» Data Source: azurestack 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.

» Attributes Reference

- 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_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: azurestack_network_security_group

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

» Example Usage

» Argument Reference

- 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.
- 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: azurestack_public_ip

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

» Example Usage (reference an existing)

» Example Usage (Retrieve the Dynamic Public IP of a new VM)

```
resource "azurestack_virtual_network" "test" {
                     = "test-network"
                     = ["10.0.0.0/16"]
  address_space
                    = "${azurestack_resource_group.test.location}"
 location
  resource_group_name = "${azurestack_resource_group.test.name}"
}
resource "azurestack_subnet" "test" {
                      = "acctsub"
 resource_group_name = "${azurestack_resource_group.test.name}"
 virtual_network_name = "${azurestack_virtual_network.test.name}"
                   = "10.0.2.0/24"
  address_prefix
}
resource "azurestack_public_ip" "test" {
 location
                              = "${azurestack_resource_group.test.location}"
                              = "${azurestack_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "Dynamic"
  idle_timeout_in_minutes
  tags = {
    environment = "test"
}
resource "azurestack_network_interface" "test" {
                     = "test-nic"
 name
                     = "${azurestack_resource_group.test.location}"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
  ip_configuration {
   name
                                 = "testconfiguration1"
    subnet_id
                                 = "${azurestack_subnet.test.id}"
    private_ip_address_allocation = "static"
                                 = "10.0.2.5"
   private_ip_address
   public_ip_address_id
                                 = "${azurestack_public_ip.test.id}"
 }
}
resource "azurestack_virtual_machine" "test" {
                       = "test-vm"
 name
                       = "${azurestack_resource_group.test.location}"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
 network_interface_ids = ["${azurestack_network_interface.test.id}"]
```

» Argument Reference

- 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: azurestack_resource_group

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

» Example Usage

```
data "azurestack_resource_group" "test" {
   name = "dsrg_test"
}

resource "azurestack_managed_disk" "test" {
   name = "managed_disk_name"
```

» Argument Reference

• 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: azurestack_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.

» Attributes Reference

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: azurestack_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.

» Attributes Reference

- id The ID of the Storage Account.
- location The Azure location where the Storage Account exists
- account_kind (Optional) Defines the Kind of account. Valid option is Storage.
 Changing this forces a new resource to be created. Defaults to Storage currently as per Azure Stack Storage Differences
- account_tier Defines the Tier of this storage account.
- account_replication_type Defines the type of replication used for this storage account.
- access_tier (Required for BlobStorage accounts) Defines the access tier for BlobStorage accounts. Valid options are Hot and Cold, defaults to Hot. - Currently Not Supported on Azure Stack
- 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: azurestack_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: azurestack_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.

» Data Source: azurestack_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.
- 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.

» azurestack_resource_group

Creates a new 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.

» azurestack_availability_set

Manages an availability set for virtual machines.

» Example Usage

» Argument Reference

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.

• 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.

» azurestack_virtual_machine

Manages a virtual machine.

» Example Usage with Unmanaged Disks

```
resource "azurestack_resource_group" "test" {
         = "acctestrg"
  location = "West US"
}
resource "azurestack_virtual_network" "test" {
                    = "acctvn"
 address_space = ["10.0.0.0/16"]
location = "${azurestack_resource_group.test.location}"
 resource_group_name = "${azurestack_resource_group.test.name}"
}
resource "azurestack_subnet" "test" {
                      = "acctsub"
 resource_group_name = "${azurestack_resource_group.test.name}"
 virtual_network_name = "${azurestack_virtual_network.test.name}"
  address_prefix
                     = "10.0.2.0/24"
}
resource "azurestack_network_interface" "test" {
                      = "acctni"
 location
                      = "${azurestack_resource_group.test.location}"
```

```
resource_group_name = "${azurestack_resource_group.test.name}"
  ip_configuration {
                                 = "testconfiguration1"
    name
    subnet id
                                  = "${azurestack_subnet.test.id}"
   private_ip_address_allocation = "dynamic"
}
resource "azurestack_storage_account" "test" {
                          = "accsa"
                          = "${azurestack_resource_group.test.name}"
 resource_group_name
 location
                          = "${azurestack_resource_group.test.location}"
                          = "Standard"
 account tier
  account_replication_type = "LRS"
 tags = {
    environment = "staging"
}
resource "azurestack_storage_container" "test" {
                        = "vhds"
                       = "${azurestack_resource_group.test.name}"
 resource_group_name
 storage_account_name = "${azurestack_storage_account.test.name}"
  container_access_type = "private"
}
resource "azurestack_virtual_machine" "test" {
                        = "acctvm"
 name
 location
                        = "${azurestack_resource_group.test.location}"
 resource_group_name = "${azurestack_resource_group.test.name}"
 network_interface_ids = ["${azurestack_network_interface.test.id}"]
 vm_size
                       = "Standard_F2"
  # 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"
    sku
             = "16.04-LTS"
```

```
version = "latest"
 }
  storage_os_disk {
                 = "myosdisk1"
   name
    vhd_uri
                 = "${azurestack_storage_account.test.primary_blob_endpoint}${azurestack_st
    caching
                 = "ReadWrite"
   create_option = "FromImage"
 # Optional data disks
  storage_data_disk {
   name
                 = "datadisk0"
                 = "${azurestack_storage_account.test.primary_blob_endpoint}${azurestack_st
    vhd_uri
   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"
 }
}
```

» Example Usage with Unmanaged Disks and Public IP

```
environment = "Production"
 }
}
resource "azurestack_virtual_network" "test" {
                     = "acctvn"
                     = ["10.0.0.0/16"]
  address_space
                     = "${azurestack_resource_group.test.location}"
  location
 resource_group_name = "${azurestack_resource_group.test.name}"
}
resource "azurestack_subnet" "test" {
                       = "acctsub"
 name
 resource_group_name = "${azurestack_resource_group.test.name}"
 virtual_network_name = "${azurestack_virtual_network.test.name}"
  address_prefix
                   = "10.0.2.0/24"
}
resource "azurestack_network_interface" "test" {
  name
                     = "acctni"
                      = "${azurestack_resource_group.test.location}"
  location
  resource_group_name = "${azurestack_resource_group.test.name}"
  ip_configuration {
   name
                                  = "testconfiguration1"
    subnet id
                                  = "${azurestack_subnet.test.id}"
    private_ip_address_allocation = "dynamic"
                                  = "${azurestack_public_ip.test.id}"
   public_ip_address_id
 }
}
resource "azurestack_storage_account" "test" {
                           = "accsa"
                          = "${azurestack_resource_group.test.name}"
 resource_group_name
                           = "${azurestack_resource_group.test.location}"
  location
                           = "Standard"
  account_tier
  account_replication_type = "LRS"
  tags = {
    environment = "staging"
}
resource "azurestack_storage_container" "test" {
 name
                        = "vhds"
  resource_group_name = "${azurestack_resource_group.test.name}"
```

```
storage_account_name = "${azurestack_storage_account.test.name}"
  container_access_type = "private"
}
resource "azurestack_virtual_machine" "test" {
                        = "acctvm"
  name
                        = "${azurestack_resource_group.test.location}"
 location
  resource_group_name = "${azurestack_resource_group.test.name}"
 network_interface_ids = ["${azurestack_network_interface.test.id}"]
  vm_size
                        = "Standard_D2_v2"
  # 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
                 = "${azurestack_storage_account.test.primary_blob_endpoint}${azurestack_st
    vhd_uri
                 = "ReadWrite"
   caching
    create_option = "FromImage"
  # Optional data disks
  storage_data_disk {
                 = "datadisk0"
   vhd_uri
                 = "${azurestack_storage_account.test.primary_blob_endpoint}${azurestack_st
   disk_size_gb = "1023"
    create_option = "Empty"
                 = 0
    lun
 }
  os_profile {
    computer_name = "hostname"
    admin_username = "testadmin"
    admin_password = "Password1234!"
  os_profile_linux_config {
    disable_password_authentication = false
  }
```

```
tags = {
    environment = "staging"
}
```

» Argument Reference

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 Stack Region 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.
- 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 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.

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 "azurestack_image" "test" {
    name = "test"
...
}

resource "azurestack_virtual_machine" "test" {
    name = "test"
...

storage_image_reference {
    id = "${azurestack_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 block 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.
- create_option (Required) Specifies how the virtual machine should be created. Possible value isFromImage.
- 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.

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.
- 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.

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 "ManagedIdentityExtensionFor-Linux" must also be added to the virtual machine. The Principal ID can be retrieved after the virtual machine has been created, e.g.

```
resource "azurestack virtual machine" "test" {
  name = "test"
  identity = {
    type = "SystemAssigned"
}
resource "azurestack_virtual_machine_extension" "test" {
                       = "test"
 name
 resource_group_name = "${azurestack_resource_group.test.name}"
                       = "${azurestack_resource_group.test.location}"
 location
 virtual machine name = "${azurestack virtual machine.test.name}"
 publisher
                       = "Microsoft.ManagedIdentity"
                       = "ManagedIdentityExtensionForWindows"
  type handler version = "1.0"
  settings = <<SETTINGS</pre>
    {
        "port": 50342
    }
SETTINGS
}
output "principal_id" {
  value = "${lookup(azurestack_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.

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.

terraform import azurestack_virtual_machine.test /subscriptions/00000000-0000-0000-0000-0000

» azurestack_virtual_machine_extension

Creates a new 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 "azurestack_subnet" "test" {
                      = "acctsub"
 resource_group_name = "${azurestack_resource_group.test.name}"
 virtual_network_name = "${azurestack_virtual_network.test.name}"
  address_prefix
                      = "10.0.2.0/24"
}
resource "azurestack_network_interface" "test" {
                     = "acctni"
                     = "West US"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
 ip_configuration {
                                  = "testconfiguration1"
   name
    subnet_id
                                  = "${azurestack_subnet.test.id}"
   private_ip_address_allocation = "dynamic"
}
resource "azurestack_storage_account" "test" {
                           = "accsa"
 resource_group_name
                          = "${azurestack_resource_group.test.name}"
                           = "westus"
 location
                           = "Standard"
 account_tier
  account_replication_type = "LRS"
  tags = {
    environment = "staging"
 }
}
resource "azurestack_storage_container" "test" {
                        = "vhds"
 resource_group_name = "${azurestack_resource_group.test.name}"
  storage_account_name = "${azurestack_storage_account.test.name}"
  container_access_type = "private"
}
resource "azurestack_virtual_machine" "test" {
                        = "acctvm"
 name
                       = "West US"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
 network_interface_ids = ["${azurestack_network_interface.test.id}"]
                       = "Standard AO"
  vm size
  storage_image_reference {
```

```
publisher = "Canonical"
    offer = "UbuntuServer"
            = "16.04-LTS"
    version = "latest"
  storage_os_disk {
                 = "myosdisk1"
   name
                 = "${azurestack_storage_account.test.primary_blob_endpoint}${azurestack_st
   vhd uri
                = "ReadWrite"
   caching
   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 "azurestack_virtual_machine_extension" "test" {
                      = "hostname"
 name
                      = "West US"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
 virtual_machine_name = "${azurestack_virtual_machine.test.name}"
                      = "Microsoft.Azure.Extensions"
 publisher
                      = "CustomScript"
  type
  type_handler_version = "2.0"
  settings = <<SETTINGS</pre>
    {
        "commandToExecute": "hostname && uptime"
    }
SETTINGS
 tags = {
    environment = "Production"
 }
```

» Argument Reference

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.

terraform import azurestack_virtual_machine_extension.test /subscriptions/00000000-0000-0000

» azurestack_virtual_machine_scale_set

Manages 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 Unmanaged Disks

```
resource "azurestack_storage_account" "test" {
                          = "accsa"
                         = "${azurestack_resource_group.test.name}"
 resource_group_name
                          = "westus"
 location
  account_tier
                          = "Standard"
  account_replication_type = "LRS"
  tags = {
    environment = "staging"
  }
}
resource "azurestack_storage_container" "test" {
                       = "vhds"
 resource_group_name = "${azurestack_resource_group.test.name}"
  storage_account_name = "${azurestack_storage_account.test.name}"
  container_access_type = "private"
}
resource "azurestack_virtual_machine_scale_set" "test" {
                     = "mytestscaleset-1"
                     = "West US"
 location
 resource_group_name = "${azurestack_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"
      path
     key_data = "${file("~/.ssh/demo_key.pub")}"
   }
 }
```

```
network_profile {
             = "TestNetworkProfile"
    name
    primary = true
    ip_configuration {
                 = "TestIPConfiguration"
      subnet_id = "${azurestack_subnet.test.id}"
    }
  }
  storage_profile_os_disk {
                    = "osDiskProfile"
                     = "ReadWrite"
    caching
    create option = "FromImage"
    vhd_containers = ["${azurestack_storage_account.test.primary_blob_endpoint}${azurestack_storage_account.test.primary_blob_endpoint}$
  storage_profile_image_reference {
    publisher = "Canonical"
               = "UbuntuServer"
    offer
               = "16.04-LTS"
    version = "latest"
}
```

» Argument Reference

The following arguments are supported:

- 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.
- 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 docu-

- mented 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_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.
- 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.

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.

```
= "${var.vm_sku}"
  name
           = "Standard"
  tier
  capacity = "${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(azurestack_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 configuration.

- 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.

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 manualUpgrade applied to them. When setting this field os_type needs to be 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.

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 "azurestack_image" "test" {
    name = "test"
    ...
}
```

```
resource "azurestack_virtual_machine_scale_set" "test" {
   name = "test"
...

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

» Attributes Reference

The following attributes are exported:

- id The virtual machine scale set ID.
- boot_diagnostics A boot diagnostics profile block as referenced below.

» Import

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

terraform import azurestack_virtual_machine_scale_set.scaleset1 /subscriptions/00000000-0000

» azurestack_dns_a_record

Enables you to manage DNS A Records within Azure DNS.

```
zone_name = "${azurestack_dns_zone.test.name}"
resource_group_name = "${azurestack_resource_group.test.name}"
ttl = 300
records = ["10.0.180.17"]
```

The following arguments are supported:

- 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.

» azurestack_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.

» azurestack_local_network_gateway

Manages a local network gateway connection over which specific connections can be configured.

» Example Usage

```
resource "azurestack_resource_group" "test" {
           = "localNetworkGWTest"
  location = "West US"
}
resource "azurestack_local_network_gateway" "home" {
                       = "backHome"
  resource_group_name = "${azurestack_resource_group.test.name}"
                      = "${azurestack_resource_group.test.location}"
  location
 gateway_address = "12.13.14.15" address space = ["10.0.0.0/16"]
}
```

» Argument Reference

- 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.

terraform import azurestack_local_network_gateway.lng1 /subscriptions/00000000-0000-0000-0000

» azurestack route

Manages a Route within a Route Table.

```
resource "azurestack_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
 location = "West US"
resource "azurestack_route_table" "test" {
                    = "acceptanceTestRouteTable1"
                     = "${azurestack_resource_group.test.location}"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
}
resource "azurestack_route" "test" {
                    = "acceptanceTestRoute1"
 resource_group_name = "${azurestack_resource_group.test.name}"
 route_table_name = "${azurestack_route_table.test.name}"
 address_prefix = "10.1.0.0/16"
                     = "vnetlocal"
 next_hop_type
}
```

The following arguments are supported:

- 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.

» Attributes Reference

The following attributes are exported:

• id - The Route ID.

» Import

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

» azurestack route table

Manages a Route Table

```
resource "azurestack_resource_group" "test" {
  name = "acceptanceTestResourceGroup1"
```

```
location = "West US"
resource "azurestack_route_table" "test" {
                      = "acceptanceTestSecurityGroup1"
                      = "${azurestack_resource_group.test.location}"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
 disable_bgp_route_propagation = false
 route {
                   = "route1"
   name
   address_prefix = "10.1.0.0/16"
   next hop type = "vnetlocal"
 }
 tags = {
    environment = "Production"
}
```

The following arguments are supported:

- 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, Virtual Appliance 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.

» azurestack_network_interface

Manages a Network Interface located in a Virtual Network, usually attached to a Virtual Machine.

```
resource "azurestack resource group" "test" {
 name = "acceptanceTestResourceGroup1"
 location = "West US"
}
resource "azurestack_virtual_network" "test" {
                   = "acceptanceTestVirtualNetwork1"
 address_space
                    = ["10.0.0.0/16"]
 location
                    = "${azurestack_resource_group.test.location}"
 resource_group_name = "${azurestack_resource_group.test.name}"
}
resource "azurestack_subnet" "test" {
                     = "testsubnet"
 resource_group_name = "${azurestack_resource_group.test.name}"
 virtual_network_name = "${azurestack_virtual_network.test.name}"
 address_prefix = "10.0.2.0/24"
```

```
}
resource "azurestack network interface" "test" {
                      = "acceptanceTestNetworkInterface1"
  name
  location
                      = "${azurestack_resource_group.test.location}"
 resource_group_name = "${azurestack_resource_group.test.name}"
  ip_configuration {
                                  = "testconfiguration1"
    name
   subnet id
                                  = "${azurestack_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.
- 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
- 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.
- 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.

» azurestack_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.

```
resource "azurestack_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
}
resource "azurestack_network_security_group" "test" {
 name
                      = "acceptanceTestSecurityGroup1"
                      = "${azurestack_resource_group.test.location}"
  location
 resource_group_name = "${azurestack_resource_group.test.name}"
  security_rule {
    name
                                = "test123"
                               = 100
   priority
    direction
                               = "Inbound"
                               = "Allow"
    access
                               = "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.
- destination_port_range (Optional) Destination Port or Range. Integer or range between 0 and 65535 or * to match any.
- 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.
- 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.
- 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.

» azurestack_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.

```
resource "azurestack_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
  location = "West US"
}
resource "azurestack_network_security_group" "test" {
                     = "acceptanceTestSecurityGroup1"
                     = "${azurestack_resource_group.test.location}"
 resource_group_name = "${azurestack_resource_group.test.name}"
}
resource "azurestack_network_security_rule" "test" {
                              = "test123"
 name
 priority
                              = 100
                              = "Outbound"
 direction
  access
                              = "Allow"
                              = "Tcp"
 protocol
                              = "*"
  source_port_range
```

```
destination_port_range = "*"
source_address_prefix = "*"
destination_address_prefix = "*"
resource_group_name = "${azurestack_resource_group.test.name}"
network_security_group_name = "${azurestack_network_security_group.test.name}"
}
```

- 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.
- destination_port_range (Optional) Destination Port or Range. Integer or range between 0 and 65535 or * to match any.
- 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.
- 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.
- 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.

» azurestack_public_ip

Manages a Public IP Address.

» Example Usage

» Argument Reference

- 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.
- 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.

» 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 azurestack_public_ip Data Source (not currently available)

• 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.

» azurestack_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 "azurestack_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurestack_virtual_network" "test" {
 name
                      = "acceptanceTestVirtualNetwork1"
 address_space = ["10.0.0.0/16"]
location = "${azurestack_resource_group.test.location}"
 resource_group_name = "${azurestack_resource_group.test.name}"
resource "azurestack subnet" "test" {
                       = "testsubnet"
 name
 resource_group_name = "${azurestack_resource_group.test.name}"
 virtual_network_name = "${azurestack_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.

» Attributes Reference

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.

» azurestack_virtual_network

Creates a new 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 Subnets.

» Example Usage

```
resource "azurestack_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
 location = "West US"
}
resource "azurestack_network_security_group" "test" {
                     = "acceptanceTestSecurityGroup1"
                     = "${azurestack_resource_group.test.location}"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
}
resource "azurestack_virtual_network" "test" {
                     = "virtualNetwork1"
 resource_group_name = "${azurestack_resource_group.test.name}"
 address_space = ["10.0.0.0/16"]
                  = "West US"
= ["10.0.0.4", "10.0.0.5"]
 location
 dns_servers
 subnet {
            = "subnet1"
   name
   address_prefix = "10.0.1.0/24"
 subnet {
                = "subnet2"
   address_prefix = "10.0.2.0/24"
 }
 subnet {
                  = "subnet3"
   address_prefix = "10.0.3.0/24"
   security_group = "${azurestack_network_security_group.test.id}"
 tags = {
   environment = "Production"
}
```

» Argument Reference

- 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. azurestack_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 azurestack_virtual_network.testNetwork /subscriptions/00000000-0000-0000-00

» azurestack_virtual_network_gateway

Manages a Virtual Network Gateway to establish secure, cross-premises connectivity.

```
resource "azurestack_resource_group" "test" {
         = "test"
 location = "Azure-stack-region"
}
resource "azurestack_virtual_network" "test" {
 name
                     = "test"
                    = "${azurestack_resource_group.test.location}"
 resource_group_name = "${azurestack_resource_group.test.name}"
 address space = ["10.0.0.0/16"]
}
resource "azurestack_subnet" "test" {
                      = "GatewaySubnet"
 resource_group_name = "${azurestack_resource_group.test.name}"
 virtual_network_name = "${azurestack_virtual_network.test.name}"
 address_prefix = "10.0.1.0/24"
}
resource "azurestack_public_ip" "test" {
                              = "test"
 name
 location
                              = "${azurestack_resource_group.test.location}"
                              = "${azurestack_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "Dynamic"
}
resource "azurestack virtual network gateway" "test" {
                     = "test"
 name
                     = "${azurestack_resource_group.test.location}"
 resource_group_name = "${azurestack_resource_group.test.name}"
          = "Vpn"
 type
 vpn_type = "RouteBased"
          = "Basic"
  sku
  ip_configuration {
   public_ip_address_id
                           = "${azurestack_public_ip.test.id}"
```

```
private_ip_address_allocation = "Dynamic"
    subnet_id = "${azurestack_subnet.test.id}"
}
```

The following arguments are supported:

- 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 the Virtual Network Gateway. Valid options is Vpn
- vpn_type (Optional) The routing type of the Virtual Network Gateway. Only valid option is RouteBased.
- enable_bgp (Optional) If true, BGP (Border Gateway Protocol) is enabled for this connection. Defaults to false.
- sku (Required) Configuration of the size and capacity of the virtual network gateway. Valid options are Basic, Standard and HighPerformance.
- 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.
- 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 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

» 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.

» azurestack_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.

```
= "${azurestack_resource_group.test.location}"
  location
 resource_group_name = "${azurestack_resource_group.test.name}"
                    = ["10.0.0.0/16"]
  address_space
}
resource "azurestack_subnet" "test" {
                      = "GatewaySubnet"
  resource_group_name = "${azurestack_resource_group.test.name}"
 virtual_network_name = "${azurestack_virtual_network.test.name}"
  address_prefix
                 = "10.0.1.0/24"
resource "azurestack_local_network_gateway" "onpremise" {
                     = "onpremise"
                    = "${azurestack_resource_group.test.location}"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
 gateway_address = "168.62.225.23"
                    = ["10.1.1.0/24"]
  address_space
}
resource "azurestack_public_ip" "test" {
                              = "test"
 name
                              = "${azurestack_resource_group.test.location}"
  location
                              = "${azurestack_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "Dynamic"
resource "azurestack_virtual_network_gateway" "test" {
                     = "test"
 name
                     = "${azurestack_resource_group.test.location}"
 location
  resource_group_name = "${azurestack_resource_group.test.name}"
  type
          = "Vpn"
  vpn_type = "RouteBased"
  active_active = false
  enable_bgp = false
               = "Basic"
  sku
  ip_configuration {
                                 = "${azurestack_public_ip.test.id}"
   public_ip_address_id
   private_ip_address_allocation = "Dynamic"
   subnet id
                                 = "${azurestack subnet.test.id}"
 }
}
```

» VNet-to-VNet connection

The following example shows a connection between two Azure virtual network in different locations/regions.

```
resource "azurestack resource group" "us" {
          = "118"
 name
  location = "East US"
}
resource "azurestack_virtual_network" "us" {
                     = "us"
                    = "${azurestack_resource_group.us.location}"
 location
 resource_group_name = "${azurestack_resource_group.us.name}"
  address_space = ["10.0.0.0/16"]
}
resource "azurestack_subnet" "us_gateway" {
                      = "GatewaySubnet"
 resource_group_name = "${azurestack_resource_group.us.name}"
 virtual_network_name = "${azurestack_virtual_network.us.name}"
  address_prefix = "10.0.1.0/24"
}
resource "azurestack public ip" "us" {
                              = "us"
 name
  location
                              = "${azurestack_resource_group.us.location}"
                              = "${azurestack_resource_group.us.name}"
 resource_group_name
  public_ip_address_allocation = "Dynamic"
}
resource "azurestack_virtual_network_gateway" "us" {
                     = "us-gateway"
```

```
= "${azurestack_resource_group.us.location}"
 location
 resource_group_name = "${azurestack_resource_group.us.name}"
          = "Vpn"
 vpn_type = "RouteBased"
         = "Basic"
 sku
  ip_configuration {
                                 = "${azurestack_public_ip.us.id}"
   public_ip_address_id
   private_ip_address_allocation = "Dynamic"
                                 = "${azurestack_subnet.us_gateway.id}"
   subnet_id
 }
}
resource "azurestack_resource_group" "europe" {
         = "europe"
 location = "West Europe"
resource "azurestack_virtual_network" "europe" {
                     = "europe"
 location
                    = "${azurestack_resource_group.europe.location}"
 resource_group_name = "${azurestack_resource_group.europe.name}"
 address_space = ["10.1.0.0/16"]
}
resource "azurestack_subnet" "europe_gateway" {
                      = "GatewaySubnet"
 resource_group_name = "${azurestack_resource_group.europe.name}"
 virtual_network_name = "${azurestack_virtual_network.europe.name}"
 address_prefix
                 = "10.1.1.0/24"
resource "azurestack_public_ip" "europe" {
                              = "europe"
                              = "${azurestack_resource_group.europe.location}"
 location
 resource_group_name
                              = "${azurestack_resource_group.europe.name}"
 public_ip_address_allocation = "Dynamic"
resource "azurestack_virtual_network_gateway" "europe" {
                     = "europe-gateway"
                     = "${azurestack_resource_group.europe.location}"
 location
 resource_group_name = "${azurestack_resource_group.europe.name}"
          = "Vpn"
 type
```

```
vpn_type = "RouteBased"
         = "Basic"
  sku
  ip_configuration {
   public_ip_address_id
                           = "${azurestack_public_ip.europe.id}"
   private_ip_address_allocation = "Dynamic"
                                 = "${azurestack_subnet.europe_gateway.id}"
    subnet_id
 }
}
resource "azurestack_virtual_network_gateway_connection" "us_to_europe" {
                     = "us-to-europe"
                     = "${azurestack_resource_group.us.location}"
 location
 resource group name = "${azurestack resource group.us.name}"
 type
                                  = "Vnet2Vnet"
                                 = "${azurestack_virtual_network_gateway.us.id}"
 virtual_network_gateway_id
 peer_virtual_network_gateway_id = "${azurestack_virtual_network_gateway.europe.id}"
  shared_key = "4-v3ry-53cr37-1p53c-5h4r3d-k3y"
}
resource "azurestack_virtual_network_gateway_connection" "europe_to_us" {
                     = "europe-to-us"
  name
                     = "${azurestack_resource_group.europe.location}"
 location
 resource_group_name = "${azurestack_resource_group.europe.name}"
                                 = "Vnet2Vnet"
  type
  virtual_network_gateway_id
                                 = "${azurestack_virtual_network_gateway.europe.id}"
 peer_virtual_network_gateway_id = "${azurestack_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 lo-

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

» Attributes Reference

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 azurestack_virtual_network_gateway_connection.testConnection /subscriptions

» azurestack_storage_account

Manages an Azure Storage Account.

» Example Usage

```
resource "azurestack_resource_group" "testrg" {
 name
           = "resourceGroupName"
  location = "westus"
}
resource "azurestack_storage_account" "testsa" {
                           = "storageaccountname"
                           = "${azurestack_resource_group.testrg.name}"
 resource_group_name
 location
                           = "westus"
                           = "Standard"
  account_tier
  account_replication_type = "LRS"
  tags = {
    environment = "staging"
}
```

» Argument Reference

- 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 option is Storage.
 Changing this forces a new resource to be created. Defaults to Storage currently as per Azure Stack Storage Differences
- 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 Can be provisioned, but no performance limit or guarantee.
- account_replication_type (Required) Defines the type of replication to use for this storage account. Valid option is LRS currently as per Azure Stack Storage Differences
- access_tier (Required for BlobStorage accounts) Defines the access tier for BlobStorage accounts. Valid options are Hot and Cold, defaults to Hot. - Currently Not Supported on Azure Stack
- 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.
- tags (Optional) A mapping of tags to assign to the resource.
- 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?

Note: More information on Validation is available here

» 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
- \bullet 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

» Import

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

» azurestack_storage_container

Manages an Azure Storage Container.

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

» azurestack_storage_blob

Manages an Azure Storage Blob.

» Example Usage

```
resource "azurestack resource group" "test" {
         = "acctestrg-d"
 location = "westus"
}
resource "azurestack storage account" "test" {
                          = "acctestaccs"
 resource_group_name
                         = "${azurestack_resource_group.test.name}"
                          = "westus"
 location
                          = "Standard"
  account_tier
  account_replication_type = "LRS"
}
resource "azurestack_storage_container" "test" {
                       = "vhds"
 name
 resource_group_name = "${azurestack_resource_group.test.name}"
 storage_account_name = "${azurestack_storage_account.test.name}"
  container_access_type = "private"
}
resource "azurestack_storage_blob" "testsb" {
 name = "sample.vhd"
 resource_group_name
                        = "${azurestack_resource_group.test.name}"
  storage_account_name = "${azurestack_storage_account.test.name}"
  storage_container_name = "${azurestack_storage_container.test.name}"
  type = "page"
  size = 5120
```

» Argument Reference

- 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.
- 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

» azurestack lb

Manages a Load Balancer Resource.

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.
- 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.

» 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 azurestack_lb.test /subscriptions/00000000-0000-0000-0000-00000000000/res

» azurestack_lb_rule

Manages a Load Balancer Rule.

NOTE When using this resource, the Load Balancer needs to have a FrontEnd IP Configuration Attached

```
resource "azurestack_resource_group" "test" {
          = "LoadBalancerRG"
 location = "West US"
}
resource "azurestack_public_ip" "test" {
                              = "PublicIPForLB"
 name
                              = "West US"
 location
                              = "${azurestack_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "static"
}
resource "azurestack lb" "test" {
                     = "TestLoadBalancer"
 name
                     = "West US"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
  frontend_ip_configuration {
                         = "PublicIPAddress"
   name
```

```
public_ip_address_id = "${azurestack_public_ip.test.id}"
}
resource "azurestack_lb_rule" "test" {
  resource_group_name
                                 = "${azurestack_resource_group.test.name}"
                                 = "${azurestack_lb.test.id}"
  loadbalancer_id
                                 = "LBRule"
 name
 protocol
                                  = "Tcp"
 frontend port
                                  = 3389
  backend_port
                                  = 3389
  frontend_ip_configuration_name = "PublicIPAddress"
}
```

The following arguments are supported:

- 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 Load Balancer 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 Load Balancer to which the resource is attached.

» Import

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

» azurestack_lb_backend_address_pool

Manages a LoadBalancer Backend Address Pool.

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

» Example Usage

```
resource "azurestack_resource_group" "test" {
        = "LoadBalancerRG"
 name
 location = "West US"
resource "azurestack_public_ip" "test" {
 name
                             = "PublicIPForLB"
                             = "West US"
 location
 resource_group_name
                            = "${azurestack_resource_group.test.name}"
 public_ip_address_allocation = "static"
resource "azurestack_lb" "test" {
                    = "TestLoadBalancer"
 name
                    = "West US"
 location
```

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 azurestack_lb_backend_address_pool.test /subscriptions/00000000-0000-0000-0

» azurestack_lb_nat_rule

Manages a LoadBalancer NAT Rule.

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

» Example Usage

```
resource "azurestack_resource_group" "test" {
         = "LoadBalancerRG"
 location = "West US"
}
resource "azurestack public ip" "test" {
 name
                              = "PublicIPForLB"
                              = "West US"
 location
                             = "${azurestack_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "static"
resource "azurestack_lb" "test" {
                     = "TestLoadBalancer"
                    = "West US"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
 frontend_ip_configuration {
                        = "PublicIPAddress"
   name
   public_ip_address_id = "${azurestack_public_ip.test.id}"
}
resource "azurestack_lb_nat_rule" "test" {
                               = "${azurestack_resource_group.test.name}"
 resource_group_name
                                = "${azurestack_lb.test.id}"
 loadbalancer_id
                                = "RDPAccess"
 name
                                = "Tcp"
 protocol
 frontend_port
                                = 3389
 backend_port
                                = 3389
 frontend_ip_configuration_name = "PublicIPAddress"
}
```

» Argument Reference

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.

» azurestack_lb_probe

Manages a LoadBalancer Probe Resource.

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

» Example Usage

```
}
resource "azurestack lb" "test" {
                      = "TestLoadBalancer"
  name
  location
                      = "West US"
 resource_group_name = "${azurestack_resource_group.test.name}"
  frontend_ip_configuration {
                         = "PublicIPAddress"
    public_ip_address_id = "${azurestack_public_ip.test.id}"
 }
}
resource "azurestack lb probe" "test" {
 resource_group_name = "${azurestack_resource_group.test.name}"
                      = "${azurestack_lb.test.id}"
  loadbalancer id
 name
                      = "ssh-running-probe"
                      = 22
 port
}
```

The following arguments are supported:

- 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.

» azurestack_lb_nat_pool

Manages a Load Balancer NAT pool.

NOTE When using this resource, the Load Balancer needs to have a FrontEnd IP Configuration Attached

» Example Usage

```
resource "azurestack_resource_group" "test" {
          = "LoadBalancerRG"
  location = "West US"
resource "azurestack_public_ip" "test" {
                               = "PublicIPForLB"
 name
 location
                               = "West US"
                              = "${azurestack_resource_group.test.name}"
 resource_group_name
 public_ip_address_allocation = "static"
resource "azurestack_lb" "test" {
                     = "TestLoadBalancer"
 name
                     = "West US"
 location
 resource_group_name = "${azurestack_resource_group.test.name}"
 frontend_ip_configuration {
                        = "PublicIPAddress"
   public_ip_address_id = "${azurestack_public_ip.test.id}"
```

```
}
resource "azurestack_lb_nat_pool" "test" {
  resource_group_name
                                 = "${azurestack_resource_group.test.name}"
                                 = "${azurestack_lb.test.id}"
 loadbalancer_id
                                 = "SampleApplicationPool"
 name
                                 = "Tcp"
 protocol
                                  = 80
 frontend_port_start
 frontend_port_end
                                 = 81
                                  = 8080
 backend_port
  frontend_ip_configuration_name = "PublicIPAddress"
}
```

The following arguments are supported:

- 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 Load Balancer 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 Load Balancer to which the resource is attached.

» Import

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

terraform import azurestack_lb_nat_pool.test /subscriptions/00000000-0000-0000-0000-00000-0000

» azurestack_template_deployment

Manages 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 azurestack_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 "azurestack_resource_group" "test" {
   name = "acctestRG-01"
   location = "West US"
}

resource "azurestack_template_deployment" "test" {
   name = "acctesttemplate-01"
   resource_group_name = "${azurestack_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": [</pre>
```

```
"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 = "${azurestack_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 a **file** 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.