in which to create the storage queue. Changing this forces a new resource to be created.

## » Attributes Reference

The following attributes are exported in addition to the arguments listed above:

• id - The storage queue Resource ID.

## » azurerm\_storage\_share

Create an Azure Storage File Share.

```
resource "azurerm_resource_group" "test" {
         = "azuretest"
  location = "westus"
}
resource "azurerm_storage_account" "test" {
                          = "azureteststorage"
 resource_group_name
                          = "${azurerm_resource_group.test.name}"
                          = "westus"
 location
                          = "Standard"
 account_tier
  account_replication_type = "LRS"
resource "azurerm_storage_share" "testshare" {
 name = "sharename"
 resource group name = "${azurerm resource group.test.name}"
```

```
storage_account_name = "${azurerm_storage_account.test.name}"
quota = 50
}
```

The following arguments are supported:

- name (Required) The name of the share. Must be unique within the storage account where the share is located.
- resource\_group\_name (Required) The name of the resource group in which to create the share. Changing this forces a new resource to be created.
- storage\_account\_name (Required) Specifies the storage account in which to create the share. Changing this forces a new resource to be created.
- quota (Optional) The maximum size of the share, in gigabytes. Must be greater than 0, and less than or equal to 5 TB (5120 GB). Default this is set to 0 which results in setting the quota to 5 TB.

#### » Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- id The storage share Resource ID.
- url The URL of the share

# $\Rightarrow$ azurerm\_storage\_table

Create an Azure Storage Table.

The following arguments are supported:

- name (Required) The name of the storage table. Must be unique within the storage account the table is located.
- resource\_group\_name (Required) The name of the resource group in which to create the storage table. Changing this forces a new resource to be created.
- storage\_account\_name (Required) Specifies the storage account in which to create the storage table. Changing this forces a new resource to be created.

#### » Attributes Reference

The following attributes are exported in addition to the arguments listed above:

• id - The storage table Resource ID.

# » azurerm\_template\_deployment

Create a template deployment of resources

Note on ARM Template Deployments: Due to the way the underlying Azure API is designed, Terraform can only manage the deployment of the ARM Template - and not any resources which are created by it. This means that when deleting the azurerm\_template\_deployment resource, Terraform will only remove the reference to the deployment, whilst leaving any resources created by that ARM Template Deployment. One workaround for this is to use a unique Resource Group for each ARM Template Deployment, which means deleting the

Resource Group would contain any resources created within it - however this isn't ideal. More information.

#### » Example Usage

**Note:** This example uses Storage Accounts and Public IP's which are natively supported by Terraform - we'd highly recommend using the Native Resources where possible instead rather than an ARM Template, for the reasons outlined above.

```
resource "azurerm_resource_group" "test" {
          = "acctestrg-01"
  location = "West US"
}
resource "azurerm_template_deployment" "test" {
                      = "acctesttemplate-01"
 resource_group_name = "${azurerm_resource_group.test.name}"
  template_body = <<DEPLOY
  "$schema": "https://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json
  "contentVersion": "1.0.0.0",
  "parameters": {
    "storageAccountType": {
      "type": "string",
      "defaultValue": "Standard LRS",
      "allowedValues": [
        "Standard_LRS",
        "Standard GRS",
        "Standard_ZRS"
     ],
      "metadata": {
        "description": "Storage Account type"
 },
  "variables": {
    "location": "[resourceGroup().location]",
    "storageAccountName": "[concat(uniquestring(resourceGroup().id), 'storage')]",
    "publicIPAddressName": "[concat('myPublicIp', uniquestring(resourceGroup().id))]",
    "publicIPAddressType": "Dynamic",
    "apiVersion": "2015-06-15",
    "dnsLabelPrefix": "terraform-acctest"
 },
```

```
"resources": [
    {
      "type": "Microsoft.Storage/storageAccounts",
      "name": "[variables('storageAccountName')]",
      "apiVersion": "[variables('apiVersion')]",
      "location": "[variables('location')]",
      "properties": {
        "accountType": "[parameters('storageAccountType')]"
    },
    {
      "type": "Microsoft.Network/publicIPAddresses",
      "apiVersion": "[variables('apiVersion')]",
      "name": "[variables('publicIPAddressName')]",
      "location": "[variables('location')]",
      "properties": {
        "publicIPAllocationMethod": "[variables('publicIPAddressType')]",
        "dnsSettings": {
          "domainNameLabel": "[variables('dnsLabelPrefix')]"
     }
    }
 ],
  "outputs": {
    "storageAccountName": {
      "type": "string",
      "value": "[variables('storageAccountName')]"
   }
 }
}
DEPLOY
  # these key-value pairs are passed into the ARM Template's `parameters` block
 parameters {
    "storageAccountType" = "Standard_GRS"
  deployment_mode = "Incremental"
output "storageAccountName" {
 value = "${azurerm_template_deployment.test.outputs["storageAccountName"]}"
```

The following arguments are supported:

- name (Required) Specifies the name of the template deployment. Changing this forces a new resource to be created.
- resource\_group\_name (Required) The name of the resource group in which to create the template deployment.
- deployment\_mode (Required) Specifies the mode that is used to deploy resources. This value could be either Incremental or Complete. Note that you will almost *always* want this to be set to Incremental otherwise the deployment will destroy all infrastructure not specified within the template, and Terraform will not be aware of this.
- template\_body (Optional) Specifies the JSON definition for the template.

**Note:** There's an file interpolation function available which allows you to read this from an external file, which helps makes this more resource more readable.

- parameters (Optional) Specifies the name and value pairs that define the deployment parameters for the template.
- parameters\_body (Optional) Specifies a valid Azure JSON parameters file that define the deployment parameters. It can contain KeyVault references

**Note:** There's an **file** interpolation function available which allows you to read this from an external file, which helps makes this more resource more readable.

#### » Attributes Reference

The following attributes are exported:

- id The Template Deployment ID.
- outputs A map of supported scalar output types returned from the deployment (currently, Azure Template Deployment outputs of type String, Int and Bool are supported, and are converted to strings others will be ignored) and can be accessed using .outputs["name"].

#### » Note

Terraform does not know about the individual resources created by Azure using a deployment template and therefore cannot delete these resources during a destroy. Destroying a template deployment removes the associated deployment operations, but will not delete the Azure resources created by the deployment.

In order to delete these resources, the containing resource group must also be destroyed. More information.