» Data Source: azurerm_application_security_group

Get information about an Application Security Group.

» Example Usage

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

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

» Argument Reference

The following arguments are supported:

- `name` - The name of the Application Security Group.

- `resource_group_name` - The name of the resource group in which the Application Security Group exists.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Application Security Group.

- `location` - The supported Azure location where the Application Security Group exists.

- `tags` - A mapping of tags assigned to the resource.

» Data Source: azurerm_app_service

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

» Example Usage

```
data "azurerm_app_service" "test" {
  name             = "search-app-service"
```

```
  resource_group_name = "search-service"
}

output "app_service_id" {
  value = "${data.azurerm_app_service.test.id}"
}
```

» Argument Reference

- `name` - (Required) The name of the App Service.
- `resource_group_name` - (Required) The Name of the Resource Group where the App Service exists.

» Attributes Reference

- `id` - The ID of the App Service.
- `location` - The Azure location where the App Service exists.
- `app_service_plan_id` - The ID of the App Service Plan within which the App Service exists.
- `app_settings` - A key-value pair of App Settings for the App Service.
- `connection_string` - An `connection_string` block as defined below.
- `client_affinity_enabled` - Does the App Service send session affinity cookies, which route client requests in the same session to the same instance?
- `enabled` - Is the App Service Enabled?
- `https_only` - Can the App Service only be accessed via HTTPS?
- `site_config` - A `site_config` block as defined below.
- `tags` - A mapping of tags to assign to the resource.

`connection_string` supports the following:

- `name` - The name of the Connection String.
- `type` - The type of the Connection String.
- `value` - The value for the Connection String.

`site_config` supports the following:

- `always_on` - Is the app be loaded at all times?
- `default_documents` - The ordering of default documents to load, if an address isn't specified.
- `dotnet_framework_version` - The version of the .net framework's CLR used in this App Service.
- `http2_enabled` - Is HTTP2 Enabled on this App Service?
- `ip_restriction` - One or more `ip_restriction` blocks as defined below.
- `java_version` - The version of Java in use.
- `java_container` - The Java Container in use.
- `java_container_version` - The version of the Java Container in use.
- `local_mysql_enabled` - Is "MySQL In App" Enabled? This runs a local MySQL instance with your app and shares resources from the App Service plan.
- `managed_pipeline_mode` - The Managed Pipeline Mode used in this App Service.
- `min_tls_version` - The minimum supported TLS version for this App Service.
- `php_version` - The version of PHP used in this App Service.
- `python_version` - The version of Python used in this App Service.
- `remote_debugging_enabled` - Is Remote Debugging Enabled in this App Service?
- `remote_debugging_version` - Which version of Visual Studio is the Remote Debugger compatible with?
- `scm_type` - The type of Source Control enabled for this App Service.
- `use_32_bit_worker_process` - Does the App Service run in 32 bit mode, rather than 64 bit mode?
- `websockets_enabled` - Are WebSockets enabled for this App Service?
- `ftps_state` - State of FTP / FTPS service for this AppService.
- `linux_fx_version` - Linux App Framework and version for the AppService.

———————————————————

`ip_restriction` exports the following:

- `ip_address` - The IP Address used for this IP Restriction.
- `subnet_mask` - The Subnet mask used for this IP Restriction.

» Data Source: azurerm_app_service_plan

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

» Example Usage

```
data "azurerm_app_service_plan" "test" {
  name                = "search-app-service-plan"
  resource_group_name = "search-service"
}

output "app_service_plan_id" {
  value = "${data.azurerm_app_service_plan.test.id}"
}
```

» Argument Reference

- `name` - (Required) The name of the App Service Plan.
- `resource_group_name` - (Required) The Name of the Resource Group where the App Service Plan exists.

» Attributes Reference

- `id` - The ID of the App Service Plan.

- `location` - The Azure location where the App Service Plan exists

- `kind` - The Operating System type of the App Service Plan

- `sku` - A `sku` block as documented below.

- `properties` - A `properties` block as documented below.

- `tags` - A mapping of tags assigned to the resource.

- `maximum_number_of_workers` - The maximum number of workers supported with the App Service Plan's sku.

A `sku` block supports the following:

- `tier` - Specifies the plan's pricing tier.

- `size` - Specifies the plan's instance size.

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

A `properties` block supports the following:

- `app_service_environment_id` - The ID of the App Service Environment where the App Service Plan is located.

- `maximum_number_of_workers` - Maximum number of instances that can be assigned to this App Service plan.

- `reserved` - Is this App Service Plan `Reserved`?

- `per_site_scaling` - Can Apps assigned to this App Service Plan be scaled independently?

» Data Source: azurerm_azuread_application

Gets information about an Application within Azure Active Directory.

NOTE: If you're authenticating using a Service Principal then it must have permissions to both `Read and write all applications` and `Sign in and read user profile` within the `Windows Azure Active Directory` API.

» Example Usage

```
data "azurerm_azuread_application" "test" {
  name = "My First AzureAD Application"
}

output "azure_active_directory_object_id" {
  value = "${data.azurerm_azuread_application.test.id}"
}
```

» Argument Reference

- `object_id` - (Optional) Specifies the Object ID of the Application within Azure Active Directory.

- `name` - (Optional) Specifies the name of the Application within Azure Active Directory.

NOTE: Either an `object_id` or `name` must be specified.

» Attributes Reference

- `id` - the Object ID of the Azure Active Directory Application.
- `application_id` - the Application ID of the Azure Active Directory Application.
- `available_to_other_tenants` - Is this Azure AD Application available to other tenants?
- `identifier_uris` - A list of user-defined URI(s) that uniquely identify a Web application within it's Azure AD tenant, or within a verified custom domain if the application is multi-tenant.
- `oauth2_allow_implicit_flow` - Does this Azure AD Application allow OAuth2.0 implicit flow tokens?
- `object_id` - the Object ID of the Azure Active Directory Application.
- `reply_urls` - A list of URLs that user tokens are sent to for sign in, or the redirect URIs that OAuth 2.0 authorization codes and access tokens are sent to.

» Data Source: azurerm_azuread_service_principal

Gets information about a Service Principal associated with an Application within Azure Active Directory.

NOTE: If you're authenticating using a Service Principal then it must have permissions to both `Read and write all applications` and `Sign in and read user profile` within the `Windows Azure Active Directory` API.

» Example Usage (by Application Display Name)

```
data "azurerm_azuread_service_principal" "test" {
  display_name = "my-awesome-application"
}
```

» Example Usage (by Application ID)

```
data "azurerm_azuread_service_principal" "test" {
  application_id = "00000000-0000-0000-0000-000000000000"
}
```

» Example Usage (by Object ID)

```
data "azurerm_azuread_service_principal" "test" {
  object_id = "00000000-0000-0000-0000-000000000000"
}
```

» Argument Reference

The following arguments are supported:

- `application_id` - (Optional) The ID of the Azure AD Application for which to create a Service Principal.

- `object_id` - (Optional) The ID of the Azure AD Service Principal.

- `display_name` - (Optional) The Display Name of the Azure AD Application associated with this Service Principal.

NOTE: At least one of `application_id`, `display_name` or `object_id` must be specified.

» Attributes Reference

The following attributes are exported:

- `id` - The Object ID for the Service Principal.

» Data Source: azurerm_builtin_role_definition

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

» Example Usage

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

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

» Argument Reference

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

» Attributes Reference

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

A `permissions` block contains:

- `actions` - a list of actions supported by this role
- `not_actions` - a list of actions which are denied by this role

» Data Source: azurerm_cdn_profile

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

» Example Usage

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

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

» Argument Reference

- `name` - (Required) The name of the CDN Profile.

- `resource_group_name` - (Required) The name of the resource group in which the CDN Profile exists.

» **Attributes Reference**

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

» **Data Source: azurerm_client_config**

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

» **Example Usage**

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

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

» **Argument Reference**

There are no arguments available for this data source.

» **Attributes Reference**

- `client_id` is set to the Azure Client ID (Application Object ID).
- `tenant_id` is set to the Azure Tenant ID.
- `subscription_id` is set to the Azure Subscription ID.

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

- `service_principal_application_id` is the Service Principal Application ID.
- `service_principal_object_id` is the Service Principal Object ID.

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

» Data Source: azurerm_container_registry

Use this data source to access information about a Container Registry

» Example Usage

```
data "azurerm_container_registry" "test" {
  name                = "testacr"
  resource_group_name = "test"
}

output "login_server" {
  value = "${data.azurerm_container_registry.test.login_server}"
}
```

» Argument Reference

- `name` - (Required) The name of the Container Registry.
- `resource_group_name` - (Required) The Name of the Resource Group where this Container Registry exists.

» Attributes Reference

The following attributes are exported:

- `id` - The Container Registry ID.

- `login_server` - The URL that can be used to log into the container registry.

- `admin_username` - The Username associated with the Container Registry Admin account - if the admin account is enabled.

- `admin_password` - The Password associated with the Container Registry Admin account - if the admin account is enabled.

- `location` - The Azure Region in which this Container Registry exists.

- `admin_enabled` - Is the Administrator account enabled for this Container Registry.

- `sku` - The SKU of this Container Registry, such as `Basic`.

- `storage_account_id` - The ID of the Storage Account used for this Container Registry. This is only returned for `Classic` SKU's.

- `tags` - A map of tags assigned to the Container Registry.

» Data Source: azurerm_cosmosdb_account

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

» Example Usage

```
data "azurerm_cosmosdb_account" "test" {
  name                = "tfex-cosmosdb-account"
  resource_group_name = "tfex-cosmosdb-account-rg"
}

output "cosmosdb_account_endpoint" {
  value = "${data.azurerm_cosmosdb_account.jobs.endpoint}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the CosmosDB Account.

- `resource_group_name` - (Required) Specifies the name of the resource group in which the CosmosDB Account resides.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the CosmosDB Account.

- `location` - The Azure location where the resource exists.

- `tags` - A mapping of tags assigned to the resource.

- `offer_type` - The Offer Type to used by this CosmosDB Account.

- `kind` - The Kind of the CosmosDB account.

- `ip_range_filter` - The current IP Filter for this CosmosDB account

- `enable_automatic_failover` - If automatic failover is enabled for this CosmosDB Account.

- `capabilities` - Capabilities enabled on this Cosmos DB account.

`consistency_policy` The current consistency Settings for this CosmosDB account with the following properties:

- `consistency_level` - The Consistency Level used by this CosmosDB Account.
- `max_interval_in_seconds` - The amount of staleness (in seconds) tolerated when the consistency level is Bounded Staleness.
- `max_staleness_prefix` - The number of stale requests tolerated when the consistency level is Bounded Staleness.

`geo_location` The geographic locations data is replicated to with the following properties:

- `id` - The ID of the location.

- `location` - The name of the Azure region hosting replicated data.

- `priority` - The locations fail over priority.

- `endpoint` - The endpoint used to connect to the CosmosDB account.

- `read_endpoints` - A list of read endpoints available for this CosmosDB account.

- `write_endpoints` - A list of write endpoints available for this CosmosDB account.

- `primary_master_key` - The Primary master key for the CosmosDB Account.

- `secondary_master_key` - The Secondary master key for the CosmosDB Account.

- `primary_readonly_master_key` - The Primary read-only master Key for the CosmosDB Account.

- `secondary_readonly_master_key` - The Secondary read-only master key for the CosmosDB Account.

» Data Source: azurerm_dns_zone

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

» Example Usage

```
data "azurerm_dns_zone" "test" {
  name                = "search-eventhubns"
  resource_group_name = "search-service"
}

output "dns_zone_id" {
```

```
  value = "${data.azurerm_dns_zone.test.id}"
}
```

» Argument Reference

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

» Attributes Reference

- `id` - The ID of the DNS Zone.

- `max_number_of_record_sets` - Maximum number of Records in the zone.

- `number_of_record_sets` - The number of records already in the zone.

- `name_servers` - A list of values that make up the NS record for the zone.

- `zone_type` - The type of this DNS zone, such as `Public` or `Private`.

- `registration_virtual_network_ids` - A list of Virtual Network ID's that register hostnames in this DNS zone.

- `resolution_virtual_network_ids` - A list of Virtual Network ID's that resolve records in this DNS zone.

- `tags` - A mapping of tags to assign to the EventHub Namespace.

» Data Source: azurerm_data_lake_store

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

» Example Usage

```
data "azurerm_data_lake_store" "test" {
  name                = "testdatalake"
  resource_group_name = "testdatalake"
}

output "data_lake_store_id" {
  value = "${data.azurerm_data_lake_store.test.id}"
}
```

» Argument Reference

- `name` - (Required) The name of the Data Lake Store.

- `resource_group_name` - (Required) The Name of the Resource Group where the Data Lake Store exists.

» Attributes Reference

- `id` - The ID of the Data Lake Store.

- `encryption_state` - the Encryption State of this Data Lake Store Account, such as `Enabled` or `Disabled`.

- `encryption_type` - the Encryption Type used for this Data Lake Store Account.

- `firewall_allow_azure_ips` - are Azure Service IP's allowed through the firewall?

- `firewall_state` - the state of the firewall, such as `Enabled` or `Disabled`.

- `tier` - Current monthly commitment tier for the account.

- `tags` - A mapping of tags to assign to the Data Lake Store.

» Data Source: azurerm_eventhub_namespace

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

» Example Usage

```
data "azurerm_eventhub_namespace" "test" {
  name                = "search-eventhubns"
  resource_group_name = "search-service"
}

output "eventhub_namespace_id" {
  value = "${data.azurerm_eventhub_namespace.test.id}"
}
```

» Argument Reference

- `name` - (Required) The name of the EventHub Namespace.

- `resource_group_name` - (Required) The Name of the Resource Group where the EventHub Namespace exists.

» Attributes Reference

- `id` - The ID of the EventHub Namespace.

- `location` - The Azure location where the EventHub Namespace exists

- `sku` - Defines which tier to use.

- `capacity` - The Capacity / Throughput Units for a `Standard` SKU namespace.

- `auto_inflate_enabled` - Is Auto Inflate enabled for the EventHub Namespace?

- `maximum_throughput_units` - Specifies the maximum number of throughput units when Auto Inflate is Enabled.

- `tags` - A mapping of tags to assign to the EventHub Namespace.

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

- `default_primary_connection_string` - The primary connection string for the authorization rule `RootManageSharedAccessKey`.

- `default_secondary_connection_string` - The secondary connection string for the authorization rule `RootManageSharedAccessKey`.

- `default_primary_key` - The primary access key for the authorization rule `RootManageSharedAccessKey`.

- `default_secondary_key` - The secondary access key for the authorization rule `RootManageSharedAccessKey`.

» Data Source: azurerm_image

Use this data source to access information about an Image.

» Example Usage

```
data "azurerm_image" "search" {
  name                = "search-api"
  resource_group_name = "packerimages"
}
```

```
output "image_id" {
  value = "${data.azurerm_image.search.id}"
}
```

» Argument Reference

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

» Attributes Reference

- `name` - the name of the Image.
- `location` - the Azure Location where this Image exists.
- `os_disk` - a `os_disk` block as defined below.
- `data_disk` - a collection of `data_disk` blocks as defined below.
- `tags` - a mapping of tags to assigned to the resource.

`os_disk` supports the following:

- `blob_uri` - the URI in Azure storage of the blob used to create the image.
- `caching` - the caching mode for the OS Disk, such as `ReadWrite`, `ReadOnly`, or `None`.
- `managed_disk_id` - the ID of the Managed Disk used as the OS Disk Image.
- `os_state` - the State of the OS used in the Image, such as `Generalized`.
- `os_type` - the type of Operating System used on the OS Disk. such as `Linux` or `Windows`.
- `size_gb` - the size of the OS Disk in GB.

`data_disk` supports the following:

- `blob_uri` - the URI in Azure storage of the blob used to create the image.
- `caching` - the caching mode for the Data Disk, such as `ReadWrite`, `ReadOnly`, or `None`.
- `lun` - the logical unit number of the data disk.
- `managed_disk_id` - the ID of the Managed Disk used as the Data Disk Image.
- `size_gb` - the size of this Data Disk in GB.

» Data Source: azurerm_key_vault

Gets information about a Key Vault.

» Example Usage

```
data "azurerm_key_vault" "test" {
  name                = "mykeyvault"
  resource_group_name = "some-resource-group"
}

output "vault_uri" {
  value = "${data.azurerm_key_vault.test.vault_uri}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Key Vault.

- `resource_group_name` - (Required) The name of the Resource Group in which the Key Vault exists.

» Attributes Reference

The following attributes are exported:

- `id` - The Vault ID.

- `vault_uri` - The URI of the vault for performing operations on keys and secrets.

- `location` - The Azure Region in which the Key Vault exists.

- `sku` - A `sku` block as described below.

- `tenant_id` - The Azure Active Directory Tenant ID used for authenticating requests to the Key Vault.

- `access_policy` - One or more `access_policy` blocks as defined below.

- `enabled_for_deployment` - Can Azure Virtual Machines retrieve certificates stored as secrets from the Key Vault?

- `enabled_for_disk_encryption` - Can Azure Disk Encryption retrieve secrets from the Key Vault?

- **enabled_for_template_deployment** - Can Azure Resource Manager retrieve secrets from the Key Vault?

- **tags** - A mapping of tags assigned to the Key Vault.

A `sku` block exports the following:

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

`access_policy` supports the following:

- **tenant_id** - The Azure Active Directory Tenant ID used to authenticate requests for this Key Vault.

- **object_id** - An Object ID of a User, Service Principal or Security Group.

- **application_id** - The Object ID of a Azure Active Directory Application.

- **certificate_permissions** - A list of certificate permissions applicable to this Access Policy.

- **key_permissions** - A list of key permissions applicable to this Access Policy.

- **secret_permissions** - A list of secret permissions applicable to this Access Policy.

» Data Source: azurerm_key_vault_access_policy

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

» Example Usage

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

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

» Argument Reference

- **name** - (Required) Specifies the name of the Management Template. Possible values are: `Key Management`, `Secret Management`, `Certificate Management`, `Key & Secret Management`, `Key & Certificate Management`,

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

» Attributes Reference

- `id` - the ID of the Key Vault Access Policy
- `key_permissions` - the key permissions for the access policy
- `secret_permissions` - the secret permissions for the access policy
- `certificate_permissions` - the certificate permissions for the access policy

» Data Source: azurerm_key_vault_secret

Returns information about the specified Key Vault Secret.

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

» Example Usage

```
data "azurerm_key_vault_secret" "test" {
  name      = "secret-sauce"
  vault_uri = "https://rickslab.vault.azure.net/"
}

output "secret_value" {
  value = "${data.azurerm_key_vault_secret.test.value}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Key Vault Secret.
- `vault_uri` - (Required) Specifies the URI used to access the Key Vault instance, available on the `azurerm_key_vault` Data Source / Resource.

» Attributes Reference

The following attributes are exported:

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

» Data Source: azurerm_kubernetes_cluster

Gets information about a managed Kubernetes Cluster (AKS)

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

» Example Usage

```
data "azurerm_kubernetes_cluster" "test" {
  name                = "myakscluster"
  resource_group_name = "my-example-resource-group"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the managed Kubernetes Cluster.

- `resource_group_name` - (Required) The name of the Resource Group in which the managed Kubernetes Cluster exists.

» Attributes Reference

The following attributes are exported:

- `id` - The Kubernetes Managed Cluster ID.

- `fqdn` - The FQDN of the Azure Kubernetes Managed Cluster.

- `kube_config_raw` - Base64 encoded Kubernetes configuration.

- `node_resource_group` - Auto-generated Resource Group containing AKS Cluster resources.

- `kube_config` - A `kube_config` block as defined below.

- `location` - The Azure Region in which the managed Kubernetes Cluster exists.

- `dns_prefix` - The DNS Prefix of the managed Kubernetes cluster.

- `kubernetes_version` - The version of Kubernetes used on the managed Kubernetes Cluster.

- `linux_profile` - A `linux_profile` block as documented below.

- `agent_pool_profile` - One or more `agent_profile_pool` blocks as documented below.

- `addon_profile` - A `addon_profile` block as documented below.

- `service_principal` - A `service_principal` block as documented below.

- `network_profile` - A `network_profile` block as documented below.

- `tags` - A mapping of tags assigned to this resource.

A `addon_profile` block exports the following:

- `http_application_routing` - A `http_application_routing` block.
- `oms_agent` - A `oms_agent` block.

A `agent_pool_profile` block exports the following:

- `name` - The name assigned to this pool of agents
- `count` - The number of Agents (VM's) in the Pool.
- `vm_size` - The size of each VM in the Agent Pool (e.g. `Standard_F1`).
- `os_disk_size_gb` - The size of the Agent VM's Operating System Disk in GB.
- `os_type` - The Operating System used for the Agents.
- `vnet_subnet_id` - The ID of the Subnet where the Agents in the Pool are provisioned.
- `max_pods` - The maximum number of pods that can run on each agent.

A `http_application_routing` block exports the following:

- `enabled` - Is HTTP Application Routing Enabled?

- `http_application_routing_zone_name` - The Zone Name of the HTTP Application Routing.

A `kube_config` block exports the following:

- `client_key` - Base64 encoded private key used by clients to authenticate to the Kubernetes cluster.

- `client_certificate` - Base64 encoded public certificate used by clients to authenticate to the Kubernetes cluster.

- `cluster_ca_certificate` - Base64 encoded public CA certificate used as the root of trust for the Kubernetes cluster.

- `host` - The Kubernetes cluster server host.

- `username` - A username used to authenticate to the Kubernetes cluster.

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

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

```
provider "kubernetes" {
  host                   = "${data.azurerm_kubernetes_cluster.main.kube_config.0.host}"
  username               = "${data.azurerm_kubernetes_cluster.main.kube_config.0.username}"
  password               = "${data.azurerm_kubernetes_cluster.main.kube_config.0.password}"
  client_certificate     = "${base64decode(data.azurerm_kubernetes_cluster.main.kube_config
  client_key             = "${base64decode(data.azurerm_kubernetes_cluster.main.kube_config
  cluster_ca_certificate = "${base64decode(data.azurerm_kubernetes_cluster.main.kube_config
}
```

A `linux_profile` block exports the following:

- `admin_username` - The username associated with the administrator account of the managed Kubernetes Cluster.
- `ssh_key` - One or more `ssh_key` blocks as defined below.

A `network_profile` block exports the following:

- `network_plugin` - Network plugin used such as `azure` or `kubenet`.
- `service_cidr` - Network range used by the Kubernetes service.
- `dns_service_ip` - IP address within the Kubernetes service address range used by cluster service discovery (kube-dns).
- `docker_bridge_cidr` - IP address (in CIDR notation) used as the Docker bridge IP address on nodes.
- `pod_cidr` - The CIDR used for pod IP addresses.

A `oms_agent` block exports the following:

- `enabled` - Is the OMS Agent Enabled?

- `log_analytics_workspace_id` - The ID of the Log Analytics Workspace which the OMS Agent should send data to.

A `service_principal` block supports the following:

- `client_id` - The Client ID of the Service Principal used by this Managed Kubernetes Cluster.

A `ssh_key` block exports the following:

- `key_data` - The Public SSH Key used to access the cluster.

» Data Source: azurerm_log_analytics_workspace

Gets information about the specified Log Analytics (formally Operational Insights) Workspace.

» Example Usage

```
data "azurerm_log_analytics_workspace" "test" {
  name                = "acctest-01"
  resource_group_name = "acctest"
}

output "log_analytics_workspace_id" {
  value = "${data.azurerm_log_analytics_workspace.test.workspace_id}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Log Analytics Workspace.
- `resource_group_name` - (Required) The name of the resource group in which the Log Analytics workspace is located in.

» Attributes Reference

The following attributes are exported:

- `id` - The Log Analytics Workspace ID.

- `primary_shared_key` - The Primary shared key for the Log Analytics Workspace.

- `secondary_shared_key` - The Secondary shared key for the Log Analytics Workspace.

- `workspace_id` - The Workspace (or Customer) ID for the Log Analytics Workspace.

- `portal_url` - The Portal URL for the Log Analytics Workspace.

- `sku` - The Sku of the Log Analytics Workspace.

- `retention_in_days` - The workspace data retention in days.

- `tags` - A mapping of tags assigned to the resource.

» Data Source: azurerm_logic_app_workflow

Gets information about a Logic App Workflow.

» Example Usage

```
data "azurerm_logic_app_workflow" "test" {
  name = "workflow1"
  resource_group_name = "my-resource-group"
}

output "access_endpoint" {
  value = "${data.azurerm_logic_app_workflow.test.access_endpoint}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the Logic App Workflow.

- `resource_group_name` - (Required) The name of the Resource Group in which the Logic App Workflow exists.

» Attributes Reference

The following attributes are exported:

- `id` - The Logic App Workflow ID.

- `location` - The Azure location where the Logic App Workflow exists.

- `workflow_schema` - The Schema used for this Logic App Workflow.

- `workflow_version` - The version of the Schema used for this Logic App Workflow. Defaults to `1.0.0.0`.

- `parameters` - A map of Key-Value pairs.

- `tags` - A mapping of tags assigned to the resource.

- `access_endpoint` - The Access Endpoint for the Logic App Workflow

» Data Source: azurerm_managed_disk

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

» Example Usage

```
data "azurerm_managed_disk" "datasourcemd" {
    name = "testManagedDisk"
    resource_group_name = "acctestRG"
}

resource "azurerm_virtual_network" "test" {
  name                = "acctvn"
  address_space       = ["10.0.0.0/16"]
  location            = "West US 2"
  resource_group_name = "acctestRG"
}

resource "azurerm_subnet" "test" {
  name                 = "acctsub"
  resource_group_name  = "acctestRG"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix       = "10.0.2.0/24"
}

resource "azurerm_network_interface" "test" {
  name                = "acctni"
  location            = "West US 2"
  resource_group_name = "acctestRG"

  ip_configuration {
    name                          = "testconfiguration1"
    subnet_id                     = "${azurerm_subnet.test.id}"
    private_ip_address_allocation = "dynamic"
```

```
    }
}

resource "azurerm_virtual_machine" "test" {
  name                  = "acctvm"
  location              = "West US 2"
  resource_group_name   = "acctestRG"
  network_interface_ids = ["${azurerm_network_interface.test.id}"]
  vm_size               = "Standard_DS1_v2"

  storage_image_reference {
    publisher = "Canonical"
    offer     = "UbuntuServer"
    sku       = "16.04-LTS"
    version   = "latest"
  }

  storage_os_disk {
    name              = "myosdisk1"
    caching           = "ReadWrite"
    create_option     = "FromImage"
    managed_disk_type = "Standard_LRS"
  }

  storage_data_disk {
    name              = "datadisk_new"
    managed_disk_type = "Standard_LRS"
    create_option     = "Empty"
    lun               = 0
    disk_size_gb      = "1023"
  }

  storage_data_disk {
    name           = "${data.azurerm_managed_disk.datasourcemd.name}"
    managed_disk_id = "${data.azurerm_managed_disk.datasourcemd.id}"
    create_option  = "Attach"
    lun            = 1
    disk_size_gb   = "${data.azurerm_managed_disk.datasourcemd.disk_size_gb}"
  }

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

```
  os_profile_linux_config {
    disable_password_authentication = false
  }

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

» Argument Reference

- `name` - (Required) Specifies the name of the Managed Disk.
- `resource_group_name` - (Required) Specifies the name of the resource group.

» Attributes Reference

- `storage_account_type` - The storage account type for the managed disk.
- `source_uri` - The source URI for the managed disk
- `source_resource_id` - ID of an existing managed disk that the current resource was created from.
- `os_type` - The operating system for managed disk. Valid values are `Linux` or `Windows`
- `disk_size_gb` - The size of the managed disk in gigabytes.
- `tags` - A mapping of tags assigned to the resource.
- `zones` - (Optional) A collection containing the availability zone the managed disk is allocated in.

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

» Data Source: azurerm_network_interface

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

» Example Usage

```
data "azurerm_network_interface" "test" {
  name                = "acctest-nic"
  resource_group_name = "networking"
```

```
}

output "network_interface_id" {
  value = "${data.azurerm_network_interface.test.id}"
}
```

» 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

- `id` - The ID of the Network Interface.
- `applied_dns_servers` - List of DNS servers applied to the specified Network Interface.
- `enable_accelerated_networking` - Indicates if accelerated networking is set on the specified Network Interface.
- `enable_ip_forwarding` - Indicate if IP forwarding is set on the specified Network Interface.
- `dns_servers` - The list of DNS servers used by the specified Network Interface.
- `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` - One or more `ip_configuration` blocks as defined below.
- `location` - The location of the specified Network Interface.
- `mac_address` - The MAC address used by the specified Network Interface.
- `network_security_group_id` - The ID of the network security group associated to 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 associated to the specified Network Interface.
- `virtual_machine_id` - The ID of the virtual machine that the specified Network Interface is attached to.

A `ip_configuration` block contains:

- `name` - The name of the IP Configuration.
- `subnet_id` - The ID of the Subnet which the Network Interface is connected to.
- `private_ip_address` - The Private IP Address assigned to this Network Interface.
- `private_ip_address_allocation` - The IP Address allocation type for the Private address, such as `Dynamic` or `Static`.
- `public_ip_address_id` - The ID of the Public IP Address which is connected to this Network Interface.
- `application_gateway_backend_address_pools_ids` - A list of Backend Address Pool ID's within a Application Gateway that this Network Interface is connected to.
- `load_balancer_backend_address_pools_ids` - A list of Backend Address Pool ID's within a Load Balancer that this Network Interface is connected to.
- `load_balancer_inbound_nat_rules_ids` - A list of Inbound NAT Rule ID's within a Load Balancer that this Network Interface is connected to.
- `primary` - is this the Primary IP Configuration for this Network Interface?

» Data Source: azurerm_network_security_group

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

» Example Usage

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

output "location" {
  value = "${data.azurerm_network_security_group.test.location}"
}
```

» 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.
- `source_application_security_group_ids` - A List of source Application Security Group ID's
- `destination_application_security_group_ids` - A List of destination Application Security Group ID's
- `access` - Is network traffic is allowed or denied?
- `priority` - The priority of the rule
- `direction` - The direction specifies if rule will be evaluated on incoming or outgoing traffic.

» Data Source: azurerm_notification_hub_namespace

Gets information about the specified Notification Hub Namespace.

» Example Usage

```
data "azurerm_notification_hub_namespace" "test" {
  name                = "my-namespace"
  resource_group_name = "my-resource-group"
}
```

```
output "servicebus_endpoint" {
  value = "${data.azurerm_notification_hub_namespace.test.servicebus_endpoint}"
}
```

» Argument Reference

- `name` - (Required) Specifies the Name of the Notification Hub Namespace.

- `resource_group_name` - (Required) Specifies the Name of the Resource Group within which the Notification Hub exists.

» Attributes Reference

- `id` - The ID of the Notification Hub Namespace.

- `location` - The Azure Region in which this Notification Hub Namespace exists.

- `namespace_type` - The Type of Namespace, such as `Messaging` or `NotificationHub`.

- `sku` - A `sku` block as defined below.

- `enabled` - Is this Notification Hub Namespace enabled?

A `sku` block exports the following:

- `name` - (Required) The name of the SKU to use for this Notification Hub Namespace. Possible values are `Free`, `Basic` or `Standard.`

» Data Source: azurerm_platform_image

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

» Example Usage

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

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

» Argument Reference

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

» Attributes Reference

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

» Data Source: azurerm_public_ip

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

» Example Usage (reference an existing)

```
data "azurerm_public_ip" "test" {
  name = "name_of_public_ip"
  resource_group_name = "name_of_resource_group"
}

output "domain_name_label" {
  value = "${data.azurerm_public_ip.test.domain_name_label}"
}

output "public_ip_address" {
  value = "${data.azurerm_public_ip.test.ip_address}"
}
```

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

```
resource "azurerm_resource_group" "test" {
  name     = "test-resources"
  location = "West US 2"
}

resource "azurerm_virtual_network" "test" {
  name                = "test-network"
  address_space       = ["10.0.0.0/16"]
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_subnet" "test" {
  name                 = "acctsub"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix       = "10.0.2.0/24"
}

resource "azurerm_public_ip" "test" {
  name                         = "test-pip"
  location                     = "${azurerm_resource_group.test.location}"
  resource_group_name          = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "Dynamic"
  idle_timeout_in_minutes      = 30

  tags {
    environment = "test"
  }
}

resource "azurerm_network_interface" "test" {
  name                = "test-nic"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  ip_configuration {
    name                          = "testconfiguration1"
    subnet_id                     = "${azurerm_subnet.test.id}"
    private_ip_address_allocation = "static"
    private_ip_address            = "10.0.2.5"
    public_ip_address_id          = "${azurerm_public_ip.test.id}"
```

```
  }
}

resource "azurerm_virtual_machine" "test" {
  name                  = "test-vm"
  location              = "${azurerm_resource_group.test.location}"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  network_interface_ids = ["${azurerm_network_interface.test.id}"]

  # ...
}

data "azurerm_public_ip" "test" {
  name                = "${azurerm_public_ip.test.name}"
  resource_group_name = "${azurerm_virtual_machine.test.resource_group_name}"
}

output "public_ip_address" {
  value = "${data.azurerm_public_ip.test.ip_address}"
}
```

» 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: azurerm_public_ips

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

» Example Usage

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

» Argument Reference

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

» Attributes Reference

- `public_ips` - A List of `public_ips` blocks as defined below filtered by the criteria above.

A `public_ips` block contains:

- `id` - The ID of the Public IP Address
- `domain_name_label` - The Domain Name Label of the Public IP Address
- `fqdn` - The FQDN of the Public IP Address
- `name` - The Name of the Public IP Address

» Data Source: azurerm_recovery_services_vault

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

» Example Usage

```
data "azurerm_recovery_services_vault" "vault" {
  name                = "tfex-recovery_vault"
  resource_group_name = "tfex-resource_group"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Recovery Services Vault.

- `resource_group_name` - (Required) The name of the resource group in which the Recovery Services Vault resides.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Recovery Services Vault.

- `location` - The Azure location where the resource resides.

- `tags` - A mapping of tags assigned to the resource.

- `sku` - The vault's current SKU.

» Data Source: azurerm_resource_group

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

» Example Usage

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

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

» 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: azurerm_role_definition

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

» Example Usage

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

data "azurerm_role_definition" "custom" {
  role_definition_id = "00000000-0000-0000-0000-000000000000"
  scope              = "${data.azurerm_subscription.primary.id}" # /subscriptions/00000000-0
}

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

» Argument Reference

- `role_definition_id` - (Required) Specifies the ID of the Role Definition as a UUID/GUID.

- `scope` - (Required) Specifies the Scope at which the Custom Role Definition exists.

» Attributes Reference

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

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

A `permissions` block contains:

- `actions` - a list of actions supported by this role
- `not_actions` - a list of actions which are denied by this role

» Data Source: azurerm_route_table

Gets information about a Route Table

» Example Usage

```
data "azurerm_route_table" "test" {
  name                = "myroutetable"
  resource_group_name = "some-resource-group"
}
```

» 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: azurerm_scheduler_job_collection

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

» Example Usage

```
data "azurerm_scheduler_job_collection" "test" {
  name                = "tfex-job-collection"
  resource_group_name = "tfex-job-collection-rg"
}

output "job_collection_state" {
  value = "${data.azurerm_scheduler_job_collection.jobs.state}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Scheduler Job Collection.

- `resource_group_name` - (Required) Specifies the name of the resource group in which the Scheduler Job Collection resides.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Scheduler Job Collection.

- `location` - The Azure location where the resource exists.

- `tags` - A mapping of tags assigned to the resource.

- `sku` - The Job Collection's pricing level's SKU.

- `state` - The Job Collection's state.

- **quota** - The Job collection quotas as documented in the `quota` block below.

The `quota` block supports:

- **max_job_count** - Sets the maximum number of jobs in the collection.

- **max_recurrence_frequency** - The maximum frequency of recurrence.

- **max_retry_interval** - The maximum interval between retries.

» **Data Source: azurerm_storage_account**

Gets information about the specified Storage Account.

» **Example Usage**

```
data "azurerm_storage_account" "test" {
  name                 = "packerimages"
  resource_group_name  = "packer-storage"
}

output "storage_account_tier" {
  value = "${data.azurerm_storage_account.test.account_tier}"
}
```

» **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** - The Kind of account.

- **account_tier** - The Tier of this storage account.

- **account_replication_type** - The type of replication used for this storage account.

- **access_tier** - The access tier for `BlobStorage` accounts.

- `enable_blob_encryption` - Are Encryption Services are enabled for Blob storage? See here for more information.

- `enable_file_encryption` - Are Encryption Services are enabled for File storage? See here for more information.

- `enable_https_traffic_only` - Is traffic only allowed via HTTPS? See here for more information.

- `account_encryption_source` - The Encryption Source for this Storage Account.

- `custom_domain` - A `custom_domain` block as documented below.

- `tags` - A mapping of tags to assigned to the resource.

- `primary_location` - The primary location of the Storage Account.

- `secondary_location` - The secondary location of the Storage Account.

- `primary_blob_endpoint` - The endpoint URL for blob storage in the primary location.

- `secondary_blob_endpoint` - The endpoint URL for blob storage in the secondary location.

- `primary_queue_endpoint` - The endpoint URL for queue storage in the primary location.

- `secondary_queue_endpoint` - The endpoint URL for queue storage in the secondary location.

- `primary_table_endpoint` - The endpoint URL for table storage in the primary location.

- `secondary_table_endpoint` - The endpoint URL for table storage in the secondary location.

- `primary_file_endpoint` - The endpoint URL for file storage in the primary location.

- `primary_access_key` - The primary access key for the Storage Account.

- `secondary_access_key` - The secondary access key for the Storage Account.

- `primary_connection_string` - The connection string associated with the primary location

- `secondary_connection_string` - The connection string associated with the secondary location

- `primary_blob_connection_string` - The connection string associated with the primary blob location

- `secondary_blob_connection_string` - The connection string associated with the secondary blob location

---

- `custom_domain` supports the following:
- `name` - The Custom Domain Name used for the Storage Account.

» Data Source: azurerm_storage_account_sas

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

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

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

» Example Usage

```
resource "azurerm_resource_group" "testrg" {
  name     = "resourceGroupName"
  location = "westus"
}

resource "azurerm_storage_account" "testsa" {
  name                     = "storageaccountname"
  resource_group_name      = "${azurerm_resource_group.testrg.name}"
  location                 = "westus"
  account_tier             = "Standard"
  account_replication_type = "GRS"

  tags {
    environment = "staging"
  }
}

data "azurerm_storage_account_sas" "test" {
    connection_string = "${azurerm_storage_account.testsa.primary_connection_string}"
    https_only        = true
    resource_types {
        service   = true
        container = false
        object    = false
    }
```

```
    services {
        blob  = true
        queue = false
        table = false
        file  = false
    }
    start   = "2018-03-21"
    expiry  = "2020-03-21"
    permissions {
        read    = true
        write   = true
        delete  = false
        list    = false
        add     = true
        create  = true
        update  = false
        process = false
    }
}


output "sas_url_query_string" {
  value = "${data.azurerm_storage_account_sas.test.sas}"
}
```

» Argument Reference

- `connection_string` - (Required) The connection string for the storage account to which this SAS applies. Typically directly from the `primary_connection_string` attribute of a terraform created `azurerm_storage_account` resource.
- `https_only` - (Optional) Only permit `https` access. If `false`, both `http` and `https` are permitted. Defaults to `true`.
- `resource_types` - (Required) A `resource_types` block as defined below.
- `services` - (Required) A `services` block as defined below.
- `start` - (Required) The starting time and date of validity of this SAS. Must be a valid ISO-8601 format time/date string.
- `expiry` - (Required) The expiration time and date of this SAS. Must be a valid ISO-8601 format time/date string.
- `permissions` - (Required) A `permissions` block as defined below.

————————————————————

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

A `resource_types` block contains:

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

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

A `services` block contains:

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

A `permissions` block contains:

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

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

» Attributes Reference

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

» Data Source: azurerm_subnet

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

» Example Usage

```
data "azurerm_subnet" "test" {
  name                 = "backend"
  virtual_network_name = "production"
  resource_group_name  = "networking"
}

output "subnet_id" {
  value = "${data.azurerm_subnet.test.id}"
}
```

» Argument Reference

- `name` - (Required) Specifies the name of the Subnet.
- `virtual_network_name` - (Required) Specifies the name of the Virtual Network this Subnet is located within.
- `resource_group_name` - (Required) Specifies the name of the resource group the Virtual Network is located in.

» Attributes Reference

- `id` - The ID of the Subnet.
- `address_prefix` - The address prefix used for the subnet.
- `network_security_group_id` - The ID of the Network Security Group associated with the subnet.
- `route_table_id` - The ID of the Route Table associated with this subnet.
- `ip_configurations` - The collection of IP Configurations with IPs within this subnet.

» Data Source: azurerm_subscription

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

» Example Usage

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

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

» Argument Reference

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

» Attributes Reference

- `display_name` - The subscription display name.
- `state` - The subscription state. Possible values are Enabled, Warned, PastDue, Disabled, and Deleted.
- `location_placement_id` - The subscription location placement ID.
- `quota_id` - The subscription quota ID.
- `spending_limit` - The subscription spending limit.

» Data Source: azurerm_subscriptions

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

» Example Usage

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

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

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

» Argument Reference

There are no arguments available for this data source.

» Attributes Reference

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

The `subscription` block contains:

- `display_name` - The subscription display name.

- **state** - The subscription state. Possible values are Enabled, Warned, PastDue, Disabled, and Deleted.
- **location_placement_id** - The subscription location placement ID.
- **quota_id** - The subscription quota ID.
- **spending_limit** - The subscription spending limit.

» Data Source: azurerm_traffic_manager_geographical_location

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

» Example Usage (World)

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

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

» Argument Reference

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

» Attributes Reference

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

» Data Source: azurerm_virtual_network

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

» Example Usage

```
data "azurerm_virtual_network" "test" {
  name                 = "production"
  resource_group_name  = "networking"
```

```
}

output "virtual_network_id" {
  value = "${data.azurerm_virtual_network.test.id}"
}
```

» Argument Reference

- `name` - (Required) Specifies the name of the Virtual Network.
- `resource_group_name` - (Required) Specifies the name of the resource group the Virtual Network is located in.

» Attributes Reference

- `id` - The ID of the virtual network.
- `address_spaces` - The list of address spaces used by the virtual network.
- `dns_servers` - The list of DNS servers used by the virtual network.
- `subnets` - The list of name of the subnets that are attached to this virtual network.
- `vnet_peerings` - A mapping of name - virtual network id of the virtual network peerings.

» Data Source: azurerm_virtual_network_gateway

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

» Example Usage

```
data "azurerm_virtual_network_gateway" "test" {
  name                = "production"
  resource_group_name = "networking"
}

output "virtual_network_gateway_id" {
  value = "${data.azurerm_virtual_network_gateway.test.id}"
}
```

» Argument Reference

- `name` - (Required) Specifies the name of the Virtual Network Gateway.

- `resource_group_name` - (Required) Specifies the name of the resource group the Virtual Network Gateway is located in.

» Attributes Reference

- `id` - The ID of the Virtual Network Gateway.

- `location` - The location/region where the Virtual Network Gateway is located.

- `type` - The type of the Virtual Network Gateway.

- `vpn_type` - The routing type of the Virtual Network Gateway.

- `enable_bgp` - Will BGP (Border Gateway Protocol) will be enabled for this Virtual Network Gateway.

- `active_active` - (Optional) Is this an Active-Active Gateway?

- `default_local_network_gateway_id` - The ID of the local network gateway through which outbound Internet traffic from the virtual network in which the gateway is created will be routed (*forced tunneling*). Refer to the Azure documentation on forced tunneling.

- `sku` - Configuration of the size and capacity of the Virtual Network Gateway.

- `ip_configuration` - One or two `ip_configuration` blocks documented below.

- `vpn_client_configuration` - A `vpn_client_configuration` block which is documented below.

- `tags` - A mapping of tags assigned to the resource.

The `ip_configuration` block supports:

- `name` - A user-defined name of the IP configuration.

- `private_ip_address_allocation` - Defines how the private IP address of the gateways virtual interface is assigned.

- `subnet_id` - The ID of the gateway subnet of a virtual network in which the virtual network gateway will be created. It is mandatory that the associated subnet is named `GatewaySubnet`. Therefore, each virtual network can contain at most a single Virtual Network Gateway.

- `public_ip_address_id` - The ID of the Public IP Address associated with the Virtual Network Gateway.

The `vpn_client_configuration` block supports:

- `address_space` - The address space out of which ip addresses for vpn clients will be taken. You can provide more than one address space, e.g. in CIDR notation.

- `root_certificate` - One or more `root_certificate` blocks which are defined below. These root certificates are used to sign the client certificate used by the VPN clients to connect to the gateway.

- `revoked_certificate` - One or more `revoked_certificate` blocks which are defined below.

- `radius_server_address` - (Optional) The address of the Radius server. This setting is incompatible with the use of `root_certificate` and `revoked_certificate`.

- `radius_server_secret` - (Optional) The secret used by the Radius server. This setting is incompatible with the use of `root_certificate` and `revoked_certificate`.

- `vpn_client_protocols` - (Optional) List of the protocols supported by the vpn client. The supported values are `SSTP` and `IkeV2`.

The `bgp_settings` block supports:

- `asn` - The Autonomous System Number (ASN) to use as part of the BGP.

- `peering_address` - The BGP peer IP address of the virtual network gateway. This address is needed to configure the created gateway as a BGP Peer on the on-premises VPN devices.

- `peer_weight` - The weight added to routes which have been learned through BGP peering.

The `root_certificate` block supports:

- `name` - The user-defined name of the root certificate.

- `public_cert_data` - The public certificate of the root certificate authority. The certificate must be provided in Base-64 encoded X.509 format (PEM).

The `root_revoked_certificate` block supports:

- `name` - The user-defined name of the revoked certificate.

- `public_cert_data` - The SHA1 thumbprint of the certificate to be revoked.

» azurerm_resource_group

Manages a resource group on Azure.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "testResourceGroup1"
  location = "West US"

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the resource group. Must be unique on your Azure subscription.

- `location` - (Required) The location where the resource group should be created. For a list of all Azure locations, please consult this link or run `az account list-locations --output table`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The resource group ID.

» Import

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

```
terraform import azurerm_resource_group.mygroup /subscriptions/00000000-0000-0000-0000-00000
```

» azurerm_app_service

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

Note: When using Slots - the `app_settings`, `connection_string` and `site_config` blocks on the `azurerm_app_service` resource will be overwritten when promoting a Slot using the `azurerm_app_service_active_slot` resource.

» Example Usage (.net 4.x)

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

  byte_length = 8
}

resource "azurerm_resource_group" "test" {
  name     = "some-resource-group"
  location = "West Europe"
}

resource "azurerm_app_service_plan" "test" {
  name                = "some-app-service-plan"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    tier = "Standard"
    size = "S1"
  }
}

resource "azurerm_app_service" "test" {
  name                = "${random_id.server.hex}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"

  site_config {
    dotnet_framework_version = "v4.0"
    scm_type                 = "LocalGit"
  }

  app_settings {
    "SOME_KEY" = "some-value"
  }

  connection_string {
    name  = "Database"
    type  = "SQLServer"
    value = "Server=some-server.mydomain.com;Integrated Security=SSPI"
```

```
  }
}
```

» Example Usage (Java 1.8)

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

  byte_length = 8
}

resource "azurerm_resource_group" "test" {
  name     = "some-resource-group"
  location = "West Europe"
}

resource "azurerm_app_service_plan" "test" {
  name                = "some-app-service-plan"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    tier = "Standard"
    size = "S1"
  }
}

resource "azurerm_app_service" "test" {
  name                = "${random_id.server.hex}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"

  site_config {
    java_version           = "1.8"
    java_container         = "JETTY"
    java_container_version = "9.3"
    scm_type               = "LocalGit"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the App Service. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the App Service.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `app_service_plan_id` - (Required) The ID of the App Service Plan within which to create this App Service. Changing this forces a new resource to be created.

- `app_settings` - (Optional) A key-value pair of App Settings.

- `connection_string` - (Optional) An `connection_string` block as defined below.

- `client_affinity_enabled` - (Optional) Should the App Service send session affinity cookies, which route client requests in the same session to the same instance?

- `enabled` - (Optional) Is the App Service Enabled? Changing this forces a new resource to be created.

- `https_only` - (Optional) Can the App Service only be accessed via HTTPS? Defaults to `false`.

- `site_config` - (Optional) A `site_config` block as defined below.

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

- `identity` - (Optional) A Managed Service Identity block as defined below.

`connection_string` supports the following:

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

`identity` supports the following:

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

The assigned `principal_id` and `tenant_id` can be retrieved after the App Service has been created. More details are available below.

`site_config` supports the following:

- `always_on` - (Optional) Should the app be loaded at all times? Defaults to `false`.

- `default_documents` - (Optional) The ordering of default documents to load, if an address isn't specified.

- `dotnet_framework_version` - (Optional) The version of the .net framework's CLR used in this App Service. Possible values are `v2.0` (which will use the latest version of the .net framework for the .net CLR v2 - currently `.net 3.5`) and `v4.0` (which corresponds to the latest version of the .net CLR v4 - which at the time of writing is `.net 4.7.1`). For more information on which .net CLR version to use based on the .net framework you're targeting - please see this table. Defaults to `v4.0`.

- `http2_enabled` - (Optional) Is HTTP2 Enabled on this App Service? Defaults to `false`.

- `ip_restriction` - (Optional) One or more `ip_restriction` blocks as defined below.

- `java_version` - (Optional) The version of Java to use. If specified `java_container` and `java_container_version` must also be specified. Possible values are `1.7` and `1.8`.

- `java_container` - (Optional) The Java Container to use. If specified `java_version` and `java_container_version` must also be specified. Possible values are `JETTY` and `TOMCAT`.

- `java_container_version` - (Optional) The version of the Java Container to use. If specified `java_version` and `java_container` must also be specified.

- `local_mysql_enabled` - (Optional) Is "MySQL In App" Enabled? This runs a local MySQL instance with your app and shares resources from the App Service plan.

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

- `managed_pipeline_mode` - (Optional) The Managed Pipeline Mode. Possible values are `Integrated` and `Classic`. Defaults to `Integrated`.
- `min_tls_version` - (Optional) The minimum supported TLS version for the app service. Possible values are `1.0`, `1.1`, and `1.2`. Defaults to `1.2` for new app services.

- `php_version` - (Optional) The version of PHP to use in this App Service. Possible values are `5.5`, `5.6`, `7.0` and `7.1`.
- `python_version` - (Optional) The version of Python to use in this App Service. Possible values are `2.7` and `3.4`.
- `remote_debugging_enabled` - (Optional) Is Remote Debugging Enabled? Defaults to `false`.
- `remote_debugging_version` - (Optional) Which version of Visual Studio should the Remote Debugger be compatible with? Possible values are `VS2012`, `VS2013`, `VS2015` and `VS2017`.
- `scm_type` - (Optional) The type of Source Control enabled for this App Service. Possible values include `None` and `LocalGit`. Defaults to `None`.
- `use_32_bit_worker_process` - (Optional) Should the App Service run in 32 bit mode, rather than 64 bit mode?

NOTE: when using an App Service Plan in the `Free` or `Shared` Tiers `use_32_bit_worker_process` must be set to `true`.

- `ftps_state` - (Optional) State of FTP / FTPS service for this AppService. Possible values include: `AllAllowed`, `FtpsOnly` and `Disabled`.

- `linux_fx_version` - (Optional) Linux App Framework and version for the AppService, e.g. `DOCKER|(golang:latest)`.

- `websockets_enabled` - (Optional) Should WebSockets be enabled?

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

`ip_restriction` supports the following:

- `ip_address` - (Required) The IP Address used for this IP Restriction.

- `subnet_mask` - (Optional) The Subnet mask used for this IP Restriction. Defaults to `255.255.255.255`.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the App Service.

- `default_site_hostname` - The Default Hostname associated with the App Service - such as `mysite.azurewebsites.net`

- `outbound_ip_addresses` - A comma separated list of outbound IP addresses - such as `52.23.25.3,52.143.43.12`

- `source_control` - A `source_control` block as defined below, which contains the Source Control information when `scm_type` is set to `LocalGit`.

- site_credential - A site_credential block as defined below, which contains the site-level credentials used to publish to this App Service.

- identity - An identity block as defined below, which contains the Managed Service Identity information for this App Service.

———————————————

identity exports the following:

- principal_id - The Principal ID for the Service Principal associated with the Managed Service Identity of this App Service.

- tenant_id - The Tenant ID for the Service Principal associated with the Managed Service Identity of this App Service.

You can access the Principal ID via ${azurerm_app_service.test.identity.0.principal_id} and the Tenant ID via ${azurerm_app_service.test.identity.0.principal_id}

———————————————

site_credential exports the following:

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

NOTE: both username and password for the site_credential block are only exported when scm_type is set to LocalGit

———————————————

source_control exports the following:

- repo_url - URL of the Git repository for this App Service.
- branch - Branch name of the Git repository for this App Service.

» Import

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

```
terraform import azurerm_app_service.instance1 /subscriptions/00000000-0000-0000-0000-000000
```

» azurerm_app_service_plan

Create an App Service Plan component.

» Example Usage (Dedicated)

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_app_service_plan" "test" {
  name                = "api-appserviceplan-pro"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    tier = "Standard"
    size = "S1"
  }
}
```

» Example Usage (Shared / Consumption Plan)

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_app_service_plan" "test" {
  name                = "api-appserviceplan-pro"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  kind                = "FunctionApp"

  sku {
    tier = "Dynamic"
    size = "Y1"
  }
}
```

» Example Usage (Linux)

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}
```

```
resource "azurerm_app_service_plan" "test" {
  name                = "api-appserviceplan-pro"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  kind                = "Linux"

  sku {
    tier = "Standard"
    size = "S1"
  }

  properties {
    reserved = true
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the App Service Plan component. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the App Service Plan component.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `kind` - (Optional) The kind of the App Service Plan to create. Possible values are `Windows` (also available as `App`), `Linux` and `FunctionApp` (for a Consumption Plan). Defaults to `Windows`. Changing this forces a new resource to be created.

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

- `sku` - (Required) A `sku` block as documented below.

- `properties` - (Optional) A `properties` block as documented below.

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

`sku` supports the following:

- `tier` - (Required) Specifies the plan's pricing tier.

- `size` - (Required) Specifies the plan's instance size.

- `capacity` - (Optional) Specifies the number of workers associated with this App Service Plan.

`properties` supports the following:

- `app_service_environment_id` - (Optional) The ID of the App Service Environment where the App Service Plan should be located. Changing forces a new resource to be created.

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

- `maximum_number_of_workers` - (Optional) Maximum number of instances that can be assigned to this App Service plan.

- `reserved` - (Optional) Is this App Service Plan `Reserved`. Defaults to `false`.

- `per_site_scaling` - (Optional) Can Apps assigned to this App Service Plan be scaled independently? If set to `false` apps assigned to this plan will scale to all instances of the plan. Defaults to `false`.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the App Service Plan component.
- `maximum_number_of_workers` - The maximum number of workers supported with the App Service Plan's sku.

» Import

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

```
terraform import azurerm_app_service_plan.instance1 /subscriptions/00000000-0000-0000-0000-0
```

» azurerm_app_service_active_slot

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

Note: When using Slots - the `app_settings`, `connection_string` and `site_config` blocks on the `azurerm_app_service` resource will be overwritten when promoting a Slot using the `azurerm_app_service_active_slot` resource.

» Example Usage

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

```
  # ...
}

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

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

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

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

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

» Argument Reference

The following arguments are supported:

- `resource_group_name` - (Required) The name of the resource group in which the App Service exists. Changing this forces a new resource to be created.

- `app_service_name` - (Required) The name of the App Service within which the Slot exists. Changing this forces a new resource to be created.

- `app_service_slot_name` - (Required) The name of the App Service Slot which should be promoted to the Production Slot within the App Service.

» azurerm_app_service_custom_hostname_binding

Manages a Hostname Binding within an App Service.

» Example Usage

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

  byte_length = 8
}

resource "azurerm_resource_group" "test" {
  name     = "some-resource-group"
  location = "West Europe"
}

resource "azurerm_app_service_plan" "test" {
  name                = "some-app-service-plan"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    tier = "Standard"
    size = "S1"
  }
}

resource "azurerm_app_service" "test" {
  name                = "${random_id.server.hex}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
}

resource "azurerm_app_service_custom_hostname_binding" "test" {
  hostname            = "www.mywebsite.com"
  app_service_name    = "${azurerm_app_service.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}
```

» Argument Reference

The following arguments are supported:

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

to be created.

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

- `app_service_name` - (Required) The name of the App Service in which to add the Custom Hostname Binding. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the App Service exists. Changing this forces a new resource to be created.

» Attributes Reference

The following attributes are exported:

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

» Import

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

```
terraform import azurerm_app_service_custom_hostname_binding.mywebsite /subscriptions/000000
```

» azurerm_app_service_slot

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

Note: When using Slots - the `app_settings`, `connection_string` and `site_config` blocks on the `azurerm_app_service` resource will be overwritten when promoting a Slot using the `azurerm_app_service_active_slot` resource.

» Example Usage (.net 4.x)

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

  byte_length = 8
}
```

```
resource "azurerm_resource_group" "test" {
  name     = "some-resource-group"
  location = "West Europe"
}

resource "azurerm_app_service_plan" "test" {
  name                = "some-app-service-plan"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    tier = "Standard"
    size = "S1"
  }
}

resource "azurerm_app_service" "test" {
  name                = "${random_id.server.hex}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"

  site_config {
    dotnet_framework_version = "v4.0"
  }

  app_settings {
    "SOME_KEY" = "some-value"
  }

  connection_string {
    name  = "Database"
    type  = "SQLServer"
    value = "Server=some-server.mydomain.com;Integrated Security=SSPI"
  }
}

resource "azurerm_app_service_slot" "test" {
  name                = "${random_id.server.hex}"
  app_service_name    = "${azurerm_app_service.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"

  site_config {
    dotnet_framework_version = "v4.0"
```

```
  }

  app_settings {
    "SOME_KEY" = "some-value"
  }

  connection_string {
    name  = "Database"
    type  = "SQLServer"
    value = "Server=some-server.mydomain.com;Integrated Security=SSPI"
  }
}
```

» Example Usage (Java 1.8)

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

  byte_length = 8
}

resource "azurerm_resource_group" "test" {
  name     = "some-resource-group"
  location = "West Europe"
}

resource "azurerm_app_service_plan" "test" {
  name                = "some-app-service-plan"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    tier = "Standard"
    size = "S1"
  }
}

resource "azurerm_app_service" "test" {
  name                = "${random_id.server.hex}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
```

```
  site_config {
    java_version         = "1.8"
    java_container       = "JETTY"
    java_container_version = "9.3"
  }
}

resource "azurerm_app_service_slot" "test" {
  name                 = "${random_id.server.hex}"
  app_service_name     = "${azurerm_app_service.test.name}"
  location             = "${azurerm_resource_group.test.location}"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  app_service_plan_id  = "${azurerm_app_service_plan.test.id}"

  site_config {
    java_version         = "1.8"
    java_container       = "JETTY"
    java_container_version = "9.3"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the App Service Slot component. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the App Service Slot component.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `app_service_plan_id` - (Required) The ID of the App Service Plan within which to create this App Service Slot. Changing this forces a new resource to be created.

- `app_service_name` - (Required) The name of the App Service within which to create the App Service Slot. Changing this forces a new resource to be created.

- `app_settings` - (Optional) A key-value pair of App Settings.

- `connection_string` - (Optional) An `connection_string` block as defined below.

- `client_affinity_enabled` - (Optional) Should the App Service Slot send session affinity cookies, which route client requests in the same session to

the same instance?

- `enabled` - (Optional) Is the App Service Slot Enabled?

- `https_only` - (Optional) Can the App Service Slot only be accessed via HTTPS? Defaults to `false`.

- `site_config` - (Optional) A `site_config` object as defined below.

- `identity` - (Optional) A Managed Service Identity block as defined below.

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

`connection_string` supports the following:

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

`site_config` supports the following:

- `always_on` - (Optional) Should the app be loaded at all times? Defaults to `false`.

- `default_documents` - (Optional) The ordering of default documents to load, if an address isn't specified.

- `dotnet_framework_version` - (Optional) The version of the .net framework's CLR used in this App Service Slot. Possible values are `v2.0` (which will use the latest version of the .net framework for the .net CLR v2 - currently `.net 3.5`) and `v4.0` (which corresponds to the latest version of the .net CLR v4 - which at the time of writing is `.net 4.7.1`). For more information on which .net CLR version to use based on the .net framework you're targeting - please see this table. Defaults to `v4.0`.

- `http2_enabled` - (Optional) Is HTTP2 Enabled on this App Service? Defaults to `false`.

- `ip_restriction` - (Optional) One or more `ip_restriction` blocks as defined below.

- `java_version` - (Optional) The version of Java to use. If specified `java_container` and `java_container_version` must also be specified. Possible values are `1.7` and `1.8`.

- `java_container` - (Optional) The Java Container to use. If specified `java_version` and `java_container_version` must also be specified. Possible values are `JETTY` and `TOMCAT`.

- `java_container_version` - (Optional) The version of the Java Container to use. If specified `java_version` and `java_container` must also be specified.

- `local_mysql_enabled` - (Optional) Is "MySQL In App" Enabled? This runs a local MySQL instance with your app and shares resources from the App Service plan.

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

- `managed_pipeline_mode` - (Optional) The Managed Pipeline Mode. Possible values are `Integrated` and `Classic`. Defaults to `Integrated`.
- `min_tls_version` - (Optional) The minimum supported TLS version for the app service. Possible values are `1.0`, `1.1`, and `1.2`. Defaults to `1.2` for new app services.
- `php_version` - (Optional) The version of PHP to use in this App Service Slot. Possible values are `5.5`, `5.6`, `7.0` and `7.1`.
- `python_version` - (Optional) The version of Python to use in this App Service Slot. Possible values are `2.7` and `3.4`.
- `remote_debugging_enabled` - (Optional) Is Remote Debugging Enabled? Defaults to `false`.
- `remote_debugging_version` - (Optional) Which version of Visual Studio should the Remote Debugger be compatible with? Possible values are `VS2012`, `VS2013`, `VS2015` and `VS2017`.
- `use_32_bit_worker_process` - (Optional) Should the App Service Slot run in 32 bit mode, rather than 64 bit mode?

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

- `websockets_enabled` - (Optional) Should WebSockets be enabled?

`ip_restriction` supports the following:

- `ip_address` - (Required) The IP Address used for this IP Restriction.

- `subnet_mask` - (Optional) The Subnet mask used for this IP Restriction. Defaults to `255.255.255.255`.

`identity` supports the following:

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

The assigned `principal_id` and `tenant_id` can be retrieved after the App Service Slot has been created.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the App Service Slot.

- `default_site_hostname` - The Default Hostname associated with the App Service Slot - such as `mysite.azurewebsites.net`

» Import

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

```
terraform import azurerm_app_service_slot.instance1 /subscriptions/00000000-0000-0000-0000-0
```

» azurerm_function_app

Manages a Function App.

» Example Usage (with App Service Plan)

```
resource "azurerm_resource_group" "test" {
  name     = "azure-functions-test-rg"
  location = "westus2"
}

resource "azurerm_storage_account" "test" {
  name                     = "functionsapptestsa"
  resource_group_name      = "${azurerm_resource_group.test.name}"
  location                 = "${azurerm_resource_group.test.location}"
  account_tier             = "Standard"
  account_replication_type = "LRS"
}

resource "azurerm_app_service_plan" "test" {
  name                = "azure-functions-test-service-plan"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    tier = "Standard"
    size = "S1"
  }
}
```

```
resource "azurerm_function_app" "test" {
  name                      = "test-azure-functions"
  location                  = "${azurerm_resource_group.test.location}"
  resource_group_name       = "${azurerm_resource_group.test.name}"
  app_service_plan_id       = "${azurerm_app_service_plan.test.id}"
  storage_connection_string = "${azurerm_storage_account.test.primary_connection_string}"
}
```

» Example Usage (in a Consumption Plan)

```
resource "azurerm_resource_group" "test" {
  name     = "azure-functions-cptest-rg"
  location = "westus2"
}

resource "azurerm_storage_account" "test" {
  name                     = "functionsapptestsa"
  resource_group_name      = "${azurerm_resource_group.test.name}"
  location                 = "${azurerm_resource_group.test.location}"
  account_tier             = "Standard"
  account_replication_type = "LRS"
}

resource "azurerm_app_service_plan" "test" {
  name                = "azure-functions-test-service-plan"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  kind                = "FunctionApp"

  sku {
    tier = "Dynamic"
    size = "Y1"
  }
}

resource "azurerm_function_app" "test" {
  name                      = "test-azure-functions"
  location                  = "${azurerm_resource_group.test.location}"
  resource_group_name       = "${azurerm_resource_group.test.name}"
  app_service_plan_id       = "${azurerm_app_service_plan.test.id}"
  storage_connection_string = "${azurerm_storage_account.test.primary_connection_string}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Function App. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the Function App.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `app_service_plan_id` - (Required) The ID of the App Service Plan within which to create this Function App. Changing this forces a new resource to be created.

- `storage_connection_string` - (Required) The connection string of the backend storage account which will be used by this Function App (such as the dashboard, logs).

- `app_settings` - (Optional) A key-value pair of App Settings.

- `connection_string` - (Optional) An `connection_string` block as defined below.

- `client_affinity_enabled` - (Optional) Should the Function App send session affinity cookies, which route client requests in the same session to the same instance?

- `enabled` - (Optional) Is the Function App enabled?

- `https_only` - (Optional) Can the Function App only be accessed via HTTPS? Defaults to `false`.

- `version` - (Optional) The runtime version associated with the Function App. Possible values are `~1` and `beta`. Defaults to `~1`.

- `site_config` - (Optional) A `site_config` object as defined below.

- `identity` - (Optional) An `identity` block as defined below.

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

`connection_string` supports the following:

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

`site_config` supports the following:

- `always_on` - (Optional) Should the Function App be loaded at all times? Defaults to `false`.
- `use_32_bit_worker_process` - (Optional) Should the Function App run in 32 bit mode, rather than 64 bit mode? Defaults to `true`.

Note: when using an App Service Plan in the `Free` or `Shared` Tiers `use_32_bit_worker_process` must be set to `true`.

- `websockets_enabled` - (Optional) Should WebSockets be enabled?

`identity` supports the following:

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

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Function App

- `default_hostname` - The default hostname associated with the Function App - such as `mysite.azurewebsites.net`

- `outbound_ip_addresses` - A comma separated list of outbound IP addresses - such as `52.23.25.3,52.143.43.12`

- `identity` - An `identity` block as defined below, which contains the Managed Service Identity information for this App Service.

- `site_credential` - A `site_credential` block as defined below, which contains the site-level credentials used to publish to this App Service.

`identity` exports the following:

- `principal_id` - The Principal ID for the Service Principal associated with the Managed Service Identity of this App Service.

- `tenant_id` - The Tenant ID for the Service Principal associated with the Managed Service Identity of this App Service.

`site_credential` exports the following:

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

» Import

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

```
terraform import azurerm_function_app.functionapp1 /subscriptions/00000000-0000-0000-0000-0(
```

» azurerm_role_assignment

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

» Example Usage (using a built-in Role)

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

data "azurerm_client_config" "test" {}

resource "azurerm_role_assignment" "test" {
  scope                = "${data.azurerm_subscription.primary.id}"
  role_definition_name = "Reader"
  principal_id         = "${data.azurerm_client_config.test.service_principal_object_id}"
}
```

» Example Usage (Custom Role & Service Principal)

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

data "azurerm_client_config" "test" {}

resource "azurerm_role_definition" "test" {
  role_definition_id = "00000000-0000-0000-0000-000000000000"
  name               = "my-custom-role-definition"
  scope              = "${data.azurerm_subscription.primary.id}"

  permissions {
    actions     = ["Microsoft.Resources/subscriptions/resourceGroups/read"]
    not_actions = []
  }

  assignable_scopes = [
    "${data.azurerm_subscription.primary.id}",
  ]
}
```

```
resource "azurerm_role_assignment" "test" {
  name               = "00000000-0000-0000-0000-000000000000"
  scope              = "${data.azurerm_subscription.primary.id}"
  role_definition_id = "${azurerm_role_definition.test.id}"
  principal_id       = "${data.azurerm_client_config.test.service_principal_object_id}"
}
```

» Example Usage (Custom Role & User)

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

data "azurerm_client_config" "test" {}

resource "azurerm_role_definition" "test" {
  role_definition_id = "00000000-0000-0000-0000-000000000000"
  name               = "my-custom-role-definition"
  scope              = "${data.azurerm_subscription.primary.id}"

  permissions {
    actions     = ["Microsoft.Resources/subscriptions/resourceGroups/read"]
    not_actions = []
  }

  assignable_scopes = [
    "${data.azurerm_subscription.primary.id}",
  ]
}

resource "azurerm_role_assignment" "test" {
  name               = "00000000-0000-0000-0000-000000000000"
  scope              = "${data.azurerm_subscription.primary.id}"
  role_definition_id = "${azurerm_role_definition.test.id}"
  principal_id       = "${data.azurerm_client_config.test.client_id}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Optional) A unique UUID/GUID for this Role Assignment - one will be generated if not specified. Changing this forces a new resource to be created.

- `scope` - (Required) The scope at which the Role Assignment applies too, such as /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333,

/subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup,
or /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup/providers/
Changing this forces a new resource to be created.

- `role_definition_id` - (Optional) The Scoped-ID of the Role Definition.
  Changing this forces a new resource to be created. Conflicts with
  `role_definition_name`.

- `role_definition_name` - (Optional) The name of a built-in Role.
  Changing this forces a new resource to be created. Conflicts with
  `role_definition_id`.

- `principal_id` - (Required) The ID of the Principal (User or Application)
  to assign the Role Definition to. Changing this forces a new resource to
  be created.

» Attributes Reference

The following attributes are exported:

- `id` - The Role Assignment ID.

» Import

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

```
terraform import azurerm_role_assignment.test /subscriptions/00000000-0000-0000-0000-00000000
```

» azurerm_role_definition

Manages a custom Role Definition, used to assign Roles to Users/Principals.
See 'Understand role definitions' in the Azure documentation for more details.

» Example Usage

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

resource "azurerm_role_definition" "test" {
  name               = "my-custom-role"
  scope              = "${data.azurerm_subscription.primary.id}"
  description        = "This is a custom role created via Terraform"

  permissions {
    actions     = ["*"]
```

```
    not_actions = []
  }

  assignable_scopes = [
    "${data.azurerm_subscription.primary.id}", # /subscriptions/00000000-0000-0000-0000-0000
  ]
}
```

» Argument Reference

The following arguments are supported:

- `role_definition_id` - (Optional) A unique UUID/GUID which identifies
  this role - one will be generated if not specified. Changing this forces a
  new resource to be created.

- `name` - (Required) The name of the Role Definition. Changing this forces
  a new resource to be created.

- `scope` - (Required) The scope at which the Role Definition applies too,
  such as `/subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333`,
  `/subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup`,
  or `/subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup/providers/`
  Changing this forces a new resource to be created.

- `description` - (Optional) A description of the Role Definition.

- `permissions` - (Required) A `permissions` block as defined below.

- `assignable_scopes` - (Required) One or more assignable scopes for this
  Role Definition, such as `/subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333`,
  `/subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup`,
  or `/subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup/providers/`

A `permissions` block as the following properties:

- `action` - (Optional) One or more Allowed Actions, such as `*`,
  `Microsoft.Resources/subscriptions/resourceGroups/read`. See
  'Azure Resource Manager resource provider operations' for details.

- `not_action` - (Optional) One or more Disallowed Actions, such as `*`,
  `Microsoft.Resources/subscriptions/resourceGroups/read`. See
  'Azure Resource Manager resource provider operations' for details.

» Attributes Reference

The following attributes are exported:

- `id` - The Role Definition ID.

» Import

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

```
terraform import azurerm_role_definition.test /subscriptions/00000000-0000-0000-0000-0000000
```

» azurerm_azuread_application

Manages an Application within Azure Active Directory.

NOTE: If you're authenticating using a Service Principal then it must have permissions to both `Read and write all applications` and `Sign in and read user profile` within the `Windows Azure Active Directory` API.

» Example Usage

```
resource "azurerm_azuread_application" "test" {
  name                     = "example"
  homepage                 = "http://homepage"
  identifier_uris          = ["http://uri"]
  reply_urls               = ["http://replyurl"]
  available_to_other_tenants = false
  oauth2_allow_implicit_flow = true
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The display name for the application.

- `homepage` - (optional) The URL to the application's home page. If no homepage is specified this defaults to `http://{name}`.

- `identifier_uris` - (Optional) A list of user-defined URI(s) that uniquely identify a Web application within it's Azure AD tenant, or within a verified custom domain if the application is multi-tenant.

- `reply_urls` - (Optional) A list of URLs that user tokens are sent to for sign in, or the redirect URIs that OAuth 2.0 authorization codes and access tokens are sent to.

- `available_to_other_tenants` - (Optional) Is this Azure AD Application available to other tenants? Defaults to `false`.

- `oauth2_allow_implicit_flow` - (Optional) Does this Azure AD Application allow OAuth2.0 implicit flow tokens? Defaults to `false`.

» Attributes Reference

The following attributes are exported:

- `application_id` - The Application ID.

» Import

Azure Active Directory Applications can be imported using the `object id`, e.g.

```
terraform import azurerm_azuread_application.test 00000000-0000-0000-0000-000000000000
```

» azurerm_azuread_service_principal

Manages a Service Principal associated with an Application within Azure Active Directory.

NOTE: If you're authenticating using a Service Principal then it must have permissions to both `Read and write all applications` and `Sign in and read user profile` within the `Windows Azure Active Directory` API.

» Example Usage

```
resource "azurerm_azuread_application" "test" {
  name                      = "example"
  homepage                  = "http://homepage"
  identifier_uris           = ["http://uri"]
  reply_urls                = ["http://replyurl"]
  available_to_other_tenants = false
  oauth2_allow_implicit_flow = true
}

resource "azurerm_azuread_service_principal" "test" {
  application_id = "${azurerm_azuread_application.test.application_id}"
}
```

» Argument Reference

The following arguments are supported:

- `application_id` - (Required) The ID of the Azure AD Application for which to create a Service Principal.

» Attributes Reference

The following attributes are exported:

- `id` - The Object ID for the Service Principal.

- `display_name` - The Display Name of the Azure Active Directory Application associated with this Service Principal.

» Import

Azure Active Directory Service Principals can be imported using the `object id`, e.g.

```
terraform import azurerm_azuread_service_principal.test 00000000-0000-0000-0000-000000000000
```

» azurerm_azuread_service_principal_password

Manages a Password associated with a Service Principal within Azure Active Directory.

NOTE: If you're authenticating using a Service Principal then it must have permissions to both `Read and write all applications` and `Sign in and read user profile` within the `Windows Azure Active Directory` API.

» Example Usage

```
resource "azurerm_azuread_application" "test" {
  name                       = "example"
  homepage                   = "http://homepage"
  identifier_uris            = ["http://uri"]
  reply_urls                 = ["http://replyurl"]
  available_to_other_tenants = false
  oauth2_allow_implicit_flow = true
}

resource "azurerm_azuread_service_principal" "test" {
  application_id = "${azurerm_azuread_application.test.application_id}"
}
```

```
resource "azurerm_azuread_service_principal_password" "test" {
  service_principal_id = "${azurerm_azuread_service_principal.test.id}"
  value                = "VT=uSgbTanZhyz@%nL9Hpd+Tfay_MRV#"
  end_date             = "2020-01-01T01:02:03Z"
}
```

» Argument Reference

The following arguments are supported:

- `service_principal_id` - (Required) The ID of the Service Principal for which this password should be created. Changing this field forces a new resource to be created.

- `value` - (Required) The Password for this Service Principal.

- `end_date` - (Required) The End Date which the Password is valid until, formatted as a RFC3339 date string (e.g. `2018-01-01T01:02:03Z`). Changing this field forces a new resource to be created.

- `key_id` - (Optional) A GUID used to uniquely identify this Key. If not specified a GUID will be created. Changing this field forces a new resource to be created.

- `start_date` - (Optional) The Start Date which the Password is valid from, formatted as a RFC3339 date string (e.g. `2018-01-01T01:02:03Z`). If this isn't specified, the current date is used. Changing this field forces a new resource to be created.

» Attributes Reference

The following attributes are exported:

- `id` - The Key ID for the Service Principal Password.

» Import

Service Principal Passwords can be imported using the `object id`, e.g.

`terraform import azurerm_azuread_service_principal_password.test 00000000-0000-0000-0000-000`

NOTE: This ID format is unique to Terraform and is composed of the Service Principal's Object ID and the Service Principal Password's Key ID in the format `{ServicePrincipalObjectId}/{ServicePrincipalPasswordKeyId}`.

» azurerm_automation_account

Manages a Automation Account.

» Example Usage

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

resource "azurerm_automation_account" "example" {
  name                = "automationAccount1"
  location            = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"

  sku {
    name = "Basic"
  }

  tags {
    environment = "development"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Automation Account. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the Automation Account is created. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `sku` - (Required) A `sku` block as defined below.

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

`sku` supports the following:

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

» Attributes Reference

The following attributes are exported:

- `id` - The Automation Account ID.

» Import

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

```
terraform import azurerm_automation_account.account1 /subscriptions/00000000-0000-0000-0000-
```

» azurerm_automation_credential

Manages a Automation Credential.

» Example Usage

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

resource "azurerm_automation_account" "example" {
  name                = "account1"
  location            = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  sku {
    name = "Basic"
  }
}

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

» Argument Reference

The following arguments are supported:

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

- `resource_group_name` - (Required) The name of the resource group in which the Credential is created. Changing this forces a new resource to be created.

- `account_name` - (Required) The name of the automation account in which the Credential is created. Changing this forces a new resource to be created.

- `username` - (Required) The username associated with this Automation Credential.

- `password` - (Required) The password associated with this Automation Credential.

- `description` - (Optional) The description associated with this Automation Credential.

» Attributes Reference

The following attributes are exported:

- `id` - The Automation Credential ID.

» Import

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

```
terraform import azurerm_automation_credential.credential1 /subscriptions/00000000-0000-0000
```

» azurerm_automation_runbook

Manages a Automation Runbook.

» Example Usage

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

```
}

resource "azurerm_automation_account" "example" {
  name                = "account1"
  location            = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  sku {
    name = "Basic"
  }
}

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

» Argument Reference

The following arguments are supported:

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

- resource_group_name - (Required) The name of the resource group in which the Runbook is created. Changing this forces a new resource to be created.

- location - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- account_name - (Required) The name of the automation account in which the Runbook is created. Changing this forces a new resource to be created.

- runbook_type - (Required) The type of the runbook - can be either Graph, GraphPowerShell, GraphPowerShellWorkflow, PowerShellWorkflow, PowerShell or Script.

- log_progress - (Required) Progress log option.

84

- `log_verbose` - (Required) Verbose log option.

- `publish_content_link` - (Required) The published runbook content link.

- `description` - (Optional) A description for this credential.

`publish_content_link` supports the following:

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

» **Attributes Reference**

The following attributes are exported:

- `id` - The Automation Runbook ID.

» **Import**

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

```
terraform import azurerm_automation_runbook.Get-AzureVMTutorial /subscriptions/00000000-0000
```

» **azurerm_automation_schedule**

Manages a Automation Schedule.

» **Example Usage**

```
resource "azurerm_resource_group" "example" {
 name     = "tfex-automation-account"
 location = "West Europe"
}

resource "azurerm_automation_account" "example" {
  name                = "tfex-automation-account"
  location            = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  sku {
    name = "Basic"
  }
}

resource "azurerm_automation_schedule" "example" {
  name                    = "tfex-automation-schedule"
```

```
  resource_group_name    = "${azurerm_resource_group.example.name}"
  automation_account_name = "${azurerm_automation_account.example.name}"
  frequency              = "Week"
  interval               = 1
  timezone               = "Central Europe Standard Time"
  start_time             = "2014-04-15T18:00:15+02:00"
  description            = "This is an example schedule"

  advanced_schedule {
    week_days = ["Friday"]
  }
}
```

» Argument Reference

The following arguments are supported:

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

- `resource_group_name` - (Required) The name of the resource group in which the Schedule is created. Changing this forces a new resource to be created.

- `automation_account_name` - (Required) The name of the automation account in which the Schedule is created. Changing this forces a new resource to be created.

- `frequency` - (Required) The frequency of the schedule. - can be either `OneTime`, `Day`, `Hour`, `Week`, or `Month`.

- `description` - (Optional) A description for this Schedule.

- `interval` - (Optional) The number of `frequency`s between runs. Only valid when frequency is `Day`, `Hour`, `Week`, or `Month` and defaults to `1`.

- `start_time` - (Optional) Start time of the schedule. Must be at least five minutes in the future. Defaults to seven minutes in the future from the time the resource is created.

- `expiry_time` - (Optional) The end time of the schedule.

- `timezone` - (Optional) The timezone of the start time. Defaults to `UTC`. For possible values see: https://msdn.microsoft.com/en-us/library/ms912391(v=winembedded.11).aspx

- `week_days` - (Optional) List of days of the week that the job should execute on. Only valid when frequency is `Week`.

86

- `month_days` - (Optional) List of days of the month that the job should execute on. Must be between `1` and `31`. `-1` for last day of the month. Only valid when frequency is `Month`.

- `monthly_occurrence` - (Optional) List of occurrences of days within a month. Only valid when frequency is `Month`. The `monthly_occurrence` block supports fields documented below.

The `monthly_occurrence` block supports:

- `day` - (Required) Day of the occurrence. Must be one of `Monday`, `Tuesday`, `Wednesday`, `Thursday`, `Friday`, `Saturday`, `Sunday`.

- `occurrence` - (Required) Occurrence of the week within the month. Must be between `1` and `5`. `-1` for last week within the month.

» **Attributes Reference**

The following attributes are exported:

- `id` - The Automation Schedule ID.

» **Import**

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

```
terraform import azurerm_automation_schedule.schedule1 /subscriptions/00000000-0000-0000-000
```

» **azurerm_application_insights**

Create an Application Insights component.

» **Example Usage**

```
resource "azurerm_resource_group" "test" {
  name     = "tf-test"
  location = "West Europe"
}

resource "azurerm_application_insights" "test" {
  name                = "tf-test-appinsights"
  location            = "West Europe"
  resource_group_name = "${azurerm_resource_group.test.name}"
```

```
  application_type    = "Web"
}

output "instrumentation_key" {
  value = "${azurerm_application_insights.test.instrumentation_key}"
}

output "app_id" {
  value = "${azurerm_application_insights.test.app_id}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Application Insights component. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the Application Insights component.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `application_type` - (Required) Specifies the type of Application Insights to create. Valid values are `Web`, `Java`, `Phone`, `Store`, `iOS` and `Other`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Application Insights component.

- `app_id` - The App ID associated with this Application Insights component.

- `instrumentation_key` - The Instrumentation Key for this Application Insights component.

» Import

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

```
terraform import azurerm_application_insights.instance1 /subscriptions/00000000-0000-0000-0(
```

» azurerm_cdn_profile

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

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_cdn_profile" "test" {
  name                = "exampleCdnProfile"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "Standard_Verizon"

  tags {
    environment = "Production"
    cost_center = "MSFT"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the CDN Profile. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the CDN Profile.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `sku` - (Required) The pricing related information of current CDN profile. Accepted values are `Standard_Akamai`, `Standard_ChinaCdn`, `Standard_Microsoft`, `Standard_Verizon` or `Premium_Verizon`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The CDN Profile ID.

» Import

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

```
terraform import azurerm_cdn_profile.test /subscriptions/00000000-0000-0000-0000-0000000000000
```

» azurerm_cdn_endpoint

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

» Example Usage

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

  byte_length = 8
}

resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_cdn_profile" "test" {
  name                = "exampleCdnProfile"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "Standard_Verizon"
}

resource "azurerm_cdn_endpoint" "test" {
  name                = "${random_id.server.hex}"
  profile_name        = "${azurerm_cdn_profile.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
```

```
  origin {
    name      = "exampleCdnOrigin"
    host_name = "www.example.com"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the CDN Endpoint. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the CDN Endpoint.

- `profile_name` - (Required) The CDN Profile to which to attach the CDN Endpoint.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `is_http_allowed` - (Optional) Defaults to `true`.

- `is_https_allowed` - (Optional) Defaults to `true`.

- `content_types_to_compress` - (Optional) An array of strings that indicates a content types on which compression will be applied. The value for the elements should be MIME types.

- `geo_filter` - (Optional) A set of Geo Filters for this CDN Endpoint. Each `geo_filter` block supports fields documented below.

- `is_compression_enabled` - (Optional) Indicates whether compression is to be enabled. Defaults to false.

- `querystring_caching_behaviour` - (Optional) Sets query string caching behavior. Allowed values are `IgnoreQueryString`, `BypassCaching` and `UseQueryString`. Defaults to `IgnoreQueryString`.

- `optimization_type` - (Optional) What types of optimization should this CDN Endpoint optimize for? Possible values include `DynamicSiteAcceleration`, `GeneralMediaStreaming`, `GeneralWebDelivery`, `LargeFileDownload` and `VideoOnDemandMediaStreaming`.

- `origin` - (Optional) The set of origins of the CDN endpoint. When multiple origins exist, the first origin will be used as primary and rest will be used as failover options. Each `origin` block supports fields documented below.

- `origin_host_header` - (Optional) The host header CDN provider will send along with content requests to origins. Defaults to the host name of the origin.

- `origin_path` - (Optional) The path used at for origin requests.

- `probe_path` - (Optional) the path to a file hosted on the origin which helps accelerate delivery of the dynamic content and calculate the most optimal routes for the CDN. This is relative to the `origin_path`.

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

The `origin` block supports:

- `name` - (Required) The name of the origin. This is an arbitrary value. However, this value needs to be unique under the endpoint. Changing this forces a new resource to be created.

- `host_name` - (Required) A string that determines the hostname/IP address of the origin server. This string can be a domain name, Storage Account endpoint, Web App endpoint, IPv4 address or IPv6 address. Changing this forces a new resource to be created.

- `http_port` - (Optional) The HTTP port of the origin. Defaults to `80`. Changing this forces a new resource to be created.

- `https_port` - (Optional) The HTTPS port of the origin. Defaults to `443`. Changing this forces a new resource to be created.

The `geo_filter` block supports:

- `relative_path` - (Required) The relative path applicable to geo filter.

- `action` - (Required) The Action of the Geo Filter. Possible values include `Allow` and `Block`.

- `country_codes` - (Required) A List of two letter country codes (e.g. `US`, `GB`) to be associated with this Geo Filter.

» Attributes Reference

The following attributes are exported:

- `id` - The CDN Endpoint ID.

» Import

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

```
terraform import azurerm_cdn_endpoint.test /subscriptions/00000000-0000-0000-0000-0000000000
```

» azurerm_availability_set

Manages an availability set for virtual machines.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_availability_set" "test" {
  name                = "acceptanceTestAvailabilitySet1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  tags {
    environment = "Production"
  }
}
```

» 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.

- `managed` - (Optional) Specifies whether the availability set is managed or not. Possible values are `true` (to specify aligned) or `false` (to specify classic). Default is `false`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The virtual Availability Set ID.

» Import

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

```
terraform import azurerm_availability_set.group1 /subscriptions/00000000-0000-0000-0000-0000
```

» azurerm_managed_disk

Create a managed disk.

» Example Usage with Create Empty

```
resource "azurerm_resource_group" "test" {
  name = "acctestRG"
  location = "West US 2"
}

resource "azurerm_managed_disk" "test" {
  name = "acctestmd"
  location = "West US 2"
  resource_group_name = "${azurerm_resource_group.test.name}"
  storage_account_type = "Standard_LRS"
  create_option = "Empty"
  disk_size_gb = "1"

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

» Example Usage with Create Copy

```
resource "azurerm_resource_group" "test" {
  name = "acctestRG"
  location = "West US 2"
}

resource "azurerm_managed_disk" "source" {
  name = "acctestmd1"
  location = "West US 2"
  resource_group_name = "${azurerm_resource_group.test.name}"
  storage_account_type = "Standard_LRS"
  create_option = "Empty"
  disk_size_gb = "1"

  tags {
    environment = "staging"
  }
}

resource "azurerm_managed_disk" "copy" {
  name = "acctestmd2"
  location = "West US 2"
  resource_group_name = "${azurerm_resource_group.test.name}"
  storage_account_type = "Standard_LRS"
  create_option = "Copy"
  source_resource_id = "${azurerm_managed_disk.source.id}"
  disk_size_gb = "1"

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

» Argument Reference

The following arguments are supported:

- **name** - (Required) Specifies the name of the managed disk. Changing this forces a new resource to be created.

- **resource_group_name** - (Required) The name of the resource group in which to create the managed disk.

- **location** - (Required) Specified the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `storage_account_type` - (Required) The type of storage to use for the managed disk. Allowable values are `Standard_LRS` or `Premium_LRS`.

- `create_option` - (Required) The method to use when creating the managed disk. Possible values include:

  - `Import` - Import a VHD file in to the managed disk (VHD specified with `source_uri`).
  - `Empty` - Create an empty managed disk.
  - `Copy` - Copy an existing managed disk or snapshot (specified with `source_resource_id`).
  - `FromImage` - Copy a Platform Image (specified with `image_reference_id`)

- `source_uri` - (Optional) URI to a valid VHD file to be used when `create_option` is `Import`.

- `source_resource_id` - (Optional) ID of an existing managed disk to copy when `create_option` is `Copy`.

- `image_reference_id` - (Optional) ID of an existing platform/marketplace disk image to copy when `create_option` is `FromImage`.

- `os_type` - (Optional) Specify a value when the source of an `Import` or `Copy` operation targets a source that contains an operating system. Valid values are `Linux` or `Windows`

- `disk_size_gb` - (Optional, Required for a new managed disk) Specifies the size of the managed disk to create in gigabytes. If `create_option` is `Copy` or `FromImage`, then the value must be equal to or greater than the source's size.

- `encryption_settings` - (Optional) an `encryption_settings` block as defined below.

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

- `zones` - (Optional) A collection containing the availability zone to allocate the Managed Disk in.

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

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

`encryption_settings` supports:

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

- `disk_encryption_key` - (Optional) A `disk_encryption_key` block as defined below.
- `key_encryption_key` - (Optional) A `key_encryption_key` block as defined below.

`disk_encryption_key` supports:

- `secret_url` - (Required) The URL to the Key Vault Secret used as the Disk Encryption Key. This can be found as `id` on the `azurerm_key_vault_secret` resource.
- `source_vault_id` - (Required) The URL of the Key Vault. This can be found as `vault_uri` on the `azurerm_key_vault` resource.

`key_encryption_key` supports:

- `key_url` - (Required) The URL to the Key Vault Key used as the Key Encryption Key. This can be found as `id` on the `azurerm_key_vault_secret` resource.
- `source_vault_id` - (Required) The URL of the Key Vault. This can be found as `vault_uri` on the `azurerm_key_vault` resource.

» Attributes Reference

The following attributes are exported:

- `id` - The managed disk ID.

» Import

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

```
terraform import azurerm_managed_disk.test /subscriptions/00000000-0000-0000-0000-000000000
```

» azurerm_snapshot

Manages a Disk Snapshot.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "snapshot-rg"
  location = "West Europe"
}
```

```
resource "azurerm_managed_disk" "test" {
  name                 = "managed-disk"
  location             = "${azurerm_resource_group.test.location}"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  storage_account_type = "Standard_LRS"
  create_option        = "Empty"
  disk_size_gb         = "10"
}

resource "azurerm_snapshot" "test" {
  name                = "snapshot"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  create_option       = "Copy"
  source_uri          = "${azurerm_managed_disk.test.id}"
}
```

» Argument Reference

The following arguments are supported:

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

- `resource_group_name` - (Required) The name of the resource group in which to create the Snapshot. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `create_option` - (Required) Indicates how the snapshot is to be created. Possible values are `Copy` or `Import`. Changing this forces a new resource to be created.

Note: One of `source_uri`, `source_resource_id` or `storage_account_id` must be specified.

- `source_uri` - (Optional) Specifies the URI to a Managed or Unmanaged Disk. Changing this forces a new resource to be created.

- `source_resource_id` - (Optional) Specifies a reference to an existing snapshot, when `create_option` is `Copy`. Changing this forces a new resource to be created.

- `storage_account_id` - (Optional) Specifies the ID of an storage account. Used with `source_uri` to allow authorization during import of unmanaged

blobs from a different subscription. Changing this forces a new resource to be created.

- `disk_size_gb` - (Optional) The size of the Snapshotted Disk in GB.

» Attributes Reference

The following attributes are exported:

- `id` - The Snapshot ID.
- `disk_size_gb` - The Size of the Snapshotted Disk in GB.

» Import

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

```
terraform import azurerm_snapshot.test /subscriptions/00000000-0000-0000-0000-000000000000/1
```

» azurerm_image

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

» Example Usage Creating from VHD

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

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

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

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

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

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

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the image. Changing this forces a new resource to be created.
- `resource_group_name` - (Required) The name of the resource group in which to create the image. Changing this forces a new resource to be created.
- `location` - (Required) Specified the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- `source_virtual_machine_id` - (Optional) The Virtual Machine ID from which to create the image.
- `os_disk` - (Optional) One or more `os_disk` elements as defined below.
- `data_disk` - (Optional) One or more `data_disk` elements as defined below.
- `tags` - (Optional) A mapping of tags to assign to the resource.

`os_disk` supports the following:

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

`data_disk` supports the following:

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

» Attributes Reference

The following attributes are exported:

- `id` - The managed image ID.

» Import

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

```
terraform import azurerm_image.test /subscriptions/00000000-0000-0000-0000-000000000000/reso
```

» azurerm_virtual_machine

Manages a Virtual Machine.

NOTE: Data Disks can be attached either directly on the `azurerm_virtual_machine` resource, or using the `azurerm_virtual_machine_data_disk_attachment` resource - but the two cannot be used together. If both are used against the same Virtual Machine, spurious changes will occur.

» Example Usage (from an Azure Platform Image)

This example provisions a Virtual Machine with Managed Disks. Other examples of the `azurerm_virtual_machine` resource can be found in the `./examples/virtual-machines` directory within the Github Repository

```
variable "prefix" {
  default = "tfvmex"
}

resource "azurerm_resource_group" "main" {
  name     = "${var.prefix}-resources"
```

```
    location = "West US 2"
}

resource "azurerm_virtual_network" "main" {
  name                = "${var.prefix}-network"
  address_space       = ["10.0.0.0/16"]
  location            = "${azurerm_resource_group.main.location}"
  resource_group_name = "${azurerm_resource_group.main.name}"
}

resource "azurerm_subnet" "internal" {
  name                 = "internal"
  resource_group_name  = "${azurerm_resource_group.main.name}"
  virtual_network_name = "${azurerm_virtual_network.main.name}"
  address_prefix       = "10.0.2.0/24"
}

resource "azurerm_network_interface" "main" {
  name                = "${var.prefix}-nic"
  location            = "${azurerm_resource_group.main.location}"
  resource_group_name = "${azurerm_resource_group.main.name}"

  ip_configuration {
    name                          = "testconfiguration1"
    subnet_id                     = "${azurerm_subnet.internal.id}"
    private_ip_address_allocation = "dynamic"
  }
}

resource "azurerm_virtual_machine" "main" {
  name                  = "${var.prefix}-vm"
  location              = "${azurerm_resource_group.main.location}"
  resource_group_name   = "${azurerm_resource_group.main.name}"
  network_interface_ids = ["${azurerm_network_interface.main.id}"]
  vm_size               = "Standard_DS1_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"
    sku       = "16.04-LTS"
```

```
      version   = "latest"
  }

  storage_os_disk {
    name              = "myosdisk1"
    caching           = "ReadWrite"
    create_option     = "FromImage"
    managed_disk_type = "Standard_LRS"
  }

  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. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) Specifies the name of the Resource Group in which the Virtual Machine should exist. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the Azure Region where the Virtual Machine exists. Changing this forces a new resource to be created.

- `network_interface_ids` - (Required) A list of Network Interface ID's which should be associated with the Virtual Machine.

- `os_profile_linux_config` - (Required, when a Linux machine) A `os_profile_linux_config` block.

- `os_profile_windows_config` - (Required, when a Windows machine) A `os_profile_windows_config` block.

- `vm_size` - (Required) Specifies the size of the Virtual Machine.

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- `availability_set_id` - (Optional) The ID of the Availability Set in which the Virtual Machine should exist. Changing this forces a new resource to be created.

- `boot_diagnostics` - (Optional) A `boot_diagnostics` block.

- `delete_os_disk_on_termination` - (Optional) Should the OS Disk (either the Managed Disk / VHD Blob) be deleted when the Virtual Machine is destroyed? Defaults to `false`.

- `delete_data_disks_on_termination` - (Optional) Should the Data Disks (either the Managed Disks / VHD Blobs) be deleted when the Virtual Machine is destroyed? Defaults to `false`.

- `identity` - (Optional) A `identity` block.

- `license_type` - (Optional) Specifies the BYOL Type for this Virtual Machine. This is only applicable to Windows Virtual Machines. Possible values are `Windows_Client` and `Windows_Server`.

- `os_profile` - (Optional) An `os_profile` block. Required when `create_option` in the `storage_os_disk` block is set to `FromImage`.

- `os_profile_secrets` - (Optional) One or more `os_profile_secrets` blocks.

- `plan` - (Optional) A `plan` block.

- `primary_network_interface_id` - (Optional) The ID of the Network Interface (which must be attached to the Virtual Machine) which should be the Primary Network Interface for this Virtual Machine.

- `storage_data_disk` - (Optional) One or more `storage_data_disk` blocks.

Please Note: Data Disks can also be attached either using this block or the `azurerm_virtual_machine_data_disk_attachment` resource - but not both.

- `storage_image_reference` - (Optional) A `storage_image_reference` block.

- `storage_os_disk` - (Required) A `storage_os_disk` block.

- `tags` - (Optional) A mapping of tags to assign to the Virtual Machine.

- `zones` - (Optional) A list of a single item of the Availability Zone which the Virtual Machine should be allocated in.

Please Note: Availability Zones are in Preview and only supported in several regions at this time - as such you must be opted into the Preview to use this

functionality. You can opt into the Availability Zones Preview in the Azure Portal.

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

---

A `additional_unattend_config` block 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.

A `boot_diagnostics` block supports the following:

- `enabled` - (Required) Should Boot Diagnostics be enabled for this Virtual Machine?

- `storage_uri` - (Required) The Storage Account's Blob Endpoint which should hold the virtual machine's diagnostic files.

NOTE: This needs to be the root of a Storage Account and not a Storage Container.

A `identity` block supports the following:

- `type` - (Required) The Managed Service Identity Type of this Virtual Machine. Possible values are `SystemAssigned` (where Azure will generate a Service Principal for you) and `UserAssigned` (where you can specify the Service Principal ID's) to be used by this Virtual Machine using the `identity_ids` field.

NOTE: Managed Service Identity previously required the installation of a VM Extension, but this information is now available via the Azure Instance Metadata Service.

NOTE: When `type` is set to `SystemAssigned`, identity the Principal ID can be retrieved after the virtual machine has been created. See documentation for more information.

- `identity_ids` - (Optional) Specifies a list of user managed identity ids to be assigned to the VM. Required if `type` is `UserAssigned`.

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A `os_profile` block supports the following:

- `computer_name` - (Required) Specifies the name of the Virtual Machine.

- `admin_username` - (Required) Specifies the name of the local administrator account.

- `admin_password` - (Required for Windows, Optional for Linux) The password associated with the local administrator account.

NOTE: If using Linux, it may be preferable to use SSH Key authentication (available in the `os_profile_linux_config` block) instead of password authentication.

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

- `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.

———————————————

A `os_profile_linux_config` block 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) One or more `ssh_keys` blocks. This field is required if `disable_password_authentication` is set to `true`.

———————————————

A `os_profile_secrets` block supports the following:

- `source_vault_id` - (Required) Specifies the ID of the Key Vault to use.

- `vault_certificates` - (Required) One or more `vault_certificates` blocks.

———————————————

A `os_profile_windows_config` block supports the following:

- `provision_vm_agent` - (Optional) Should the Azure Virtual Machine Guest Agent be installed on this Virtual Machine? Defaults to `false`.

NOTE: This is different from the Default value used for this field within Azure.

- `enable_automatic_upgrades` - (Optional) Are automatic updates enabled on this Virtual Machine? Defaults to `false.`

- `timezone` - (Optional) Specifies the time zone of the virtual machine, the possible values are defined here.

- `winrm` - (Optional) One or more `winrm` block.

- `additional_unattend_config` - (Optional) A `additional_unattend_config` block.

———————————————

A `plan` block 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.

———————————————

A `ssh_keys` block supports the following:

- `key_data` - (Required) The Public SSH Key which should be written to the `path` defined above.

NOTE: Rather than defining this in-line you can source this from a local file using the `file` interpolation function - for example `key_data = "${file("~/.ssh/id_rsa.pub")}"`.

- `path` - (Required) The path of the destination file on the virtual machine

NOTE: Due to a limitation in the Azure VM Agent the only allowed `path` is `/home/{username}/.ssh/authorized_keys`.

———————————————

A `storage_image_reference` block supports the following:

This block provisions the Virtual Machine from one of two sources: an Azure Platform Image (e.g. Ubuntu/Windows Server) or a Custom Image.

To provision from an Azure Platform Image, the following fields are applicable:

- `publisher` - (Required) Specifies the publisher of the image used to create the virtual machine. Changing this forces a new resource to be created.

- **offer** - (Required) Specifies the offer of the image used to create the virtual machine. Changing this forces a new resource to be created.

- **sku** - (Required) 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.

To provision a Custom Image, the following fields are applicable:

- **id** - (Required) Specifies the ID of the Custom Image which the Virtual Machine should be created from. Changing this forces a new resource to be created.

NOTE: An example of how to use this is available within the `./examples/virtual-machines/managed-disks/` directory within the Github Repository

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A `storage_data_disk` block supports the following:

NOTE: Data Disks can also be attached either using this block or the `azurerm_virtual_machine_data_disk_attachment` resource - but not both.

- **name** - (Required) The name of the Data Disk.

- **caching** - (Optional) Specifies the caching requirements for the Data Disk. Possible values include `None`, `ReadOnly` and `ReadWrite`.

- **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.

- **lun** - (Required) Specifies the logical unit number of the data disk. This needs to be unique within all the Data Disks on the Virtual Machine.

- **write_accelerator_enabled** - (Optional) Specifies if Write Accelerator is enabled on the disk. This can only be enabled on `Premium_LRS` managed disks with no caching and M-Series VMs. Defaults to `false`.

The following properties apply when using Managed Disks:

- **managed_disk_type** - (Optional) Specifies the type of managed disk to create. Possible values are either `Standard_LRS` or `Premium_LRS`.

- **managed_disk_id** - (Optional) Specifies the ID of an Existing Managed Disk which should be attached to this Virtual Machine. When this field is set `create_option` must be set to `Attach`.

The following properties apply when using Unmanaged Disks:

- **vhd_uri** - (Optional) Specifies the URI of the VHD file backing this Unmanaged Data Disk. Changing this forces a new resource to be created.

A `storage_os_disk` block supports the following:

- `name` - (Required) Specifies the name of the OS Disk.

- `create_option` - (Required) Specifies how the OS Disk should be created. Possible values are `Attach` (managed disks only) and `FromImage`.

- `caching` - (Optional) Specifies the caching requirements for the OS Disk. Possible values include `None`, `ReadOnly` and `ReadWrite`.

- `disk_size_gb` - (Optional) Specifies the size of the OS Disk in gigabytes.

- `image_uri` - (Optional) Specifies the Image URI in the format `publisherName:offer:skus:version`. This field can also specify the VHD uri of a custom VM image to clone. When cloning a Custom (Unmanaged) Disk Image the `os_type` field must be set.

- `os_type` - (Optional) Specifies the Operating System on the OS Disk. Possible values are `Linux` and `Windows`.

- `write_accelerator_enabled` - (Optional) Specifies if Write Accelerator is enabled on the disk. This can only be enabled on `Premium_LRS` managed disks with no caching and M-Series VMs. Defaults to `false`.

The following properties apply when using Managed Disks:

- `managed_disk_id` - (Optional) Specifies the ID of an existing Managed Disk which should be attached as the OS Disk of this Virtual Machine. If this is set then the `create_option` must be set to `Attach`.

- `managed_disk_type` - (Optional) Specifies the type of Managed Disk which should be created. Possible values are `Standard_LRS` or `Premium_LRS`.

The following properties apply when using Unmanaged Disks:

- `vhd_uri` - (Optional) Specifies the URI of the VHD file backing this Unmanaged OS Disk. Changing this forces a new resource to be created.

A `vault_certificates` block supports the following:

- `certificate_url` - (Required) The ID of the Key Vault Secret. 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>"
}
```

NOTE: If your certificate is stored in Azure Key Vault - this can be sourced from the `secret_id` property on the `azurerm_key_vault_certificate` resource.

- `certificate_store` - (Required, on windows machines) Specifies the certificate store on the Virtual Machine where the certificate should be added to, such as `My`.

A `winrm` block supports the following:

- `protocol` - (Required) Specifies the protocol of listener. Possible values are `HTTP` or `HTTPS`.

- `certificate_url` - (Optional) The ID of the Key Vault Secret which contains the encrypted Certificate which should be installed on the Virtual Machine. This certificate must also be specified in the `vault_certificates` block within the `os_profile_secrets` block.

NOTE: This can be sourced from the `secret_id` field on the `azurerm_key_vault_certificate` resource.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Virtual Machine.

» Import

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

```
terraform import azurerm_virtual_machine.test /subscriptions/00000000-0000-0000-0000-0000000
```

» azurerm_virtual_machine_data_disk_attachment

Manages attaching a Disk to a Virtual Machine.

NOTE: Data Disks can be attached either directly on the `azurerm_virtual_machine` resource, or using the `azurerm_virtual_machine_data_disk_attachment` resource - but the two cannot be used together. If both are used against the same Virtual Machine, spurious changes will occur.

Please Note: only Managed Disks are supported via this separate resource, Unmanaged Disks can be attached using the `storage_data_disk` block in the `azurerm_virtual_machine` resource.

» Example Usage

```
variable "prefix" {
  default = "example"
}

locals {
  vm_name = "${var.prefix}-vm"
}

resource "azurerm_resource_group" "main" {
  name = "${var.prefix}-resources"
  location = "West Europe"
}

resource "azurerm_virtual_network" "main" {
  name                = "${var.prefix}-network"
  address_space       = ["10.0.0.0/16"]
  location            = "${azurerm_resource_group.main.location}"
  resource_group_name = "${azurerm_resource_group.main.name}"
}

resource "azurerm_subnet" "internal" {
  name                 = "internal"
  resource_group_name  = "${azurerm_resource_group.main.name}"
  virtual_network_name = "${azurerm_virtual_network.main.name}"
  address_prefix       = "10.0.2.0/24"
}

resource "azurerm_network_interface" "main" {
  name                = "${var.prefix}-nic"
  location            = "${azurerm_resource_group.main.location}"
  resource_group_name = "${azurerm_resource_group.main.name}"

  ip_configuration {
    name                          = "internal"
    subnet_id                     = "${azurerm_subnet.internal.id}"
    private_ip_address_allocation = "dynamic"
  }
}

resource "azurerm_virtual_machine" "test" {
  name                = "${local.vm_name}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
```

```
  network_interface_ids = ["${azurerm_network_interface.test.id}"]
  vm_size               = "Standard_F2"

  storage_image_reference {
    publisher = "Canonical"
    offer     = "UbuntuServer"
    sku       = "16.04-LTS"
    version   = "latest"
  }

  storage_os_disk {
    name              = "myosdisk1"
    caching           = "ReadWrite"
    create_option     = "FromImage"
    managed_disk_type = "Standard_LRS"
  }

  os_profile {
    computer_name  = "${local.vm_name}"
    admin_username = "testadmin"
    admin_password = "Password1234!"
  }

  os_profile_linux_config {
    disable_password_authentication = false
  }
}

resource "azurerm_managed_disk" "test" {
  name                 = "${local.vm_name}-disk1"
  location             = "${azurerm_resource_group.test.location}"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  storage_account_type = "Standard_LRS"
  create_option        = "Empty"
  disk_size_gb         = 10
}

resource "azurerm_virtual_machine_data_disk_attachment" "test" {
  managed_disk_id    = "${azurerm_managed_disk.test.id}"
  virtual_machine_id = "${azurerm_virtual_machine.windows.id}"
  lun                = "10"
  caching            = "ReadWrite"
}
```

» Argument Reference

The following arguments are supported:

- `virtual_machine_id` - (Required) The ID of the Virtual Machine to which the Data Disk should be attached. Changing this forces a new resource to be created.

- `managed_disk_id` - (Required) The ID of an existing Managed Disk which should be attached. Changing this forces a new resource to be created.

- `lun` - (Required) The Logical Unit Number of the Data Disk, which needs to be unique within the Virtual Machine. Changing this forces a new resource to be created.

- `caching` - (Required) Specifies the caching requirements for this Data Disk. Possible values include `None`, `ReadOnly` and `ReadWrite`.

- `create_option` - (Optional) The Create Option of the Data Disk, such as `Empty` or `Attach`. Defaults to `Attach`. Changing this forces a new resource to be created.

- `write_accelerator_enabled` - (Optional) Specifies if Write Accelerator is enabled on the disk. This can only be enabled on `Premium_LRS` managed disks with no caching and M-Series VMs. Defaults to `false`.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Virtual Machine Data Disk attachment.

» Import

Virtual Machines Data Disk Attachments can be imported using the `resource id`, e.g.

```
terraform import azurerm_virtual_machine_data_disk_attachment.test /subscriptions/00000000-
```

Please Note: This is a Terraform Unique ID matching the format: `{virtualMachineID}/dataDisks/{diskName}`

» azurerm_virtual_machine_extension

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

NOTE: Custom Script 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`.

NOTE: Custom Script Extensions require that the Azure Virtual Machine Guest Agent is running on the Virtual Machine.

» Example Usage

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

resource "azurerm_virtual_network" "test" {
  name                = "acctvn"
  address_space       = ["10.0.0.0/16"]
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_subnet" "test" {
  name                 = "acctsub"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix       = "10.0.2.0/24"
}

resource "azurerm_network_interface" "test" {
  name                = "acctni"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  ip_configuration {
    name                          = "testconfiguration1"
    subnet_id                     = "${azurerm_subnet.test.id}"
    private_ip_address_allocation = "dynamic"
  }
}

resource "azurerm_storage_account" "test" {
  name                = "accsa"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
```

```
  account_tier             = "Standard"
  account_replication_type = "LRS"

  tags {
    environment = "staging"
  }
}

resource "azurerm_storage_container" "test" {
  name                  = "vhds"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  storage_account_name  = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}

resource "azurerm_virtual_machine" "test" {
  name                  = "acctvm"
  location              = "${azurerm_resource_group.test.location}"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  network_interface_ids = ["${azurerm_network_interface.test.id}"]
  vm_size               = "Standard_F2"

  storage_image_reference {
    publisher = "Canonical"
    offer     = "UbuntuServer"
    sku       = "16.04-LTS"
    version   = "latest"
  }

  storage_os_disk {
    name          = "myosdisk1"
    vhd_uri       = "${azurerm_storage_account.test.primary_blob_endpoint}${azurerm_storage_
    caching       = "ReadWrite"
    create_option = "FromImage"
  }

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

  os_profile_linux_config {
    disable_password_authentication = false
  }
```

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

resource "azurerm_virtual_machine_extension" "test" {
  name                 = "hostname"
  location             = "${azurerm_resource_group.test.location}"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  virtual_machine_name = "${azurerm_virtual_machine.test.name}"
  publisher            = "Microsoft.Azure.Extensions"
  type                 = "CustomScript"
  type_handler_version = "2.0"

  settings = <<SETTINGS
    {
        "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 azurerm_virtual_machine_extension.test /subscriptions/00000000-0000-0000-00`

» azurerm_virtual_machine_scale_set

Create a virtual machine scale set.

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

» Example Usage with Managed Disks (Recommended)

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG"
  location = "West US 2"
}

resource "azurerm_virtual_network" "test" {
  name                = "acctvn"
  address_space       = ["10.0.0.0/16"]
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_subnet" "test" {
  name                 = "acctsub"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix       = "10.0.2.0/24"
}

resource "azurerm_public_ip" "test" {
  name                         = "test"
  location                     = "${azurerm_resource_group.test.location}"
  resource_group_name          = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "static"
  domain_name_label            = "${azurerm_resource_group.test.name}"

  tags {
    environment = "staging"
  }
}

resource "azurerm_lb" "test" {
  name                = "test"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

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

resource "azurerm_lb_backend_address_pool" "bpepool" {
```

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

resource "azurerm_lb_nat_pool" "lbnatpool" {
  count                          = 3
  resource_group_name            = "${azurerm_resource_group.test.name}"
  name                           = "ssh"
  loadbalancer_id                = "${azurerm_lb.test.id}"
  protocol                       = "Tcp"
  frontend_port_start            = 50000
  frontend_port_end              = 50119
  backend_port                   = 22
  frontend_ip_configuration_name = "PublicIPAddress"
}

resource "azurerm_virtual_machine_scale_set" "test" {
  name                = "mytestscaleset-1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  upgrade_policy_mode = "Manual"

  sku {
    name     = "Standard_F2"
    tier     = "Standard"
    capacity = 2
  }

  storage_profile_image_reference {
    publisher = "Canonical"
    offer     = "UbuntuServer"
    sku       = "16.04-LTS"
    version   = "latest"
  }

  storage_profile_os_disk {
    name              = ""
    caching           = "ReadWrite"
    create_option     = "FromImage"
    managed_disk_type = "Standard_LRS"
  }

  storage_profile_data_disk {
    lun     = 0
    caching = "ReadWrite"
```

```
      create_option = "Empty"
      disk_size_gb   = 10
  }

  os_profile {
    computer_name_prefix = "testvm"
    admin_username       = "myadmin"
    admin_password       = "Passwword1234"
  }

  os_profile_linux_config {
    disable_password_authentication = true

    ssh_keys {
      path     = "/home/myadmin/.ssh/authorized_keys"
      key_data = "${file("~/.ssh/demo_key.pub")}"
    }
  }

  network_profile {
    name    = "terraformnetworkprofile"
    primary = true

    ip_configuration {
      name                                   = "TestIPConfiguration"
      subnet_id                              = "${azurerm_subnet.test.id}"
      load_balancer_backend_address_pool_ids = ["${azurerm_lb_backend_address_pool.bpepool.
      load_balancer_inbound_nat_rules_ids    = ["${element(azurerm_lb_nat_pool.lbnatpool.*.
    }
  }

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

» Example Usage with Unmanaged Disks

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

resource "azurerm_virtual_network" "test" {
  name                = "acctvn"
```

```
  address_space      = ["10.0.0.0/16"]
  location           = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_subnet" "test" {
  name                 = "acctsub"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix       = "10.0.2.0/24"
}

resource "azurerm_storage_account" "test" {
  name                     = "accsa"
  resource_group_name      = "${azurerm_resource_group.test.name}"
  location                 = "westus"
  account_tier             = "Standard"
  account_replication_type = "LRS"

  tags {
    environment = "staging"
  }
}

resource "azurerm_storage_container" "test" {
  name                  = "vhds"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  storage_account_name  = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}

resource "azurerm_virtual_machine_scale_set" "test" {
  name                = "mytestscaleset-1"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"
  upgrade_policy_mode = "Manual"

  sku {
    name     = "Standard_F2"
    tier     = "Standard"
    capacity = 2
  }

  os_profile {
    computer_name_prefix = "testvm"
    admin_username       = "myadmin"
```

```
    admin_password       = "Passwword1234"
  }

  os_profile_linux_config {
    disable_password_authentication = true

    ssh_keys {
      path     = "/home/myadmin/.ssh/authorized_keys"
      key_data = "${file("~/.ssh/demo_key.pub")}"
    }
  }

  network_profile {
    name    = "TestNetworkProfile"
    primary = true

    ip_configuration {
      name      = "TestIPConfiguration"
      subnet_id = "${azurerm_subnet.test.id}"
    }
  }

  storage_profile_os_disk {
    name          = "osDiskProfile"
    caching       = "ReadWrite"
    create_option = "FromImage"
    vhd_containers = ["${azurerm_storage_account.test.primary_blob_endpoint}${azurerm_storag
  }

  storage_profile_image_reference {
    publisher = "Canonical"
    offer     = "UbuntuServer"
    sku       = "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`.
- `single_placement_group` - (Optional) Specifies whether the scale set is limited to a single placement group with a maximum size of 100 virtual machines. If set to false, managed disks must be used. Defaults to `true`. Changing this forces a new resource to be created. See documentation for more information.
- `license_type` - (Optional, when a Windows machine) Specifies the Windows OS license type. If supplied, the only allowed values are `Windows_Client` and `Windows_Server`.
- `os_profile` - (Required) A Virtual Machine OS Profile block as documented below.
- `os_profile_secrets` - (Optional) A collection of Secret blocks as documented below.
- `os_profile_windows_config` - (Required, when a windows machine) A Windows config block as documented below.
- `os_profile_linux_config` - (Required, when a linux machine) A Linux config block as documented below.
- `network_profile` - (Required) A collection of network profile block as documented below.
- `storage_profile_os_disk` - (Required) A storage profile os disk block as documented below
- `storage_profile_data_disk` - (Optional) A storage profile data disk block as documented below
- `storage_profile_image_reference` - (Optional) A storage profile image reference block as documented below.
- `extension` - (Optional) Can be specified multiple times to add extension profiles to the scale set. Each `extension` block supports the fields documented below.
- `boot_diagnostics` - (Optional) A boot diagnostics profile block as referenced below.
- `plan` - (Optional) A plan block as documented below.
- `priority` - (Optional) Specifies the priority for the virtual machines in the scale set, defaults to `Regular`. Possible values are `Low` and `Regular`.
- `tags` - (Optional) A mapping of tags to assign to the resource.
- `zones` - (Optional) A collection of availability zones to spread the Virtual Machines over.

Please Note: Availability Zones are in Preview and only supported in several regions at this time - as such you must be opted into the Preview to use this

functionality. You can opt into the Availability Zones Preview in the Azure Portal.

`sku` supports the following:

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

`identity` supports the following:

- `type` - (Required) Specifies the identity type to be assigned to the scale set. Allowable values are `SystemAssigned` and `UserAssigned`. 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. For the `SystemAssigned` identity the scale set's Service Principal ID (SPN) can be retrieved after the scale set has been created. See documentation for more information.

- `identity_ids` - (Optional) Specifies a list of user managed identity ids to be assigned to the VMSS. Required if `type` is `UserAssigned`.

```
resource "azurerm_virtual_machine_scale_set" "test" {
  name                = "vm-scaleset"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"

  sku {
    name     = "${var.vm_sku}"
    tier     = "Standard"
    capacity = "${var.instance_count}"
  }

  identity {
    type = "systemAssigned"
  }

  extension {
    name                 = "MSILinuxExtension"
    publisher            = "Microsoft.ManagedIdentity"
    type                 = "ManagedIdentityExtensionForLinux"
    type_handler_version = "1.0"
    settings             = "{\"port\": 50342}"
  }
  # ...
}
```

```
output "principal_id" {
  value = "${lookup(azurerm_virtual_machine_scale_set.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.
- `accelerated_networking` - (Optional) Specifies whether to enable accelerated networking or not. Defaults to `false`.
- `dns_settings` - (Optional) A dns_settings block as documented below.
- `ip_forwarding` - (Optional) Whether IP forwarding is enabled on this NIC. Defaults to `false`.
- `network_security_group_id` - (Optional) Specifies the identifier for the network security group.

`dns_settings` supports the following:

- `dns_servers` - (Required) Specifies an array of dns servers.

`ip_configuration` supports the following:

- `name` - (Required) Specifies name of the IP configuration.
- `subnet_id` - (Required) Specifies the identifier of the subnet.
- `application_gateway_backend_address_pool_ids` - (Optional) Specifies an array of references to backend address pools of application gate-

126

ways. A scale set can reference backend address pools of one application gateway. Multiple scale sets cannot use the same application gateway.

- `load_balancer_backend_address_pool_ids` - (Optional) Specifies an array of references to backend address pools of load balancers. A scale set can reference backend address pools of one public and one internal load balancer. Multiple scale sets cannot use the same load balancer.
- `load_balancer_inbound_nat_rules_ids` - (Optional) Specifies an array of references to inbound NAT rules for load balancers.
- `primary` - (Optional) Specifies if this ip_configuration is the primary one.
- `public_ip_address_configuration` - (Optional) describes a virtual machines scale set IP Configuration's PublicIPAddress configuration. The public_ip_address_configuration is documented below.

`public_ip_address_configuration` supports the following:

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

`storage_profile_os_disk` supports the following:

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

`storage_profile_data_disk` supports the following:

- `lun` - (Required) Specifies the Logical Unit Number of the disk in each virtual machine in the scale set.

- `create_option` - (Optional) Specifies how the data disk should be created. The only possible options are `FromImage` and `Empty`.
- `caching` - (Optional) Specifies the caching requirements. Possible values include: `None` (default), `ReadOnly`, `ReadWrite`.
- `disk_size_gb` - (Optional) Specifies the size of the disk in GB. This element is required when creating an empty disk.
- `managed_disk_type` - (Optional) Specifies the type of managed disk to create. Value must be either `Standard_LRS` or `Premium_LRS`.

`storage_profile_image_reference` supports the following:

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

`boot_diagnostics` supports the following:

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

`extension` supports the following:

- `name` - (Required) Specifies the name of the extension.
- `publisher` - (Required) The publisher of the extension, available publishers can be found by using the Azure CLI.
- `type` - (Required) The type of extension, available types for a publisher can be found using the Azure CLI.
- `type_handler_version` - (Required) Specifies the version of the extension to use, available versions can be found using the Azure CLI.
- `auto_upgrade_minor_version` - (Optional) Specifies whether or not to use the latest minor version available.
- `settings` - (Required) The settings passed to the extension, these are specified as a JSON object in a string.
- `protected_settings` - (Optional) The protected_settings passed to the extension, like settings, these are specified as a JSON object in a string.

`plan` supports the following:

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

- product - (Required) Specifies the product of the image from the market-
  place.

» Example of storage_profile_image_reference with id

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

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

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

  # ...
}
```

» Attributes Reference

The following attributes are exported:

- id - The virtual machine scale set ID.

» Import

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

```
terraform import azurerm_virtual_machine_scale_set.scaleset1 /subscriptions/00000000-0000-00
```

» azurerm_container_group

Create as an Azure Container Group instance.

» Example Usage

```
resource "azurerm_resource_group" "aci-rg" {
  name     = "aci-test"
  location = "west us"
```

```
}

resource "azurerm_storage_account" "aci-sa" {
  name                = "acistorageacct"
  resource_group_name = "${azurerm_resource_group.aci-rg.name}"
  location            = "${azurerm_resource_group.aci-rg.location}"
  account_tier        = "Standard"

  account_replication_type = "LRS"
}

resource "azurerm_storage_share" "aci-share" {
  name = "aci-test-share"

  resource_group_name  = "${azurerm_resource_group.aci-rg.name}"
  storage_account_name = "${azurerm_storage_account.aci-sa.name}"

  quota = 50
}

resource "azurerm_container_group" "aci-helloworld" {
  name                = "aci-hw"
  location            = "${azurerm_resource_group.aci-rg.location}"
  resource_group_name = "${azurerm_resource_group.aci-rg.name}"
  ip_address_type     = "public"
  dns_name_label      = "aci-label"
  os_type             = "linux"

  container {
    name   = "hw"
    image  = "seanmckenna/aci-hellofiles"
    cpu    ="0.5"
    memory =  "1.5"
    port   = "80"

    environment_variables {
      "NODE_ENV" = "testing"
    }

    commands = ["/bin/bash", "-c", "'/path to/myscript.sh'"]

    volume {
      name       = "logs"
      mount_path = "/aci/logs"
      read_only  = false
      share_name = "${azurerm_storage_share.aci-share.name}"
```

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

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

tags {
  environment = "testing"
}
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Container Group. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the Container Group. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `ip_address_type` - (Optional) Specifies the ip address type of the container. `Public` is the only acceptable value at this time. Changing this forces a new resource to be created.

- `dns_name_label` - (Optional) The DNS label/name for the container groups IP.

- `os_type` - (Required) The OS for the container group. Allowed values are `Linux` and `Windows`. Changing this forces a new resource to be created.

- `restart_policy` - (Optional) Restart policy for the container group. Allowed values are `Always`, `Never`, `OnFailure`. Defaults to `Always`.

- `image_registry_credential` - (Optional) Set image registry credentials for the group as documented in the `image_registry_credential` block below

- **container** - (Required) The definition of a container that is part of the group as documented in the **container** block below. Changing this forces a new resource to be created.

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

The **container** block supports:

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

- **image** - (Required) The container image name. Changing this forces a new resource to be created.

- **cpu** - (Required) The required number of CPU cores of the containers. Changing this forces a new resource to be created.

- **memory** - (Required) The required memory of the containers in GB. Changing this forces a new resource to be created.

- **port** - (Optional) A public port for the container. Changing this forces a new resource to be created.

- **environment_variables** - (Optional) A list of environment variables to be set on the container. Specified as a map of name/value pairs. Changing this forces a new resource to be created.

- **command** - (Optional) A command line to be run on the container. Changing this forces a new resource to be created.

NOTE: The field **command** has been deprecated in favor of **commands** to better match the API.

- **commands** - (Optional) A list of commands which should be run on the container. Changing this forces a new resource to be created.

- **volume** - (Optional) The definition of a volume mount for this container as documented in the **volume** block below. Changing this forces a new resource to be created.

The **volume** block supports:

- **name** - (Required) The name of the volume mount. Changing this forces a new resource to be created.

- **mount_path** - (Required) The path on which this volume is to be mounted. Changing this forces a new resource to be created.

- **read_only** - (Optional) Specify if the volume is to be mounted as read only or not. The default value is **false**. Changing this forces a new resource to be created.

- `storage_account_name` - (Required) The Azure storage account from which the volume is to be mounted. Changing this forces a new resource to be created.

- `storage_account_key` - (Required) The access key for the Azure Storage account specified as above. Changing this forces a new resource to be created.

- `share_name` - (Required) The Azure storage share that is to be mounted as a volume. This must be created on the storage account specified as above. Changing this forces a new resource to be created.

The `image_registry_credential` block supports:

- `username` - (Required) The username with which to connect to the registry.

- `password` - (Required) The password with which to connect to the registry.

- `server` - (Required) The address to use to connect to the registry without protocol ("https"/"http"). For example: "myacr.acr.io"

» Attributes Reference

The following attributes are exported:

- `id` - The container group ID.

- `ip_address` - The IP address allocated to the container group.

- `fqdn` - The FQDN of the container group derived from `dns_name_label`.

» Import

Container Group's can be imported using the `resource id`, e.g.

```
terraform import azurerm_container_group.containerGroup1 /subscriptions/00000000-0000-0000-0
```

» azurerm_container_registry

Manages an Azure Container Registry.

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

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_storage_account" "test" {
  name                     = "storageaccount1"
  resource_group_name      = "${azurerm_resource_group.test.name}"
  location                 = "${azurerm_resource_group.test.location}"
  account_tier             = "Standard"
  account_replication_type = "GRS"
}

resource "azurerm_container_registry" "test" {
  name                = "containerRegistry1"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  admin_enabled       = true
  sku                 = "Classic"
  storage_account_id  = "${azurerm_storage_account.test.id}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Container Registry. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the Container Registry. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `admin_enabled` - (Optional) Specifies whether the admin user is enabled. Defaults to `false`.

- `storage_account_id` - (Required for `Classic` Sku - Optional otherwise) The ID of a Storage Account which must be located in the same Azure Region as the Container Registry.

- `sku` - (Optional) The SKU name of the the container registry. Possible values are `Classic` (which was previously `Basic`), `Basic`, `Standard` and `Premium`.

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

» **Attributes Reference**

The following attributes are exported:

- **id** - The Container Registry ID.

- **login_server** - The URL that can be used to log into the container registry.

- **admin_username** - The Username associated with the Container Registry Admin account - if the admin account is enabled.

- **admin_password** - The Password associated with the Container Registry Admin account - if the admin account is enabled.

» **Import**

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

```
terraform import azurerm_container_registry.test /subscriptions/00000000-0000-0000-0000-0000
```

» **azurerm__container__service**

Manages an Azure Container Service Instance

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

» **Example Usage (DCOS)**

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG1"
  location = "West US"
}

resource "azurerm_container_service" "test" {
  name                   = "acctestcontservice1"
  location               = "${azurerm_resource_group.test.location}"
  resource_group_name    = "${azurerm_resource_group.test.name}"
  orchestration_platform = "DCOS"

  master_profile {
```

```
    count      = 1
    dns_prefix = "acctestmaster1"
  }

  linux_profile {
    admin_username = "acctestuser1"

    ssh_key {
      key_data = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCqaZoyiz1qbdOQ8xEf6uEu1cCwYowo5FHts
    }
  }

  agent_pool_profile {
    name       = "default"
    count      = 1
    dns_prefix = "acctestagent1"
    vm_size    = "Standard_F2"
  }

  diagnostics_profile {
    enabled = false
  }

  tags {
    Environment = "Production"
  }
}
```

» Example Usage (Kubernetes)

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG1"
  location = "West US"
}

resource "azurerm_container_service" "test" {
  name                  = "acctestcontservice1"
  location              = "${azurerm_resource_group.test.location}"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  orchestration_platform = "Kubernetes"

  master_profile {
    count      = 1
    dns_prefix = "acctestmaster1"
  }
```

```
  linux_profile {
    admin_username = "acctestuser1"

    ssh_key {
      key_data = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCqaZoyiz1qbdOQ8xEf6uEu1cCwYowo5FHtsI
    }
  }

  agent_pool_profile {
    name       = "default"
    count      = 1
    dns_prefix = "acctestagent1"
    vm_size    = "Standard_F2"
  }

  service_principal {
    client_id     = "00000000-0000-0000-0000-000000000000"
    client_secret = "00000000000000000000000000000000"
  }

  diagnostics_profile {
    enabled = false
  }

  tags {
    Environment = "Production"
  }
}
```

» Example Usage (Swarm)

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG1"
  location = "West US"
}

resource "azurerm_container_service" "test" {
  name                   = "acctestcontservice1"
  location               = "${azurerm_resource_group.test.location}"
  resource_group_name    = "${azurerm_resource_group.test.name}"
  orchestration_platform = "Swarm"

  master_profile {
    count        = 1
```

```
    dns_prefix = "acctestmaster1"
  }

  linux_profile {
    admin_username = "acctestuser1"

    ssh_key {
      key_data = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCqaZoyiz1qbdOQ8xEf6uEu1cCwYowo5FHtsk
    }
  }

  agent_pool_profile {
    name       = "default"
    count      = 1
    dns_prefix = "acctestagent1"
    vm_size    = "Standard_F2"
  }

  diagnostics_profile {
    enabled = false
  }

  tags {
    Environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the Container Service instance to create. Changing this forces a new resource to be created.

- `location` - (Required) The location where the Container Service instance should be created. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.

- `orchestration_platform` - (Required) Specifies the Container Orchestration Platform to use. Currently can be either `DCOS`, `Kubernetes` or `Swarm`. Changing this forces a new resource to be created.

- `master_profile` - (Required) A Master Profile block as documented below.

- `linux_profile` - (Required) A Linux Profile block as documented below.

- `agent_pool_profile` - (Required) One or more Agent Pool Profile's block as documented below.

- `service_principal` - (only Required when you're using `Kubernetes` as an Orchestration Platform) A Service Principal block as documented below.

- `diagnostics_profile` - (Required) A VM Diagnostics Profile block as documented below.

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

`master_profile` supports the following:

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

`linux_profile` supports the following:

- `admin_username` - (Required) The Admin Username for the Cluster.
- `ssh_key` - (Required) An SSH Key block as documented below.

`ssh_key` supports the following:

- `key_data` - (Required) The Public SSH Key used to access the cluster.

`agent_pool_profile` supports the following:

- `name` - (Required) Unique name of the agent pool profile in the context of the subscription and resource group.
- `count` - (Required) Number of agents (VMs) to host docker containers. Allowed values must be in the range of 1 to 100 (inclusive). The default value is 1.
- `dns_prefix` - (Required) The DNS Prefix given to Agents in this Agent Pool.
- `vm_size` - (Required) The VM Size of each of the Agent Pool VM's (e.g. Standard_F1 / Standard_D2v2).

`service_principal` supports the following:

- `client_id` - (Required) The ID for the Service Principal.
- `client_secret` - (Required) The secret password associated with the service principal.

`diagnostics_profile` supports the following:

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

» Attributes Reference

The following attributes are exported:

- `id` - The Container Service ID.

- `master_profile.fqdn` - FDQN for the master.

- `agent_pool_profile.fqdn` - FDQN for the agent pool.

- `diagnostics_profile.storage_uri` - The URI of the storage account where diagnostics are stored.

» azurerm_kubernetes_cluster

Manages a managed Kubernetes Cluster (AKS)

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

» Example Usage - Basic

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG1"
  location = "East US"
}

resource "azurerm_kubernetes_cluster" "test" {
  name                = "acctestaks1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  dns_prefix          = "acctestagent1"

  linux_profile {
    admin_username = "acctestuser1"

    ssh_key {
      key_data = "ssh-rsa ..."
    }
  }

  agent_pool_profile {
    name            = "default"
    count           = 1
    vm_size         = "Standard_D1_v2"
    os_type         = "Linux"
```

```
    os_disk_size_gb = 30
  }

  service_principal {
    client_id     = "00000000-0000-0000-0000-000000000000"
    client_secret = "00000000000000000000000000000000"
  }

  tags {
    Environment = "Production"
  }
}

output "id" {
    value = "${azurerm_kubernetes_cluster.test.id}"
}

output "kube_config" {
  value = "${azurerm_kubernetes_cluster.test.kube_config_raw}"
}

output "client_key" {
  value = "${azurerm_kubernetes_cluster.test.kube_config.0.client_key}"
}

output "client_certificate" {
  value = "${azurerm_kubernetes_cluster.test.kube_config.0.client_certificate}"
}

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

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

» Example Usage - Advanced Networking

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG1"
  location = "East US"
}

resource azurerm_network_security_group "test_advanced_network" {
```

```
  name                = "akc-1-nsg"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_virtual_network" "test_advanced_network" {
  name                = "akc-1-vnet"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  address_space       = ["10.1.0.0/16"]
}

resource "azurerm_subnet" "test_subnet" {
  name                      = "akc-1-subnet"
  resource_group_name       = "${azurerm_resource_group.test.name}"
  network_security_group_id = "${azurerm_network_security_group.test_advanced_network.id}"
  address_prefix            = "10.1.0.0/24"
  virtual_network_name      = "${azurerm_virtual_network.test_advanced_network.name}"
}

resource "azurerm_kubernetes_cluster" "test" {
  name       = "akc-1"
  location   = "${azurerm_resource_group.test.location}"
  dns_prefix = "akc-1"

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

  linux_profile {
    admin_username = "acctestuser1"

    ssh_key {
      key_data = "ssh-rsa ..."
    }
  }

  agent_pool_profile {
    name    = "agentpool"
    count   = "2"
    vm_size = "Standard_DS2_v2"
    os_type = "Linux"

    # Required for advanced networking
    vnet_subnet_id = "${azurerm_subnet.test_subnet.id}"
  }

  service_principal {
```

```
    client_id     = "00000000-0000-0000-0000-000000000000"
    client_secret = "00000000000000000000000000000000"
  }

  network_profile {
    network_plugin = "azure"
  }
}

output "subnet_id" {
  value = "${azurerm_kubernetes_cluster.test.agent_pool_profile.0.vnet_subnet_id}"
}

output "network_plugin" {
  value = "${azurerm_kubernetes_cluster.test.network_profile.0.network_plugin}"
}

output "service_cidr" {
  value = "${azurerm_kubernetes_cluster.test.network_profile.0.service_cidr}"
}

output "dns_service_ip" {
  value = "${azurerm_kubernetes_cluster.test.network_profile.0.dns_service_ip}"
}

output "docker_bridge_cidr" {
  value = "${azurerm_kubernetes_cluster.test.network_profile.0.docker_bridge_cidr}"
}

output "pod_cidr" {
  value = "${azurerm_kubernetes_cluster.test.network_profile.0.pod_cidr}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the AKS Managed Cluster instance to create. Changing this forces a new resource to be created.

- `location` - (Required) The location where the AKS Managed Cluster instance should be created. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.

- `dns_prefix` - (Required) DNS prefix specified when creating the managed cluster.

- `linux_profile` - (Required) A Linux Profile block as documented below.

- `agent_pool_profile` - (Required) One or more Agent Pool Profile's block as documented below.

- `service_principal` - (Required) A Service Principal block as documented below.

- `addon_profile` - (Optional) A `addon_profile` block.

- `kubernetes_version` - (Optional) Version of Kubernetes specified when creating the AKS managed cluster. If not specified, the latest recommended version will be used at provisioning time (but won't auto-upgrade).

- `network_profile` - (Optional) A Network Profile block as documented below.

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

A `addon_profile` block supports the following:

- `http_application_routing` - (Optional) A `http_application_routing` block.
- `oms_agent` - (Optional) A `oms_agent` block.

A `agent_pool_profile` block supports the following:

- `name` - (Required) Unique name of the Agent Pool Profile in the context of the Subscription and Resource Group. Changing this forces a new resource to be created.
- `count` - (Required) Number of Agents (VMs) in the Pool. Possible values must be in the range of 1 to 50 (inclusive). Defaults to `1`.
- `vm_size` - (Required) The size of each VM in the Agent Pool (e.g. `Standard_F1`). Changing this forces a new resource to be created.
- `os_disk_size_gb` - (Optional) The Agent Operating System disk size in GB. Changing this forces a new resource to be created.
- `os_type` - (Optional) The Operating System used for the Agents. Possible values are `Linux` and `Windows`. Changing this forces a new resource to be created. Defaults to `Linux`.
- `vnet_subnet_id` - (Optional) The ID of the Subnet where the Agents in the Pool should be provisioned. Changing this forces a new resource to be created.

- `max_pods` - (Optional) The maximum number of pods that can run on each agent.

A `http_application_routing` block supports the following:

- `enabled` (Required) Is HTTP Application Routing Enabled? Changing this forces a new resource to be created.

A `linux_profile` block supports the following:

- `admin_username` - (Required) The Admin Username for the Cluster. Changing this forces a new resource to be created.
- `ssh_key` - (Required) An SSH Key block as documented below.

A `oms_agent` block supports the following:

- `enabled` - (Required) Is the OMS Agent Enabled? Changing this forces a new resource to be created.

- `log_analytics_workspace_id` - (Required) The ID of the Log Analytics Workspace which the OMS Agent should send data to. Changing this forces a new resource to be created.

A `ssh_key` block supports the following:

- `key_data` - (Required) The Public SSH Key used to access the cluster. Changing this forces a new resource to be created.

A `service_principal` block supports the following:

- `client_id` - (Required) The Client ID for the Service Principal.
- `client_secret` - (Required) The Client Secret for the Service Principal.

A `network_profile` block supports the following:

- `network_plugin` - (Required) Network plugin to use for networking. Currently supported values are `azure` and `kubenet`. Changing this forces a new resource to be created.

NOTE: When `network_plugin` is set to `azure` - the `vnet_subnet_id` field in the `agent_pool_profile` block must be set.

- `service_cidr` - (Optional) The Network Range used by the Kubernetes service. This is required when `network_plugin` is set to `kubenet`. Changing this forces a new resource to be created.

NOTE: This range should not be used by any network element on or connected to this VNet. Service address CIDR must be smaller than /12.

- `dns_service_ip` - (Optional) IP address within the Kubernetes service address range that will be used by cluster service discovery (kube-dns). This is required when `network_plugin` is set to `kubenet`. Changing this forces a new resource to be created.

- `docker_bridge_cidr` - (Optional) IP address (in CIDR notation) used as the Docker bridge IP address on nodes. This is required when `network_plugin` is set to `kubenet`. Changing this forces a new resource to be created.

- `pod_cidr` - (Optional) The CIDR to use for pod IP addresses. Changing this forces a new resource to be created.

Here's an example of configuring the `kubenet` Networking Profile:

```
resource "azurerm_subnet" "test" {
  # ...
}

resource "azurerm_kubernetes_cluster" "test" {
  # ...

  agent_pool_profile {
    # ...
    vnet_subnet_id = "${azurerm_subnet.test.id}"
  }

  network_profile {
    network_plugin = "kubenet"
  }
}
```

Find out more about AKS Advanced Networking

» Attributes Reference

The following attributes are exported:

- `id` - The Kubernetes Managed Cluster ID.
- `fqdn` - The FQDN of the Azure Kubernetes Managed Cluster.

- `node_resource_group` - Auto-generated Resource Group containing AKS Cluster resources.

- `kube_config_raw` - Raw Kubernetes config to be used by kubectl and other compatible tools

- `http_application_routing` - A `http_application_routing` block as defined below.

- `kube_config` - A `kube_config` block as defined below.

———————————————————

A `http_application_routing` block exports the following:

- `http_application_routing_zone_name` - The Zone Name of the HTTP Application Routing.

———————————————————

A `kube_config` exports the following::

- `client_key` - Base64 encoded private key used by clients to authenticate to the Kubernetes cluster.

- `client_certificate` - Base64 encoded public certificate used by clients to authenticate to the Kubernetes cluster.

- `cluster_ca_certificate` - Base64 encoded public CA certificate used as the root of trust for the Kubernetes cluster.

- `host` - The Kubernetes cluster server host.

- `username` - A username used to authenticate to the Kubernetes cluster.

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

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

```
provider "kubernetes" {
  host                   = "${azurerm_kubernetes_cluster.main.kube_config.0.host}"
  username               = "${azurerm_kubernetes_cluster.main.kube_config.0.username}"
  password               = "${azurerm_kubernetes_cluster.main.kube_config.0.password}"
  client_certificate     = "${base64decode(azurerm_kubernetes_cluster.main.kube_config.0.cli
  client_key             = "${base64decode(azurerm_kubernetes_cluster.main.kube_config.0.cli
  cluster_ca_certificate = "${base64decode(azurerm_kubernetes_cluster.main.kube_config.0.clu
}
```

» Import

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

```
terraform import azurerm_kubernetes_cluster.cluster1 /subscriptions/00000000-0000-0000-0000-
```

» azurerm_cosmosdb_account

Manages a CosmosDB (formally DocumentDB) Account.

» Example Usage

```
resource "azurerm_resource_group" "rg" {
    name     = "${var.resource_group_name}"
    location = "${var.resource_group_location}"
}

resource "random_integer" "ri" {
    min = 10000
    max = 99999
}

resource "azurerm_cosmosdb_account" "db" {
    name                = "tfex-cosmos-db-${random_integer.ri.result}"
    location            = "${azurerm_resource_group.rg.location}"
    resource_group_name = "${azurerm_resource_group.rg.name}"
    offer_type          = "Standard"
    kind                = "GlobalDocumentDB"

    enable_automatic_failover = true

    consistency_policy {
        consistency_level       = "BoundedStaleness"
        max_interval_in_seconds = 10
        max_staleness_prefix    = 200
    }

    geo_location {
        location          = "${var.failover_location}"
        failover_priority = 1
    }

    geo_location {
        id                = "tfex-cosmos-db-${random_integer.ri.result}-customid"
        location          = "${azurerm_resource_group.rg.location}"
        failover_priority = 0
    }
```

```
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the CosmosDB Account. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the CosmosDB Account is created. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

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

- `offer_type` - (Required) Specifies the Offer Type to use for this CosmosDB Account - currently this can only be set to `Standard`.

- `kind` - (Optional) Specifies the Kind of CosmosDB to create - possible values are `GlobalDocumentDB` and `MongoDB`. Defaults to `GlobalDocumentDB`. Changing this forces a new resource to be created.

- `consistency_policy` - (Required) Specifies a `consistency_policy` resource, used to define the consistency policy for this CosmosDB account.

- `geo_location` - (Required) Specifies a `geo_location` resource, used to define where data should be replicated with the `failover_priority` 0 specifying the primary location.

- `ip_range_filter` - (Optional) CosmosDB Firewall Support: This value specifies the set of IP addresses or IP address ranges in CIDR form to be included as the allowed list of client IP's for a given database account. IP addresses/ranges must be comma separated and must not contain any spaces.

- `enable_automatic_failover` - (Optional) Enable automatic fail over for this Cosmos DB account.

- `capabilities` - (Optional) Enable capabilities for this Cosmos DB account. Possible values are `EnableTable` and `EnableGremlin`.

`consistency_policy` Configures the database consistency and supports the following:

- `consistency_level` - (Required) The Consistency Level to use for this CosmosDB Account - can be either `BoundedStaleness`, `Eventual`, `Session`, `Strong` or `ConsistentPrefix`.

- `max_interval_in_seconds` - (Optional) When used with the Bounded Staleness consistency level, this value represents the time amount of staleness (in seconds) tolerated. Accepted range for this value is `5 - 86400` (1 day). Defaults to `5`. Required when `consistency_level` is set to `BoundedStaleness`.
- `max_staleness_prefix` - (Optional) When used with the Bounded Staleness consistency level, this value represents the number of stale requests tolerated. Accepted range for this value is `10 – 2147483647`. Defaults to `100`. Required when `consistency_level` is set to `BoundedStaleness`.

Note: `max_interval_in_seconds` and `max_staleness_prefix` can only be set to custom values when `consistency_level` is set to `BoundedStaleness` - otherwise they will return the default values shown above.

`geo_location` Configures the geographic locations the data is replicated to and supports the following:

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

NOTE: The `prefix` and `failover_priority` fields of a location cannot be changed for the location with a failover priority of `0`.

» Attributes Reference

The following attributes are exported:

- `id` - The CosmosDB Account ID.

- `endpoint` - The endpoint used to connect to the CosmosDB account.

- `read_endpoints` - A list of read endpoints available for this CosmosDB account.

- `write_endpoints` - A list of write endpoints available for this CosmosDB account.

- `primary_master_key` - The Primary master key for the CosmosDB Account.

- `secondary_master_key` - The Secondary master key for the CosmosDB Account.

- `primary_readonly_master_key` - The Primary read-only master Key for the CosmosDB Account.

- `secondary_readonly_master_key` - The Secondary read-only master key for the CosmosDB Account.

- `connection_strings` - A list of connection strings available for this CosmosDB account. If the kind is `GlobalDocumentDB`, this will be empty.

» Import

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

```
terraform import azurerm_cosmosdb_account.account1 /subscriptions/00000000-0000-0000-0000-00
```

» azurerm_mysql_configuration

Sets a MySQL Configuration value on a MySQL Server.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_mysql_server" "test" {
  name                = "mysql-server-1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    name = "B_Gen4_2"
    capacity = 2
    tier = "Basic"
    family = "Gen4"
  }

  storage_profile {
    storage_mb = 5120
    backup_retention_days = 7
```

```
    geo_redundant_backup = "Disabled"
  }

  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
  version = "5.7"
  ssl_enforcement = "Enabled"
}

resource "azurerm_mysql_configuration" "test" {
  name                = "interactive_timeout"
  resource_group_name = "${azurerm_resource_group.test.name}"
  server_name         = "${azurerm_mysql_server.test.name}"
  value               = "600"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the MySQL Configuration, which needs to be a valid MySQL configuration name. Changing this forces a new resource to be created.

- `server_name` - (Required) Specifies the name of the MySQL Server. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the MySQL Server exists. Changing this forces a new resource to be created.

- `value` - (Required) Specifies the value of the MySQL Configuration. See the MySQL documentation for valid values.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the MySQL Configuration.

» Import

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

`terraform import azurerm_mysql_configuration.interactive_timeout /subscriptions/00000000-000`

» azurerm_mysql_database

Manages a MySQL Database within a MySQL Server

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_mysql_server" "test" {
  name                = "mysql-server-1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    name = "B_Gen4_2"
    capacity = 2
    tier = "Basic"
    family = "Gen4"
  }

  storage_profile {
    storage_mb = 5120
    backup_retention_days = 7
    geo_redundant_backup = "Disabled"
  }

  administrator_login = "mysqladminun"
  administrator_login_password = "H@Sh1CoR3!"
  version = "5.7"
  ssl_enforcement = "Enabled"
}

resource "azurerm_mysql_database" "test" {
  name                = "exampledb"
  resource_group_name = "${azurerm_resource_group.test.name}"
  server_name         = "${azurerm_mysql_server.test.name}"
  charset             = "utf8"
  collation           = "utf8_unicode_ci"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the MySQL Database, which needs to be a valid MySQL identifier. Changing this forces a new resource to be created.

- `server_name` - (Required) Specifies the name of the MySQL Server. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the MySQL Server exists. Changing this forces a new resource to be created.

- `charset` - (Required) Specifies the Charset for the MySQL Database, which needs to be a valid MySQL Charset. Changing this forces a new resource to be created.

- `collation` - (Required) Specifies the Collation for the MySQL Database, which needs to be a valid MySQL Collation. Changing this forces a new resource to be created.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the MySQL Database.

» Import

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

```
terraform import azurerm_mysql_database.database1 /subscriptions/00000000-0000-0000-0000-000
```

» azurerm_mysql_firewall_rule

Manages a Firewall Rule for a MySQL Server

» Example Usage (Single IP Address)

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}
```

```
resource "azurerm_mysql_server" "test" {
  # ...
}

resource "azurerm_mysql_firewall_rule" "test" {
  name                = "office"
  resource_group_name = "${azurerm_resource_group.test.name}"
  server_name         = "${azurerm_mysql_server.test.name}"
  start_ip_address    = "40.112.8.12"
  end_ip_address      = "40.112.8.12"
}
```

» Example Usage (IP Range)

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_mysql_server" "test" {
  # ...
}

resource "azurerm_mysql_firewall_rule" "test" {
  name                = "office"
  resource_group_name = "${azurerm_resource_group.test.name}"
  server_name         = "${azurerm_mysql_server.test.name}"
  start_ip_address    = "40.112.0.0"
  end_ip_address      = "40.112.255.255"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the MySQL Firewall Rule. Changing this forces a new resource to be created.

- `server_name` - (Required) Specifies the name of the MySQL Server. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the MySQL Server exists. Changing this forces a new resource to be created.

- `start_ip_address` - (Required) Specifies the Start IP Address associated with this Firewall Rule. Changing this forces a new resource to be created.

- `end_ip_address` - (Required) Specifies the End IP Address associated with this Firewall Rule. Changing this forces a new resource to be created.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the MySQL Firewall Rule.

» Import

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

```
terraform import azurerm_mysql_firewall_rule.rule1 /subscriptions/00000000-0000-0000-0000-00
```

» azurerm_mysql_server

Manages a MySQL Server.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_mysql_server" "test" {
  name                = "mysql-server-1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    name = "B_Gen4_2"
    capacity = 2
    tier = "Basic"
    family = "Gen4"
  }

  storage_profile {
    storage_mb = 5120
```

```
    backup_retention_days = 7
    geo_redundant_backup = "Disabled"
  }

  administrator_login = "mysqladminun"
  administrator_login_password = "H@Sh1CoR3!"
  version = "5.7"
  ssl_enforcement = "Enabled"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the MySQL Server. Changing this forces a new resource to be created. This needs to be globally unique within Azure.

- `resource_group_name` - (Required) The name of the resource group in which to create the MySQL Server. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `sku` - (Required) A `sku` block as defined below.

- `storage_profile` - (Required) A `storage_profile` block as defined below.

- `administrator_login` - (Required) The Administrator Login for the MySQL Server. Changing this forces a new resource to be created.

- `administrator_login_password` - (Required) The Password associated with the `administrator_login` for the MySQL Server.

- `version` - (Required) Specifies the version of MySQL to use. Valid values are `5.6` and `5.7`. Changing this forces a new resource to be created.

- `ssl_enforcement` - (Required) Specifies if SSL should be enforced on connections. Possible values are `Enforced` and `Disabled`.

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

———————————————

`sku` supports the following:

- `name` - (Required) Specifies the SKU Name for this MySQL Server. The name of the SKU, follows the `tier` + `family` + `cores` pattern (e.g.

B_Gen4_1, GP_Gen5_8). For more information see the product documentation.

- `capacity` - (Required) The scale up/out capacity, representing server's compute units.

- `tier` - (Required) The tier of the particular SKU. Possible values are `Basic`, `GeneralPurpose`, and `MemoryOptimized`. For more information see the product documentation.

- `family` - (Required) The `family` of hardware `Gen4` or `Gen5`, before selecting your `family` check the product documentation for availability in your region.

`storage_profile` supports the following:

- `storage_mb` - (Required) Max storage allowed for a server. Possible values are between `5120` MB(5GB) and `1048576` MB(1TB) for the Basic SKU and between `5120` MB(5GB) and `4194304` MB(4TB) for General Purpose/Memory Optimized SKUs. For more information see the product documentation.

- `backup_retention_days` - (Optional) Backup retention days for the server, supported values are between `7` and `35` days.

- `geo_redundant_backup` - (Optional) Enable Geo-redundant or not for server backup. Valid values for this property are `Enabled` or `Disabled`, not supported for the `basic` tier.

» Attributes Reference

The following attributes are exported:

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

» Import

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

```
terraform import azurerm_mysql_server.server1 /subscriptions/00000000-0000-0000-0000-0000000
```

» azurerm_postgresql_configuration

Sets a PostgreSQL Configuration value on a PostgreSQL Server.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_postgresql_server" "test" {
  name                = "postgresql-server-1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    name = "B_Gen4_2"
    capacity = 2
    tier = "Basic"
    family = "Gen4"
  }

  storage_profile {
    storage_mb = 5120
    backup_retention_days = 7
    geo_redundant_backup = "Disabled"
  }

  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
  version = "9.5"
  ssl_enforcement = "Enabled"
}

resource "azurerm_postgresql_configuration" "test" {
  name                = "backslash_quote"
  resource_group_name = "${azurerm_resource_group.test.name}"
  server_name         = "${azurerm_postgresql_server.test.name}"
  value               = "on"
}
```

» Argument Reference

The following arguments are supported:

- **name** - (Required) Specifies the name of the PostgreSQL Configuration, which needs to be a valid PostgreSQL configuration name. Changing this forces a new resource to be created.

- `server_name` - (Required) Specifies the name of the PostgreSQL Server. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the PostgreSQL Server exists. Changing this forces a new resource to be created.

- `value` - (Required) Specifies the value of the PostgreSQL Configuration. See the PostgreSQL documentation for valid values.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the PostgreSQL Configuration.

» Import

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

```
terraform import azurerm_postgresql_configuration.backslash_quote /subscriptions/00000000-00
```

» azurerm_postgresql_database

Manages a PostgreSQL Database within a PostgreSQL Server

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_postgresql_server" "test" {
  name                = "postgresql-server-1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    name = "B_Gen4_2"
    capacity = 2
    tier = "Basic"
    family = "Gen4"
```

```
  }

  storage_profile {
    storage_mb = 5120
    backup_retention_days = 7
    geo_redundant_backup = "Disabled"
  }

  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
  version = "9.5"
  ssl_enforcement = "Enabled"
}

resource "azurerm_postgresql_database" "test" {
  name              = "exampledb"
  resource_group_name = "${azurerm_resource_group.test.name}"
  server_name       = "${azurerm_postgresql_server.test.name}"
  charset           = "UTF8"
  collation         = "English_United States.1252"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the PostgreSQL Database, which needs to be a valid PostgreSQL identifier. Changing this forces a new resource to be created.

- `server_name` - (Required) Specifies the name of the PostgreSQL Server. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the PostgreSQL Server exists. Changing this forces a new resource to be created.

- `charset` - (Required) Specifies the Charset for the PostgreSQL Database, which needs to be a valid PostgreSQL Charset. Changing this forces a new resource to be created.

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

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the PostgreSQL Database.

» Import

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

```
terraform import azurerm_postgresql_database.database1 /subscriptions/00000000-0000-0000-000
```

» azurerm_postgresql_firewall_rule

Manages a Firewall Rule for a PostgreSQL Server

» Example Usage (Single IP Address)

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_postgresql_server" "test" {
  # ...
}

resource "azurerm_postgresql_firewall_rule" "test" {
  name                = "office"
  resource_group_name = "${azurerm_resource_group.test.name}"
  server_name         = "${azurerm_postgresql_server.test.name}"
  start_ip_address    = "40.112.8.12"
  end_ip_address      = "40.112.8.12"
}
```

» Example Usage (IP Range)

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}
```

```
resource "azurerm_postgresql_server" "test" {
  # ...
}

resource "azurerm_postgresql_firewall_rule" "test" {
  name                = "office"
  resource_group_name = "${azurerm_resource_group.test.name}"
  server_name         = "${azurerm_postgresql_server.test.name}"
  start_ip_address    = "40.112.0.0"
  end_ip_address      = "40.112.255.255"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the PostgreSQL Firewall Rule.
  Changing this forces a new resource to be created.

- `server_name` - (Required) Specifies the name of the PostgreSQL Server.
  Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in
  which the PostgreSQL Server exists. Changing this forces a new resource
  to be created.

- `start_ip_address` - (Required) Specifies the Charset for the PostgreSQL
  Database. Changing this forces a new resource to be created.

- `end_ip_address` - (Required) Specifies the End IP Address associated
  with this Firewall Rule. Changing this forces a new resource to be created.

NOTE: The Azure feature `Allow access to Azure services` can be enabled
by setting `start_ip_address` and `end_ip_address` to `0.0.0.0` which (is doc-
umented in the Azure API Docs).

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the PostgreSQL Firewall Rule.

» Import

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

`terraform import azurerm_postgresql_firewall_rule.rule1 /subscriptions/00000000-0000-0000-00`

» azurerm_postgresql_server

Create a PostgreSQL Server.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "api-rg-pro"
  location = "West Europe"
}

resource "azurerm_postgresql_server" "test" {
  name                = "postgresql-server-1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    name = "B_Gen4_2"
    capacity = 2
    tier = "Basic"
    family = "Gen4"
  }

  storage_profile {
    storage_mb = 5120
    backup_retention_days = 7
    geo_redundant_backup = "Disabled"
  }

  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
  version = "9.5"
  ssl_enforcement = "Enabled"
}
```

» Argument Reference

The following arguments are supported:

- **name** - (Required) Specifies the name of the PostgreSQL Server. Changing this forces a new resource to be created.

- **resource_group_name** - (Required) The name of the resource group in which to create the PostgreSQL Server. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `sku` - (Required) A `sku` block as defined below.

- `storage_profile` - (Required) A `storage_profile` block as defined below.

- `administrator_login` - (Required) The Administrator Login for the PostgreSQL Server. Changing this forces a new resource to be created.

- `administrator_login_password` - (Required) The Password associated with the `administrator_login` for the PostgreSQL Server.

- `version` - (Required) Specifies the version of PostgreSQL to use. Valid values are `9.5`, `9.6`, and `10.0`. Changing this forces a new resource to be created.

- `ssl_enforcement` - (Required) Specifies if SSL should be enforced on connections. Possible values are `Enabled` and `Disabled`.

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

`sku` supports the following:

- `name` - (Required) Specifies the SKU Name for this PostgreSQL Server. The name of the SKU, follows the `tier` + `family` + `cores` pattern (e.g. B_Gen4_1, GP_Gen5_8). For more information see the product documentation.

- `capacity` - (Required) The scale up/out capacity, representing server's compute units.

- `tier` - (Required) The tier of the particular SKU. Possible values are `Basic`, `GeneralPurpose`, and `MemoryOptimized`. For more information see the product documentation.

- `family` - (Required) The `family` of hardware `Gen4` or `Gen5`, before selecting your `family` check the product documentation for availability in your region.

`storage_profile` supports the following:

- `storage_mb` - (Required) Max storage allowed for a server. Possible values are between `5120` MB(5GB) and `1048576` MB(1TB) for the Basic SKU and between `5120` MB(5GB) and `4194304` MB(4TB) for General Purpose/Memory Optimized SKUs. For more information see the product documentation.

- `backup_retention_days` - (Optional) Backup retention days for the server, supported values are between **7** and **35** days.

- `geo_redundant_backup` - (Optional) Enable Geo-redundant or not for server backup. Valid values for this property are `Enabled` or `Disabled`, not supported for the `basic` tier.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the PostgreSQL Server.

- `fqdn` - The FQDN of the PostgreSQL Server.

» Import

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

```
terraform import azurerm_postgresql_server.server1 /subscriptions/00000000-0000-0000-0000-00
```

» azurerm_sql_database

Allows you to manage an Azure SQL Database

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_sql_server" "test" {
    name = "mysqlserver"
    resource_group_name = "${azurerm_resource_group.test.name}"
    location = "West US"
    version = "12.0"
    administrator_login = "4dm1n157r470r"
    administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}

resource "azurerm_sql_database" "test" {
  name                = "mysqldatabase"
```

```
  resource_group_name = "${azurerm_resource_group.test.name}"
    location = "West US"
    server_name = "${azurerm_sql_server.test.name}"

  tags {
    environment = "production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the database.

- `resource_group_name` - (Required) The name of the resource group in which to create the database. This must be the same as Database Server resource group currently.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `server_name` - (Required) The name of the SQL Server on which to create the database.

- `create_mode` - (Optional) Specifies the type of database to create. Defaults to `Default`. See below for the accepted values/

- `import` - (Optional) A Database Import block as documented below. `create_mode` must be set to `Default`.

- `source_database_id` - (Optional) The URI of the source database if `create_mode` value is not `Default`.

- `restore_point_in_time` - (Optional) The point in time for the restore. Only applies if `create_mode` is `PointInTimeRestore` e.g. 2013-11-08T22:00:40Z

- `edition` - (Optional) The edition of the database to be created. Applies only if `create_mode` is `Default`. Valid values are: `Basic`, `Standard`, `Premium`, or `DataWarehouse`. Please see Azure SQL Database Service Tiers.

- `collation` - (Optional) The name of the collation. Applies only if `create_mode` is `Default`. Azure default is `SQL_LATIN1_GENERAL_CP1_CI_AS`. Changing this forces a new resource to be created.

- `max_size_bytes` - (Optional) The maximum size that the database can grow to. Applies only if `create_mode` is `Default`. Please see Azure SQL Database Service Tiers.

- `requested_service_objective_id` - (Optional) Use `requested_service_objective_id` or `requested_service_objective_name` to set the performance level for the database. Valid values are: `S0`, `S1`, `S2`, `S3`, `P1`, `P2`, `P4`, `P6`, `P11` and `ElasticPool`. Please see Azure SQL Database Service Tiers.

- `requested_service_objective_name` - (Optional) Use `requested_service_objective_name` or `requested_service_objective_id` to set the performance level for the database. Please see Azure SQL Database Service Tiers.

- `source_database_deletion_date` - (Optional) The deletion date time of the source database. Only applies to deleted databases where `create_mode` is `PointInTimeRestore`.

- `elastic_pool_name` - (Optional) The name of the elastic database pool.

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

`import` supports the following:

- `storage_uri` - (Required) Specifies the blob URI of the .bacpac file.
- `storage_key` - (Required) Specifies the access key for the storage account.
- `storage_key_type` - (Required) Specifies the type of access key for the storage account. Valid values are `StorageAccessKey` or `SharedAccessKey`.
- `administrator_login` - (Required) Specifies the name of the SQL administrator.
- `administrator_login_password` - (Required) Specifies the password of the SQL administrator.
- `authentication_type` - (Required) Specifies the type of authentication used to access the server. Valid values are `SQL` or `ADPassword`.
- `operation_mode` - (Optional) Specifies the type of import operation being performed. The only allowable value is `Import`.

» Attributes Reference

The following attributes are exported:

- `id` - The SQL Database ID.
- `creation_date` - The creation date of the SQL Database.
- `default_secondary_location` - The default secondary location of the SQL Database.

» Import

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

`terraform import azurerm_sql_database.database1 /subscriptions/00000000-0000-0000-0000-00000`

» azurerm_sql_active_directory_administrator

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

» Example Usage

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

resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_sql_server" "test" {
  name = "mysqlserver"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location = "${azurerm_resource_group.test.location}"
  version = "12.0"
  administrator_login = "4dm1n157r470r"
  administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}

resource "azurerm_sql_active_directory_administrator" "test" {
  server_name = "${azurerm_sql_server.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  login = "sqladmin"
  tenant_id = "${data.azurerm_client_config.current.tenant_id}"
  object_id = "${data.azurerm_client_config.current.service_principal_object_id}"
}
```

» Argument Reference

The following arguments are supported:

- **server_name** - (Required) The name of the SQL Server on which to set the administrator. Changing this forces a new resource to be created.

- **resource_group_name** - (Required) The name of the resource group for the SQL server. Changing this forces a new resource to be created.

- **login** - (Required) The login name of the principal to set as the server administrator

- **object_id** - (Required) The ID of the principal to set as the server administrator

- `tenant_id` - (Required) The Azure Tenant ID

» Attributes Reference

The following attributes are exported:

- `id` - The SQL Active Directory Administrator ID.

» Import

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

```
terraform import azurerm_sql_active_directory_administrator.administrator /subscriptions/000
```

» azurerm_sql_elasticpool

Allows you to manage an Azure SQL Elastic Pool.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name = "my-resource-group"
  location = "West US"
}

resource "azurerm_sql_server" "test" {
    name = "my-sql-server" # NOTE: needs to be globally unique
    resource_group_name = "${azurerm_resource_group.test.name}"
    location = "${azurerm_resource_group.test.location}"
    version = "12.0"
    administrator_login = "4dm1n157r470r"
    administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}

resource "azurerm_sql_elasticpool" "test" {
    name = "test"
    resource_group_name = "${azurerm_resource_group.test.name}"
    location = "${azurerm_resource_group.test.location}"
    server_name = "${azurerm_sql_server.test.name}"
    edition = "Basic"
    dtu = 50
```

```
    db_dtu_min = 0
    db_dtu_max = 5
    pool_size = 5000
}
```

NOTE on `azurerm_sql_elasticpool`: - The values of `edition`, `dtu`, and `pool_size` must be consistent with the Azure SQL Database Service Tiers. Any inconsistent argument configuration will be rejected.

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the elastic pool. This needs to be globally unique. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the elastic pool. This must be the same as the resource group of the underlying SQL server.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `server_name` - (Required) The name of the SQL Server on which to create the elastic pool. Changing this forces a new resource to be created.

- `edition` - (Required) The edition of the elastic pool to be created. Valid values are `Basic`, `Standard`, and `Premium`. Refer to Azure SQL Database Service Tiers for details. Changing this forces a new resource to be created.

- `dtu` - (Required) The total shared DTU for the elastic pool. Valid values depend on the `edition` which has been defined. Refer to Azure SQL Database Service Tiers for valid combinations.

- `db_dtu_min` - (Optional) The minimum DTU which will be guaranteed to all databases in the elastic pool to be created.

- `db_dtu_max` - (Optional) The maximum DTU which will be guaranteed to all databases in the elastic pool to be created.

- `pool_size` - (Optional) The maximum size in MB that all databases in the elastic pool can grow to. The maximum size must be consistent with combination of `edition` and `dtu` and the limits documented in Azure SQL Database Service Tiers. If not defined when creating an elastic pool, the value is set to the size implied by `edition` and `dtu`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The SQL Elastic Pool ID.

- `creation_date` - The creation date of the SQL Elastic Pool.

» azurerm_sql_firewall_rule

Allows you to manage an Azure SQL Firewall Rule

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_sql_server" "test" {
    name = "mysqlserver"
    resource_group_name = "${azurerm_resource_group.test.name}"
    location = "West US"
    version = "12.0"
    administrator_login = "4dm1n157r470r"
    administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}

resource "azurerm_sql_firewall_rule" "test" {
  name                = "FirewallRule1"
  resource_group_name = "${azurerm_resource_group.test.name}"
  server_name         = "${azurerm_sql_server.test.name}"
  start_ip_address    = "10.0.17.62"
  end_ip_address      = "10.0.17.62"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the firewall rule.

- `resource_group_name` - (Required) The name of the resource group in which to create the sql server.

- `server_name` - (Required) The name of the SQL Server on which to create the Firewall Rule.

- `start_ip_address` - (Required) The starting IP address to allow through the firewall for this rule.

- `end_ip_address` - (Required) The ending IP address to allow through the firewall for this rule.

NOTE: The Azure feature `Allow access to Azure services` can be enabled by setting `start_ip_address` and `end_ip_address` to `0.0.0.0` which (is documented in the Azure API Docs).

» Attributes Reference

The following attributes are exported:

- `id` - The SQL Firewall Rule ID.

» Import

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

```
terraform import azurerm_sql_firewall_rule.rule1 /subscriptions/00000000-0000-0000-0000-0000
```

» azurerm_sql_server

Manages a SQL Azure Database Server.

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

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "database-rg"
  location = "West US"
}

resource "azurerm_sql_server" "test" {
  name                         = "mysqlserver"
  resource_group_name          = "${azurerm_resource_group.test.name}"
  location                     = "${azurerm_resource_group.test.location}"
  version                      = "12.0"
```

```
  administrator_login          = "mradministrator"
  administrator_login_password = "thisIsDog11"

  tags {
    environment = "production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the SQL Server. This needs to be globally unique within Azure.

- `resource_group_name` - (Required) The name of the resource group in which to create the SQL Server.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `version` - (Required) The version for the new server. Valid values are: 2.0 (for v11 server) and 12.0 (for v12 server).

- `administrator_login` - (Required) The administrator login name for the new server. Changing this forces a new resource to be created.

- `administrator_login_password` - (Required) The password associated with the `administrator_login` user. Needs to comply with Azure's Password Policy

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

» Attributes Reference

The following attributes are exported:

- `id` - The SQL Server ID.
- `fully_qualified_domain_name` - The fully qualified domain name of the Azure SQL Server (e.g. myServerName.database.windows.net)

» Import

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

```
terraform import azurerm_sql_server.test /subscriptions/00000000-0000-0000-0000-000000000000
```

» azurerm_sql_virtual_network_rule

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

» Example Usage

```
resource "azurerm_resource_group" "example" {
  name     = "example-sql-server-vnet-rule"
  location = "West US"
}

resource "azurerm_virtual_network" "vnet" {
  name                = "example-vnet"
  address_space       = ["10.7.29.0/29"]
  location            = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
}

resource "azurerm_subnet" "subnet" {
  name                 = "example-subnet"
  resource_group_name  = "${azurerm_resource_group.example.name}"
  virtual_network_name = "${azurerm_virtual_network.vnet.name}"
  address_prefix       = "10.7.29.0/29"
  service_endpoints    = ["Microsoft.Sql"]
}

resource "azurerm_sql_server" "sqlserver" {
    name                         = "unqiueazuresqlserver"
    resource_group_name          = "${azurerm_resource_group.example.name}"
    location                     = "${azurerm_resource_group.example.location}"
    version                      = "12.0"
    administrator_login          = "4dm1n157r470r"
    administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}

resource "azurerm_sql_virtual_network_rule" "sqlvnetrule" {
  name                = "sql-vnet-rule"
  resource_group_name = "${azurerm_resource_group.example.name}"
  server_name         = "${azurerm_sql_server.sqlserver.name}"
  subnet_id           = "${azurerm_subnet.subnet.id}"
}
```

» Argument Reference

The following arguments are supported:

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

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

- `resource_group_name` - (Required) The name of the resource group where the SQL server resides. Changing this forces a new resource to be created.

- `server_name` - (Required) The name of the SQL Server to which this SQL virtual network rule will be applied to. Changing this forces a new resource to be created.

- `subnet_id` - (Required) The ID of the subnet that the SQL server will be connected to.

- `ignore_missing_vnet_service_endpoint` - (Optional) Create the virtual network rule before the subnet has the virtual network service endpoint enabled. The default value is false.

NOTE: If `ignore_missing_vnet_service_endpoint` is false, and the target subnet does not contain the `Microsoft.SQL` endpoint in the `service_endpoints` array, the deployment will fail when it tries to create the SQL virtual network rule.

» Attributes Reference

The following attributes are exported:

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

» Import

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

```
terraform import azurerm_sql_virtual_network_rule.rule1 /subscriptions/00000000-0000-0000-00
```

» azurerm_data_lake_store

Manage an Azure Data Lake Store.

» Example Usage

```
resource "azurerm_resource_group" "example" {
  name     = "example"
  location = "northeurope"
}

resource "azurerm_data_lake_store" "example" {
  name                = "consumptiondatalake"
  resource_group_name = "${azurerm_resource_group.example.name}"
  location            = "${azurerm_resource_group.example.location}"

  encrytpion {
    type = "UserManaged"
    key_vault_id = "${azurerm_key_vault.example.id}"
    key_name     = "${azurerm_key_vault_key.example.name}"
    key_version  = "${azurerm_key_vault_key.example.version}"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Data Lake Store. Changing this forces a new resource to be created. Has to be between 3 to 24 characters.

- `resource_group_name` - (Required) The name of the resource group in which to create the Data Lake Store.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `tier` - (Optional) The monthly commitment tier for Data Lake Store. Accepted values are `Consumption`, `Commitment_1TB`, `Commitment_10TB`, `Commitment_100TB`, `Commitment_500TB`, `Commitment_1PB` or `Commitment_5PB`.

- `encryption_state` - (Optional) Is Encryption enabled on this Data Lake Store Account? Possible values are `Enabled` or `Disabled`. Defaults to `Enabled`.

- `encryption_type` - (Optional) The Encryption Type used for this Data Lake Store Account. Currently can be set to `SystemManaged` when `encryption_state` is `Enabled` - and must be a blank string when it's Disabled.

NOTE: Support for User Managed encryption will be supported in the future once a bug in the API is fixed.

- `firewall_allow_azure_ips` - are Azure Service IP's allowed through the firewall? Possible values are `Enabled` and `Disabled`. Defaults to `Enabled`.

- `firewall_state` - the state of the Firewall. Possible values are `Enabled` and `Disabled`. Defaults to `Enabled`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The Date Lake Store ID.

» Import

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

```
terraform import azurerm_data_lake_store.test /subscriptions/00000000-0000-0000-0000-0000000
```

» azurerm_data_lake_store_firewall_rule

Manage a Azure Data Lake Store Firewall Rule.

» Example Usage

```
resource "azurerm_resource_group" "example" {
  name     = "example"
  location = "northeurope"
}

resource "azurerm_data_lake_store" "example" {
  name                = "consumptiondatalake"
  resource_group_name = "${azurerm_resource_group.example.name}"
  location            = "${azurerm_resource_group.example.location}"
}

resource "azurerm_data_lake_store_firewall_rule" "example" {
  name                = "office-ip-range"
  account_name        = "${azurerm_data_lake_store.example.name}"
  resource_group_name = "${azurerm_resource_group.example.name}"
```

```
  start_ip_address    = "1.2.3.4"
  end_ip_address      = "2.3.4.5"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Data Lake Store. Changing this forces a new resource to be created. Has to be between 3 to 24 characters.

- `resource_group_name` - (Required) The name of the resource group in which to create the Data Lake Store.

- `account_name` - (Required) Specifies the name of the Data Lake Store for which the Firewall Rule should take effect.

- `start_ip_address` - (Required) The Start IP address for the firewall rule.

- `end_ip_address` - (Required) The End IP Address for the firewall rule.

» Attributes Reference

The following attributes are exported:

- `id` - The Date Lake Store Firewall Rule ID.

» Import

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

```
terraform import azurerm_data_lake_store_firewall_rule.rule1 /subscriptions/00000000-0000-00
```

» azurerm_data_lake_analytics_account

Manage an Azure Data Lake Analytics Account.

» Example Usage

```
resource "azurerm_resource_group" "example" {
  name     = "example"
  location = "northeurope"
}
```

```
resource "azurerm_data_lake_store" "example" {
  name                = "consumptiondatalake"
  resource_group_name = "${azurerm_resource_group.example.name}"
  location            = "${azurerm_resource_group.example.location}"
}

resource "azurerm_data_lake_analytics_account" "example" {
  name                = "acctest%s"
  resource_group_name = "${azurerm_resource_group.example.name}"
  location            = "${azurerm_resource_group.example.location}"

  default_store_account_name = "${azurerm_data_lake_store.example.name}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Data Lake Analytics Account. Changing this forces a new resource to be created. Has to be between 3 to 24 characters.

- `resource_group_name` - (Required) The name of the resource group in which to create the Data Lake Analytics Account.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `default_store_account_name` - (Required) Specifies the data lake store to use by default. Changing this forces a new resource to be created.

- `tier` - (Optional) The monthly commitment tier for Data Lake Analytics Account. Accepted values are `Consumption`, `Commitment_100000AUHours`, `Commitment_10000AUHours`, `Commitment_1000AUHours`, `Commitment_100AUHours`, `Commitment_500000AUHours`, `Commitment_50000AUHours`, `Commitment_5000AUHours`, or `Commitment_500AUHours`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The Date Lake Store ID.

» Import

Date Lake Analytics Account can be imported using the `resource id`, e.g.

```
terraform import azurerm_data_lake_analytics_account.test /subscriptions/00000000-0000-0000-
```

» azurerm_data_lake_analytics_firewall_rule

Manage a Azure Data Lake Analytics Firewall Rule.

» Example Usage

```
resource "azurerm_resource_group" "example" {
  name     = "example"
  location = "northeurope"
}

resource "azurerm_data_lake_store" "example" {
  name                = "consumptiondatalake"
  resource_group_name = "${azurerm_resource_group.example.name}"
  location            = "${azurerm_resource_group.example.location}"
}

resource "azurerm_data_lake_analytics_account" "example" {
  name                = "acctest%s"
  resource_group_name = "${azurerm_resource_group.example.name}"
  location            = "${azurerm_resource_group.example.location}"

  default_store_account_name = "${azurerm_data_lake_store.example.name}"
}

resource "azurerm_data_lake_analytics_firewall_rule" "example" {
  name                = "office-ip-range"
  account_name        = "${azurerm_data_lake_analytics.example.name}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  start_ip_address    = "1.2.3.4"
  end_ip_address      = "2.3.4.5"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Data Lake Analytics. Changing this forces a new resource to be created. Has to be between 3 to 24 characters.

- `resource_group_name` - (Required) The name of the resource group in which to create the Data Lake Analytics.

- `account_name` - (Required) Specifies the name of the Data Lake Analytics for which the Firewall Rule should take effect.

- `start_ip_address` - (Required) The Start IP address for the firewall rule.

- `end_ip_address` - (Required) The End IP Address for the firewall rule.

» Attributes Reference

The following attributes are exported:

- `id` - The Date Lake Store Firewall Rule ID.

» Import

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

```
terraform import azurerm_data_lake_analytics_firewall_rule.rule1 /subscriptions/00000000-000
```

» azurerm_dns_a_record

Enables you to manage DNS A Records within Azure DNS.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_dns_a_record" "test" {
  name                = "test"
```

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

» Argument Reference

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.

```
terraform import azurerm_dns_a_record.test /subscriptions/00000000-0000-0000-0000-0000000000
```

» azurerm_dns_aaaa_record

Enables you to manage DNS AAAA Records within Azure DNS.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
```

```
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_dns_aaaa_record" "test" {
  name                = "test"
  zone_name           = "${azurerm_dns_zone.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  ttl                 = 300
  records             = ["2607:f8b0:4009:1803::1005"]
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the DNS AAAA Record.

- `resource_group_name` - (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.

- `zone_name` - (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.

- `TTL` - (Required) The Time To Live (TTL) of the DNS record.

- `records` - (Required) List of IPv6 Addresses.

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

» Attributes Reference

The following attributes are exported:

- `id` - The DNS AAAA Record ID.

» Import

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

```
terraform import azurerm_dns_aaaa_record.test /subscriptions/00000000-0000-0000-0000-0000000
```

» azurerm_dns_caa_record

Enables you to manage DNS CAA Records within Azure DNS.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_dns_caa_record" "test" {
  name                = "test"
  zone_name           = "${azurerm_dns_zone.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  ttl                 = 300

  record {
    flags = 0
    tag   = "issue"
    value = "example.com"
  }

  record {
    flags = 0
    tag   = "issue"
    value = "example.net"
  }

  record {
    flags = 0
    tag   = "issuewild"
    value = ";"
  }

  record {
    flags = 0
    tag   = "iodef"
    value = "mailto:terraform@nonexisting.tld"
```

```
  }

  tags {
    Environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the DNS CAA Record.

- `resource_group_name` - (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.

- `zone_name` - (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.

- `ttl` - (Required) The Time To Live (TTL) of the DNS record.

- `record` - (Required) A list of values that make up the CAA record. Each `record` block supports fields documented below.

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

The `record` block supports:

- `flags` - (Required) Extensible CAA flags, currently only 1 is implemented to set the issuer critical flag.

- `tag` - (Required) A property tag, options are issue, issuewild and iodef.

- `value` - (Required) A property value such as a registrar domain.

» Attributes Reference

The following attributes are exported:

- `id` - The DNS CAA Record ID.

» Import

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

```
terraform import azurerm_dns_caa_record.test /subscriptions/00000000-0000-0000-0000-00000000
```

» azurerm_dns_cname_record

Enables you to manage DNS CNAME Records within Azure DNS.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_dns_cname_record" "test" {
  name                = "test"
  zone_name           = "${azurerm_dns_zone.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  ttl                 = 300
  record              = "contoso.com"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the DNS CNAME Record.

- `resource_group_name` - (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.

- `zone_name` - (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.

- `TTL` - (Required) The Time To Live (TTL) of the DNS record.

- `record` - (Required) The target of the CNAME.

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

» Attributes Reference

The following attributes are exported:

- `id` - The DNS CName Record ID.

» Import

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

```
terraform import azurerm_dns_cname_record.test /subscriptions/00000000-0000-0000-0000-000000
```

» azurerm__dns__mx__record

Enables you to manage DNS MX Records within Azure DNS.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_dns_mx_record" "test" {
  name                = "test"
  zone_name           = "${azurerm_dns_zone.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  ttl                 = 300

  record {
    preference = 10
    exchange   = "mail1.contoso.com"
  }

  record {
    preference = 20
    exchange   = "mail2.contoso.com"
  }

  tags {
    Environment = "Production"
  }
```

```
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the DNS MX Record.

- `resource_group_name` - (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.

- `zone_name` - (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.

- `ttl` - (Required) The Time To Live (TTL) of the DNS record.

- `record` - (Required) A list of values that make up the MX record. Each `record` block supports fields documented below.

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

The `record` block supports:

- `preference` - (Required) String representing the "preference" value of the MX records. Records with lower preference value take priority.

- `exchange` - (Required) The mail server responsible for the domain covered by the MX record.

» Attributes Reference

The following attributes are exported:

- `id` - The DNS MX Record ID.

» Import

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

```
terraform import azurerm_dns_mx_record.test /subscriptions/00000000-0000-0000-0000-000000000
```

» azurerm_dns_ns_record

Enables you to manage DNS NS Records within Azure DNS.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_dns_ns_record" "test" {
  name                = "test"
  zone_name           = "${azurerm_dns_zone.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  ttl                 = 300

  records = ["ns1.contoso.com", "ns2.contoso.com"]

  tags {
    Environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the DNS NS Record.

- `resource_group_name` - (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.

- `zone_name` - (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.

- `ttl` - (Required) The Time To Live (TTL) of the DNS record.

- `records` - (Optional) A list of values that make up the NS record. *WARNING*: Either `records` or `record` is required.

- `record` - (Optional) A list of values that make up the NS record. Each `record` block supports fields documented below. This field has been deprecated and will be removed in a future release.

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

The `record` block supports:

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

» Attributes Reference

The following attributes are exported:

- **id** - The DNS NS Record ID.

» Import

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

```
terraform import azurerm_dns_ns_record.test /subscriptions/00000000-0000-0000-0000-000000000
```

» azurerm_dns_ptr_record

Enables you to manage DNS PTR Records within Azure DNS.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_dns_ptr_record" "test" {
  name                = "test"
  zone_name           = "${azurerm_dns_zone.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  ttl                 = 300
  records             = ["yourdomain.com"]
}
```

» Argument Reference

The following arguments are supported:

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

» Attributes Reference

The following attributes are exported:

- `id` - The DNS PTR Record ID.

» Import

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

```
terraform import azurerm_dns_ptr_record.test /subscriptions/00000000-0000-0000-0000-00000000
```

» azurerm_dns_srv_record

Enables you to manage DNS SRV Records within Azure DNS.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_dns_srv_record" "test" {
  name                = "test"
  zone_name           = "${azurerm_dns_zone.test.name}"
```

```
  resource_group_name = "${azurerm_resource_group.test.name}"
  ttl                 = 300

  record {
    priority = 1
    weight   = 5
    port     = 8080
    target   = "target1.contoso.com"
  }

  tags {
    Environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the DNS SRV Record.

- `resource_group_name` - (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.

- `zone_name` - (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.

- `ttl` - (Required) The Time To Live (TTL) of the DNS record.

- `record` - (Required) A list of values that make up the SRV record. Each `record` block supports fields documented below.

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

The `record` block supports:

- `priority` - (Required) Priority of the SRV record.

- `weight` - (Required) Weight of the SRV record.

- `port` - (Required) Port the service is listening on.

- `target` - (Required) FQDN of the service.

» Attributes Reference

The following attributes are exported:

- `id` - The DNS SRV Record ID.

» Import

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

```
terraform import azurerm_dns_srv_record.test /subscriptions/00000000-0000-0000-0000-00000000
```

» azurerm__dns__txt__record

Enables you to manage DNS TXT Records within Azure DNS.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_dns_txt_record" "test" {
  name                = "test"
  zone_name           = "${azurerm_dns_zone.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  ttl                 = 300

  record {
    value = "google-site-authenticator"
  }

  record {
    value = "more site information here"
  }

  tags {
    Environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the DNS TXT Record.

- `resource_group_name` - (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.

- `zone_name` - (Required) Specifies the DNS Zone where the resource exists. Changing this forces a new resource to be created.

- `ttl` - (Required) The Time To Live (TTL) of the DNS record.

- `record` - (Required) A list of values that make up the txt record. Each `record` block supports fields documented below.

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

The `record` block supports:

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

» Attributes Reference

The following attributes are exported:

- `id` - The DNS TXT Record ID.

» Import

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

```
terraform import azurerm_dns_txt_record.test /subscriptions/00000000-0000-0000-0000-00000000
```

» azurerm_dns_zone

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

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
```

```
}

resource "azurerm_dns_zone" "test" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
  zone_type           = "Public"
}

resource "azurerm_dns_zone" "test_private" {
  name                = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
  zone_type           = "Private"
}
```

» 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.

- `zone_type` - (Required) Specifies the type of this DNS zone. Possible values are `Public` or `Private` (Defaults to `Public`).

- `registration_virtual_network_ids` - (Optional) A list of Virtual Network ID's that register hostnames in this DNS zone. This field can only be set when `zone_type` is set to `Private`.

- `resolution_virtual_network_ids` - (Optional) A list of Virtual Network ID's that resolve records in this DNS zone. This field can only be set when `zone_type` is set to `Private`.

- `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.

196

- **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.

```
terraform import azurerm_dns_zone.zone1 /subscriptions/00000000-0000-0000-0000-000000000000/
```

» azurerm_key_vault

Manages a Key Vault.

NOTE: It's possible to define Key Vault Access Policies both within the `azurerm_key_vault` resource via the `access_policy` block and by using the `azurerm_key_vault_access_policy` resource. However it's not possible to use both methods to manage Access Policies within a KeyVault, since there'll be conflicts.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_key_vault" "test" {
  name                = "testvault"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    name = "standard"
  }

  tenant_id = "d6e396d0-5584-41dc-9fc0-268df99bc610"

  access_policy {
    tenant_id = "d6e396d0-5584-41dc-9fc0-268df99bc610"
    object_id = "d746815a-0433-4a21-b95d-fc437d2d475b"

    key_permissions = [
      "get",
```

```
    ]

    secret_permissions = [
      "get",
    ]
  }

  enabled_for_disk_encryption = true

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

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

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the Key Vault. Changing this forces a new resource to be created.

- `sku` - (Required) An SKU block as described below.

- `tenant_id` - (Required) The Azure Active Directory tenant ID that should be used for authenticating requests to the key vault.

- `access_policy` - (Optional) An access policy block as described below. A maximum of 16 may be declared.

NOTE: It's possible to define Key Vault Access Policies both within the `azurerm_key_vault` resource via the `access_policy` block and by using the `azurerm_key_vault_access_policy` resource. However it's not possible to use both methods to manage Access Policies within a KeyVault, since there'll be conflicts.

- `enabled_for_deployment` - (Optional) Boolean flag to specify whether Azure Virtual Machines are permitted to retrieve certificates stored as secrets from the key vault. Defaults to false.

- `enabled_for_disk_encryption` - (Optional) Boolean flag to specify whether Azure Disk Encryption is permitted to retrieve secrets from the vault and unwrap keys. Defaults to false.

- `enabled_for_template_deployment` - (Optional) Boolean flag to specify whether Azure Resource Manager is permitted to retrieve secrets from the key vault. Defaults to false.

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

`sku` supports the following:

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

`access_policy` supports the following:

- `tenant_id` - (Required) The Azure Active Directory tenant ID that should be used for authenticating requests to the key vault. Must match the `tenant_id` used above.

- `object_id` - (Required) The object ID of a user, service principal or security group in the Azure Active Directory tenant for the vault. The object ID must be unique for the list of access policies.

- `application_id` - (Optional) The object ID of an Application in Azure Active Directory.

- `certificate_permissions` - (Optional) List of certificate permissions, must be one or more from the following: `create`, `delete`, `deleteissuers`, `get`, `getissuers`, `import`, `list`, `listissuers`, `managecontacts`, `manageissuers`, `purge`, `recover`, `setissuers` and `update`.

- `key_permissions` - (Required) List of key permissions, must be one or more from the following: `backup`, `create`, `decrypt`, `delete`, `encrypt`, `get`, `import`, `list`, `purge`, `recover`, `restore`, `sign`, `unwrapKey`, `update`, `verify` and `wrapKey`.

- `secret_permissions` - (Required) List of secret permissions, must be one or more from the following: `backup`, `delete`, `get`, `list`, `purge`, `recover`, `restore` and `set`.

» Attributes Reference

The following attributes are exported:

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

» Import

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

```
terraform import azurerm_key_vault.test /subscriptions/00000000-0000-0000-0000-000000000000/
```

» azurerm_key_vault_access_policy

Manages a Key Vault Access Policy.

NOTE: It's possible to define Key Vault Access Policies both within the `azurerm_key_vault` resource via the `access_policy` block and by using the `azurerm_key_vault_access_policy` resource. However it's not possible to use both methods to manage Access Policies within a KeyVault, since there'll be conflicts.

NOTE: Azure permits a maximum of 16 Access Policies per Key Vault - more information can be found in this document.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "${azurerm_resource_group.test.location}"
}

resource "azurerm_key_vault" "test" {
  name                = "testvault"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  sku {
    name = "standard"
  }

  tenant_id = "22222222-2222-2222-2222-222222222222"

  enabled_for_disk_encryption = true

  tags {
    environment = "Production"
  }
}

resource "azurerm_key_vault_access_policy" "test" {
  vault_name          = "${azurerm_key_vault.test.name}"
  resource_group_name = "${azurerm_key_vault.test.resource_group_name}"
```

```
  tenant_id = "00000000-0000-0000-0000-000000000000"
  object_id = "11111111-1111-1111-1111-111111111111"

  key_permissions = [
    "get",
  ]

  secret_permissions = [
    "get",
  ]

}
```

» Argument Reference

The following arguments are supported:

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

- `resource_group_name` - (Required) The name of the resource group in which to create the namespace. Changing this forces a new resource to be created.

- `tenant_id` - (Required) The Azure Active Directory tenant ID that should be used for authenticating requests to the key vault. Changing this forces a new resource to be created.

- `object_id` - (Required) The object ID of a user, service principal or security group in the Azure Active Directory tenant for the vault. The object ID must be unique for the list of access policies. Changing this forces a new resource to be created.

- `application_id` - (Optional) The object ID of an Application in Azure Active Directory.

- `certificate_permissions` - (Optional) List of certificate permissions, must be one or more from the following: `create`, `delete`, `deleteissuers`, `get`, `getissuers`, `import`, `list`, `listissuers`, `managecontacts`, `manageissuers`, `purge`, `recover`, `setissuers` and `update`.

- `key_permissions` - (Required) List of key permissions, must be one or more from the following: `backup`, `create`, `decrypt`, `delete`, `encrypt`, `get`, `import`, `list`, `purge`, `recover`, `restore`, `sign`, `unwrapKey`, `update`, `verify` and `wrapKey`.

- `secret_permissions` - (Required) List of secret permissions, must be one or more from the following: `backup`, `delete`, `get`, `list`, `purge`, `recover`, `restore` and `set`.

» Attributes Reference

The following attributes are exported:

- `id` - Key Vault Access Policy ID.

NOTE: This Identifier is unique to Terraform and doesn't map to an existing object within Azure.

» Import

Key Vault Access Policies can be imported using the Resource ID of the Key Vault, plus some additional metadata.

If both an `object_id` and `application_id` are specified, then the Access Policy can be imported using the following code:

```
terraform import azurerm_key_vault_access_policy.test /subscriptions/00000000-0000-0000-0000
```

where `11111111-1111-1111-1111-111111111111` is the `object_id` and `22222222-2222-2222-2222-222222222222` is the `application_id`.

Access Policies with an `object_id` but no `application_id` can be imported using the following command:

```
terraform import azurerm_key_vault_access_policy.test /subscriptions/00000000-0000-0000-0000
```

where `11111111-1111-1111-1111-111111111111` is the `object_id`.

NOTE: Both Identifiers are unique to Terraform and don't map to an existing object within Azure.

» azurerm_key_vault_certificate

Manages a Key Vault Certificate.

» Example Usage (Importing a PFX)

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

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

resource "azurerm_resource_group" "test" {
  name     = "key-vault-certificate-example"
  location = "West Europe"
```

```
}

resource "azurerm_key_vault" "test" {
  name                = "keyvaultcertexample"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  tenant_id           = "${data.azurerm_client_config.current.tenant_id}"

  sku {
    name = "standard"
  }

  access_policy {
    tenant_id = "${data.azurerm_client_config.current.tenant_id}"
    object_id = "${data.azurerm_client_config.current.service_principal_object_id}"

    certificate_permissions = [
      "create","delete","deleteissuers",
      "get","getissuers","import","list",
      "listissuers","managecontacts","manageissuers",
      "setissuers","update",
    ]

    key_permissions = [
      "backup","create","decrypt","delete","encrypt","get",
      "import","list","purge","recover","restore","sign",
      "unwrapKey","update","verify","wrapKey",
    ]

    secret_permissions = [
      "backup","delete","get","list","purge","recover","restore","set",
    ]
  }

  tags {
    environment = "Production"
  }
}


resource "azurerm_key_vault_certificate" "test" {
  name      = "imported-cert"
  vault_uri = "${azurerm_key_vault.test.vault_uri}"

  certificate {
    contents = "${base64encode(file("certificate-to-import.pfx"))}"
```

```
      password = ""
  }

  certificate_policy {
    issuer_parameters {
      name = "Self"
    }

    key_properties {
      exportable = true
      key_size   = 2048
      key_type   = "RSA"
      reuse_key  = false
    }

    secret_properties {
      content_type = "application/x-pkcs12"
    }
  }
}
```

» Example Usage (Generating a new certificate)

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

resource "azurerm_resource_group" "test" {
  name     = "key-vault-certificate-example"
  location = "West Europe"
}

resource "azurerm_key_vault" "test" {
  name                = "keyvaultcertexample"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  tenant_id           = "${data.azurerm_client_config.current.tenant_id}"

  sku {
    name = "standard"
  }

  access_policy {
    tenant_id = "${data.azurerm_client_config.current.tenant_id}"
    object_id = "${data.azurerm_client_config.current.service_principal_object_id}"

    certificate_permissions = [
```

```
        "all",
      ]

      key_permissions = [
        "all",
      ]

      secret_permissions = [
        "all",
      ]
  }

  tags {
    environment = "Production"
  }
}

resource "azurerm_key_vault_certificate" "test" {
  name      = "generated-cert"
  vault_uri = "${azurerm_key_vault.test.vault_uri}"

  certificate_policy {
    issuer_parameters {
      name = "Self"
    }

    key_properties {
      exportable = true
      key_size   = 2048
      key_type   = "RSA"
      reuse_key  = true
    }

    lifetime_action {
      action {
        action_type = "AutoRenew"
      }

      trigger {
        days_before_expiry = 30
      }
    }

    secret_properties {
      content_type = "application/x-pkcs12"
    }
```

```
    x509_certificate_properties {
      key_usage = [
        "cRLSign",
        "dataEncipherment",
        "digitalSignature",
        "keyAgreement",
        "keyCertSign",
        "keyEncipherment",
      ]

      subject            = "CN=hello-world"
      validity_in_months = 12
    }
  }
}
```

» Argument Reference

The following arguments are supported:

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

- `vault_uri` - (Required) Specifies the URI used to access the Key Vault instance, available on the `azurerm_key_vault` resource.

- `certificate` - (Optional) A `certificate` block as defined below, used to Import an existing certificate.

- `certificate_policy` - (Required) A `certificate_policy` block as defined below.

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

`certificate` supports the following:

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

`certificate_policy` supports the following:

- `issuer_parameters` - (Required) A `issuer_parameters` block as defined below.
- `key_properties` - (Required) A `key_properties` block as defined below.

- `lifetime_action` - (Optional) A `lifetime_action` block as defined below.
- `secret_properties` - (Required) A `secret_properties` block as defined below.
- `x509_certificate_properties` - (Optional) A `x509_certificate_properties` block as defined below.

`issuer_parameters` supports the following:

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

`key_properties` supports the following:

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

`lifetime_action` supports the following:

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

`action` supports the following:

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

`trigger` supports the following:

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

`secret_properties` supports the following:

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

`x509_certificate_properties` supports the following:

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

» Attributes Reference

The following attributes are exported:

- `id` - The Key Vault Certificate ID.
- `secret_id` - The ID of the associated Key Vault Secret.
- `version` - The current version of the Key Vault Certificate.
- `certificate_data` - The raw Key Vault Certificate

» Import

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

```
terraform import azurerm_key_vault_certificate.test https://example-keyvault.vault.azure.net
```

» azurerm_key_vault_key

Manages a Key Vault Key.

» Example Usage

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

resource "azurerm_resource_group" "test" {
  name     = "my-resource-group"
  location = "West US"
}

resource "random_id" "server" {
  keepers = {
    ami_id = 1
```

```
  }
  byte_length = 8
}

resource "azurerm_key_vault" "test" {
  name                = "${format("%s%s", "kv", random_id.server.hex)}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  tenant_id           = "${data.azurerm_client_config.current.tenant_id}"

  sku {
    name = "premium"
  }

  access_policy {
    tenant_id = "${data.azurerm_client_config.current.tenant_id}"
    object_id = "${data.azurerm_client_config.current.service_principal_object_id}"

    key_permissions = [
      "create",
      "get",
    ]

    secret_permissions = [
      "set",
    ]
  }

  tags {
    environment = "Production"
  }
}

resource "azurerm_key_vault_key" "generated" {
  name      = "generated-certificate"
  vault_uri = "${azurerm_key_vault.test.vault_uri}"
  key_type  = "RSA"
  key_size  = 2048

  key_opts = [
    "decrypt",
    "encrypt",
    "sign",
    "unwrapKey",
    "verify",
    "wrapKey",
```

```
    ]
}
```

» Argument Reference

The following arguments are supported:

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

- `vault_uri` - (Required) Specifies the URI used to access the Key Vault instance, available on the `azurerm_key_vault` resource.

- `key_type` - (Required) Specifies the Key Type to use for this Key Vault Key. Possible values are `EC` (Elliptic Curve), `Oct` (Octet), `RSA` and `RSA-HSM`. Changing this forces a new resource to be created.

- `key_size` - (Required) Specifies the Size of the Key to create in bytes. For example, 1024 or 2048. Changing this forces a new resource to be created.

- `key_opts` - (Required) A list of JSON web key operations. Possible values include: `decrypt`, `encrypt`, `sign`, `unwrapKey`, `verify` and `wrapKey`. Please note these values are case sensitive.

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

» Attributes Reference

The following attributes are exported:

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

» Import

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

```
terraform import azurerm_key_vault_key.test https://example-keyvault.vault.azure.net/keys/ex
```

» azurerm_key_vault_secret

Manages a Key Vault Secret.

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

» Example Usage

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

resource "azurerm_resource_group" "test" {
  name     = "my-resource-group"
  location = "West US"
}

resource "random_id" "server" {
  keepers = {
    ami_id = 1
  }
  byte_length = 8
}

resource "azurerm_key_vault" "test" {
  name                = "${format("%s%s", "kv", random_id.server.hex)}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  tenant_id           = "${data.azurerm_client_config.current.tenant_id}"

  sku {
    name = "premium"
  }

  access_policy {
    tenant_id = "${data.azurerm_client_config.current.tenant_id}"
    object_id = "${data.azurerm_client_config.current.service_principal_object_id}"

    key_permissions = [
      "create",
      "get",
    ]

    secret_permissions = [
      "set",
      "get",
      "delete",
    ]
  }
```

```
  tags {
    environment = "Production"
  }
}

resource "azurerm_key_vault_secret" "test" {
  name     = "secret-sauce"
  value    = "szechuan"
  vault_uri = "${azurerm_key_vault.test.vault_uri}"

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

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

- `value` - (Required) Specifies the value of the Key Vault Secret.

- `vault_uri` - (Required) Specifies the URI used to access the Key Vault instance, available on the `azurerm_key_vault` resource.

- `content_type` - (Optional) Specifies the content type for the Key Vault Secret.

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

» Attributes Reference

The following attributes are exported:

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

» Import

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

```
terraform import azurerm_key_vault_secret.test https://example-keyvault.vault.azure.net/secr
```

» azurerm_lb

Create a Load Balancer Resource.

» Example Usage

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

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

resource "azurerm_lb" "test" {
  name                = "TestLoadBalancer"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"

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

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the LoadBalancer.

- `resource_group_name` - (Required) The name of the resource group in which to create the LoadBalancer.

- `location` - (Required) Specifies the supported Azure location where the resource exists.

- `frontend_ip_configuration` - (Optional) A frontend ip configuration block as documented below.

- `sku` - (Optional) The SKU of the Azure Load Balancer. Accepted values are `Basic` and `Standard`. Defaults to `Basic`.

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

`frontend_ip_configuration` supports the following:

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

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

» **Attributes Reference**

The following attributes are exported:

- `id` - The Load Balancer ID.
- `private_ip_address` - The first private IP address assigned to the load balancer in `frontend_ip_configuration` blocks, if any.
- `private_ip_addresses` - The list of private IP address assigned to the load balancer in `frontend_ip_configuration` blocks, if any.

» **Import**

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

```
terraform import azurerm_lb.test /subscriptions/00000000-0000-0000-0000-000000000000/resour
```

» **azurerm_lb_backend_address_pool**

Create a Load Balancer Backend Address Pool.

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

» Example Usage

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

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

resource "azurerm_lb" "test" {
  name                = "TestLoadBalancer"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"

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

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

» Argument Reference

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 Load Balancer in which to create the Backend Address Pool.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Load Balancer to which the resource is attached.

» Import

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

```
terraform import azurerm_lb_backend_address_pool.test /subscriptions/00000000-0000-0000-0000
```

» azurerm_lb_rule

Manages a Load Balancer Rule.

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

» Example Usage

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

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

resource "azurerm_lb" "test" {
  name                = "TestLoadBalancer"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"

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

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

```
  loadbalancer_id                 = "${azurerm_lb.test.id}"
  name                            = "LBRule"
  protocol                        = "Tcp"
  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 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 `Tcp`, `Udp` or `All`.
- `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.

217

» 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.

```
terraform import azurerm_lb_rule.test /subscriptions/00000000-0000-0000-0000-000000000000/re
```

» azurerm_lb_nat_rule

Manages a Load Balancer NAT Rule.

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

» Example Usage

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

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

resource "azurerm_lb" "test" {
  name                = "TestLoadBalancer"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"

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

```
resource "azurerm_lb_nat_rule" "test" {
  resource_group_name          = "${azurerm_resource_group.test.name}"
  loadbalancer_id              = "${azurerm_lb.test.id}"
  name                         = "RDPAccess"
  protocol                     = "Tcp"
  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 Load Balancer 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`, `Tcp` or `All`.
- `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 Load Balancer to which the resource is attached.

» Import

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

```
terraform import azurerm_lb_nat_rule.test /subscriptions/00000000-0000-0000-0000-00000000000
```

» azurerm_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 "azurerm_resource_group" "test" {
  name     = "LoadBalancerRG"
  location = "West US"
}

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

resource "azurerm_lb" "test" {
  name                = "TestLoadBalancer"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"

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

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

» **Argument Reference**

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 azurerm_lb_nat_pool.test /subscriptions/00000000-0000-0000-0000-000000000000
```

» **azurerm_lb_probe**

Manages a LoadBalancer Probe Resource.

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

» Example Usage

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

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

resource "azurerm_lb" "test" {
  name                = "TestLoadBalancer"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"

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

resource "azurerm_lb_probe" "test" {
  resource_group_name = "${azurerm_resource_group.test.name}"
  loadbalancer_id     = "${azurerm_lb.test.id}"
  name                = "ssh-running-probe"
  port                = 22
}
```

» Argument Reference

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`, `Https` 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 Load Balancer to which the resource is attached.

» Import

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

```
terraform import azurerm_lb_probe.test /subscriptions/00000000-0000-0000-0000-000000000000/r
```

» azurerm_logic_app_action_custom

Manages a Custom Action within a Logic App Workflow

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "workflow-resources"
  location = "East US"
}

resource "azurerm_logic_app_workflow" "test" {
  name = "workflow1"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}
```

```
resource "azurerm_logic_app_action_custom" "test" {
  name         = "example-action"
  logic_app_id = "${azurerm_logic_app_workflow.test.id}"
  body = <<BODY
{
    "description": "A variable to configure the auto expiration age in days. Configured in r
    "inputs": {
        "variables": [
            {
                "name": "ExpirationAgeInDays",
                "type": "Integer",
                "value": -30
            }
        ]
    },
    "runAfter": {},
    "type": "InitializeVariable"
}
BODY
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the HTTP Action to be created
  within the Logic App Workflow. Changing this forces a new resource to
  be created.

NOTE: This name must be unique across all Actions within the Logic App
Workflow.

- `logic_app_id` - (Required) Specifies the ID of the Logic App Workflow.
  Changing this forces a new resource to be created.

- `body` - (Required) Specifies the JSON Blob defining the Body of this Cus-
  tom Action.

NOTE: To make the Action more readable, you may wish to consider using
HEREDOC syntax (as shown above) or the `local_file` resource to load the
schema from a file on disk.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Action within the Logic App Workflow.

» Import

Logic App Custom Actions can be imported using the `resource id`, e.g.

```
terraform import azurerm_logic_app_action_custom.custom1 /subscriptions/00000000-0000-0000-0
```

NOTE: This ID is unique to Terraform and doesn't directly match to any other resource. To compose this ID, you can take the ID Logic App Workflow and append `/actions/{name of the action}`.

» azurerm_logic_app_action_http

Manages an HTTP Action within a Logic App Workflow

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "workflow-resources"
  location = "East US"
}

resource "azurerm_logic_app_workflow" "test" {
  name = "workflow1"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_logic_app_action_http" "test" {
  name        = "webhook"
  logic_app_id = "${azurerm_logic_app_workflow.test.id}"
  method      = "GET"
  uri         = "http://example.com/some-webhook"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the HTTP Action to be created within the Logic App Workflow. Changing this forces a new resource to be created.

NOTE: This name must be unique across all Actions within the Logic App Workflow.

- `logic_app_id` - (Required) Specifies the ID of the Logic App Workflow. Changing this forces a new resource to be created.

- `method` - (Required) Specifies the HTTP Method which should be used for this HTTP Action. Possible values include `DELETE`, `GET`, `PATCH`, `POST` and `PUT`.

- `uri` - (Required) Specifies the URI which will be called when this HTTP Action is triggered.

- `body` - (Optional) Specifies the HTTP Body that should be sent to the `uri` when this HTTP Action is triggered.

- `headers` - (Optional) Specifies a Map of Key-Value Pairs that should be sent to the `uri` when this HTTP Action is triggered.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the HTTP Action within the Logic App Workflow.

» Import

Logic App HTTP Actions can be imported using the `resource id`, e.g.

```
terraform import azurerm_logic_app_action_http.webhook1 /subscriptions/00000000-0000-0000-00
```

NOTE: This ID is unique to Terraform and doesn't directly match to any other resource. To compose this ID, you can take the ID Logic App Workflow and append `/actions/{name of the action}`.

» azurerm_logic_app_trigger_custom

Manages a Custom Trigger within a Logic App Workflow

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "workflow-resources"
  location = "East US"
}
```

```
resource "azurerm_logic_app_workflow" "test" {
  name = "workflow1"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_logic_app_trigger_custom" "test" {
  name        = "example-trigger"
  logic_app_id = "${azurerm_logic_app_workflow.test.id}"
  body = <<BODY
{
  "recurrence": {
    "frequency": "Day",
    "interval": 1
  },
  "type": "Recurrence"
}
BODY
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the HTTP Trigger to be created within the Logic App Workflow. Changing this forces a new resource to be created.

NOTE: This name must be unique across all Triggers within the Logic App Workflow.

- `logic_app_id` - (Required) Specifies the ID of the Logic App Workflow. Changing this forces a new resource to be created.

- `body` - (Required) Specifies the JSON Blob defining the Body of this Custom Trigger.

NOTE: To make the Trigger more readable, you may wish to consider using HEREDOC syntax (as shown above) or the `local_file` resource to load the schema from a file on disk.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Trigger within the Logic App Workflow.

» Import

Logic App Custom Triggers can be imported using the `resource id`, e.g.

```
terraform import azurerm_logic_app_trigger_custom.custom1 /subscriptions/00000000-0000-0000-
```

NOTE: This ID is unique to Terraform and doesn't directly match to any other resource. To compose this ID, you can take the ID Logic App Workflow and append `/triggers/{name of the trigger}`.

» azurerm_logic_app_trigger_http_request

Manages a HTTP Request Trigger within a Logic App Workflow

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "workflow-resources"
  location = "East US"
}

resource "azurerm_logic_app_workflow" "test" {
  name = "workflow1"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_logic_app_trigger_http_request" "test" {
  name        = "some-http-trigger"
  logic_app_id = "${azurerm_logic_app_workflow.test.id}"

  schema = <<SCHEMA
{
    "type": "object",
    "properties": {
        "hello": {
            "type": "string"
        }
    }
}
SCHEMA
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the HTTP Request Trigger to be created within the Logic App Workflow. Changing this forces a new resource to be created.

NOTE: This name must be unique across all Triggers within the Logic App Workflow.

- `logic_app_id` - (Required) Specifies the ID of the Logic App Workflow. Changing this forces a new resource to be created.

- `schema` - (Required) A JSON Blob defining the Schema of the incoming request. This needs to be valid JSON.

NOTE: To make the Trigger more readable, you may wish to consider using HEREDOC syntax (as shown above) or the `local_file` resource to load the schema from a file on disk.

- `method` - (Optional) Specifies the HTTP Method which the request be using. Possible values include `DELETE`, `GET`, `PATCH`, `POST` or `PUT`.

- `relative_path` - (Optional) Specifies the Relative Path used for this Request.

NOTE: When `relative_path` is set a `method` must also be set.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the HTTP Request Trigger within the Logic App Workflow.

» Import

Logic App HTTP Request Triggers can be imported using the `resource id`, e.g.

```
terraform import azurerm_logic_app_trigger_http_request.request1 /subscriptions/00000000-000
```

NOTE: This ID is unique to Terraform and doesn't directly match to any other resource. To compose this ID, you can take the ID Logic App Workflow and append `/triggers/{name of the trigger}`.

» azurerm_logic_app_trigger_recurrence

Manages a Recurrence Trigger within a Logic App Workflow

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "workflow-resources"
  location = "East US"
}

resource "azurerm_logic_app_workflow" "test" {
  name = "workflow1"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_logic_app_trigger_recurrence" "test" {
  name         = "run-every-day"
  logic_app_id = "${azurerm_logic_app_workflow.test.id}"
  frequency    = "Day"
  interval     = 1
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Recurrence Triggers to be created within the Logic App Workflow. Changing this forces a new resource to be created.

NOTE: This name must be unique across all Triggers within the Logic App Workflow.

- `logic_app_id` - (Required) Specifies the ID of the Logic App Workflow. Changing this forces a new resource to be created.

- `frequency` - (Required) Specifies the Frequency at which this Trigger should be run. Possible values include `Month`, `Week`, `Day`, `Hour`, `Minute` and `Second`.

- `interval` - (Required) Specifies interval used for the Frequency, for example a value of `4` for `interval` and `hour` for `frequency` would run the Trigger every 4 hours.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Recurrence Trigger within the Logic App Workflow.

» Import

Logic App Recurrence Triggers can be imported using the `resource id`, e.g.

```
terraform import azurerm_logic_app_trigger_recurrence.daily /subscriptions/00000000-0000-000
```

NOTE: This ID is unique to Terraform and doesn't directly match to any other resource. To compose this ID, you can take the ID Logic App Workflow and append `/triggers/{name of the trigger}`.

» azurerm_logic_app_workflow

Manages a Logic App Workflow.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "workflow-resources"
  location = "East US"
}

resource "azurerm_logic_app_workflow" "test" {
  name = "workflow1"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Logic App Workflow. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the Resource Group in which the Logic App Workflow should be created. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the Logic App Workflow exists. Changing this forces a new resource to be created.

- `workflow_schema` - (Optional) Specifies the Schema to use for this Logic App Workflow. Defaults to `https://schema.management.azure.com/providers/Microsoft.Logic/sc` Changing this forces a new resource to be created.

- `workflow_version` - (Optional) Specifies the version of the Schema used for this Logic App Workflow. Defaults to `1.0.0.0`. Changing this forces a new resource to be create.d

- `parameters` - (Optional) A map of Key-Value pairs.

NOTE: Any parameters specified must exist in the Schema defined in `workflow_schema`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The Logic App Workflow ID.

- `access_endpoint` - The Access Endpoint for the Logic App Workflow

» Import

Logic App Workflows can be imported using the `resource id`, e.g.

```
terraform import azurerm_logic_app_workflow.workflow1 /subscriptions/00000000-0000-0000-0000
```

» azurerm_management_lock

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

» Example Usage (Subscription Level Lock)

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

resource "azurerm_management_lock" "subscription-level" {
  name      = "subscription-level"
  scope     = "${data.azurerm_subscription.current.id}"
```

```
  lock_level = "CanNotDelete"
  notes      = "Items can't be deleted in this subscription!"
}
```

» Example Usage (Resource Group Level Lock)

```
resource "azurerm_resource_group" "test" {
  name     = "locked-resource-group"
  location = "West Europe"
}

resource "azurerm_management_lock" "resource-group-level" {
  name       = "resource-group-level"
  scope      = "${azurerm_resource_group.test.id}"
  lock_level = "ReadOnly"
  notes      = "This Resource Group is Read-Only"
}
```

» Example Usage (Resource Level Lock)

```
resource "azurerm_resource_group" "test" {
  name     = "locked-resource-group"
  location = "West Europe"
}

resource "azurerm_public_ip" "test" {
  name = "locked-publicip"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "static"
  idle_timeout_in_minutes = 30
}

resource "azurerm_management_lock" "public-ip" {
  name       = "resource-ip"
  scope      = "${azurerm_public_ip.test.id}"
  lock_level = "CanNotDelete"
  notes      = "Locked because it's needed by a third-party"
}
```

» Argument Reference

The following arguments are supported:

- **name** - (Required) Specifies the name of the Management Lock. Changing this forces a new resource to be created.

- **scope** - (Required) Specifies the scope at which the Management Lock should be created. Changing this forces a new resource to be created.

- **lock_level** - (Required) Specifies the Level to be used for this Lock. Possible values are **CanNotDelete** and **ReadOnly**. Changing this forces a new resource to be created.

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

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

» Attributes Reference

The following attributes are exported:

- **id** - The ID of the Management Lock

» Import

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

```
terraform import azurerm_management_lock.lock1 /subscriptions/00000000-0000-0000-0000-000000
```

» azurerm_eventgrid_topic

Manages an EventGrid Topic

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

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US 2"
}

resource "azurerm_eventgrid_topic" "test" {
  name                = "my-eventgrid-topic"
```

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

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

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

- `resource_group_name` - (Required) The name of the resource group in which the EventGrid Topic exists. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

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

» Attributes Reference

The following attributes are exported:

- `id` - The EventGrid Topic ID.

- `endpoint` - The Endpoint associated with the EventGrid Topic.

- `primary_access_key` - The Primary Shared Access Key associated with the EventGrid Topic.

- `secondary_access_key` - The Secondary Shared Access Key associated with the EventGrid Topic.

» Import

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

```
terraform import azurerm_eventgrid_topic.topic1 /subscriptions/00000000-0000-0000-0000-00000
```

» azurerm_eventhub

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

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_eventhub_namespace" "test" {
  name                = "acceptanceTestEventHubNamespace"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "Standard"
  capacity            = 1

  tags {
    environment = "Production"
  }
}

resource "azurerm_eventhub" "test" {
  name                = "acceptanceTestEventHub"
  namespace_name      = "${azurerm_eventhub_namespace.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  partition_count     = 2
  message_retention   = 1
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the EventHub Namespace resource. Changing this forces a new resource to be created.

- `namespace_name` - (Required) Specifies the name of the EventHub Namespace. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the EventHub's parent Namespace exists. Changing this forces a new resource to be created.

- `partition_count` - (Required) Specifies the current number of shards on the Event Hub.

- `message_retention` - (Required) Specifies the number of days to retain the events for this Event Hub. Needs to be between 1 and 7 days; or 1 day when using a Basic SKU for the parent EventHub Namespace.

- `capture_description` - (Optional) A `capture_description` block as defined below.

A `capture_description` block supports the following:

- `enabled` - (Required) Specifies if the Capture Description is Enabled.

- `encoding` - (Required) Specifies the Encoding used for the Capture Description. Possible values are `Avro` and `AvroDeflate`.

- `interval_in_seconds` - (Optional) Specifies the time interval in seconds at which the capture will happen. Values can be between `60` and `900` seconds. Defaults to `300` seconds.

- `size_limit_in_bytes` - (Optional) Specifies the amount of data built up in your EventHub before a Capture Operation occurs. Value should be between `10485760` and `524288000` bytes. Defaults to `314572800` bytes.

- `destination` - (Required) A `destination` block as defined below.

A `destination` block supports the following:

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

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

- `archive_name_format` - The Blob naming convention for archiving. e.g. `{Namespace}/{EventHub}/{PartitionId}/{Year}/{Month}/{Day}/{Hour}/{Minute}/{Second}`. Here all the parameters (Namespace,EventHub .. etc) are mandatory irrespective of order

- `blob_container_name` - (Required) The name of the Container within the Blob Storage Account where messages should be archived.

- `storage_account_id` - (Required) The ID of the Blob Storage Account where messages should be archived.

» Attributes Reference

The following attributes are exported:

- `id` - The EventHub ID.
- `partition_ids` - The identifiers for partitions created for Event Hubs.

» Import

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

```
terraform import azurerm_eventhub.eventhub1 /subscriptions/00000000-0000-0000-0000-000000000
```

» azurerm_eventhub_authorization_rule

Manages a Event Hubs authorization Rule within an Event Hub.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_eventhub_namespace" "test" {
  name                = "acceptanceTestEventHubNamespace"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "Basic"
  capacity            = 2

  tags {
    environment = "Production"
  }
}

resource "azurerm_eventhub" "test" {
  name                = "acceptanceTestEventHub"
  namespace_name      = "${azurerm_eventhub_namespace.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  partition_count     = 2
  message_retention   = 2
}
```

```
resource "azurerm_eventhub_authorization_rule" "test" {
  name                = "navi"
  namespace_name      = "${azurerm_eventhub_namespace.test.name}"
  eventhub_name       = "${azurerm_eventhub.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  listen              = true
  send                = false
  manage              = false
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the EventHub Authorization Rule resource. Changing this forces a new resource to be created.

- `namespace_name` - (Required) Specifies the name of the grandparent EventHub Namespace. Changing this forces a new resource to be created.

- `eventhub_name` - (Required) Specifies the name of the EventHub. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the EventHub Namespace exists. Changing this forces a new resource to be created.

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

- `listen` - (Optional) Does this Authorization Rule have permissions to Listen to the Event Hub? Defaults to `false`.

- `send` - (Optional) Does this Authorization Rule have permissions to Send to the Event Hub? Defaults to `false`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The EventHub ID.

- `primary_key` - The Primary Key for the Event Hubs authorization Rule.

- `primary_connection_string` - The Primary Connection String for the Event Hubs authorization Rule.

- `secondary_key` - The Secondary Key for the Event Hubs authorization Rule.

- `secondary_connection_string` - The Secondary Connection String for the Event Hubs authorization Rule.

» Import

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

```
terraform import azurerm_eventhub_authorization_rule.rule1 /subscriptions/00000000-0000-0000
```

» azurerm_eventhub_consumer_group

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

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_eventhub_namespace" "test" {
  name                = "acceptanceTestEventHubNamespace"
  location            = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "Basic"
  capacity            = 2

  tags {
    environment = "Production"
  }
}

resource "azurerm_eventhub" "test" {
  name                = "acceptanceTestEventHub"
  namespace_name      = "${azurerm_eventhub_namespace.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  partition_count     = 2
```

```
  message_retention   = 2
}

resource "azurerm_eventhub_consumer_group" "test" {
  name                = "acceptanceTestEventHubConsumerGroup"
  namespace_name      = "${azurerm_eventhub_namespace.test.name}"
  eventhub_name       = "${azurerm_eventhub.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  user_metadata       = "some-meta-data"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the EventHub Consumer Group resource. Changing this forces a new resource to be created.

- `namespace_name` - (Required) Specifies the name of the grandparent EventHub Namespace. Changing this forces a new resource to be created.

- `eventhub_name` - (Required) Specifies the name of the EventHub. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the EventHub Consumer Group's grandparent Namespace exists. Changing this forces a new resource to be created.

- `user_metadata` - (Optional) Specifies the user metadata.

» Attributes Reference

The following attributes are exported:

- `id` - The EventHub Consumer Group ID.

» Import

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

```
terraform import azurerm_eventhub_consumer_group.consumerGroup1 /subscriptions/00000000-0000
```

» azurerm_eventhub_namespace

Create an EventHub Namespace.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_eventhub_namespace" "test" {
  name                = "acceptanceTestEventHubNamespace"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "Standard"
  capacity            = 2

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the EventHub Namespace resource. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the namespace. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `sku` - (Required) Defines which tier to use. Valid options are `Basic` and `Standard`.

- `capacity` - (Optional) Specifies the Capacity / Throughput Units for a `Standard` SKU namespace. Valid values range from 1 - 20.

- `auto_inflate_enabled` - (Optional) Is Auto Inflate enabled for the EventHub Namespace?

- `maximum_throughput_units` - (Optional) Specifies the maximum number of throughput units when Auto Inflate is Enabled. Valid values range from 1 - 20.

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

» Attributes Reference

The following attributes are exported:

- `id` - The EventHub Namespace ID.

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

- `default_primary_connection_string` - The primary connection string for the authorization rule `RootManageSharedAccessKey`.

- `default_secondary_connection_string` - The secondary connection string for the authorization rule `RootManageSharedAccessKey`.

- `default_primary_key` - The primary access key for the authorization rule `RootManageSharedAccessKey`.

- `default_secondary_key` - The secondary access key for the authorization rule `RootManageSharedAccessKey`.

» Import

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

```
terraform import azurerm_eventhub_namespace.namespace1 /subscriptions/00000000-0000-0000-000
```

» azurerm_iothub

Manages a IotHub

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_iothub" "test" {
  name                = "test"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  sku {
    name = "S1"
    tier = "Standard"
    capacity = "1"
```

```
  }

  tags {
    "purpose" = "testing"
  }
}
```

» Argument Reference

The following arguments are supported:

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

- `resource_group_name` - (Required) The name of the resource group under which the IotHub resource has to be created. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource has to be createc. Changing this forces a new resource to be created.

- `sku` - (Required) A `sku` block as defined below.

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

A `sku` block supports the following:

- `name` - (Required) The name of the sku. Possible values are `B1`, `B2`, `B3`, `F1`, `S1`, `S2`, and `S3`.

- `tier` - (Required) The billing tier for the IoT Hub. Possible values are `Basic`, `Free` or `Standard`.

- `capacity` - (Required) The number of provisioned IoT Hub units.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the IoTHub.

- `hostname` - The hostname of the IotHub Resource.

- `shared_access_policy` - One or more `shared_access_policy` blocks as defined below.

A `shared access policy` block contains the following:

- `key_name` - The name of the shared access policy.

- `primary_key` - The primary key.

- `secondary_key` - The secondary key.

- `permissions` - The permissions assigned to the shared access policy.

» Import

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

```
terraform import azurerm_iothub.hub1 /subscriptions/00000000-0000-0000-0000-000000000000/res
```

» azurerm_notification_hub

Manages a Notification Hub within a Notification Hub Namespace.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name = "notificationhub-resources"
  location = "Australia East"
}

resource "azurerm_notification_hub_namespace" "test" {
  name                = "myappnamespace"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  namespace_type      = "NotificationHub"

  sku {
    name = "Free"
  }
}

resource "azurerm_notification_hub" "test" {
  name                = "mynotificationhub"
  namespace_name      = "${azurerm_notification_hub_namespace.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name to use for this Notification Hub. Changing this forces a new resource to be created.

- `namespace_name` - (Required) The name of the Notification Hub Namespace in which to create this Notification Hub. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the Resource Group in which the Notification Hub Namespace exists. Changing this forces a new resource to be created.

- `location` - (Required) The Azure Region in which this Notification Hub Namespace exists. Changing this forces a new resource to be created.

- `apns_credential` - (Optional) A `apns_credential` block as defined below.

NOTE: Removing the `apns_credential` block will currently force a recreation of this resource due to this bug in the Azure SDK for Go - we'll remove this limitation when the SDK bug is fixed.

- `gcm_credential` - (Optional) A `gcm_credential` block as defined below.

NOTE: Removing the `gcm_credential` block will currently force a recreation of this resource due to this bug in the Azure SDK for Go - we'll remove this limitation when the SDK bug is fixed.

A `apns_credential` block contains:

- `application_mode` - (Required) The Application Mode which defines which server the APNS Messages should be sent to. Possible values are `Production` and `Sandbox`.

- `bundle_id` - (Required) The Bundle ID of the iOS/macOS application to send push notifications for, such as `com.hashicorp.example`.

- `key_id` - (Required) The Apple Push Notifications Service (APNS) Key.

- `team_id` - (Required) The ID of the team the Token.

- `token` - (Required) The Push Token associated with the Apple Developer Account. This is the contents of the `key` downloaded from the Apple Developer Portal between the `-----BEGIN PRIVATE KEY-----` and `-----END PRIVATE KEY-----` blocks.

A `gcm_credential` block contains:

- `api_key` - (Required) The API Key associated with the Google Cloud Messaging service.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Notification Hub.

» Import

Notification Hubs can be imported using the `resource id`, e.g.

```
terraform import azurerm_notification_hub.hub1 /subscriptions/00000000-0000-0000-0000-000000
```

» azurerm_notification_hub_authorization_rule

Manages an Authorization Rule associated with a Notification Hub within a Notification Hub Namespace.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name = "notificationhub-resources"
  location = "Australia East"
}

resource "azurerm_notification_hub_namespace" "test" {
  name                = "myappnamespace"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  namespace_type      = "NotificationHub"

  sku {
    name = "Free"
  }
}

resource "azurerm_notification_hub" "test" {
  name                = "mynotificationhub"
  namespace_name      = "${azurerm_notification_hub_namespace.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
```

```
  location                 = "${azurerm_resource_group.test.location}"
}

resource "azurerm_notification_hub_authorization_rule" "test" {
  name                  = "management-auth-rule"
  notification_hub_name = "${azurerm_notification_hub.test.name}"
  namespace_name        = "${azurerm_notification_hub_namespace.test.name}"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  manage                = true
  send                  = true
  listen                = true
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name to use for this Authorization Rule. Changing this forces a new resource to be created.

- `notification_hub_name` - (Required) The name of the Notification Hub for which the Authorization Rule should be created. Changing this forces a new resource to be created.

- `namespace_name` - (Required) The name of the Notification Hub Namespace in which the Notification Hub exists. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the Resource Group in which the Notification Hub Namespace exists. Changing this forces a new resource to be created.

- `manage` - (Optional) Does this Authorization Rule have Manage access to the Notification Hub? Defaults to `false`.

NOTE: If `manage` is set to `true` then both `send` and `listen` must also be set to `true`.

- `send` - (Optional) Does this Authorization Rule have Send access to the Notification Hub? Defaults to `false`.

- `listen` - (Optional) Does this Authorization Rule have Listen access to the Notification Hub? Defaults to `false`.

» Attributes Reference

The following attributes are exported:

248

- `id` - The ID of the Authorization Rule.

- `primary_access_key` - The Primary Access Key associated with this Authorization Rule.

- `secondary_access_key` - The Secondary Access Key associated with this Authorization Rule.

» Import

Notification Hub Authorization Rule can be imported using the `resource id`, e.g.

```
terraform import azurerm_notification_hub_authorization_rule.rule1 /subscriptions/00000000-(
```

» azurerm_notification_hub_namespace

Manages a Notification Hub Namespace.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name = "notificationhub-resources"
  location = "Australia East"
}

resource "azurerm_notification_hub_namespace" "test" {
  name                = "myappnamespace"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  namespace_type      = "NotificationHub"

  sku {
    name = "Free"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name to use for this Notification Hub Namespace. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the Resource Group in which the Notification Hub Namespace should exist. Changing this forces a new resource to be created.

- `location` - (Required) The Azure Region in which this Notification Hub Namespace should be created.

- `namespace_type` - (Required) The Type of Namespace - possible values are `Messaging` or `NotificationHub`. Changing this forces a new resource to be created.

- `sku` - (Required) A `sku` block as defined below.

- `enabled` - (Optional) Is this Notification Hub Namespace enabled? Defaults to `true`.

A `sku` block contains:

- `name` - (Required) The name of the SKU to use for this Notification Hub Namespace. Possible values are `Free`, `Basic` or `Standard`. Changing this forces a new resource to be created.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Notification Hub Namespace.

- `servicebus_endpoint` - The ServiceBus Endpoint for this Notification Hub Namespace.

» Import

Notification Hub Namespaces can be imported using the `resource id`, e.g.

```
terraform import azurerm_notification_hub_namespace.namespace1 /subscriptions/00000000-0000-
```

» azurerm_relay_namespace

Manages an Azure Relay Namespace.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "example-resources"
  location = "West Europe"
}

resource "azurerm_relay_namespace" "test" {
  name                = "example-relay"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
    name = "Standard"
  }

  tags {
    source = "terraform"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Azure Relay Namespace. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the Azure Relay Namespace.

- `location` - (Required) Specifies the supported Azure location where the Azure Relay Namespace exists. Changing this forces a new resource to be created.

- `sku` - (Required) A `sku` block as defined below.

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

A `sku` block contains:

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

» Attributes Reference

The following attributes are exported:

- `id` - The Azure Relay Namespace ID.

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

- `primary_connection_string` - The primary connection string for the authorization rule `RootManageSharedAccessKey`.

- `secondary_connection_string` - The secondary connection string for the authorization rule `RootManageSharedAccessKey`.

- `primary_key` - The primary access key for the authorization rule `RootManageSharedAccessKey`.

- `secondary_key` - The secondary access key for the authorization rule `RootManageSharedAccessKey`.

- `metric_id` - The Identifier for Azure Insights metrics.

» Import

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

```
terraform import azurerm_relay_namespace.relay1 /subscriptions/00000000-0000-0000-0000-00000
```

» azurerm_servicebus_namespace

Create a ServiceBus Namespace.

» Example Usage

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

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

resource "azurerm_resource_group" "test" {
  name     = "terraform-servicebus"
  location = "${var.location}"
}

resource "azurerm_servicebus_namespace" "test" {
```

```
  name                = "${var.servicebus_name}"
  location            = "${var.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "basic"

  tags {
    source = "terraform"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the ServiceBus Namespace resource . Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the namespace.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `sku` - (Required) Defines which tier to use. Options are basic, standard or premium.

- `capacity` - (Optional) Specifies the capacity, can only be set when `sku` is `Premium` namespace. Can be `1`, `2` or `4`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The ServiceBus Namespace ID.

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

- `default_primary_connection_string` - The primary connection string for the authorization rule `RootManageSharedAccessKey`.

- `default_secondary_connection_string` - The secondary connection string for the authorization rule `RootManageSharedAccessKey`.

- `default_primary_key` - The primary access key for the authorization rule `RootManageSharedAccessKey`.

- `default_secondary_key` - The secondary access key for the authorization rule RootManageSharedAccessKey.

» Import

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

```
terraform import azurerm_servicebus_namespace.test /subscriptions/00000000-0000-0000-0000-00
```

» azurerm_servicebus_namespace_authorization_rule

Manages a ServiceBus Namespace authorization Rule within a ServiceBus.

» Example Usage

```
resource "azurerm_resource_group" "example" {
  name     = "terraform-servicebus"
  location = "West US"
}

resource "azurerm_servicebus_namespace" "example" {
  name                = "tfex_sevicebus_namespace"
  location            = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  sku                 = "standard"

  tags {
    source = "terraform"
  }
}

resource "azurerm_servicebus_namespace_authorization_rule" "example" {
  name                = "examplerule"
  namespace_name      = "${azurerm_servicebus_namespace.example.name}"
  resource_group_name = "${azurerm_resource_group.example.name}"

  listen = true
  send   = true
  manage = false
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the ServiceBus Namespace Authorization Rule resource. Changing this forces a new resource to be created.

- `namespace_name` - (Required) Specifies the name of the ServiceBus Namespace. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the ServiceBus Namespace exists. Changing this forces a new resource to be created.

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

- `listen` - (Optional) Grants listen access to this this Authorization Rule. Defaults to `false`.

- `send` - (Optional) Grants send access to this this Authorization Rule. Defaults to `false`.

- `manage` - (Optional) Grants manage access to this this Authorization Rule. When this property is `true` - both `listen` and `send` must be too. Defaults to `false`.

» Attributes Reference

The following attributes are exported:

- `id` - The ServiceBus Topic ID.

- `primary_key` - The Primary Key for the ServiceBus Namespace authorization Rule.

- `primary_connection_string` - The Primary Connection String for the ServiceBus Namespace authorization Rule.

- `secondary_key` - The Secondary Key for the ServiceBus Namespace authorization Rule.

- `secondary_connection_string` - The Secondary Connection String for the ServiceBus Namespace authorization Rule.

» Import

ServiceBus Namespace authorization rules can be imported using the `resource id`, e.g.

```
terraform import azurerm_servicebus_namespace_authorization_rule.rule1 /subscriptions/000000
```

» azurerm_servicebus_queue

Create and manage a ServiceBus Queue.

» Example Usage

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

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

resource "azurerm_resource_group" "test" {
  name     = "terraform-servicebus"
  location = "${var.location}"
}

resource "azurerm_servicebus_namespace" "test" {
  name                = "${var.servicebus_name}"
  location            = "${var.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "standard"

  tags {
    source = "terraform"
  }
}

resource "azurerm_servicebus_queue" "test" {
  name                = "testQueue"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"

  enable_partitioning = true
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the ServiceBus Queue resource. Changing this forces a new resource to be created.

- `namespace_name` - (Required) The name of the ServiceBus Namespace to create this queue in. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the namespace. Changing this forces a new resource to be created.

- `auto_delete_on_idle` - (Optional) The idle interval after which the Queue is automatically deleted, minimum of 5 minutes. Provided in the TimeSpan format.

- `default_message_ttl` - (Optional) The TTL of messages sent to this queue. This is the default value used when TTL is not set on message itself. Provided in the TimeSpan format.

- `duplicate_detection_history_time_window` - (Optional) The duration during which duplicates can be detected. Default value is 10 minutes. Provided in the TimeSpan format.

- `enable_express` - (Optional) Boolean flag which controls whether Express Entities are enabled. An express queue holds a message in memory temporarily before writing it to persistent storage. Defaults to `false` for Basic and Standard. For Premium, it MUST be set to `false`.

NOTE: Service Bus Premium namespaces do not support Express Entities, so `enable_express` MUST be set to `false`.

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

NOTE: Partitioning is available at entity creation for all queues and topics in Basic or Standard SKUs. It is not available for the Premium messaging SKU, but any previously existing partitioned entities in Premium namespaces continue to work as expected. Please see the documentation for more information.

- `lock_duration` - (Optional) The ISO 8601 timespan duration of a peek-lock; that is, the amount of time that the message is locked for other receivers. Maximum value is 5 minutes. Defaults to 1 minute. (`PT1M`)

- `max_size_in_megabytes` - (Optional) Integer value which controls the size of memory allocated for the queue. For supported values see the "Queue/topic size" section of this document.

257

- `requires_duplicate_detection` - (Optional) Boolean flag which controls whether the Queue requires duplicate detection. Changing this forces a new resource to be created. Defaults to `false`.

- `requires_session` - (Optional) Boolean flag which controls whether the Queue requires sessions. This will allow ordered handling of unbounded sequences of related messages. With sessions enabled a queue can guarantee first-in-first-out delivery of messages. Changing this forces a new resource to be created. Defaults to `false`.

- `dead_lettering_on_message_expiration` - (Optional) Boolean flag which controls whether the Queue has dead letter support when a message expires. Defaults to `false`.

» TimeSpan Format

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

» Attributes Reference

The following attributes are exported:

- `id` - The ServiceBus Queue ID.

» Import

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

```
terraform import azurerm_servicebus_queue.test /subscriptions/00000000-0000-0000-0000-000000
```

» azurerm_servicebus_queue_authorization_rule

Manages an Authorization Rule for a ServiceBus Queue.

» Example Usage

```
resource "azurerm_resource_group" "example" {
  name     = "terraform-servicebus"
  location = "West US"
}

resource "azurerm_servicebus_namespace" "example" {
```

```
  name                = "tfex_sevicebus_namespace"
  location            = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  sku                 = "standard"

  tags {
    source = "terraform"
  }
}

resource "azurerm_servicebus_queue" "example" {
  name                = "acctest-%[1]d"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"

  enable_partitioning = true
}

resource "azurerm_servicebus_queue_authorization_rule" "example" {
  name                = "examplerule"
  namespace_name      = "${azurerm_servicebus_namespace.example.name}"
  queue_name          = "${azurerm_servicebus_queue.example.name}"
  resource_group_name = "${azurerm_resource_group.example.name}"

  listen = true
  send   = true
  manage = false
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Authorization Rule. Changing this forces a new resource to be created.

- `namespace_name` - (Required) Specifies the name of the ServiceBus Namespace in which the Queue exists. Changing this forces a new resource to be created.

- `queue_name` - (Required) Specifies the name of the ServiceBus Queue. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the Resource Group in which the ServiceBus Namespace exists. Changing this forces a new resource to be created.

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

- `listen` - (Optional) Does this Authorization Rule have Listen permissions to the ServiceBus Queue? Defaults to `false`.

- `send` - (Optional) Does this Authorization Rule have Send permissions to the ServiceBus Queue? Defaults to `false`.

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

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Authorization Rule.

- `primary_key` - The Primary Key for the Authorization Rule.

- `primary_connection_string` - The Primary Connection String for the Authorization Rule.

- `secondary_key` - The Secondary Key for the Authorization Rule.

- `secondary_connection_string` - The Secondary Connection String for the Authorization Rule.

» Import

ServiceBus Queue Authorization Rules can be imported using the `resource id`, e.g.

```
terraform import azurerm_servicebus_queue_authorization_rule.rule1 /subscriptions/00000000-0
```

» azurerm_servicebus_subscription

Create a ServiceBus Subscription.

» Example Usage

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

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

resource "azurerm_resource_group" "test" {
  name     = "terraform-servicebus"
  location = "${var.location}"
}

resource "azurerm_servicebus_namespace" "test" {
  name                = "${var.servicebus_name}"
  location            = "${var.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "standard"

  tags {
    source = "terraform"
  }
}

resource "azurerm_servicebus_topic" "test" {
  name                = "testTopic"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"

  enable_partitioning = true
}

resource "azurerm_servicebus_subscription" "test" {
  name                = "testSubscription"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"
  topic_name          = "${azurerm_servicebus_topic.test.name}"
  max_delivery_count  = 1
}
```

» Argument Reference

The following arguments are supported:

- **name** - (Required) Specifies the name of the ServiceBus Subscription resource. Changing this forces a new resource to be created.

- **namespace_name** - (Required) The name of the ServiceBus Namespace to create this Subscription in. Changing this forces a new resource to be created.

- `topic_name` - (Required) The name of the ServiceBus Topic to create this Subscription in. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the namespace. Changing this forces a new resource to be created.

- `max_delivery_count` - (Required) The maximum number of deliveries.

- `auto_delete_on_idle` - (Optional) The idle interval after which the Subscription is automatically deleted, minimum of 5 minutes. Provided in the TimeSpan format.

- `default_message_ttl` - (Optional) The TTL of messages sent to this Subscription if no TTL value is set on the message itself. Provided in the TimeSpan format.

- `lock_duration` - (Optional) The lock duration for the subscription, maximum supported value is 5 minutes. Defaults to 1 minute.

- `dead_lettering_on_message_expiration` - (Optional) Boolean flag which controls whether the Subscription has dead letter support when a message expires. Defaults to false.

- `enable_batched_operations` - (Optional) Boolean flag which controls whether the Subscription supports batched operations. Defaults to false.

- `requires_session` - (Optional) Boolean flag which controls whether this Subscription supports the concept of a session. Defaults to false. Changing this forces a new resource to be created.

- `forward_to` - (Optional) The name of a Queue or Topic to automatically forward messages to.

» TimeSpan Format

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

» Attributes Reference

The following attributes are exported:

- `id` - The ServiceBus Subscription ID.

» Import

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

```
terraform import azurerm_servicebus_subscription.test /subscriptions/00000000-0000-0000-0000
```

» azurerm_servicebus_subscription_rule

Create a ServiceBus Subscription Rule.

» Example Usage (SQL Filter)

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

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

resource "azurerm_resource_group" "test" {
  name     = "terraform-servicebus"
  location = "${var.location}"
}

resource "azurerm_servicebus_namespace" "test" {
  name                = "${var.servicebus_name}"
  location            = "${var.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "standard"

  tags {
    source = "terraform"
  }
}

resource "azurerm_servicebus_topic" "test" {
  name                = "testTopic"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"

  enable_partitioning = true
}
```

```
resource "azurerm_servicebus_subscription" "test" {
  name               = "testSubscription"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"
  topic_name          = "${azurerm_servicebus_topic.test.name}"
  max_delivery_count  = 1
}

resource "azurerm_servicebus_subscription_rule" "test" {
  name               = "testSubscriptionRule"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"
  topic_name          = "${azurerm_servicebus_topic.test.name}"
  subscription_name   = "${azurerm_servicebus_subscription.test.name}"
  filter_type         = "SqlFilter"
  sql_filter          = "color = 'red'"
}
```

» Example Usage (Correlation Filter)

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

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

resource "azurerm_resource_group" "test" {
  name     = "terraform-servicebus"
  location = "${var.location}"
}

resource "azurerm_servicebus_namespace" "test" {
  name               = "${var.servicebus_name}"
  location            = "${var.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "standard"

  tags {
    source = "terraform"
  }
}
```

```
resource "azurerm_servicebus_topic" "test" {
  name                = "testTopic"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"

  enable_partitioning = true
}

resource "azurerm_servicebus_subscription" "test" {
  name                = "testSubscription"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"
  topic_name          = "${azurerm_servicebus_topic.test.name}"
  max_delivery_count  = 1
}

resource "azurerm_servicebus_subscription_rule" "test" {
  name                = "testSubscriptionRule"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"
  topic_name          = "${azurerm_servicebus_topic.test.name}"
  subscription_name   = "${azurerm_servicebus_subscription.test.name}"
  filter_type         = "CorrelationFilter"
  correlation_filter  = {
    correlation_id = "high"
    label          = "red"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the ServiceBus Subscription Rule. Changing this forces a new resource to be created.

- `namespace_name` - (Required) The name of the ServiceBus Namespace in which the ServiceBus Topic exists. Changing this forces a new resource to be created.

- `topic_name` - (Required) The name of the ServiceBus Topic in which the ServiceBus Subscription exists. Changing this forces a new resource to be created.

- `subscription_name` - (Required) The name of the ServiceBus Subscription in which this Rule should be created. Changing this forces a new

resource to be created.

- `resource_group_name` - (Required) The name of the resource group in the ServiceBus Namespace exists. Changing this forces a new resource to be created.

- `filter_type` - (Required) Type of filter to be applied to a BrokeredMessage. Possible values are `SqlFilter` and `CorrelationFilter`.

- `sql_filter` - (Optional) Represents a filter written in SQL language-based syntax that to be evaluated against a BrokeredMessage. Required when `filter_type` is set to `SqlFilter`.

- `correlation_filter` - (Optional) A `correlation_filter` block as documented below to be evaluated against a BrokeredMessage. Required when `filter_type` is set to `CorrelationFilter`.

- `action` - (Optional) Represents set of actions written in SQL language-based syntax that is performed against a BrokeredMessage.

`correlation_filter` supports the following:

- `content_type` - (Optional) Content type of the message.

- `correlation_id` - (Optional) Identifier of the correlation.

- `label` - (Optional) Application specific label.

- `message_id` - (Optional) Identifier of the message.

- `reply_to` - (Optional) Address of the queue to reply to.

- `reply_to_session_id` - (Optional) Session identifier to reply to.

- `session_id` - (Optional) Session identifier.

- `to` - (Optional) Address to send to.

NOTE: When creating a subscription rule of type `CorrelationFilter` at least one property must be set in the `correlation_filter` block.

» Attributes Reference

The following attributes are exported:

- `id` - The ServiceBus Subscription Rule ID.

» Import

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

```
terraform import azurerm_servicebus_subscription.test /subscriptions/00000000-0000-0000-0000
```

» azurerm_servicebus_topic

Create a ServiceBus Topic.

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

» Example Usage

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

resource "azurerm_resource_group" "test" {
  name     = "terraform-servicebus"
  location = "${var.location}"
}

resource "azurerm_servicebus_namespace" "test" {
  name                = "${var.servicebus_name}"
  location            = "${var.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "standard"

  tags {
    source = "terraform"
  }
}

resource "azurerm_servicebus_topic" "test" {
  name                = "testTopic"
  resource_group_name = "${azurerm_resource_group.test.name}"
  namespace_name      = "${azurerm_servicebus_namespace.test.name}"

  enable_partitioning = true
}
```

» Argument Reference

The following arguments are supported:

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

- `namespace_name` - (Required) The name of the ServiceBus Namespace to create this topic in. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the namespace. Changing this forces a new resource to be created.

- `status` - (Optional) The Status of the Service Bus Topic. Acceptable values are `Active` or `Disabled`. Defaults to `Active`.

- `auto_delete_on_idle` - (Optional) The idle interval after which the Topic is automatically deleted, minimum of 5 minutes. Provided in the TimeSpan format.

- `default_message_ttl` - (Optional) The TTL of messages sent to this topic if no TTL value is set on the message itself. Provided in the TimeSpan format.

- `duplicate_detection_history_time_window` - (Optional) The duration during which duplicates can be detected. Provided in the TimeSpan format. Defaults to 10 minutes (`00:10:00`)

- `enable_batched_operations` - (Optional) Boolean flag which controls if server-side batched operations are enabled. Defaults to false.

- `enable_express` - (Optional) Boolean flag which controls whether Express Entities are enabled. An express topic holds a message in memory temporarily before writing it to persistent storage. Defaults to false.

- `enable_partitioning` - (Optional) Boolean flag which controls whether to enable the topic to be partitioned across multiple message brokers. Defaults to false. Changing this forces a new resource to be created.

NOTE: Partitioning is available at entity creation for all queues and topics in Basic or Standard SKUs. It is not available for the Premium messaging SKU, but any previously existing partitioned entities in Premium namespaces continue to work as expected. Please see the documentation for more information.

- `max_size_in_megabytes` - (Optional) Integer value which controls the size of memory allocated for the topic. For supported values see the "Queue/topic size" section of this document.

- `requires_duplicate_detection` - (Optional) Boolean flag which controls whether the Topic requires duplicate detection. Defaults to false. Changing this forces a new resource to be created.

- `support_ordering` - (Optional) Boolean flag which controls whether the Topic supports ordering. Defaults to false.

» TimeSpan Format

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

» Attributes Reference

The following attributes are exported:

- `id` - The ServiceBus Topic ID.

» Import

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

```
terraform import azurerm_servicebus_topic.test /subscriptions/00000000-0000-0000-0000-000000
```

» azurerm_servicebus_topic_authorization_rule

Manages a ServiceBus Topic authorization Rule within a ServiceBus Topic.

» Example Usage

```
resource "azurerm_resource_group" "example" {
  name     = "tfex-servicebus"
  location = "West US"
}

resource "azurerm_servicebus_namespace" "example" {
  name                = "tfex_servicebus_namespace"
  location            = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  sku                 = "standard"

  tags {
    source = "terraform"
  }
}

resource "azurerm_servicebus_topic" "example" {
  name                = "tfex_servicebus_topic"
  resource_group_name = "${azurerm_resource_group.example.name}"
```

```
  namespace_name     = "${azurerm_servicebus_namespace.example.name}"
}

resource "azurerm_servicebus_topic_authorization_rule" "example" {
  name                = "tfex_servicebus_topic_sasPolicy"
  namespace_name      = "${azurerm_servicebus_namespace.example.name}"
  topic_name          = "${azurerm_servicebus_topic.example.name}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  listen              = true
  send                = false
  manage              = false
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the ServiceBus Topic Authorization Rule resource. Changing this forces a new resource to be created.

- `namespace_name` - (Required) Specifies the name of the ServiceBus Namespace. Changing this forces a new resource to be created.

- `topic_name` - (Required) Specifies the name of the ServiceBus Topic. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the ServiceBus Namespace exists. Changing this forces a new resource to be created.

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

- `listen` - (Optional) Grants listen access to this this Authorization Rule. Defaults to `false`.

- `send` - (Optional) Grants send access to this this Authorization Rule. Defaults to `false`.

- `manage` - (Optional) Grants manage access to this this Authorization Rule. When this property is `true` - both `listen` and `send` must be too. Defaults to `false`.

» Attributes Reference

The following attributes are exported:

- `id` - The ServiceBus Topic ID.

- `primary_key` - The Primary Key for the ServiceBus Topic authorization Rule.

- `primary_connection_string` - The Primary Connection String for the ServiceBus Topic authorization Rule.

- `secondary_key` - The Secondary Key for the ServiceBus Topic authorization Rule.

- `secondary_connection_string` - The Secondary Connection String for the ServiceBus Topic authorization Rule.

» Import

ServiceBus Topic authorization rules can be imported using the `resource id`, e.g.

```
terraform import azurerm_servicebus_topic_authorization_rule.rule1 /subscriptions/00000000-0
```

» azurerm_monitor_action_group

Manages an Action Group within Azure Monitor.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "monitoring-resources"
  location = "West US"
}

resource "azurerm_monitor_action_group" "test" {
  name                = "CriticalAlertsAction"
  resource_group_name = "${azurerm_resource_group.test.name}"
  short_name          = "p0action"

  email_receiver {
    name          = "sendtoadmin"
    email_address = "admin@contoso.com"
  }

  email_receiver {
    name          = "sendtodevops"
    email_address = "devops@contoso.com"
  }
```

```
  sms_receiver {
    name         = "oncallmsg"
    country_code = "1"
    phone_number = "1231231234"
  }

  webhook_receiver {
    name        = "callmyapiaswell"
    service_uri = "http://example.com/alert"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the Action 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 Action Group instance.
- `short_name` - (Required) The short name of the action group. This will be used in SMS messages.
- `enabled` - (Optional) Whether this action group is enabled. If an action group is not enabled, then none of its receivers will receive communications. Defaults to `true`.
- `email_receiver` - (Optional) One or more `email_receiver` blocks as defined below.
- `sms_receiver` - (Optional) One or more `sms_receiver` blocks as defined below.
- `webhook_receiver` - (Optional) One or more `webhook_receiver` blocks as defined below.
- `tags` - (Optional) A mapping of tags to assign to the resource.

`email_receiver` supports the following:

- `name` - (Required) The name of the email receiver. Names must be unique (case-insensitive) across all receivers within an action group.
- `email_address` - (Required) The email address of this receiver.

`sms_receiver` supports the following:

- `name` - (Required) The name of the SMS receiver. Names must be unique (case-insensitive) across all receivers within an action group.

- `country_code` - (Required) The country code of the SMS receiver.
- `phone_number` - (Required) The phone number of the SMS receiver.

`webhook_receiver` supports the following:

- `name` - (Required) The name of the webhook receiver. Names must be unique (case-insensitive) across all receivers within an action group.
- `service_uri` - (Required) The URI where webhooks should be sent.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Action Group.

» Import

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

```
terraform import azurerm_monitor_action_group.test /subscriptions/00000000-0000-0000-0000-00
```

» azurerm_autoscale_setting

Manages an AutoScale Setting which can be applied to Virtual Machine Scale Sets, App Services and other scalable resources.

» Example Usage

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

resource "azurerm_virtual_machine_scale_set" "test" {
  # ...
}

resource "azurerm_autoscale_setting" "test" {
  name                = "myAutoscaleSetting"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  target_resource_id  = "${azurerm_virtual_machine_scale_set.test.id}"
```

```
profile {
  name = "defaultProfile"

  capacity {
    default = 1
    minimum = 1
    maximum = 10
  }

  rule {
    metric_trigger {
      metric_name        = "Percentage CPU"
      metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
      time_grain         = "PT1M"
      statistic          = "Average"
      time_window        = "PT5M"
      time_aggregation   = "Average"
      operator           = "GreaterThan"
      threshold          = 75
    }

    scale_action {
      direction = "Increase"
      type      = "ChangeCount"
      value     = "1"
      cooldown  = "PT1M"
    }
  }

  rule {
    metric_trigger {
      metric_name        = "Percentage CPU"
      metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
      time_grain         = "PT1M"
      statistic          = "Average"
      time_window        = "PT5M"
      time_aggregation   = "Average"
      operator           = "LessThan"
      threshold          = 25
    }

    scale_action {
      direction = "Decrease"
      type      = "ChangeCount"
      value     = "1"
```

```
        cooldown  = "PT1M"
      }
    }
  }

  notification {
    operation = "Scale"
    email {
      send_to_subscription_administrator    = true
      send_to_subscription_co_administrator = true
      custom_emails                         = ["admin@contoso.com"]
    }
  }
}
```

» Example Usage (repeating on weekends)

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

resource "azurerm_virtual_machine_scale_set" "test" {
  # ...
}

resource "azurerm_autoscale_setting" "test" {
  name                = "myAutoscaleSetting"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  target_resource_id  = "${azurerm_virtual_machine_scale_set.test.id}"

  profile {
    name = "Weekends"

    capacity {
      default = 1
      minimum = 1
      maximum = 10
    }

    rule {
      metric_trigger {
        metric_name        = "Percentage CPU"
        metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
```

```
      time_grain         = "PT1M"
      statistic          = "Average"
      time_window        = "PT5M"
      time_aggregation   = "Average"
      operator           = "GreaterThan"
      threshold          = 90
    }

    scale_action {
      direction = "Increase"
      type      = "ChangeCount"
      value     = "2"
      cooldown  = "PT1M"
    }
  }

  rule {
    metric_trigger {
      metric_name         = "Percentage CPU"
      metric_resource_id  = "${azurerm_virtual_machine_scale_set.test.id}"
      time_grain          = "PT1M"
      statistic           = "Average"
      time_window         = "PT5M"
      time_aggregation    = "Average"
      operator            = "LessThan"
      threshold           = 10
    }

    scale_action {
      direction = "Decrease"
      type      = "ChangeCount"
      value     = "2"
      cooldown  = "PT1M"
    }
  }

  recurrence {
    frequency = "Week"
    schedule {
      timezone = "Pacific Standard Time"
      days     = [ "Saturday", "Sunday" ]
      hours    = [ 12 ]
      minutes  = [ 0 ]
    }
  }
}
```

```
  notification {
    operation = "Scale"

    email {
      send_to_subscription_administrator    = true
      send_to_subscription_co_administrator = true
      custom_emails                         = ["admin@contoso.com"]
    }
  }
}
```

» Example Usage (for fixed dates)

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

resource "azurerm_virtual_machine_scale_set" "test" {
  # ...
}

resource "azurerm_autoscale_setting" "test" {
  name                = "myAutoscaleSetting"
  enabled             = true
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  target_resource_id  = "${azurerm_virtual_machine_scale_set.test.id}"

  profile {
    name = "forJuly"

    capacity {
      default = 1
      minimum = 1
      maximum = 10
    }

    rule {
      metric_trigger {
        metric_name        = "Percentage CPU"
        metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
        time_grain         = "PT1M"
        statistic          = "Average"
```

```
      time_window         = "PT5M"
      time_aggregation    = "Average"
      operator            = "GreaterThan"
      threshold           = 90
    }

    scale_action {
      direction = "Increase"
      type      = "ChangeCount"
      value     = "2"
      cooldown  = "PT1M"
    }
  }

  rule {
    metric_trigger {
      metric_name         = "Percentage CPU"
      metric_resource_id  = "${azurerm_virtual_machine_scale_set.test.id}"
      time_grain          = "PT1M"
      statistic           = "Average"
      time_window         = "PT5M"
      time_aggregation    = "Average"
      operator            = "LessThan"
      threshold           = 10
    }

    scale_action {
      direction = "Decrease"
      type      = "ChangeCount"
      value     = "2"
      cooldown  = "PT1M"
    }
  }

  fixed_date {
    timezone = "Pacific Standard Time"
    start    = "2020-07-01T00:00:00Z"
    end      = "2020-07-31T23:59:59Z"
  }
}

notification {
  operation = "Scale"

  email {
    send_to_subscription_administrator    = true
```

```
      send_to_subscription_co_administrator = true
      custom_emails                         = ["admin@contoso.com"]
    }
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the AutoScale Setting. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the Resource Group in the AutoScale Setting should be created. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the AutoScale Setting should exist. Changing this forces a new resource to be created.

- `profile` - (Required) Specifies one or more (up to 20) `profile` blocks as defined below.

- `target_resource_id` - (Required) Specifies the resource ID of the resource that the autoscale setting should be added to.

- `enabled` - (Optional) Specifies whether automatic scaling is enabled for the target resource. Defaults to `true`.

- `notification` - (Optional) Specifies a `notification` block as defined below.

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

A `profile` block supports the following:

- `name` - (Required) Specifies the name of the profile.

- `capacity` - (Required) A `capacity` block as defined below.

- `rule` - (Required) One or more (up to 10) `rule` blocks as defined below.

- `fixed_date` - (Optional) A `fixed_date` block as defined below. This cannot be specified if a `recurrence` block is specified.

- `recurrence` - (Optional) A `recurrence` block as defined below. This cannot be specified if a `fixed_date` block is specified.

A `capacity` block supports the following:

- `default` - (Required) The number of instances that are available for scaling if metrics are not available for evaluation. The default is only used if the current instance count is lower than the default.

- `maximum` - (Required) The maximum number of instances for this resource. Valid values are between `1` and `40`.

NOTE: The maximum number of instances is also limited by the amount of Cores available in the subscription.

- `minimum` - (Required) The minimum number of instances for this resource. Valid values are between `1` and `40`.

A `rule` block supports the following:

- `metric_trigger` - (Required) A `metric_trigger` block as defined below.

- `scale_action` - (Required) A `scale_action` block as defined below.

A `metric_trigger` block supports the following:

- `metric_name` - (Required) The name of the metric that defines what the rule monitors, such as `Percentage CPU`.

- `metric_resource_id` - (Required) The ID of the Resource which the Rule monitors.

- `operator` - (Required) Specifies the operator used to compare the metric data and threshold. Possible values are: `Equals`, `NotEquals`, `GreaterThan`, `GreaterThanOrEqual`, `LessThan`, `LessThanOrEqual`.

- `statistic` - (Required) Specifies how the metrics from multiple instances are combined. Possible values are `Average`, `Min` and `Max`.

- `time_aggregation` - (Required) Specifies how the data that's collected should be combined over time. Possible values include `Average`, `Count`, `Maximum`, `Minimum`, `Last` and `Total`. Defaults to `Average`.

- `time_grain` - (Required) Specifies the granularity of metrics that the rule monitors, which must be one of the pre-defined values returned from the metric definitions for the metric. This value must be between 1 minute and 12 hours an be formatted as an ISO 8601 string.

- `time_window` - (Required) Specifies the time range for which data is collected, which must be greater than the delay in metric collection (which varies from resource to resource). This value must be between 5 minutes and 12 hours and be formatted as an ISO 8601 string.

- **threshold** - (Required) Specifies the threshold of the metric that triggers the scale action.

A **scale_action** block supports the following:

- **cooldown** - (Required) The amount of time to wait since the last scaling action before this action occurs. Must be between 1 minute and 1 week and formatted as a ISO 8601 string.

- **direction** - (Required) The scale direction. Possible values are **Increase** and **Decrease**.

- **type** - (Required) The type of action that should occur. Possible values are **ChangeCount**, **ExactCount** and **PercentChangeCount**.

- **value** - (Required) The number of instances involved in the scaling action. Defaults to **1**.

A **fixed_date** block supports the following:

- **end** - (Required) Specifies the end date for the profile, formatted as an RFC3339 date string.

- **start** - (Required) Specifies the start date for the profile, formatted as an RFC3339 date string.

- **timezone** (Optional) The Time Zone of the **start** and **end** times. A list of possible values can be found here. Defaults to **UTC**.

A **recurrence** block supports the following:

- **timezone** - (Required) The Time Zone used for the **hours** field. A list of possible values can be found here. Defaults to **UTC**.

- **days** - (Required) A list of days that this profile takes effect on. Possible values include **Monday**, **Tuesday**, **Wednesday**, **Thursday**, **Friday**, **Saturday** and **Sunday**.

- **hours** - (Required) A list containing a single item, which specifies the Hour interval at which this recurrence should be triggered (in 24-hour time). Possible values are from **0** to **23**.

- **minutes** - (Required) A list containing a single item which specifies the Minute interval at which this recurrence should be triggered.

A **notification** block supports the following:

- **email** - (Required) A **email** block as defined below.

- webhook - (Optional) One or more `webhook` blocks as defined below.

A `email` block supports the following:

- `send_to_subscription_administrator` - (Optional) Should email notifications be sent to the subscription administrator? Defaults to `false`.

- `send_to_subscription_co_administrator` - (Optional) Should email notifications be sent to the subscription co-administrator? Defaults to `false`.

- `custom_emails` - (Optional) Specifies a list of custom email addresses to which the email notifications will be sent.

A `webhook` block supports the following:

- `service_uri` - (Required) The HTTPS URI which should receive scale notifications.

- `properties` - (Optional) A map of settings.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the AutoScale Setting.

» Import

AutoScale Setting can be imported using the `resource id`, e.g.

```
terraform import azurerm_autoscale_setting.test /subscriptions/00000000-0000-0000-0000-00000
```

» azurerm_metric_alertrule

Manages a metric-based alert rule in Azure Monitor.

» Example Usage (CPU Percentage of a virtual machine)

```
resource "azurerm_metric_alertrule" "test" {
  name = "${azurerm_virtual_machine.test.name}-cpu"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location = "${azurerm_resource_group.test.location}"
```

```
  description = "An alert rule to watch the metric Percentage CPU"

  enabled = true

  resource_id = "${azurerm_virtual_machine.test.id}"
  metric_name = "Percentage CPU"
  operator = "GreaterThan"
  threshold = 75
  aggregation = "Average"
  period = "PT5M"

  email_action {
    send_to_service_owners = false
    custom_emails = [
      "some.user@example.com",
    ]
  }

  webhook_action {
    service_uri = "https://example.com/some-url"
      properties = {
        severity = "incredible"
        acceptance_test = "true"
      }
  }
}
```

» Example Usage (Storage usage of a SQL Database)

```
resource "azurerm_metric_alertrule" "test" {
  name = "${azurerm_sql_database.test.name}-storage"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location = "${azurerm_resource_group.test.location}"

  description = "An alert rule to watch the metric Storage"

  enabled = true

  resource_id = "${azurerm_sql_database.test.id}"
  metric_name = "storage"
  operator = "GreaterThan"
  threshold = 1073741824
  aggregation = "Maximum"
  period = "PT10M"
```

```
  email_action {
    send_to_service_owners = false
    custom_emails = [
      "some.user@example.com",
    ]
  }

  webhook_action {
    service_uri = "https://example.com/some-url"
      properties = {
        severity = "incredible"
        acceptance_test = "true"
      }
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the alert rule. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the alert rule. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `description` - (Optional) A verbose description of the alert rule that will be included in the alert email.

- `enabled` - (Optional) If `true`, the alert rule is enabled. Defaults to `true`.

————————————————

- `resource_id` - (Required) The ID of the resource monitored by the alert rule.

- `metric_name` - (Required) The metric that defines what the rule monitors.

For a comprehensive reference of supported `metric_name` values for types of `resource` refer to Supported metrics with Azure Monitor in the Azure documentation. In the referred table, the column "Metric" corresponds to supported values for `metric_name`.

- `operator` - (Required) The operator used to compare the metric data and the threshold. Possible values are `GreaterThan`, `GreaterThanOrEqual`, `LessThan`, and `LessThanOrEqual`.

- `threshold` - (Required) The threshold value that activates the alert.

- `period` - (Required) The period of time formatted in ISO 8601 duration format that is used to monitor the alert activity based on the threshold. The period must be between 5 minutes and 1 day.

- `aggregation` - (Required) Defines how the metric data is combined over time. Possible values are `Average`, `Minimum`, `Maximum`, `Total`, and `Last`.

- `email_action` - (Optional) A `email_action` block as defined below.

- `webhook_action` - (Optional) A `webhook_action` block as defined below.

- `tags` - (Optional) A mapping of tags to assign to the resource. Changing this forces a new resource to be created.

`email_action` supports the following:

- `send_to_service_owners` - (Optional) If `true`, the administrators (service and co-administrators) of the subscription are notified when the alert is triggered. Defaults to `false`.

- `custom_emails` - (Optional) A list of email addresses to be notified when the alert is triggered.

`webhook_action` supports the following:

- `service_uri` - (Required) The service uri of the webhook to POST the notification when the alert is triggered.

- `properties` - (Optional) A dictionary of custom properties to include with the webhook POST operation payload.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the alert rule.

» Import

Metric Alert Rules can be imported using the `resource id`, e.g.

```
terraform import azurerm_metric_alertrule.alertrule1 /subscriptions/00000000-0000-0000-0000-
```

» azurerm_application_gateway

Manages a application gateway based on a previously created virtual network
with configured subnets.

» Example Usage

```
# Create a resource group
resource "azurerm_resource_group" "rg" {
  name     = "my-rg-application-gateway-12345"
  location = "West US"
}

# Create a application gateway in the web_servers resource group
resource "azurerm_virtual_network" "vnet" {
  name                = "my-vnet-12345"
  resource_group_name = "${azurerm_resource_group.rg.name}"
  address_space       = ["10.254.0.0/16"]
  location            = "${azurerm_resource_group.rg.location}"
}

resource "azurerm_subnet" "sub1" {
  name                 = "my-subnet-1"
  resource_group_name  = "${azurerm_resource_group.rg.name}"
  virtual_network_name = "${azurerm_virtual_network.vnet.name}"
  address_prefix       = "10.254.0.0/24"
}

resource "azurerm_subnet" "sub2" {
  name                 = "my-subnet-2"
  resource_group_name  = "${azurerm_resource_group.rg.name}"
  virtual_network_name = "${azurerm_virtual_network.vnet.name}"
  address_prefix       = "10.254.2.0/24"
}

resource "azurerm_public_ip" "pip" {
  name                         = "my-pip-12345"
  location                     = "${azurerm_resource_group.rg.location}"
  resource_group_name          = "${azurerm_resource_group.rg.name}"
  public_ip_address_allocation = "dynamic"
}
```

```
# Create an application gateway
resource "azurerm_application_gateway" "network" {
  name                = "my-application-gateway-12345"
  resource_group_name = "${azurerm_resource_group.rg.name}"
  location            = "West US"

  sku {
    name            = "Standard_Small"
    tier            = "Standard"
    capacity        = 2
  }

  gateway_ip_configuration {
    name            = "my-gateway-ip-configuration"
    subnet_id       = "${azurerm_virtual_network.vnet.id}/subnets/${azurerm_subnet.sub1.name}"
  }

  frontend_port {
    name            = "${azurerm_virtual_network.vnet.name}-feport"
    port            = 80
  }

  frontend_ip_configuration {
    name            = "${azurerm_virtual_network.vnet.name}-feip"
    public_ip_address_id = "${azurerm_public_ip.pip.id}"
  }

  backend_address_pool {
    name = "${azurerm_virtual_network.vnet.name}-beap"
  }

  backend_http_settings {
    name                  = "${azurerm_virtual_network.vnet.name}-be-htst"
    cookie_based_affinity = "Disabled"
    port                  = 80
    protocol              = "Http"
    request_timeout       = 1
  }

  http_listener {
    name                           = "${azurerm_virtual_network.vnet.name}-httplstn"
    frontend_ip_configuration_name = "${azurerm_virtual_network.vnet.name}-feip"
    frontend_port_name             = "${azurerm_virtual_network.vnet.name}-feport"
    protocol                       = "Http"
  }
```

```
request_routing_rule {
  name                       = "${azurerm_virtual_network.vnet.name}-rqrt"
  rule_type                  = "Basic"
  http_listener_name         = "${azurerm_virtual_network.vnet.name}-httplstn"
  backend_address_pool_name  = "${azurerm_virtual_network.vnet.name}-beap"
  backend_http_settings_name = "${azurerm_virtual_network.vnet.name}-be-htst"
}

// Path-based routing example
http_listener {
  name                          = "${azurerm_virtual_network.vnet.name}-httplstn-pbr.cont
  host_name                     = "pbr.contoso.com"
  frontend_ip_configuration_name = "${azurerm_virtual_network.vnet.name}-feip"
  frontend_port_name            = "${azurerm_virtual_network.vnet.name}-feport"
  protocol                      = "Http"
}

backend_address_pool {
  name = "${azurerm_virtual_network.vnet.name}-beap-fallback"
}
backend_address_pool {
  name = "${azurerm_virtual_network.vnet.name}-beap-first"
}
backend_address_pool {
  name = "${azurerm_virtual_network.vnet.name}-beap-second"
}

request_routing_rule {
  name               = "${azurerm_virtual_network.vnet.name}-rqrt"
  rule_type          = "PathBasedRouting"
  http_listener_name = "${azurerm_virtual_network.vnet.name}-httplstn-pbr.contoso.com"
  url_path_map_name  = "pbr.contoso.com"
}

url_path_map {
  name = "pbr.contoso.com"
  default_backend_address_pool_name = "${azurerm_virtual_network.vnet.name}-beap-fallback'
  default_backend_http_settings_name = ${azurerm_virtual_network.vnet.name}-be-htst"

  path_rule {
    name = "pbr.contoso.com_first"
    paths = ["/first/*"]
    backend_address_pool_name = "${local.awg_clusters_name}-beap-first"
    backend_http_settings_name = "${local.awg_clusters_name}-be-htst"
  }
```

```
    path_rule {
      name = "pbr.contoso.com_second"
      paths = ["/second/*"]
      backend_address_pool_name = "${local.awg_clusters_name}-beap-second"
      backend_http_settings_name = "${local.awg_clusters_name}-be-htst"
    }
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the application gateway. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the application gateway.

- `location` - (Required) The location/region where the application gateway is created. Changing this forces a new resource to be created.

- `sku` - (Required) Specifies size, tier and capacity of the application gateway. Must be specified once. The `sku` block fields documented below.

- `gateway_ip_configuration` - (Required) List of subnets that the application gateway is deployed into. The application gateway must be deployed into an existing virtual network/subnet. No other resource can be deployed in a subnet where application gateway is deployed. The `gateway_ip_configuration` block supports fields documented below.

- `frontend_port` - (Required) Front-end port for the application gateway. The `frontend_port` block supports fields documented below.

- `frontend_ip_configuration` - (Required) Specifies lists of frontend IP configurations. Currently only one Public and/or one Private IP address can be specified. Also one frontendIpConfiguration element can specify either Public or Private IP address, not both. The `frontend_ip_configuration` block supports fields documented below.

- `backend_address_pool` - (Required) Backend pools can be composed of NICs, virtual machine scale sets, public IPs, internal IPs, fully qualified domain names (FQDN), and multi-tenant back-ends like Azure Web Apps. Application Gateway backend pool members are not tied to an availability set. Members of backend pools can be across clusters, data centers, or outside of Azure as long as they have IP connectivity. The `backend_address_pool` block supports fields documented below.

- `backend_http_settings` - (Required) Related group of backend http and/or https features to be applied when routing to backend address pools. The `backend_http_settings` block supports fields documented below.

- `http_listener` - (Required) 1 or more listeners specifying port, http or https and SSL certificate (if configuring SSL offload) Each `http_listener` is attached to a `frontend_ip_configuration`. The `http_listener` block supports fields documented below.

- `probe` - (Optional) Specifies list of URL probes. The `probe` block supports fields documented below.

- `request_routing_rule` - (Required) Request routing rules can be either Basic or Path Based. Request routing rules are order sensitive. The `request_routing_rule` block supports fields documented below.

- `url_path_map` - (Optional) UrlPathMaps give url Path to backend mapping information for PathBasedRouting specified in `request_routing_rule`. The `url_path_map` block supports fields documented below.

- `authentication_certificate` - (Optional) List of authentication certificates. The `authentication_certificate` block supports fields documented below.

- `ssl_certificate` - (Optional) List of ssl certificates. The `ssl_certificate` block supports fields documented below.

- `waf_configuration` - (Optional) Web Application Firewall configuration settings. The `waf_configuration` block supports fields documented below.

- `disabled_ssl_protocols` - TODO - based on "sslPolicy": {"disabledSsl-Protocols": []}

The `sku` block supports:

- `name` - (Required) Supported values are:

  - `Standard_Small`
  - `Standard_Medium`
  - `Standard_Large`
  - `WAF_Medium`
  - `WAF_Large`

- `tier` - (Required) Supported values are:

  - `Standard`
  - `WAF`

- `capacity` - (Required) Specifies instance count. Can be 1 to 10.

The `gateway_ip_configuration` block supports:

- **name** - (Required) User defined name of the gateway ip configuration.

- **subnet_id** - (Required) Reference to a Subnet. Application Gateway is deployed in this subnet. No other resource can be deployed in a subnet where Application Gateway is deployed.

The **frontend_port** block supports:

- **name** - (Required) User defined name for frontend Port.

- **port** - (Required) Port number.

The **frontend_ip_configuration** block supports:

- **name** - (Required) User defined name for a frontend IP configuration.

- **subnet_id** - (Optional) Reference to a Subnet.

- **private_ip_address** - (Optional) Private IP Address.

- **public_ip_address_id**- (Optional) Specifies resource Id of a Public Ip Address resource. IPAllocationMethod should be Dynamic.

- **private_ip_address_allocation** - (Optional) Valid values are:

    - **Dynamic**
    - **Static**

The **backend_address_pool** block supports:

- **name** - (Required) User defined name for a backend address pool.

- **ip_address_list** - (Optional) List of public IPAdresses, or internal IP addresses in a backend address pool.

- **fqdn_list** - (Optional) List of FQDNs in a backend address pool.

The **backend_http_settings** block supports:

- **name** - (Required) User defined name for a backend http setting.

- **port** - (Required) Backend port for backend address pool.

- **protocol** - (Required) Valid values are:

    - **Http**
    - **Https**

- **cookie_based_affinity** - (Required) Valid values are:

    - **Enabled**
    - **Disabled**

- **request_timeout** - (Required) RequestTimeout in second. Application Gateway fails the request if response is not received within RequestTimeout. Minimum 1 second and Maximum 86400 secs.

- **probe_name** - (Optional) Reference to URL probe.

- `authentication_certificate` - (Optional) - A list of `authentication_certificate` references for the `backend_http_setting` to use. Each element consists of:
  - `name` (Required)
  - `id` (Calculated)

The `http_listener` block supports:

- `name` - (Required) User defined name for a backend http setting.

- `frontend_ip_configuration_name` - (Required) Reference to frontend Ip configuration.

- `frontend_port_name` - (Required) Reference to frontend port.

- `protocol` - (Required) Valid values are:
  - `Http`
  - `Https`

- `host_name` - (Optional) HostName for `http_listener`. It has to be a valid DNS name.

- `ssl_certificate_name` - (Optional) Reference to ssl certificate. Valid only if protocol is https.

- `require_sni` - (Optional) Applicable only if protocol is https. Enables SNI for multi-hosting. Valid values are:
  - `true`
  - `false` (default)

The `probe` block supports:

- `name` - (Required) User defined name for a probe.

- `protocol` - (Required) Protocol used to send probe. Valid values are:
  - `Http`
  - `Https`

- `path` - (Required) Relative path of probe. Valid path starts from '/'. Probe is sent to {Protocol}://{host}:{port}{path}. The port used will be the same port as defined in the `backend_http_settings`.

- `host` - (Required) Host name to send probe to. If Application Gateway is configured for a single site, by default the Host name should be specified as '127.0.0.1', unless otherwise configured in custom probe.

- `interval` - (Required) Probe interval in seconds. This is the time interval between two consecutive probes. Minimum 1 second and Maximum 86,400 secs.

- `timeout` - (Required) Probe timeout in seconds. Probe marked as failed if valid response is not received with this timeout period. Minimum 1 second and Maximum 86,400 secs.

- `unhealthy_threshold` - (Required) Probe retry count. Backend server is marked down after consecutive probe failure count reaches UnhealthyThreshold. Minimum 1 second and Maximum 20.

- `minimum_servers` - (Optional) Minimum number of servers that are always marked healthy. Default value is 0.

- `match` - (Optional) Probe health response match.

  - `body` - (Optional) Body that must be contained in the health response. Defaults to "*"
  - `status_code` - (Optional) Allowed health response status codes.

The `request_routing_rule` block supports:

- `name` - (Required) User defined name for a request routing rule.

- 'rule_type' - (Required) Routing rule type. Valid values are:

  - `Basic`
  - `PathBasedRouting`

- `http_listener_name` - (Required) Reference to `http_listener`.

- `backend_address_pool_name` - (Optional) Reference to `backend_address_pool_name`. Valid for Basic Rule only.

- `backend_http_settings_name` - (Optional) Reference to `backend_http_settings`. Valid for Basic Rule only.

- `url_path_map_name` - (Optional) Reference to `url_path_map`. Valid for PathBasedRouting Rule only.

The `url_path_map` block supports:

- `name` - (Required) User defined name for a url path map.

- `default_backend_address_pool_name` - (Required) Reference to `backend_address_pool_name`.

- `default_backend_http_settings_name` - (Required) Reference to `backend_http_settings`.

- `path_rule` - (Required) One or more `path_rule` blocks. `path_rule`s are order sensitive. Are applied in order they are specified.

The `path_rule` block supports:

- `name` - (Required) User defined name for a path rule.

293

- **paths** - (Required) The list of path patterns to match. Each must start with / and the only place a * is allowed is at the end following a /. The string fed to the path matcher does not include any text after the first ? or #, and those chars are not allowed here.

- **backend_address_pool_name** - (Required) Reference to backend_address_pool_name.

- **backend_http_settings_name** - (Required) Reference to backend_http_settings.

The `authentication_certificate` block supports:

- **name** - (Required) User defined name for an authentication certificate.

- **data** - (Required) Base-64 encoded cer certificate. Only applicable in PUT Request.

The `ssl_certificate` block supports:

- **name** - (Required) User defined name for an SSL certificate.

- **data** - (Required) Base-64 encoded Public cert data corresponding to pfx specified in data. Only applicable in GET request.

- **password** - (Required) Password for the pfx file specified in data. Only applicable in PUT request.

The `waf_configuration` block supports:

- **firewall_mode** - (Required) Firewall mode. Valid values are:

  - `Detection`
  - `Prevention`

- **rule_set_type** - (Required) Rule set type. Must be set to `OWASP`

- **rule_set_version** - (Required) Ruleset version. Supported values:

  - `2.2.9`
  - `3.0`

- **enabled** - (Required) Is the Web Application Firewall enabled?

» Attributes Reference

The following attributes are exported:

- **id** - The application gatewayConfiguration ID.

- **name** - The name of the application gateway.

- **resource_group_name** - The name of the resource group in which to create the application gateway.

- **location** - The location/region where the application gateway is created

» Import

application gateways can be imported using the `resource id`, e.g.

```
terraform import azurerm_application_gateway.testApplicationGateway /subscriptions/00000000-
```

» azurerm_application_security_group

Create an Application Security Group.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "tf-test"
  location = "West Europe"
}

resource "azurerm_application_security_group" "test" {
  name                = "tf-appsecuritygroup"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  tags {
    "Hello" = "World"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Application Security Group.
  Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in
  which to create the Application Security Group.

- `location` - (Required) Specifies the supported Azure location where the
  resource exists. Changing this forces a new resource to be created.

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

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Application Security Group.

» Import

Application Security Groups can be imported using the `resource id`, e.g.

```
terraform import azurerm_application_security_group.securitygroup1 /subscriptions/00000000-0
```

» azurerm_express_route_circuit

Manages an ExpressRoute circuit.

» Example Usage

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

resource "azurerm_express_route_circuit" "test" {
  name                  = "expressRoute1"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  location              = "${azurerm_resource_group.test.location}"
  service_provider_name = "Equinix"
  peering_location      = "Silicon Valley"
  bandwidth_in_mbps     = 50
  sku {
    tier   = "Standard"
    family = "MeteredData"
  }

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the ExpressRoute circuit. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the ExpressRoute circuit. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `service_provider_name` - (Required) The name of the ExpressRoute Service Provider.

- `peering_location` - (Required) The name of the peering location and **not** the Azure resource location.

- `bandwidth_in_mbps` - (Required) The bandwidth in Mbps of the circuit being created.

NOTE: Once you increase your bandwidth, you will not be able to decrease it to it's previous value.

- `sku` - (Required) A `sku` block for the ExpressRoute circuit as documented below.

- `allow_classic_operations` - (Optional) Allow the circuit to interact with classic (RDFE) resources. The default value is `false`.

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

`sku` supports the following:

- `tier` - (Required) The service tier. Possible values are `Standard` or `Premium`.

- `family` - (Required) The billing mode for bandwidth. Possible values are `MeteredData` or `UnlimitedData`.

NOTE: You can migrate from `MeteredData` to `UnlimitedData`, but not the other way around.

» Attributes Reference

The following attributes are exported:

- `id` - The Resource ID of the ExpressRoute circuit.
- `service_provider_provisioning_state` - The ExpressRoute circuit provisioning state from your chosen service provider. Possible values are "NotProvisioned", "Provisioning", "Provisioned", and "Deprovisioning".
- `service_key` - The string needed by the service provider to provision the ExpressRoute circuit.

» Import

ExpressRoute circuits can be imported using the `resource id`, e.g.

```
terraform import azurerm_express_route_circuit.myExpressRoute /subscriptions/00000000-0000-0
```

» azurerm_express_route_circuit_authorization

Manages an ExpressRoute Circuit Authorization.

» Example Usage

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

resource "azurerm_express_route_circuit" "test" {
  name                  = "expressRoute1"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  location              = "${azurerm_resource_group.test.location}"
  service_provider_name = "Equinix"
  peering_location      = "Silicon Valley"
  bandwidth_in_mbps     = 50
  sku {
    tier   = "Standard"
    family = "MeteredData"
  }
  allow_classic_operations = false

  tags {
    environment = "Production"
  }
}

resource "azurerm_express_route_circuit_authorization" "test" {
  name                      = "exampleERCAuth"
  express_route_circuit_name = "${azurerm_express_route_circuit.test.name}"
  resource_group_name       = "${azurerm_resource_group.test.name}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the ExpressRoute circuit. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the ExpressRoute circuit. Changing this forces a new resource to be created.

- `express_route_circuit_name` - (Required) The name of the Express Route Circuit in which to create the Authorization.

» Attributes Reference

The following attributes are exported:

- `id` - The Resource ID of the ExpressRoute Circuit Authorization.

- `authorization_key` - The Authorization Key.

- `authorization_use_status` - The authorization use status.

» Import

ExpressRoute Circuit Authorizations can be imported using the `resource id`, e.g.

```
terraform import azurerm_express_route_circuit_authorization.auth1 /subscriptions/00000000-0
```

» azurerm_express_route_circuit_peering

Manages an ExpressRoute Circuit Peering.

» Example Usage (Creating a Microsoft Peering)

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

resource "azurerm_express_route_circuit" "test" {
  name                  = "expressRoute1"
  resource_group_name   = "${azurerm_resource_group.test.name}"
```

```
  location                 = "${azurerm_resource_group.test.location}"
  service_provider_name    = "Equinix"
  peering_location         = "Silicon Valley"
  bandwidth_in_mbps        = 50
  sku {
    tier   = "Standard"
    family = "MeteredData"
  }
  allow_classic_operations = false

  tags {
    environment = "Production"
  }
}

resource "azurerm_express_route_circuit_peering" "test" {
  peering_type                  = "MicrosoftPeering"
  express_route_circuit_name    = "${azurerm_express_route_circuit.test.name}"
  resource_group_name           = "${azurerm_resource_group.test.name}"
  peer_asn                      = 100
  primary_peer_address_prefix   = "123.0.0.0/30"
  secondary_peer_address_prefix = "123.0.0.4/30"
  vlan_id                       = 300

  microsoft_peering_config {
    advertised_public_prefixes = ["123.1.0.0/24"]
  }
}
```

» Argument Reference

The following arguments are supported:

- `peering_type` - (Required) The type of the ExpressRoute Circuit Peering. Acceptable values include `AzurePrivatePeering`, `AzurePublicPeering` and `MicrosoftPeering`. Changing this forces a new resource to be created.

NOTE: only one Peering of each Type can be created. Attempting to create multiple peerings of the same type will overwrite the original peering.

- `express_route_circuit_name` - (Required) The name of the Express-Route Circuit in which to create the Peering.

- `resource_group_name` - (Required) The name of the resource group in which to create the Express Route Circuit Peering. Changing this forces a new resource to be created.

300

- `primary_peer_address_prefix` - (Optional) A `/30` subnet for the primary link.

- `secondary_peer_address_prefix` - (Optional) A `/30` subnet for the secondary link.

- `vlan_id` - (Optional) A valid VLAN ID to establish this peering on.

- `shared_key` - (Optional) The shared key. Can be a maximum of 25 characters.

- `peer_asn` - (Optional) The Either a 16-bit or a 32-bit ASN. Can either be public or private..

- `microsoft_peering_config` - (Optional) A `microsoft_peering_config` block as defined below. Required when `peering_type` is set to `MicrosoftPeering`.

A `microsoft_peering_config` block contains:

- `advertised_public_prefixes` - (Required) A list of Advertised Public Prefixes

» Attributes Reference

The following attributes are exported:

- `id` - The Resource ID of the ExpressRoute Circuit Peering.

- `azure_asn` - The ASN used by Azure.

- `primary_azure_port` - The Primary Port used by Azure for this Peering.

- `secondary_azure_port` - The Secondary Port used by Azure for this Peering.

» Import

ExpressRoute Circuit Peerings can be imported using the `resource id`, e.g.

```
terraform import azurerm_express_route_circuit_peering.peering1 /subscriptions/00000000-0000
```

» azurerm_local_network_gateway

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

» Example Usage

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

resource "azurerm_local_network_gateway" "home" {
  name                = "backHome"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  gateway_address     = "12.13.14.15"
  address_space       = ["10.0.0.0/16"]
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the local network gateway. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the local network gateway.

- `location` - (Required) The location/region where the local network gateway is created. Changing this forces a new resource to be created.

- `gateway_address` - (Required) The IP address of the gateway to which to connect.

- `address_space` - (Required) The list of string CIDRs representing the address spaces the gateway exposes.

- `bgp_settings` - (Optional) A `bgp_settings` block as defined below containing the Local Network Gateway's BGP speaker settings.

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

`bgp_settings` supports the following:

- `asn` - (Required) The BGP speaker's ASN.

- `bgp_peering_address` - (Required) The BGP peering address and BGP identifier of this BGP speaker.

- `peer_weight` - (Optional) The weight added to routes learned from this BGP speaker.

» Attributes Reference

The following attributes are exported:

- `id` - The local network gateway unique ID within Azure.

» Import

Local Network Gateways can be imported using the `resource id`, e.g.

```
terraform import azurerm_local_network_gateway.lng1 /subscriptions/00000000-0000-0000-0000-0
```

» azurerm_network_interface

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

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_virtual_network" "test" {
  name                = "acceptanceTestVirtualNetwork1"
  address_space       = ["10.0.0.0/16"]
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_subnet" "test" {
  name                 = "testsubnet"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix       = "10.0.2.0/24"
}

resource "azurerm_network_interface" "test" {
  name                = "acceptanceTestNetworkInterface1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
```

```
ip_configuration {
  name                          = "testconfiguration1"
  subnet_id                     = "${azurerm_subnet.test.id}"
  private_ip_address_allocation = "dynamic"
}

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

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the network interface. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the network interface. Changing this forces a new resource to be created.

- `location` - (Required) The location/region where the network interface is created. Changing this forces a new resource to be created.

- `network_security_group_id` - (Optional) The ID of the Network Security Group to associate with the network interface.

- `internal_dns_name_label` - (Optional) Relative DNS name for this NIC used for internal communications between VMs in the same VNet

- `enable_ip_forwarding` - (Optional) Enables IP Forwarding on the NIC. Defaults to `false`.

- `enable_accelerated_networking` - (Optional) Enables Azure Accelerated Networking using SR-IOV. Only certain VM instance sizes are supported. Refer to Create a Virtual Machine with Accelerated Networking. Defaults to `false`.

NOTE: when using Accelerated Networking in an Availability Set - the Availability Set must be deployed on an Accelerated Networking enabled cluster.

- `dns_servers` - (Optional) List of DNS servers IP addresses to use for this NIC, overrides the VNet-level server list

- `ip_configuration` - (Required) One or more `ip_configuration` associated with this NIC as documented below.

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

The `ip_configuration` block supports:

- `name` - (Required) User-defined name of the IP.
- `subnet_id` - (Required) Reference to a subnet in which this NIC has been created.
- `private_ip_address` - (Optional) Static IP Address.
- `private_ip_address_allocation` - (Required) Defines how a private IP address is assigned. Options are Static or Dynamic.
- `public_ip_address_id` - (Optional) Reference to a Public IP Address to associate with this NIC
- `application_gateway_backend_address_pools_ids` - (Optional) List of Application Gateway Backend Address Pool IDs references to which this NIC belongs
- `load_balancer_backend_address_pools_ids` - (Optional) List of Load Balancer Backend Address Pool IDs references to which this NIC belongs
- `load_balancer_inbound_nat_rules_ids` - (Optional) List of Load Balancer Inbound Nat Rules IDs involving this NIC
- `application_security_group_ids` - (Optional) List of Application Security Group IDs which should be attached to this NIC
- `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.

```
terraform import azurerm_network_interface.test /subscriptions/00000000-0000-0000-0000-00000
```

» azurerm__network__security__group

Manages a network security group that contains a list of network security rules. Network security groups enable inbound or outbound traffic to be enabled or denied.

NOTE on Network Security Groups and Network Security Rules: Terraform currently provides both a standalone Network Security Rule resource, and allows for Network Security Rules to be defined in-line within the Network Security Group resource. At this time you cannot use a Network Security Group with in-line Network Security Rules in conjunction with any Network Security Rule resources. Doing so will cause a conflict of rule settings and will overwrite rules.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_network_security_group" "test" {
  name                = "acceptanceTestSecurityGroup1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  security_rule {
    name                       = "test123"
    priority                   = 100
    direction                  = "Inbound"
    access                     = "Allow"
    protocol                   = "Tcp"
    source_port_range          = "*"
    destination_port_range     = "*"
    source_address_prefix      = "*"
    destination_address_prefix = "*"
  }

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the network security group. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the network security group. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `security_rule` - (Optional) One or more `security_rule` blocks as defined below.

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

The `security_rule` block supports:

- `name` - (Required) The name of the security rule.

- `description` - (Optional) A description for this rule. Restricted to 140 characters.

- `protocol` - (Required) Network protocol this rule applies to. Can be `Tcp`, `Udp` or `*` to match both.

- `source_port_range` - (Optional) Source Port or Range. Integer or range between `0` and `65535` or `*` to match any. This is required if `source_port_ranges` is not specified.

- `source_port_ranges` - (Optional) List of source ports or port ranges. This is required if `source_port_range` is not specified.

- `destination_port_range` - (Optional) Destination Port or Range. Integer or range between `0` and `65535` or `*` to match any. This is required if `destination_port_ranges` is not specified.

- `destination_port_ranges` - (Optional) List of destination ports or port ranges. This is required if `destination_port_range` is not specified.

- `source_address_prefix` - (Optional) CIDR or source IP range or * to match any IP. Tags such as 'VirtualNetwork', 'AzureLoadBalancer' and 'Internet' can also be used. This is required if `source_address_prefixes` is not specified.

- `source_address_prefixes` - (Optional) List of source address prefixes. Tags may not be used. This is required if `source_address_prefix` is not specified.

- `source_application_security_group_ids` - (Optional) A List of source Application Security Group ID's

- `destination_address_prefix` - (Optional) CIDR or destination IP range or * to match any IP. Tags such as 'VirtualNetwork', 'AzureLoadBalancer' and 'Internet' can also be used. This is required if `destination_address_prefixes` is not specified.

- `destination_address_prefixes` - (Optional) List of destination address prefixes. Tags may not be used. This is required if `destination_address_prefix` is not specified.

- `destination_application_security_group_ids` - (Optional) A List of destination Application Security Group ID's

- `access` - (Required) Specifies whether network traffic is allowed or denied. Possible values are `Allow` and `Deny`.

- `priority` - (Required) Specifies the priority of the rule. The value can be between 100 and 4096. The priority number must be unique for each rule in the collection. The lower the priority number, the higher the priority of the rule.

- `direction` - (Required) The direction specifies if rule will be evaluated on incoming or outgoing traffic. Possible values are `Inbound` and `Outbound`.

» Attributes Reference

The following attributes are exported:

- `id` - The Network Security Group ID.

» Import

Network Security Groups can be imported using the `resource id`, e.g.

```
terraform import azurerm_network_security_group.group1 /subscriptions/00000000-0000-0000-000
```

» azurerm_network_security_rule

Manages a Network Security Rule.

NOTE on Network Security Groups and Network Security Rules: Terraform currently provides both a standalone Network Security Rule resource, and allows for Network Security Rules to be defined in-line within the Network Security Group resource. At this time you cannot use a Network Security Group with in-line Network Security Rules in conjunction with any Network Security

Rule resources. Doing so will cause a conflict of rule settings and will overwrite rules.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_network_security_group" "test" {
  name                = "acceptanceTestSecurityGroup1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_network_security_rule" "test" {
  name                        = "test123"
  priority                    = 100
  direction                   = "Outbound"
  access                      = "Allow"
  protocol                    = "Tcp"
  source_port_range           = "*"
  destination_port_range      = "*"
  source_address_prefix       = "*"
  destination_address_prefix  = "*"
  resource_group_name         = "${azurerm_resource_group.test.name}"
  network_security_group_name = "${azurerm_network_security_group.test.name}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the security rule. This needs to be unique across all Rules in the Network Security Group. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the Network Security Rule. Changing this forces a new resource to be created.

- `network_security_group_name` - (Required) The name of the Network Security Group that we want to attach the rule to. Changing this forces a new resource to be created.

- `description` - (Optional) A description for this rule. Restricted to 140 characters.

- `protocol` - (Required) Network protocol this rule applies to. Possible values include `Tcp`, `Udp` or `*` (which matches both).

- `source_port_range` - (Optional) Source Port or Range. Integer or range between `0` and `65535` or `*` to match any. This is required if `source_port_ranges` is not specified.

- `source_port_ranges` - (Optional) List of source ports or port ranges. This is required if `source_port_range` is not specified.

- `destination_port_range` - (Optional) Destination Port or Range. Integer or range between `0` and `65535` or `*` to match any. This is required if `destination_port_ranges` is not specified.

- `destination_port_ranges` - (Optional) List of destination ports or port ranges. This is required if `destination_port_range` is not specified.

- `source_address_prefix` - (Optional) CIDR or source IP range or * to match any IP. Tags such as 'VirtualNetwork', 'AzureLoadBalancer' and 'Internet' can also be used. This is required if `source_address_prefixes` is not specified.

- `source_address_prefixes` - (Optional) List of source address prefixes. Tags may not be used. This is required if `source_address_prefix` is not specified.

- `source_application_security_group_ids` - (Optional) A List of source Application Security Group ID's

- `destination_address_prefix` - (Optional) CIDR or destination IP range or * to match any IP. Tags such as 'VirtualNetwork', 'AzureLoadBalancer' and 'Internet' can also be used. This is required if `destination_address_prefixes` is not specified.

- `destination_address_prefixes` - (Optional) List of destination address prefixes. Tags may not be used. This is required if `destination_address_prefix` is not specified.

- `destination_application_security_group_ids` - (Optional) A List of destination Application Security Group ID's

- `access` - (Required) Specifies whether network traffic is allowed or denied. Possible values are `Allow` and `Deny`.

- `priority` - (Required) Specifies the priority of the rule. The value can be between 100 and 4096. The priority number must be unique for each rule in the collection. The lower the priority number, the higher the priority of the rule.

- **direction** - (Required) The direction specifies if rule will be evaluated on incoming or outgoing traffic. Possible values are `Inbound` and `Outbound`.

» **Attributes Reference**

The following attributes are exported:

- **id** - The Network Security Rule ID.

» **Import**

Network Security Rules can be imported using the `resource id`, e.g.

```
terraform import azurerm_network_security_rule.rule1 /subscriptions/00000000-0000-0000-0000-
```

» **azurerm_network_watcher**

Manages a Network Watcher.

» **Example Usage**

```
resource "azurerm_resource_group" "test" {
  name     = "production-nwwatcher"
  location = "West US"
}

resource "azurerm_network_watcher" "test" {
  name                = "production-nwwatcher"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}
```

» **Argument Reference**

The following arguments are supported:

- **name** - (Required) The name of the Network Watcher. Changing this forces a new resource to be created.

- **resource_group_name** - (Required) The name of the resource group in which to create the Network Watcher. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

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

» Attributes Reference

The following attributes are exported:

- `id` - The Network Watcher ID.

» Import

Network Watchers can be imported using the `resource id`, e.g.

```
terraform import azurerm_network_watcher.watcher1 /subscriptions/00000000-0000-0000-0000-000
```

» azurerm_packet_capture

Configures Packet Capturing against a Virtual Machine using a Network Watcher.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name = "packet-capture-rg"
  location = "West Europe"
}

resource "azurerm_network_watcher" "test" {
  name                = "network-watcher"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_virtual_network" "test" {
  name = "production-network"
  address_space = ["10.0.0.0/16"]
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_subnet" "test" {
```

312

```
  name = "internal"
  resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.2.0/24"
}

resource "azurerm_network_interface" "test" {
  name = "pctest-nic"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  ip_configuration {
    name = "testconfiguration1"
    subnet_id = "${azurerm_subnet.test.id}"
    private_ip_address_allocation = "dynamic"
  }
}

resource "azurerm_virtual_machine" "test" {
  name = "pctest-vm"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  network_interface_ids = ["${azurerm_network_interface.test.id}"]
  vm_size = "Standard_F2"

  storage_image_reference {
    publisher = "Canonical"
    offer = "UbuntuServer"
    sku = "16.04-LTS"
    version = "latest"
  }

  storage_os_disk {
    name = "osdisk"
    caching = "ReadWrite"
    create_option = "FromImage"
    managed_disk_type = "Standard_LRS"
  }

  os_profile {
    computer_name = "pctest-vm"
    admin_username = "testadmin"
    admin_password = "Password1234!"
  }

  os_profile_linux_config {
```

```
    disable_password_authentication = false
  }
}

resource "azurerm_virtual_machine_extension" "test" {
  name                      = "network-watcher"
  location                  = "${azurerm_resource_group.test.location}"
  resource_group_name       = "${azurerm_resource_group.test.name}"
  virtual_machine_name      = "${azurerm_virtual_machine.test.name}"
  publisher                 = "Microsoft.Azure.NetworkWatcher"
  type                      = "NetworkWatcherAgentLinux"
  type_handler_version      = "1.4"
  auto_upgrade_minor_version = true
}


resource "azurerm_storage_account" "test" {
  name = "pctestsa"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location = "${azurerm_resource_group.test.location}"
  account_tier = "Standard"
  account_replication_type = "LRS"
}

resource "azurerm_packet_capture" "test" {
  name                 = "pctestcapture"
  network_watcher_name = "${azurerm_network_watcher.test.name}"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  target_resource_id   = "${azurerm_virtual_machine.test.id}"

  storage_location {
    storage_account_id = "${azurerm_storage_account.test.id}"
  }

  depends_on = ["azurerm_virtual_machine_extension.test"]
}
```

NOTE: This Resource requires that the Network Watcher Virtual Machine Extension is installed on the Virtual Machine before capturing can be enabled which can be installed via the `azurerm_virtual_machine_extension` resource.

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name to use for this Packet Capture. Changing

this forces a new resource to be created.

- `network_watcher_name` - (Required) The name of the Network Watcher. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the Network Watcher exists. Changing this forces a new resource to be created.

- `target_resource_id` - (Required) The ID of the Resource to capture packets from. Changing this forces a new resource to be created.

NOTE: Currently only Virtual Machines ID's are supported.

- `maximum_bytes_per_packet` - (Optional) The number of bytes captured per packet. The remaining bytes are truncated. Defaults to `0` (Entire Packet Captured). Changing this forces a new resource to be created.

- `maximum_bytes_per_session` - (Optional) Maximum size of the capture in Bytes. Defaults to `1073741824` (1GB). Changing this forces a new resource to be created.

- `maximum_capture_duration` - (Optional) The maximum duration of the capture session in seconds. Defaults to `18000` (5 hours). Changing this forces a new resource to be created.

- `storage_location` - (Required) A `storage_location` block as defined below. Changing this forces a new resource to be created.

- `filter` - (Optional) One or more `filter` blocks as defined below. Changing this forces a new resource to be created.

A `storage_location` block contains:

- `file_path` - (Optional) A valid local path on the targeting VM. Must include the name of the capture file (*.cap). For linux virtual machine it must start with `/var/captures`.

- `storage_account_id` - (Optional) The ID of the storage account to save the packet capture session

NOTE: At least one of `file_path` or `storage_account_id` must be specified.

A `filter` block contains:

- `local_ip_address` - (Optional) The local IP Address to be filtered on. Notation: "127.0.0.1" for single address entry. "127.0.0.1-127.0.0.255" for range. "127.0.0.1;127.0.0.5" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported. Changing this forces a new resource to be created.

315

- **local_port** - (Optional) The local port to be filtered on. Notation: "80" for single port entry."80-85" for range. "80;443;" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported. Changing this forces a new resource to be created.

- **protocol** - (Required) The Protocol to be filtered on. Possible values include `Any`, `TCP` and `UDP`. Changing this forces a new resource to be created.

- **remote_ip_address** - (Optional) The remote IP Address to be filtered on. Notation: "127.0.0.1" for single address entry. "127.0.0.1-127.0.0.255" for range. "127.0.0.1;127.0.0.5;" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported.. Changing this forces a new resource to be created.

- **remote_port** - (Optional) The remote port to be filtered on. Notation: "80" for single port entry."80-85" for range. "80;443;" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported. Changing this forces a new resource to be created.

» Attributes Reference

The following attributes are exported:

- **id** - The Packet Capture ID.

- **storage_location** - (Required) A `storage_location` block as defined below.

A `storage_location` block contains:

- **storage_path** - The URI of the storage path to save the packet capture.

» Import

Packet Captures can be imported using the `resource id`, e.g.

```
terraform import azurerm_packet_capture.capture1 /subscriptions/00000000-0000-0000-0000-0000
```

» azurerm_public_ip

Create a Public IP Address.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "resourceGroup1"
  location = "West US"
}

resource "azurerm_public_ip" "test" {
  name                         = "acceptanceTestPublicIp1"
  location                     = "West US"
  resource_group_name          = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "static"

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Public IP resource . Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the public ip.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `sku` - (Optional) The SKU of the Public IP. Accepted values are `Basic` and `Standard`. Defaults to `Basic`.

Note Public IP Standard SKUs require `public_ip_address_allocation` to be set to `static`.

Note: The `Standard` SKU is currently in Public Preview on an opt-in basis. More information, including how you can register for the Preview, and which regions `Standard` SKU's are available in are available here

- `public_ip_address_allocation` - (Required) Defines whether the IP address is static or dynamic. Options are Static or Dynamic.

Note `Dynamic` Public IP Addresses aren't allocated until they're assigned to a resource (such as a Virtual Machine or a Load Balancer) by design within Azure - more information is available below.

- `idle_timeout_in_minutes` - (Optional) Specifies the timeout for the TCP idle connection. The value can be set between 4 and 30 minutes.

- `domain_name_label` - (Optional) Label for the Domain Name. Will be used to make up the FQDN. If a domain name label is specified, an A DNS record is created for the public IP in the Microsoft Azure DNS system.

- `reverse_fqdn` - (Optional) A fully qualified domain name that resolves to this public IP address. If the reverseFqdn is specified, then a PTR DNS record is created pointing from the IP address in the in-addr.arpa domain to the reverse FQDN.

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

- `zones` - (Optional) A collection containing the availability zone to allocate the Public IP in.

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

» Attributes Reference

The following attributes are exported:

- `id` - The Public IP ID.
- `ip_address` - The IP address value that was allocated.

Note `Dynamic` Public IP Addresses aren't allocated until they're attached to a device (e.g. a Virtual Machine/Load Balancer). Instead you can obtain the IP Address once the the Public IP has been assigned via the `azurerm_public_ip` Data Source.

- `fqdn` - Fully qualified domain name of the A DNS record associated with the public IP. This is the concatenation of the domainNameLabel and the regionalized DNS zone

» Import

Public IPs can be imported using the `resource id`, e.g.

```
terraform import azurerm_public_ip.myPublicIp /subscriptions/00000000-0000-0000-0000-000000000
```

» azurerm_route

Manages a Route within a Route Table.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_route_table" "test" {
  name                = "acceptanceTestRouteTable1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_route" "test" {
  name                = "acceptanceTestRoute1"
  resource_group_name = "${azurerm_resource_group.test.name}"
  route_table_name    = "${azurerm_route_table.test.name}"
  address_prefix      = "10.1.0.0/16"
  next_hop_type       = "vnetlocal"
}
```

» Argument Reference

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.

```
terraform import azurerm_route.testRoute /subscriptions/00000000-0000-0000-0000-000000000000
```

» azurerm_route_table

Manages a Route Table

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_route_table" "test" {
  name                = "acceptanceTestSecurityGroup1"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

disable_bgp_route_propagation = false

  route {
    name           = "route1"
    address_prefix = "10.1.0.0/16"
    next_hop_type  = "vnetlocal"
  }

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

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.

- `disable_bgp_route_propagation` - (Optional) Boolean flag which controls propagation of routes learned by BGP on that route table. True means disable.

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

The `route` block supports:

- `name` - (Required) The name of the route.

- `address_prefix` - (Required) The destination CIDR to which the route applies, such as 10.1.0.0/16

- `next_hop_type` - (Required) The type of Azure hop the packet should be sent to. Possible values are `VirtualNetworkGateway`, `VnetLocal`, `Internet`, `VirtualAppliance` and `None`.

- `next_hop_in_ip_address` - (Optional) Contains the IP address packets should be forwarded to. Next hop values are only allowed in routes where the next hop type is `VirtualAppliance`.

» Attributes Reference

The following attributes are exported:

- `id` - The Route Table ID.
- `subnets` - The collection of Subnets associated with this route table.

» Import

Route Tables can be imported using the `resource id`, e.g.

```
terraform import azurerm_route_table.test /subscriptions/00000000-0000-0000-0000-00000000000
```

» azurerm_subnet

Manages a subnet. Subnets represent network segments within the IP space defined by the virtual network.

NOTE on Virtual Networks and Subnet's: Terraform currently provides both a standalone Subnet resource, and allows for Subnets to be defined in-line within the Virtual Network resource. At this time you cannot use a Virtual Network with in-line Subnets in conjunction with any Subnet resources. Doing so will cause a conflict of Subnet configurations and will overwrite Subnet's.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_virtual_network" "test" {
  name                = "acceptanceTestVirtualNetwork1"
  address_space       = ["10.0.0.0/16"]
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
}

resource "azurerm_subnet" "test" {
  name                 = "testsubnet"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix       = "10.0.1.0/24"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the subnet. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the subnet. Changing this forces a new resource to be created.

- `virtual_network_name` - (Required) The name of the virtual network to which to attach the subnet. Changing this forces a new resource to be created.

- `address_prefix` - (Required) The address prefix to use for the subnet.

- `network_security_group_id` - (Optional) The ID of the Network Security Group to associate with the subnet.

- `route_table_id` - (Optional) The ID of the Route Table to associate with the subnet.

- `service_endpoints` - (Optional) The list of Service endpoints to associate with the subnet. Possible values include: `Microsoft.Storage`, `Microsoft.Sql`.

» 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.

```
terraform import azurerm_subnet.testSubnet /subscriptions/00000000-0000-0000-0000-0000000000
```

» azurerm_traffic_manager_endpoint

Manages a Traffic Manager Endpoint.

» Example Usage

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

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

resource "azurerm_traffic_manager_profile" "test" {
  name                = "${random_id.server.hex}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  traffic_routing_method = "Weighted"

  dns_config {
    relative_name = "${random_id.server.hex}"
    ttl           = 100
  }

  monitor_config {
    protocol = "http"
    port     = 80
    path     = "/"
  }

  tags {
    environment = "Production"
  }
}

resource "azurerm_traffic_manager_endpoint" "test" {
  name                = "${random_id.server.hex}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  profile_name        = "${azurerm_traffic_manager_profile.test.name}"
  target              = "terraform.io"
  type                = "externalEndpoints"
  weight              = 100
}
```

» Argument Reference

The following arguments are supported:

- **name** - (Required) The name of the Traffic Manager endpoint. Changing this forces a new resource to be created.

- **resource_group_name** - (Required) The name of the resource group in which to create the Traffic Manager endpoint.

- `profile_name` - (Required) The name of the Traffic Manager Profile to attach create the Traffic Manager endpoint.

- `endpoint_status` - (Optional) The status of the Endpoint, can be set to either `Enabled` or `Disabled`. Defaults to `Enabled`.

- `type` - (Required) The Endpoint type, must be one of:

  - `azureEndpoints`
  - `externalEndpoints`
  - `nestedEndpoints`

- `target` - (Optional) The FQDN DNS name of the target. This argument must be provided for an endpoint of type `externalEndpoints`, for other types it will be computed.

- `target_resource_id` - (Optional) The resource id of an Azure resource to target. This argument must be provided for an endpoint of type `azureEndpoints` or `nestedEndpoints`.

- `weight` - (Optional) Specifies how much traffic should be distributed to this endpoint, this must be specified for Profiles using the `Weighted` traffic routing method. Supports values between 1 and 1000.

- `priority` - (Optional) Specifies the priority of this Endpoint, this must be specified for Profiles using the `Priority` traffic routing method. Supports values between 1 and 1000, with no Endpoints sharing the same value. If omitted the value will be computed in order of creation.

- `endpoint_location` - (Optional) Specifies the Azure location of the Endpoint, this must be specified for Profiles using the `Performance` routing method if the Endpoint is of either type `nestedEndpoints` or `externalEndpoints`. For Endpoints of type `azureEndpoints` the value will be taken from the location of the Azure target resource.

- `min_child_endpoints` - (Optional) This argument specifies the minimum number of endpoints that must be 'online' in the child profile in order for the parent profile to direct traffic to any of the endpoints in that child profile. This argument only applies to Endpoints of type `nestedEndpoints` and defaults to `1`.

- `geo_mappings` - (Optional) A list of Geographic Regions used to distribute traffic, such as `WORLD`, `UK` or `DE`. The same location can't be specified in two endpoints. See the Geographic Hierarchies documentation for more information.

» Attributes Reference

The following attributes are exported:

- `id` - The Traffic Manager Endpoint id.

» Import

Traffic Manager Endpoints can be imported using the `resource id`, e.g.

```
terraform import azurerm_traffic_manager_endpoint.testEndpoints /subscriptions/00000000-0000
```

» azurerm_traffic_manager_profile

Manages a Traffic Manager Profile to which multiple endpoints can be attached.

» Example Usage

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

resource "azurerm_resource_group" "test" {
  name     = "trafficmanagerProfile"
  location = "West US"
}

resource "azurerm_traffic_manager_profile" "test" {
  name                   = "${random_id.server.hex}"
  resource_group_name    = "${azurerm_resource_group.test.name}"
  traffic_routing_method = "Weighted"

  dns_config {
    relative_name = "${random_id.server.hex}"
    ttl           = 100
  }

  monitor_config {
    protocol = "http"
    port     = 80
    path     = "/"
  }

  tags {
```

```
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the virtual network. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the virtual network.

- `profile_status` - (Optional) The status of the profile, can be set to either `Enabled` or `Disabled`. Defaults to `Enabled`.

- `traffic_routing_method` - (Required) Specifies the algorithm used to route traffic, possible values are:

  - `Geographic` - Traffic is routed based on Geographic regions specified in the Endpoint.
  - `Performance` - Traffic is routed via the User's closest Endpoint
  - `Weighted` - Traffic is spread across Endpoints proportional to their `weight` value.
  - `Priority` - Traffic is routed to the Endpoint with the lowest `priority` value.

- `dns_config` - (Required) This block specifies the DNS configuration of the Profile, it supports the fields documented below.

- `monitor_config` - (Required) This block specifies the Endpoint monitoring configuration for the Profile, it supports the fields documented below.

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

The `dns_config` block supports:

- `relative_name` - (Required) The relative domain name, this is combined with the domain name used by Traffic Manager to form the FQDN which is exported as documented below. Changing this forces a new resource to be created.

- `ttl` - (Required) The TTL value of the Profile used by Local DNS resolvers and clients.

The `monitor_config` block supports:

- `protocol` - (Required) The protocol used by the monitoring checks, supported values are `HTTP`, `HTTPS` and `TCP`.

- `port` - (Required) The port number used by the monitoring checks.

327

- `path` - (Optional) The path used by the monitoring checks. Required when `protocol` is set to `HTTP` or `HTTPS` - cannot be set when `protocol` is set to `TCP`.

» Attributes Reference

The following attributes are exported:

- `id` - The Traffic Manager Profile id.
- `fqdn` - The FQDN of the created Profile.

» Notes

The Traffic Manager is created with the location `global`.

» Import

Traffic Manager Profiles can be imported using the **resource id**, e.g.

```
terraform import azurerm_traffic_manager_profile.testProfile /subscriptions/00000000-0000-00
```

» azurerm_virtual_network

Manages a virtual network including any configured subnets. Each subnet can optionally be configured with a security group to be associated with the subnet.

NOTE on Virtual Networks and Subnet's: Terraform currently provides both a standalone Subnet resource, and allows for Subnets to be defined in-line within the Virtual Network resource. At this time you cannot use a Virtual Network with in-line Subnets in conjunction with any Subnet resources. Doing so will cause a conflict of Subnet configurations and will overwrite Subnet's.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_network_security_group" "test" {
  name                = "acceptanceTestSecurityGroup1"
  location            = "${azurerm_resource_group.test.location}"
```

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

resource "azurerm_virtual_network" "test" {
  name                = "virtualNetwork1"
  resource_group_name = "${azurerm_resource_group.test.name}"
  address_space       = ["10.0.0.0/16"]
  location            = "West US"
  dns_servers         = ["10.0.0.4", "10.0.0.5"]

  subnet {
    name           = "subnet1"
    address_prefix = "10.0.1.0/24"
  }

  subnet {
    name           = "subnet2"
    address_prefix = "10.0.2.0/24"
  }

  subnet {
    name           = "subnet3"
    address_prefix = "10.0.3.0/24"
    security_group = "${azurerm_network_security_group.test.id}"
  }

  tags {
    environment = "Production"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the virtual network. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the virtual network.

- `address_space` - (Required) The address space that is used the virtual network. You can supply more than one address space. Changing this forces a new resource to be created.

- `location` - (Required) The location/region where the virtual network is created. Changing this forces a new resource to be created.

- `dns_servers` - (Optional) List of IP addresses of DNS servers

- `subnet` - (Optional) Can be specified multiple times to define multiple subnets. Each `subnet` block supports fields documented below.

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

The `subnet` block supports:

- `name` - (Required) The name of the subnet.

- `address_prefix` - (Required) The address prefix to use for the subnet.

- `security_group` - (Optional) The Network Security Group to associate with the subnet. (Referenced by `id`, ie. `azurerm_network_security_group.test.id`)

» Attributes Reference

The following attributes are exported:

- `id` - The virtual NetworkConfiguration ID.

- `name` - The name of the virtual network.

- `resource_group_name` - The name of the resource group in which to create the virtual network.

- `location` - The location/region where the virtual network is created

- `address_space` - The address space that is used the virtual network.

» Import

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

```
terraform import azurerm_virtual_network.testNetwork /subscriptions/00000000-0000-0000-0000-
```

» azurerm_virtual_network_gateway

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

Note: Please be aware that provisioning a Virtual Network Gateway takes a long time (between 30 minutes and 1 hour)

» Example Usage

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

resource "azurerm_virtual_network" "test" {
  name = "test"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  address_space = ["10.0.0.0/16"]
}

resource "azurerm_subnet" "test" {
  name = "GatewaySubnet"
  resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.1.0/24"
}

resource "azurerm_public_ip" "test" {
  name = "test"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "Dynamic"
}

resource "azurerm_virtual_network_gateway" "test" {
  name = "test"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  type = "Vpn"
  vpn_type = "RouteBased"

  active_active = false
  enable_bgp = false
    sku = "Basic"

  ip_configuration {
    name = "vnetGatewayConfig"
    public_ip_address_id = "${azurerm_public_ip.test.id}"
    private_ip_address_allocation = "Dynamic"
    subnet_id = "${azurerm_subnet.test.id}"
```

```
  }

  vpn_client_configuration {
    address_space = [ "10.2.0.0/24" ]

    root_certificate {
      name = "DigiCert-Federated-ID-Root-CA"
      public_cert_data = <<EOF
```

```
MIIDuzCCAqOgAwIBAgIQCHTZWCM+IlfFIRXIvyKSrjANBgkqhkiG9w0BAQsFADBn
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3
d3cuZGlnaWNlcnQuY29tMSYwJAYDVQQDEx1EaWdpQ2VydCBGZWRlcmF0ZWQgSUQg
Um9vdCBDQTAeFw0xMzAxMTUxMjAwMDBaFw0zMzAxMTUxMjAwMDBaMGcxCzAJBgNV
BAYTAlVTMRUwEwYDVQQKEwxEaWdpQ2VydCBJbmMxGTAXBgNVBAsTEHd3dy5kaWdp
Y2VydC5jb20xJjAkBgNVBAMTHURpZ2lDZXJ0IEZlZGVyYXRlZCBJRCBSb290IENB
MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAvAEB4pcCqnNNOWE6Ur5j
QPUH+1y1F9KdHTRSza6k5iDlXq1kGS1qAkuKtw9JsiNRrjltmFnzMZRBbX8Tlfl8
zAhBmb6dDduDGED01kBsTkgywYPxXVTKec0WxYEEF0oMn4wSYNl0lt2eJAKHXjNf
GTwiibdP8CUR2ghSM2sUTI8Nt1Omfc4SMHhGhYD64uJMbX98THQ/4LMGuYegou+d
GTiahfHtjn7AboSEknwAMJHCh5RlYZZ6B1O4QbKJ+34Q0eKgnI3X6Vc9u0zf6DH8
Dk+4zQDYRRTqTnVO3VT8jzqDlCRuNtq6YvryOWN74/dq8LQhUnXHvFyrsdMaE1X2
DwIDAQABo2MwYTAPBgNVHRMBAf8EBTADAQH/MA4GA1UdDwEB/wQEAwIBhjAdBgNV
HQ4EFgQUGRdkFnbGt1EWjKwbUne+5OaZvRYwHwYDVR0jBBgwFoAUGRdkFnbGt1EW
jKwbUne+5OaZvRYwDQYJKoZIhvcNAQELBQADggEBAHcqsHkrjpESqfuVTRiptJfP
9JbdtWqRTmOf6uJi2c8YVqI6XlKXsD8C1dUUaaHKLUJzvKiazibVuBwMIT84AyqR
QELn3e0BtgEymEygMU569b01ZPxoFSnNXc7qDZBDef8WfqAV/sxkTi8L9BkmFYfL
uGLOhRJOFprPdoDIUBB+tmCl3oDcBy3vnUeOEioz8zAkprcb3GHwHAK+vHmmfgcn
WsfMLH4JCLa/tRYL+Rw/N3ybCkDp00s0WUZ+AoDywSl0Q/ZEnNY0MsFiw6LyIdbq
M/s/1JRtO3bDSzD9TazRVzn2oBqzSa8VgIo5C1nOnoAKJTlsClJKvIhnRlaLQqk=
```

```
EOF
    }

    revoked_certificate {
      name = "Verizon-Global-Root-CA"
      thumbprint = "912198EEF23DCAC40939312FEE97DD560BAE49B1"
    }
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the Virtual Network Gateway. Changing the name forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in

which to create the Virtual Network Gateway. Changing the resource group name forces a new resource to be created.

- `location` - (Required) The location/region where the Virtual Network Gateway is located. Changing the location/region forces a new resource to be created.

- `type` - (Required) The type of the Virtual Network Gateway. Valid options are `Vpn` or `ExpressRoute`. Changing the type forces a new resource to be created.

- `vpn_type` - (Optional) The routing type of the Virtual Network Gateway. Valid options are `RouteBased` or `PolicyBased`. Defaults to `RouteBased`.

- `enable_bgp` - (Optional) If `true`, BGP (Border Gateway Protocol) will be enabled for this Virtual Network Gateway. Defaults to `false`.

- `active_active` - (Optional) If `true`, an active-active Virtual Network Gateway will be created. An active-active gateway requires a `HighPerformance` or an `UltraPerformance` sku. If `false`, an active-standby gateway will be created. Defaults to `false`.

- `default_local_network_gateway_id` - (Optional) The ID of the local network gateway through which outbound Internet traffic from the virtual network in which the gateway is created will be routed (*forced tunneling*). Refer to the Azure documentation on forced tunneling. If not specified, forced tunneling is disabled.

- `sku` - (Required) Configuration of the size and capacity of the virtual network gateway. Valid options are `Basic`, `Standard`, `HighPerformance`, `UltraPerformance`, `VpnGw1`, `VpnGw2` and `VpnGw3` and depend on the `type` and `vpn_type` arguments. A `PolicyBased` gateway only supports the `Basic` sku. Further, the `UltraPerformance` sku is only supported by an `ExpressRoute` gateway.

- `ip_configuration` (Required) One or two `ip_configuration` blocks documented below. An active-standby gateway requires exactly one `ip_configuration` block whereas an active-active gateway requires exactly two `ip_configuration` blocks.

- `vpn_client_configuration` (Optional) A `vpn_client_configuration` block which is documented below. In this block the Virtual Network Gateway can be configured to accept IPSec point-to-site connections.

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

The `ip_configuration` block supports:

- `name` - (Optional) A user-defined name of the IP configuration. Defaults to `vnetGatewayConfig`.

- `private_ip_address_allocation` - (Optional) Defines how the private IP address of the gateways virtual interface is assigned. Valid options are `Static` or `Dynamic`. Defaults to `Dynamic`.

- `subnet_id` - (Required) The ID of the gateway subnet of a virtual network in which the virtual network gateway will be created. It is mandatory that the associated subnet is named `GatewaySubnet`. Therefore, each virtual network can contain at most a single Virtual Network Gateway.

- `public_ip_address_id` - (Optional) The ID of the public ip address to associate with the Virtual Network Gateway.

The `vpn_client_configuration` block supports:

- `address_space` - (Required) The address space out of which ip addresses for vpn clients will be taken. You can provide more than one address space, e.g. in CIDR notation.

- `root_certificate` - (Optional) One or more `root_certificate` blocks which are defined below. These root certificates are used to sign the client certificate used by the VPN clients to connect to the gateway. This setting is incompatible with the use of `radius_server_address` and `radius_server_secret`.

- `revoked_certificate` - (Optional) One or more `revoked_certificate` blocks which are defined below. This setting is incompatible with the use of `radius_server_address` and `radius_server_secret`.

- `radius_server_address` - (Optional) The address of the Radius server. This setting is incompatible with the use of `root_certificate` and `revoked_certificate`.

- `radius_server_secret` - (Optional) The secret used by the Radius server. This setting is incompatible with the use of `root_certificate` and `revoked_certificate`.

- `vpn_client_protocols` - (Optional) List of the protocols supported by the vpn client. The supported values are `SSTP` and `IkeV2`.

The `bgp_settings` block supports:

- `asn` - (Optional) The Autonomous System Number (ASN) to use as part of the BGP.

- `peering_address` - (Optional) The BGP peer IP address of the virtual network gateway. This address is needed to configure the created gateway as a BGP Peer on the on-premises VPN devices. The IP address must be part of the subnet of the Virtual Network Gateway. Changing this forces a new resource to be created.

- `peer_weight` - (Optional) The weight added to routes which have been learned through BGP peering. Valid values can be between `0` and `100`.

The `root_certificate` block supports:

- `name` - (Required) A user-defined name of the root certificate.

- `public_cert_data` - (Required) The public certificate of the root certificate authority. The certificate must be provided in Base-64 encoded X.509 format (PEM). In particular, this argument *must not* include the `-----BEGIN CERTIFICATE-----` or `-----END CERTIFICATE-----` markers.

The `root_revoked_certificate` block supports:

- `name` - (Required) A user-defined name of the revoked certificate.

- `public_cert_data` - (Required) The SHA1 thumbprint of the certificate to be revoked.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Virtual Network Gateway.

» Import

Virtual Network Gateways can be imported using the `resource id`, e.g.

```
terraform import azurerm_virtual_network_gateway.testGateway /subscriptions/00000000-0000-00
```

» azurerm_virtual_network_gateway_connection

Manages a connection in an existing Virtual Network Gateway.

» Example Usage

» Site-to-Site connection

The following example shows a connection between an Azure virtual network and an on-premises VPN device and network.

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

```
resource "azurerm_virtual_network" "test" {
  name = "test"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  address_space = ["10.0.0.0/16"]
}

resource "azurerm_subnet" "test" {
  name = "GatewaySubnet"
  resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.1.0/24"
}

resource "azurerm_local_network_gateway" "onpremise" {
  name = "onpremise"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  gateway_address = "168.62.225.23"
  address_space = ["10.1.1.0/24"]
}

resource "azurerm_public_ip" "test" {
  name = "test"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "Dynamic"
}

resource "azurerm_virtual_network_gateway" "test" {
  name = "test"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  type = "Vpn"
  vpn_type = "RouteBased"

  active_active = false
  enable_bgp = false
    sku = "Basic"

  ip_configuration {
    public_ip_address_id = "${azurerm_public_ip.test.id}"
    private_ip_address_allocation = "Dynamic"
    subnet_id = "${azurerm_subnet.test.id}"
  }
```

```
}

resource "azurerm_virtual_network_gateway_connection" "onpremise" {
  name = "onpremise"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"

  type = "IPsec"
  virtual_network_gateway_id = "${azurerm_virtual_network_gateway.test.id}"
  local_network_gateway_id = "${azurerm_local_network_gateway.onpremise.id}"

  shared_key = "4-v3ry-53cr37-1p53c-5h4r3d-k3y"
}
```

» VNet-to-VNet connection

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

```
resource "azurerm_resource_group" "us" {
    name = "us"
    location = "East US"
}

resource "azurerm_virtual_network" "us" {
  name = "us"
  location = "${azurerm_resource_group.us.location}"
  resource_group_name = "${azurerm_resource_group.us.name}"
  address_space = ["10.0.0.0/16"]
}

resource "azurerm_subnet" "us_gateway" {
  name = "GatewaySubnet"
  resource_group_name = "${azurerm_resource_group.us.name}"
  virtual_network_name = "${azurerm_virtual_network.us.name}"
  address_prefix = "10.0.1.0/24"
}

resource "azurerm_public_ip" "us" {
  name = "us"
  location = "${azurerm_resource_group.us.location}"
  resource_group_name = "${azurerm_resource_group.us.name}"
  public_ip_address_allocation = "Dynamic"
}
```

```
resource "azurerm_virtual_network_gateway" "us" {
  name = "us-gateway"
  location = "${azurerm_resource_group.us.location}"
  resource_group_name = "${azurerm_resource_group.us.name}"

  type = "Vpn"
  vpn_type = "RouteBased"
    sku = "Basic"

  ip_configuration {
    public_ip_address_id = "${azurerm_public_ip.us.id}"
    private_ip_address_allocation = "Dynamic"
    subnet_id = "${azurerm_subnet.us_gateway.id}"
  }
}

resource "azurerm_resource_group" "europe" {
  name = "europe"
  location = "West Europe"
}

resource "azurerm_virtual_network" "europe" {
  name = "europe"
  location = "${azurerm_resource_group.europe.location}"
  resource_group_name = "${azurerm_resource_group.europe.name}"
  address_space = ["10.1.0.0/16"]
}

resource "azurerm_subnet" "europe_gateway" {
  name = "GatewaySubnet"
  resource_group_name = "${azurerm_resource_group.europe.name}"
  virtual_network_name = "${azurerm_virtual_network.europe.name}"
  address_prefix = "10.1.1.0/24"
}

resource "azurerm_public_ip" "europe" {
  name = "europe"
  location = "${azurerm_resource_group.europe.location}"
  resource_group_name = "${azurerm_resource_group.europe.name}"
  public_ip_address_allocation = "Dynamic"
}

resource "azurerm_virtual_network_gateway" "europe" {
  name = "europe-gateway"
  location = "${azurerm_resource_group.europe.location}"
  resource_group_name = "${azurerm_resource_group.europe.name}"
```

```
  type = "Vpn"
  vpn_type = "RouteBased"
    sku = "Basic"

  ip_configuration {
    public_ip_address_id = "${azurerm_public_ip.europe.id}"
    private_ip_address_allocation = "Dynamic"
    subnet_id = "${azurerm_subnet.europe_gateway.id}"
  }
}

resource "azurerm_virtual_network_gateway_connection" "us_to_europe" {
  name = "us-to-europe"
  location = "${azurerm_resource_group.us.location}"
  resource_group_name = "${azurerm_resource_group.us.name}"

  type = "Vnet2Vnet"
  virtual_network_gateway_id = "${azurerm_virtual_network_gateway.us.id}"
  peer_virtual_network_gateway_id = "${azurerm_virtual_network_gateway.europe.id}"

  shared_key = "4-v3ry-53cr37-1p53c-5h4r3d-k3y"
}

resource "azurerm_virtual_network_gateway_connection" "europe_to_us" {
  name = "europe-to-us"
  location = "${azurerm_resource_group.europe.location}"
  resource_group_name = "${azurerm_resource_group.europe.name}"

  type = "Vnet2Vnet"
  virtual_network_gateway_id = "${azurerm_virtual_network_gateway.europe.id}"
  peer_virtual_network_gateway_id = "${azurerm_virtual_network_gateway.us.id}"

  shared_key = "4-v3ry-53cr37-1p53c-5h4r3d-k3y"
}
```

» Argument Reference

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 connection. Valid options are `IPsec` (Site-to-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 ExpressRoute connections do not need a shared key.

- `enable_bgp` - (Optional) If `true`, BGP (Border Gateway Protocol) is enabled for this connection. Defaults to `false`.

- `use_policy_based_traffic_selectors` - (Optional) If `true`, policy-based traffic selectors are enabled for this connection. Enabling policy-based traffic selectors requires an `ipsec_policy` block. Defaults to `false`.

- `ipsec_policy` (Optional) A `ipsec_policy` block which is documented below. Only a single policy can be defined for a connection. For details on custom policies refer to the relevant section in the Azure documentation.

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

The `ipsec_policy` block supports:

- `dh_group` - (Required) The DH group used in IKE phase 1 for initial SA. Valid options are `DHGroup1`, `DHGroup14`, `DHGroup2`, `DHGroup2048`, `DHGroup24`, `ECP256`, `ECP384`, or `None`.

- `ike_encryption` - (Required) The IKE encryption algorithm. Valid options are `AES128`, `AES192`, `AES256`, `DES`, or `DES3`.

- `ike_integrity` - (Required) The IKE integrity algorithm. Valid options are `MD5`, `SHA1`, `SHA256`, or `SHA384`.

- `ipsec_encryption` - (Required) The IPSec encryption algorithm. Valid options are `AES128`, `AES192`, `AES256`, `DES`, `DES3`, `GCMAES128`, `GCMAES192`, `GCMAES256`, or `None`.

- `ipsec_integrity` - (Required) The IPSec integrity algorithm. Valid options are `GCMAES128`, `GCMAES192`, `GCMAES256`, `MD5`, `SHA1`, or `SHA256`.

- `pfs_group` - (Required) The DH group used in IKE phase 2 for new child SA. Valid options are `ECP256`, `ECP384`, `PFS1`, `PFS2`, `PFS2048`, `PFS24`, or `None`.

- `sa_datasize` - (Optional) The IPSec SA payload size in KB. Must be at least 1024 KB. Defaults to `102400000` KB.

- `sa_lifetime` - (Optional) The IPSec SA lifetime in seconds. Must be at least 300 seconds. Defaults to `27000` seconds.

» 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 azurerm_virtual_network_gateway_connection.testConnection /subscriptions/00
```

» azurerm_virtual_network_peering

Manages a virtual network peering which allows resources to access other resources in the linked virtual network.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "peeredvnets-rg"
  location = "West US"
}

resource "azurerm_virtual_network" "test1" {
  name                = "peternetwork1"
  resource_group_name = "${azurerm_resource_group.test.name}"
  address_space       = ["10.0.1.0/24"]
  location            = "West US"
}

resource "azurerm_virtual_network" "test2" {
  name                = "peternetwork2"
  resource_group_name = "${azurerm_resource_group.test.name}"
  address_space       = ["10.0.2.0/24"]
  location            = "West US"
}

resource "azurerm_virtual_network_peering" "test1" {
  name                      = "peer1to2"
  resource_group_name       = "${azurerm_resource_group.test.name}"
  virtual_network_name      = "${azurerm_virtual_network.test1.name}"
  remote_virtual_network_id = "${azurerm_virtual_network.test2.id}"
}

resource "azurerm_virtual_network_peering" "test2" {
  name                      = "peer2to1"
  resource_group_name       = "${azurerm_resource_group.test.name}"
  virtual_network_name      = "${azurerm_virtual_network.test2.name}"
  remote_virtual_network_id = "${azurerm_virtual_network.test1.id}"
}
```

» Example Usage (Global virtual network peering)

```
variable "location" {
  default = [
    "uksouth",
    "southeastasia",
  ]
}

variable "vnet_address_space" {
```

```
  default = [
    "10.0.0.0/16",
    "10.1.0.0/16",
  ]
}

resource "azurerm_resource_group" "vnet" {
  count    = "${length(var.location)}"
  name     = "rg-global-vnet-peering-${count.index}"
  location = "${element(var.location, count.index)}"
}

resource "azurerm_virtual_network" "vnet" {
  count               = "${length(var.location)}"
  name                = "vnet-${count.index}"
  resource_group_name = "${element(azurerm_resource_group.vnet.*.name, count.index)}"
  address_space       = ["${element(var.vnet_address_space, count.index)}"]
  location            = "${element(azurerm_resource_group.vnet.*.location, count.index)}"
}

resource "azurerm_subnet" "nva" {
  count                = "${length(var.location)}"
  name                 = "nva"
  resource_group_name  = "${element(azurerm_resource_group.vnet.*.name, count.index)}"
  virtual_network_name = "${element(azurerm_virtual_network.vnet.*.name, count.index)}"
  address_prefix       = "${cidrsubnet("${element(azurerm_virtual_network.vnet.*.address_spa
}

# enable global peering between the two virtual network
resource "azurerm_virtual_network_peering" "peering" {
  count                        = "${length(var.location)}"
  name                         = "peering-to-${element(azurerm_virtual_network.vnet.*.name,
  resource_group_name          = "${element(azurerm_resource_group.vnet.*.name, count.index)
  virtual_network_name         = "${element(azurerm_virtual_network.vnet.*.name, count.index
  remote_virtual_network_id    = "${element(azurerm_virtual_network.vnet.*.id, 1 - count.ind
  allow_virtual_network_access = true
  allow_forwarded_traffic      = true
  # `allow_gateway_transit` must be set to false for vnet Global Peering
  allow_gateway_transit        = false
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the virtual network peering. Changing this forces a new resource to be created.

- `virtual_network_name` - (Required) The name of the virtual network. Changing this forces a new resource to be created.

- `remote_virtual_network_id` - (Required) The full Azure resource ID of the remote virtual network. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the virtual network. Changing this forces a new resource to be created.

- `allow_virtual_network_access` - (Optional) Controls if the VMs in the remote virtual network can access VMs in the local virtual network. Defaults to false.

- `allow_forwarded_traffic` - (Optional) Controls if forwarded traffic from VMs in the remote virtual network is allowed. Defaults to false.

- `allow_gateway_transit` - (Optional) Controls gatewayLinks can be used in the remote virtual network's link to the local virtual network.

- `use_remote_gateways` - (Optional) Controls if remote gateways can be used on the local virtual network. If the flag is set to `true`, and `allow_gateway_transit` on the remote peering is also `true`, virtual network will use gateways of remote virtual network for transit. Only one peering can have this flag set to `true`. This flag cannot be set if virtual network already has a gateway. Defaults to `false`.

NOTE: `use_remote_gateways` must be set to `false` if using Global Virtual Network Peerings.

» Attributes Reference

The following attributes are exported:

- `id` - The Virtual Network Peering resource ID.

» Note

Virtual Network peerings cannot be created, updated or deleted concurrently.

» Import

Virtual Network Peerings can be imported using the `resource id`, e.g.

344

```
terraform import azurerm_virtual_network_peering.testPeering /subscriptions/00000000-0000-00
```

» azurerm_policy_assignment

Configured the specified Policy Definition at the specified Scope.

» Example Usage

```
resource "azurerm_policy_definition" "test" {
  name         = "my-policy-definition"
  policy_type  = "Custom"
  mode         = "All"
  display_name = "acctestpol-%d"
  policy_rule  = <<POLICY_RULE
    {
    "if": {
      "not": {
        "field": "location",
        "in": "[parameters('allowedLocations')]"
      }
    },
    "then": {
      "effect": "audit"
    }
  }
POLICY_RULE

  parameters = <<PARAMETERS
    {
    "allowedLocations": {
      "type": "Array",
      "metadata": {
        "description": "The list of allowed locations for resources.",
        "displayName": "Allowed locations",
        "strongType": "location"
      }
    }
  }
PARAMETERS
}

resource "azurerm_resource_group" "test" {
  name = "test-resources"
```

```
      location = "West Europe"
}

resource "azurerm_policy_assignment" "test" {
  name                 = "example-policy-assignment"
  scope                = "${azurerm_resource_group.test.id}"
  policy_definition_id = "${azurerm_policy_definition.test.id}"
  description          = "Policy Assignment created via an Acceptance Test"
  display_name         = "Acceptance Test Run %d"
  parameters = <<PARAMETERS
{
  "allowedLocations": {
    "value": [ "West Europe" ]
  }
}
PARAMETERS
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the Policy Assignment. Changing this forces a new resource to be created.

- `scope`- (Required) The Scope at which the Policy Assignment should be applied. This can either be the Subscription (e.g. /subscriptions/00000000-0000-0000-000000000000) or a Resource Group (e.g./subscriptions/00000000-0000-0000-000000000000/resourceGroups/myResourceGroup). Changing this forces a new resource to be created.

- `policy_definition_id` - (Required) The ID of the Policy Definition to be applied at the specified Scope.

- `description` - (Optional) A description to use for this Policy Assignment. Changing this forces a new resource to be created.

- `display_name` - (Optional) A friendly display name to use for this Policy Assignment. Changing this forces a new resource to be created.

- `parameters` - (Optional) Parameters for the policy definition. This field is a JSON object that maps to the Parameters field from the Policy Definition. Changing this forces a new resource to be created.

NOTE: This value is required when the specified Policy Definition contains the `parameters` field.

» Attributes Reference

The following attributes are exported:

- `id` - The Policy Assignment id.

» Import

Policy Assignments can be imported using the `policy name`, e.g.

```
terraform import azurerm_policy_assignment.assignment1  /subscriptions/00000000-0000-0000-0
```

» azurerm_policy_definition

Manages a policy for all of the resource groups under the subscription.

» Example Usage

```
resource "azurerm_policy_definition" "policy" {
  name         = "accTestPolicy"
  policy_type  = "BuiltIn"
  mode         = "Indexed"
  display_name = "acceptance test policy definition"
  policy_rule  = <<POLICY_RULE
    {
    "if": {
      "not": {
        "field": "location",
        "in": "[parameters('allowedLocations')]"
      }
    },
    "then": {
      "effect": "audit"
    }
  }
POLICY_RULE

  parameters = <<PARAMETERS
    {
    "allowedLocations": {
      "type": "Array",
      "metadata": {
        "description": "The list of allowed locations for resources.",
```

```
        "displayName": "Allowed locations",
        "strongType": "location"
      }
    }
  }
PARAMETERS

}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the policy definition. Changing this forces a new resource to be created.

- `policy_type` - (Required) The policy type. The value can be "BuiltIn", "Custom" or "NotSpecified". Changing this forces a new resource to be created.

- `mode` - (Required) The policy mode that allows you to specify which resource types will be evaluated. The value can be "All", "Indexed" or "NotSpecified". Changing this resource forces a new resource to be created.

- `display_name` - (Required) The display name of the policy definition.

- `description` - (Optional) The description of the policy definition.

- `policy_rule` - (Optional) The policy rule for the policy definition. This is a json object representing the rule that contains an if and a then block.

- `metadata` - (Optional) The metadata for the policy definition. This is a json object representing the rule that contains an if and a then block.

- `parameters` - (Optional) Parameters for the policy definition. This field is a json object that allows you to parameterize your policy definition.

» Attributes Reference

The following attributes are exported:

- `id` - The policy definition id.

» Import

Policy Definitions can be imported using the `policy name`, e.g.

```
terraform import azurerm_policy_definition.testPolicy  /subscriptions/<SUBSCRIPTION_ID>/prov
```

» azurerm_log_analytics_solution

Manages a Log Analytics (formally Operational Insights) Solution.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "k8s-log-analytics-test"
  location = "westeurope"
}

resource "random_id" "workspace" {
  keepers = {
    # Generate a new id each time we switch to a new resource group
    group_name = "${azurerm_resource_group.test.name}"
  }

  byte_length = 8
}

resource "azurerm_log_analytics_workspace" "test" {
  name                = "k8s-workspace-${random_id.workspace.hex}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "Free"
}

resource "azurerm_log_analytics_solution" "test" {
  solution_name         = "Containers"
  location              = "${azurerm_resource_group.test.location}"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  workspace_resource_id = "${azurerm_log_analytics_workspace.test.id}"
  workspace_name        = "${azurerm_log_analytics_workspace.test.name}"

  plan {
    publisher = "Microsoft"
    product   = "OMSGallery/Containers"
  }
}
```

» Argument Reference

The following arguments are supported:

- `solution_name` - (Required) Specifies the name of the solution to be deployed. See here for options.Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the Log Analytics solution is created. Changing this forces a new resource to be created. Note: The solution and it's related workspace can only exist in the same resource group.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `workspace_resource_id` - (Required) The full resource ID of the Log Analytics workspace with which the solution will be linked. Changing this forces a new resource to be created.

- `workspace_resource_name` - (Required) The full name of the Log Analytics workspace with which the solution will be linked. Changing this forces a new resource to be created.

- `plan` - A `plan` block as documented below.

A `plan` block includes:

- `publisher` - (Required) The publisher of the solution. For example `Microsoft`. Changing this forces a new resource to be created.

- `product` - (Required) The product name of the solution. For example `OMSGallery/Containers`. Changing this forces a new resource to be created.

- `promotion_code` - (Optional) A promotion code to be used with the solution.

» Import

Log Analytics Solutions can be imported using the `resource id`, e.g.

```
terraform import azurerm_log_analytics_solution.solution1 /subscriptions/00000000-0000-0000-
```

» azurerm_log_analytics_workspace

Manages a Log Analytics (formally Operational Insights) Workspace.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG-01"
  location = "East US"
}

resource "azurerm_log_analytics_workspace" "test" {
  name                = "acctest-01"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku                 = "Standard"
  retention_in_days   = 30
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Log Analytics Workspace. Workspace name should include 4-63 letters, digits or '-'. The '-' shouldn't be the first or the last symbol. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which the Log Analytics workspace is created. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `sku` - (Required) Specifies the Sku of the Log Analytics Workspace. Possible values are `Free`, `PerNode`, `Premium`, `Standard`, `Standalone`, `Unlimited`, and `PerGB2018` (new Sku as of `2018-04-03`).

NOTE: A new pricing model took effect on `2018-04-03`, which requires the SKU `PerGB2018`. If you're provisioned resources before this date you have the option of remaining with the previous Pricing SKU and using the other SKU's defined above. More information about the Pricing SKU's is available at the following URI.

- `retention_in_days` - (Optional) The workspace data retention in days. Possible values range between 30 and 730.

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

» Attributes Reference

The following attributes are exported:

- `id` - The Log Analytics Workspace ID.
- `primary_shared_key` - The Primary shared key for the Log Analytics Workspace.
- `secondary_shared_key` - The Secondary shared key for the Log Analytics Workspace.
- `workspace_id` - The Workspace (or Customer) ID for the Log Analytics Workspace.
- `portal_url` - The Portal URL for the Log Analytics Workspace.

» Import

Log Analytics Workspaces can be imported using the `resource id`, e.g.

```
terraform import azurerm_log_analytics_workspace.workspace1 /subscriptions/00000000-0000-000
```

» azurerm_recovery_services_vault

Create an Recovery Services Vault.

» Example Usage

```
resource "azurerm_resource_group" "rg" {
  name     = "tfex-recovery_vault"
  location = "West US"
}

resource "azurerm_recovery_services_vault" "vault" {
    name                = "example_recovery_vault"
    location            = "${azurerm_resource_group.rg.location}"
    resource_group_name = "${azurerm_resource_group.rg.name}"
    sku                 = "standard"
}
```

» Argument Reference

The following arguments are supported:

- **name** - (Required) Specifies the name of the Recovery Services Vault. Changing this forces a new resource to be created.

- **resource_group_name** - (Required) The name of the resource group in which to create the Recovery Services Vault. Changing this forces a new resource to be created.

- **location** - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

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

- **sku** - (Required) Sets the vault's SKU. Possible values include: `Standard`, `RS0`.

» Attributes Reference

The following attributes are exported:

- **id** - The ID of the Recovery Services Vault.

» Import

Recovery Services Vaults can be imported using the `resource id`, e.g.

```
terraform import azurerm_recovery_services_vault.vault1 /subscriptions/00000000-0000-0000-00
```

» azurerm_redis_cache

Manages a Redis Cache.

» Example Usage (Basic)

```
resource "azurerm_resource_group" "test" {
  name     = "redis-resources"
  location = "West US"
}

# NOTE: the Name used for Redis needs to be globally unique
resource "azurerm_redis_cache" "test" {
  name                = "tf-redis-basic"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  capacity            = 0
```

```
  family            = "C"
  sku_name          = "Basic"
  enable_non_ssl_port = false
}
```

» Example Usage (Standard)

```
resource "azurerm_resource_group" "test" {
  name     = "redis-resources"
  location = "West US"
}

# NOTE: the Name used for Redis needs to be globally unique
resource "azurerm_redis_cache" "test" {
  name                = "tf-redis-standard"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  capacity            = 2
  family              = "C"
  sku_name            = "Standard"
  enable_non_ssl_port = false
}
```

» Example Usage (Premium with Clustering)

```
resource "azurerm_resource_group" "test" {
  name     = "redis-resources"
  location = "West US"
}

# NOTE: the Name used for Redis needs to be globally unique
resource "azurerm_redis_cache" "test" {
  name                = "tf-redis-premium"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  capacity            = 1
  family              = "P"
  sku_name            = "Premium"
  enable_non_ssl_port = false
  shard_count         = 3

  redis_configuration {
    maxmemory_reserved = 2
    maxmemory_delta    = 2
```

```
    maxmemory_policy   = "allkeys-lru"
  }
}
```

» Example Usage (Premium with Backup)

```
resource "azurerm_resource_group" "test" {
  name     = "redis-resources"
  location = "West US"
}

resource "azurerm_storage_account" "test" {
  name                     = "redissa"
  resource_group_name      = "${azurerm_resource_group.test.name}"
  location                 = "${azurerm_resource_group.test.location}"
  account_tier             = "Standard"
  account_replication_type = "GRS"
}

# NOTE: the Name used for Redis needs to be globally unique
resource "azurerm_redis_cache" "test" {
  name                = "tf-redis-pbkup"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  capacity            = 3
  family              = "P"
  sku_name            = "Premium"
  enable_non_ssl_port = false
  redis_configuration {
    rdb_backup_enabled            = true
    rdb_backup_frequency          = 60
    rdb_backup_max_snapshot_count = 1
    rdb_storage_connection_string = "DefaultEndpointsProtocol=https;BlobEndpoint=${azurerm_s
  }
}
```

» Argument Reference

The following arguments are supported:

- **name** - (Required) The name of the Redis instance. Changing this forces
  a new resource to be created.

- **location** - (Required) The location of the resource group.

- `resource_group_name` - (Required) The name of the resource group in which to create the Redis instance.

- `capacity` - (Required) The size of the Redis cache to deploy. Valid values for a SKU `family` of C (Basic/Standard) are `0, 1, 2, 3, 4, 5, 6`, and for P (Premium) `family` are `1, 2, 3, 4`.

- `family` - (Required) The SKU family to use. Valid values are `C` and `P`, where C = Basic/Standard, P = Premium.

The pricing group for the Redis Family - either "C" or "P" at present.

- `sku_name` - (Required) The SKU of Redis to use - can be either Basic, Standard or Premium.

- `enable_non_ssl_port` - (Optional) Enable the non-SSL port (6789) - disabled by default.

- `patch_schedule` - (Optional) A list of `patch_schedule` blocks as defined below - only available for Premium SKU's.

- `private_static_ip_address` - (Optional) The Static IP Address to assign to the Redis Cache when hosted inside the Virtual Network. Changing this forces a new resource to be created.

- `redis_configuration` - (Required) A `redis_configuration` as defined below - with some limitations by SKU - defaults/details are shown below.

- `shard_count` - (Optional) *Only available when using the Premium SKU* The number of Shards to create on the Redis Cluster.

- `subnet_id` - (Optional) The ID of the Subnet within which the Redis Cache should be deployed. Changing this forces a new resource to be created.

- `redis_configuration` supports the following:

- `maxmemory_reserved` - (Optional) Value in megabytes reserved for non-cache usage e.g. failover. Defaults are shown below.

- `maxmemory_delta` - (Optional) The max-memory delta for this Redis instance. Defaults are shown below.

- `maxmemory_policy` - (Optional) How Redis will select what to remove when `maxmemory` is reached. Defaults are shown below.

- `rdb_backup_enabled` - (Optional) Is Backup Enabled? Only supported on Premium SKU's.

- `rdb_backup_frequency` - (Optional) The Backup Frequency in Minutes. Only supported on Premium SKU's. Possible values are: `15, 30, 60, 360`, `720` and `1440`.

356

- `rdb_backup_max_snapshot_count` - (Optional) The maximum number of snapshots to create as a backup. Only supported for Premium SKU's.

- `rdb_storage_connection_string` - (Optional) The Connection String to the Storage Account. Only supported for Premium SKU's. In the format: `DefaultEndpointsProtocol=https;BlobEndpoint=${azurerm_storage_account.test.primary_blob`

NOTE: There's a bug in the Redis API where the original storage connection string isn't being returned, which is being tracked in this issue. In the interim you can use the `ignore_changes` attribute to ignore changes to this field e.g.:

```
resource "azurerm_redis_cache" "test" {
  # ...
  ignore_changes = ["redis_configuration.0.rdb_storage_connection_string"]
}
```

- `notify_keyspace_events` - (Optional) Keyspace notifications allows clients to subscribe to Pub/Sub channels in order to receive events affecting the Redis data set in some way. Reference

```
redis_configuration {
  maxmemory_reserved = 10
  maxmemory_delta    = 2
  maxmemory_policy   = "allkeys-lru"
}
```

» Default Redis Configuration Values

Redis Value	Basic	Standard	Premium
maxmemory_reserved	2	50	200
maxmemory_delta	2	50	200
maxmemory_policy	volatile-lru	volatile-lru	volatile-lru

Important*: The `maxmemory_reserved` and `maxmemory_delta` settings are only available for Standard and Premium caches. More details are available in the Relevant Links section below.*

- `patch_schedule` supports the following:

- `day_of_week` (Required) the Weekday name - possible values include `Monday`, `Tuesday`, `Wednesday` etc.

- `start_hour_utc` - (Optional) the Start Hour for maintenance in UTC - possible values range from `0 - 23`.

Note: The Patch Window lasts for `5` hours from the `start_hour_utc`.

» Attributes Reference

The following attributes are exported:

- `id` - The Route ID.

- `hostname` - The Hostname of the Redis Instance

- `ssl_port` - The SSL Port of the Redis Instance

- `port` - The non-SSL Port of the Redis Instance

- `primary_access_key` - The Primary Access Key for the Redis Instance

- `secondary_access_key` - The Secondary Access Key for the Redis Instance

- `redis_configuration` - A `redis_configuration` block as defined below:

A `redis_configuration` block exports the following:

- `maxclients` - Returns the max number of connected clients at the same time.

» Relevant Links

- Azure Redis Cache: SKU specific configuration limitations
- Redis: Available Configuration Settings

» Import

Redis Cache's can be imported using the `resource id`, e.g.

```
terraform import azurerm_redis_cache.cache1 /subscriptions/00000000-0000-0000-0000-000000000
```

» azurerm_redis_firewall_rule

Manages a Firewall Rule associated with a Premium Redis Cache.

Note: Redis Firewall Rules can only be assigned to a Redis Cache with a `Premium` SKU.

» Example Usage

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

  byte_length = 8
}

resource "azurerm_resource_group" "test" {
  name     = "redis-resourcegroup"
  location = "West Europe"
}

resource "azurerm_redis_cache" "test" {
  name                = "redis${random_id.server.hex}"
  location            = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  capacity            = 1
  family              = "P"
  sku_name            = "Premium"
  enable_non_ssl_port = false

  redis_configuration {
    maxclients         = 256
    maxmemory_reserved = 2
    maxmemory_delta    = 2
    maxmemory_policy   = "allkeys-lru"
  }
}

resource "azurerm_redis_firewall_rule" "test" {
  name                = "someIPrange"
  redis_cache_name    = "${azurerm_redis_cache.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  start_ip            = "1.2.3.4"
  end_ip              = "2.3.4.5"
}
```

» Argument Reference

The following arguments are supported:

- **name** - (Required) The name of the Firewall Rule. Changing this forces a

new resource to be created.

- `redis_cache_name` - (Required) The name of the Redis Cache. Changing this forces a new resource to be created.
- `resource_group_name` - (Required) The name of the resource group in which this Redis Cache exists.
- `start_ip` - (Required) The lowest IP address included in the range
- `end_ip` - (Required) The highest IP address included in the range.

» Attributes Reference

The following attributes are exported:

- `id` - The Redis Firewall Rule ID.

» Import

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

```
terraform import azurerm_redis_firewall_rule.rule1 /subscriptions/00000000-0000-0000-0000-00
```

» azurerm_search_service

Allows you to manage an Azure Search Service

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acceptanceTestResourceGroup1"
  location = "West US"
}

resource "azurerm_search_service" "test" {
  name                = "acceptanceTestSearchService1"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  sku                 = "standard"

  tags {
    environment = "staging"
    database    = "test"
```

```
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the Search Service. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the Search Service. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `sku` - (Required) Valid values are `free` and `standard`. `standard2` and `standard3` are also valid, but can only be used when it's enabled on the backend by Microsoft support. `free` provisions the service in shared clusters. `standard` provisions the service in dedicated clusters. Changing this forces a new resource to be created.

- `replica_count` - (Optional) Default is 1. Valid values include 1 through 12. Valid only when `sku` is `standard`. Changing this forces a new resource to be created.

- `partition_count` - (Optional) Default is 1. Valid values include 1, 2, 3, 4, 6, or 12. Valid only when `sku` is `standard`. Changing this forces a new resource to be created.

- `tags` - (Optional) A mapping of tags to assign to the resource. Changing this forces a new resource to be created.

» Attributes Reference

The following attributes are exported:

- `id` - The Search Service ID.

» Import

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

```
terraform import azurerm_search_service.service1 /subscriptions/00000000-0000-0000-0000-0000
```

» azurerm_scheduler_job_collection

Manages a Scheduler Job Collection.

» Example Usage

```
resource "azurerm_resource_group" "rg" {
  name     = "tfex-job_collection"
  location = "West US"
}

resource "azurerm_scheduler_job_collection" "jobs" {
    name                = "example_job_collection"
    location            = "${azurerm_resource_group.rg.location}"
    resource_group_name = "${azurerm_resource_group.rg.name}"
    sku                 = "free"
    state               = "enabled"

    quota {
        max_job_count           = 5
        max_recurrence_interval = 24
        max_recurrence_frequency = "hour"
    }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the Scheduler Job Collection. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the Scheduler Job Collection. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

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

- `sku` - (Required) Sets the Job Collection's pricing level's SKU. Possible values include: `Standard`, `Free`, `P10Premium`, `P20Premium`.

- `state` - (Optional) Sets Job Collection's state. Possible values include: `Enabled`, `Disabled`, `Suspended`.

362

- `quota` - (Optional) Configures the Job collection quotas as documented in the `quota` block below.

The `quota` block supports:

- `max_job_count` - (Optional) Sets the maximum number of jobs in the collection.

- `max_recurrence_frequency` - (Required) The maximum frequency of recurrence. Possible values include: `Minute`, `Hour`, `Day`, `Week`, `Month`

- `max_recurrence_interval` - (Optional) The maximum interval between recurrence.

» **Attributes Reference**

The following attributes are exported:

- `id` - The ID of the Scheduler Job Collection.

» **Import**

Scheduler Job Collections can be imported using the `resource id`, e.g.

```
terraform import azurerm_scheduler_job_collection.jobcollection1 /subscriptions/00000000-000
```

» **azurerm_scheduler_job**

Manages a Scheduler Job.

» **Example Usage (single web get now)**

```
resource "azurerm_scheduler_job" "web-once-now" {
  name                 = "tfex-web-once-now"
  resource_group_name  = "${azurerm_resource_group.example.name}"
  job_collection_name  = "${azurerm_scheduler_job_collection.example.name}"

  # re-enable it each run
  state = "enabled"

  action_web {
    # defaults to get
    url = "http://this.url.fails"
  }
```

```
  # default start time is now
}
```

» Example Usage (recurring daily with retry and basic authentication)

```
resource "azurerm_scheduler_job" "web-recurring-daily" {
  name               = "tfex-web-recurring-daily"
  resource_group_name = "${azurerm_resource_group.example.name}"
  job_collection_name = "${azurerm_scheduler_job_collection.example.name}"

  action_web {
    url     = "https://this.url.fails"
    method  = "put"
    body    = "this is some text"

    headers = {
      Content-Type = "text"
    }

    authentication_basic {
      username = "login"
      password = "apassword"
    }
  }

  retry {
    # retry every 5 min a maximum of 10 times
    interval = "00:05:00"
    count    =  10
  }

  recurrence {
    frequency = "day"
    count     = 1000
    # run 4 times an hour every 12 hours
    hours     = [0,12]
    minutes   = [0,15,30,45]
  }

  start_time = "2018-07-07T07:07:07-07:00"
}
```

» Example Usage (recurring monthly with an error action and client certificate authentication)

```
resource "azurerm_scheduler_job" "web-recurring-daily" {
  name                 = "tfex-web-recurring-daily"
  resource_group_name  = "${azurerm_resource_group.example.name}"
  job_collection_name  = "${azurerm_scheduler_job_collection.example.name}"

  action_web {
    url     = "https://this.url.fails"
    authentication_certificate {
      pfx      = "${base64encode(file("your_cert.pfx"))}"
      password = "cert_password"
    }
  }

  error_action_web {
    url     = "https://this.url.fails"
    method  = "put"
    body    = "The job failed"

    headers = {
      "Content-Type" = "text"
    }

    authentication_basic {
      username = "login"
      password = "apassword"
    }
  }

  recurrence {
    frequency = "monthly"
    count     = 1000
    monthly_occurrences = [
      {
        # first Sunday
        day        = "Sunday"
        occurrence = 1
      },
      {
        # third Sunday
        day        = "Sunday"
        occurrence = 3
      },
```

```
      {
        # last Sunday
        day        = "Sunday"
        occurrence = -1
      }
    ]
  }

  start_time = "2018-07-07T07:07:07-07:00"
}
```

» Example Usage (storage queue action)

```
resource "azurerm_storage_account" "example" {
  name                     = "tfexstorageaccount"
  resource_group_name      = "${azurerm_resource_group.example.name}"
  location                 = "${azurerm_resource_group.example.location}"
  account_tier             = "Standard"
  account_replication_type = "LRS"
}

resource "azurerm_storage_queue" "example" {
  name                 = "tfex-schedulerjob-storagequeue"
  resource_group_name  = "${azurerm_resource_group.example.name}"
  storage_account_name = "${azurerm_storage_account.example.name}"
}

resource "azurerm_scheduler_job" "storage-once-now" {
  name                = "tfex-storage-once-now"
  resource_group_name = "${azurerm_resource_group.example.name}"
  job_collection_name = "${azurerm_scheduler_job_collection.example.name}"

  action_storage_queue = {
    storage_account_name = "${azurerm_storage_account.example.name}"
    storage_queue_name   = "${azurerm_storage_queue.example.name}"
    sas_token            = "${azurerm_storage_account.example.primary_access_key}"
    message              = "storage message"
  }
}
```

» Argument Reference

The following arguments are supported:

- **name** - (Required) The name of the Scheduler Job. Changing this forces a new resource to be created.

- **resource_group_name** - (Required) The name of the resource group in which to create the Scheduler Job. Changing this forces a new resource to be created.

- **job_collection_name** - (Required) Specifies the name of the Scheduler Job Collection in which the Job should exist. Changing this forces a new resource to be created.

- **action_web** - (Optional) A **action_web** block defining the job action as described below. Note this is identical to an **error_action_web** block.

NOTE At least one of **error_action_web** or **action_storage_queue** needs to be set.

- **action_storage_queue** - (Optional) A **action_storage_queue** block defining a storage queue job action as described below. Note this is identical to an **error_action_storage_queue** block.

- **error_action_web** - (Optional) A **error_action_web** block defining the action to take on an error as described below. Note this is identical to an **action_web** block.

- **error_action_storage_queue** - (Optional) A **error_action_storage_queue** block defining the a web action to take on an error as described below. Note this is identical to an **action_storage_queue** block.

- **retry** - (Optional) A **retry** block defining how to retry as described below.

- **recurrence** - (Optional) A **recurrence** block defining a job occurrence schedule.

- **start_time** - (Optional) The time the first instance of the job is to start running at.

- **state** - (Optional) The sets or gets the current state of the job. Can be set to either **Enabled** or **Completed**

web_action & **error_web_action** block supports the following:

- **url** - (Required) Specifies the URL of the web request. Must be HTTPS for authenticated requests.
- **method** - (Optional) Specifies the method of the request. Defaults to **Get** and must be one of **Get**, **Put**, **Post**, **Delete**.
- **body** - (Optional) Specifies the request body.
- **headers** - (Optional) A map specifying the headers sent with the request.
- **authentication_basic** - (Optional) An **authentication_active_directory** block which defines the Active Directory oauth configuration to use.
- **authentication_certificate** - (Optional) An **authentication_certificate** block which defines the client certificate information to be use.

367

- `authentication_active_directory` - (Optional) An `authentication_active_directory` block which defines the OAUTH Active Directory information to use.

`authentication_basic` block supports the following:

- `username` - (Required) Specifies the username to use.
- `password` - (Required) Specifies the password to use.

`authentication_certificate` block supports the following:

- `pfx` - (Required) Specifies the pfx certificate in base-64 format.
- `password` - (Required) Specifies the certificate password.

`authentication_active_directory` block supports the following:

- `client_id` - (Required) Specifies the client ID to use.
- `tenant_id` - (Required) Specifies the tenant ID to use.
- `client_secret` - (Required) Specifies the secret to use.
- `audience` - (Optional) Specifies the audience.

`action_storage_queue` & `error_action_storage_queue` block supports the following:

- `storage_account_name` - (Required) Specifies the the storage account name.
- `storage_queue_name` - (Required) Specifies the the storage account queue.
- `sas_token` - (Required) Specifies a SAS token/key to authenticate with.
- `message` - (Required) The message to send into the queue.

`retry` block supports the following:

- `interval` - (Required) Specifies the duration between retries.
- `count` - (Required) Specifies the number of times a retry should be attempted.

`recurrence` block supports the following:

- `frequency` - (Required) Specifies the frequency of recurrence. Must be one of `Minute`, `Hour`, `Day`, `Week`, `Month`.
- `interval` - (Optional) Specifies the interval between executions. Defaults to `1`.
- `count` - (Optional) Specifies the maximum number of times that the job should run.
- `end_time` - (Optional) Specifies the time at which the job will cease running. Must be less then 500 days into the future.
- `minutes` - (Optional) Specifies the minutes of the hour that the job should execute at. Must be between `0` and `59`
- `hours` - (Optional) Specifies the hours of the day that the job should execute at. Must be between `0` and `23`

- `week_days` - (Optional) Specifies the days of the week that the job should execute on. Must be one of `Monday`, `Tuesday`, `Wednesday`, `Thursday`, `Friday`, `Saturday`, `Sunday`. Only applies when `Week` is used for frequency.
- `month_days` - (Optional) Specifies the days of the month that the job should execute on. Must be non zero and between `-1` and `31`. Only applies when `Month` is used for frequency.
- `monthly_occurrences` - (Optional) Specifies specific monthly occurrences like "last sunday of the month" with `monthly_occurrences` blocks. Only applies when `Month` is used for frequency.

`monthly_occurrences` block supports the following:

- `day` - (Optional) Specifies the day of the week that the job should execute on. Must be one of one of `Monday`, `Tuesday`, `Wednesday`, `Thursday`, `Friday`, `Saturday`, `Sunday`.
- `occurrence` - (Optional) Specifies the week the job should run on. For example `1` for the first week, `-1` for the last week of the month. Must be between `-5` and `5`.

» Attributes Reference

The following attributes are exported:

- `id` - The Scheduler Job ID.

`authentication_certificate` block exports the following:

- `thumbprint` - (Computed) The certificate thumbprint.
- `expiration` - (Computed) The certificate expiration date.
- `subject_name` - (Computed) The certificate's certificate subject name.

» Import

Scheduler Job can be imported using a `resource id`, e.g.

```
terraform import azurerm_scheduler_job.job1 /subscriptions/00000000-0000-0000-0000-000000000
```

» azurerm_service_fabric_cluster

Manage a Service Fabric Cluster.

» Example Usage

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

```
  name     = "example-resources"
  location = "West Europe"
}

resource "azurerm_service_fabric_cluster" "test" {
  name                = "example-servicefabric"
  resource_group_name = "${azurerm_resource_group.test.name}"
  location            = "${azurerm_resource_group.test.location}"
  reliability_level   = "Bronze"
  upgrade_mode        = "Automatic"
  vm_image            = "Windows"
  management_endpoint = "https://example:80"

  node_type {
    name                 = "first"
    instance_count       = 3
    is_primary           = true
    client_endpoint_port = 2020
    http_endpoint_port   = 80
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the Service Fabric Cluster. Changing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the Resource Group in which the Service Fabric Cluster exists. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the Azure Region where the Service Fabric Cluster should exist. Changing this forces a new resource to be created.

- `reliability_level` - (Required) Specifies the Reliability Level of the Cluster. Possible values include `None`, `Bronze`, `Silver`, `Gold` and `Platinum`.

NOTE: The Reliability Level of the Cluster depends on the number of nodes in the Cluster: `Platinum` requires at least 9 VM's, `Gold` requires at least 7 VM's, `Silver` requires at least 5 VM's, `Bronze` requires at least 3 VM's.

- `management_endpoint` - (Required) Specifies the Management Endpoint of the cluster such as `http://example.com`. Changing this forces a new resource to be created.

- **node_type** - (Required) One or more **node_type** blocks as defined below.

- **upgrade_mode** - (Required) Specifies the Upgrade Mode of the cluster. Possible values are **Automatic** or **Manual**.

- **vm_image** - (Required) Specifies the Image expected for the Service Fabric Cluster, such as **Windows**. Changing this forces a new resource to be created.

- **add_on_features** - (Optional) A List of one or more features which should be enabled, such as **DnsService**.

- **certificate** - (Optional) A **certificate** block as defined below.

- **client_certificate_thumbprint** - (Optional) A **client_certificate_thumbprint** block as defined below.

NOTE: If Client Certificates are enabled then at a Certificate must be configured on the cluster.

- **diagnostics_config** - (Optional) A **diagnostics_config** block as defined below. Changing this forces a new resource to be created.

- **fabric_settings** - (Optional) One or more **fabric_settings** blocks as defined below.

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

A **certificate** block supports the following:

- **thumbprint** - (Required) The Thumbprint of the Certificate.

- **thumbprint_secondary** - (Required) The Secondary Thumbprint of the Certificate.

- **x509_store_name** - (Required) The X509 Store where the Certificate Exists, such as **My**.

A **client_certificate_thumbprint** block supports the following:

- **thumbprint** - (Required) The Thumbprint associated with the Client Certificate.

- **is_admin** - (Required) Does the Client Certificate have Admin Access to the cluster? Non-admin clients can only perform read only operations on the cluster.

A **diagnostics_config** block supports the following:

- `storage_account_name` - (Required) The name of the Storage Account where the Diagnostics should be sent to.

- `protected_account_key_name` - (Required) The protected diagnostics storage key name, such as `StorageAccountKey1`.

- `blob_endpoint` - (Required) The Blob Endpoint of the Storage Account.

- `queue_endpoint` - (Required) The Queue Endpoint of the Storage Account.

- `table_endpoint` - (Required) The Table Endpoint of the Storage Account.

A `fabric_settings` block supports the following:

- `name` - (Required) The name of the Fabric Setting, such as `Security` or `Federation`.

- `parameters` - (Optional) A map containing settings for the specified Fabric Setting.

A `node_type` block supports the following:

- `name` - (Required) The name of the Node Type. Changing this forces a new resource to be created.

- `instance_count` - (Required) The number of nodes for this Node Type.

- `is_primary` - (Required) Is this the Primary Node Type? Changing this forces a new resource to be created.

- `client_endpoint_port` - (Required) The Port used for the Client Endpoint for this Node Type. Changing this forces a new resource to be created.

- `http_endpoint_port` - (Required) The Port used for the HTTP Endpoint for this Node Type. Changing this forces a new resource to be created.

- `durability_level` - (Optional) The Durability Level for this Node Type. Possible values include `Bronze`, `Gold` and `Silver`. Defaults to `Bronze`. Changing this forces a new resource to be created.

- `application_ports` - (Optional) A `application_ports` block as defined below.

- `ephemeral_ports` - (Optional) A `ephemeral_ports` block as defined below.

A `application_ports` block supports the following:

- `start_port` - (Required) The start of the Application Port Range on this Node Type.

- `end_port` - (Required) The end of the Application Port Range on this Node Type.

A `ephemeral_ports` block supports the following:

- `start_port` - (Required) The start of the Ephemeral Port Range on this Node Type.

- `end_port` - (Required) The end of the Ephemeral Port Range on this Node Type.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the Service Fabric Cluster.

- `cluster_endpoint` - The Cluster Endpoint for this Service Fabric Cluster.

» Import

Service Fabric Clusters can be imported using the `resource id`, e.g.

```
terraform import azurerm_service_fabric_cluster.cluster1 /subscriptions/00000000-0000-0000-(
```

» azurerm_storage_account

Create an Azure Storage Account.

» Example Usage

```
resource "azurerm_resource_group" "testrg" {
  name     = "resourceGroupName"
  location = "westus"
}

resource "azurerm_storage_account" "testsa" {
  name                     = "storageaccountname"
  resource_group_name      = "${azurerm_resource_group.testrg.name}"
  location                 = "westus"
```

```
  account_tier              = "Standard"
  account_replication_type = "GRS"

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

» Example Usage with Network Rules

```
resource "azurerm_resource_group" "testrg" {
  name     = "resourceGroupName"
  location = "westus"
}

resource "azurerm_virtual_network" "test" {
    name = "virtnetname"
    address_space = ["10.0.0.0/16"]
    location = "${azurerm_resource_group.testrg.location}"
    resource_group_name = "${azurerm_resource_group.testrg.name}"
}

resource "azurerm_subnet" "test" {
    name                 = "subnetname"
    resource_group_name  = "${azurerm_resource_group.testrg.name}"
    virtual_network_name = "${azurerm_virtual_network.test.name}"
    address_prefix       = "10.0.2.0/24"
    service_endpoints    = ["Microsoft.Sql","Microsoft.Storage"]
  }

resource "azurerm_storage_account" "testsa" {
    name = "storageaccountname"
    resource_group_name = "${azurerm_resource_group.testrg.name}"

    location = "${azurerm_resource_group.testrg.location}"
    account_tier = "Standard"
    account_replication_type = "LRS"

    network_rules {
        ip_rules = ["127.0.0.1"]
        virtual_network_subnet_ids = ["${azurerm_subnet.test.id}"]
    }

    tags {
        environment = "staging"
```

```
    }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the storage account. Changing this forces a new resource to be created. This must be unique across the entire Azure service, not just within the resource group.

- `resource_group_name` - (Required) The name of the resource group in which to create the storage account. Changing this forces a new resource to be created.

- `location` - (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.

- `account_kind` - (Optional) Defines the Kind of account. Valid options are `Storage`, `StorageV2` and `BlobStorage`. Changing this forces a new resource to be created. Defaults to `Storage`.

- `account_tier` - (Required) Defines the Tier to use for this storage account. Valid options are `Standard` and `Premium`. Changing this forces a new resource to be created

- `account_replication_type` - (Required) Defines the type of replication to use for this storage account. Valid options are `LRS`, `GRS`, `RAGRS` and `ZRS`.

- `access_tier` - (Optional) Defines the access tier for `BlobStorage` and `StorageV2` accounts. Valid options are `Hot` and `Cool`, defaults to `Hot`.

- `enable_blob_encryption` - (Optional) Boolean flag which controls if Encryption Services are enabled for Blob storage, see here for more information. Defaults to `true`.

- `enable_file_encryption` - (Optional) Boolean flag which controls if Encryption Services are enabled for File storage, see here for more information. Defaults to `true`.

- `enable_https_traffic_only` - (Optional) Boolean flag which forces HTTPS if enabled, see here for more information.

- `account_encryption_source` - (Optional) The Encryption Source for this Storage Account. Possible values are `Microsoft.Keyvault` and `Microsoft.Storage`. Defaults to `Microsoft.Storage`.

- `custom_domain` - (Optional) A `custom_domain` block as documented below.

- **network_rules** - (Optional) A **network_rules** block as documented below.

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

- **identity** - (Optional) A Managed Service Identity block as defined below.

- **custom_domain** supports the following:

- **name** - (Optional) The Custom Domain Name to use for the Storage Account, which will be validated by Azure.

- **use_subdomain** - (Optional) Should the Custom Domain Name be validated by using indirect CNAME validation?

- **network_rules** supports the following:

- **bypass** - (Optional) Specifies whether traffic is bypassed for Logging/Metrics/AzureServices. Valid options are any combination of **Logging**, **Metrics**, **AzureServices**, or **None**.

- **ip_rules** - (Optional) List of IP or IP ranges in CIDR Format. Only IPV4 addresses are allowed.

- **virtual_network_subnet_ids** - (Optional) A list of resource ids for subnets.

Note: More information on Validation is available here

---

identity supports the following:

- **type** - (Required) Specifies the identity type of the Storage Account. At this time the only allowed value is **SystemAssigned**.

The assigned **principal_id** and **tenant_id** can be retrieved after the identity **type** has been set to **SystemAssigned** and Storage Account has been created. More details are available below.

» Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- **id** - The storage account Resource ID.
- **primary_location** - The primary location of the storage account.
- **secondary_location** - The secondary location of the storage account.
- **primary_blob_endpoint** - The endpoint URL for blob storage in the primary location.

- `secondary_blob_endpoint` - The endpoint URL for blob storage in the secondary location.
- `primary_queue_endpoint` - The endpoint URL for queue storage in the primary location.
- `secondary_queue_endpoint` - The endpoint URL for queue storage in the secondary location.
- `primary_table_endpoint` - The endpoint URL for table storage in the primary location.
- `secondary_table_endpoint` - The endpoint URL for table storage in the secondary location.
- `primary_file_endpoint` - The endpoint URL for file storage in the primary location.
- `primary_access_key` - The primary access key for the storage account
- `secondary_access_key` - The secondary access key for the storage account
- `primary_connection_string` - The connection string associated with the primary location
- `secondary_connection_string` - The connection string associated with the secondary location
- `primary_blob_connection_string` - The connection string associated with the primary blob location
- `secondary_blob_connection_string` - The connection string associated with the secondary blob location
- `identity` - An `identity` block as defined below, which contains the Identity information for this Storage Account.

`identity` exports the following:

- `principal_id` - The Principal ID for the Service Principal associated with the Identity of this Storage Account.

- `tenant_id` - The Tenant ID for the Service Principal associated with the Identity of this Storage Account.

You can access the Principal ID via `${azurerm_storage_account.test.identity.0.principal_id}` and the Tenant ID via `${azurerm_storage_account.test.identity.0.tenant_id}`

» Import

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

```
terraform import azurerm_storage_account.storageAcc1 /subscriptions/00000000-0000-0000-0000-
```

» azurerm_storage_container

Create an Azure Storage Container.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG"
  location = "westus"
}

resource "azurerm_storage_account" "test" {
  name                     = "accteststorageaccount"
  resource_group_name      = "${azurerm_resource_group.test.name}"
  location                 = "westus"
  account_tier             = "Standard"
  account_replication_type = "LRS"

  tags {
    environment = "staging"
  }
}

resource "azurerm_storage_container" "test" {
  name                  = "vhds"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  storage_account_name  = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the storage container. Must be unique within the storage service the container is located.

- `resource_group_name` - (Required) The name of the resource group in which to create the storage container. Changing this forces a new resource to be created.

- `storage_account_name` - (Required) Specifies the storage account in which to create the storage container. Changing this forces a new resource to be created.

- `container_access_type` - (Optional) The 'interface' for access the container provides. Can be either `blob`, `container` or `private`. Defaults to `private`. Changing this forces a new resource to be created.

» Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- `id` - The storage container Resource ID.
- `properties` - Key-value definition of additional properties associated to the storage container

» azurerm_storage_blob

Create an Azure Storage Blob.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG-d"
  location = "westus"
}

resource "azurerm_storage_account" "test" {
  name                     = "acctestaccs"
  resource_group_name      = "${azurerm_resource_group.test.name}"
  location                 = "westus"
  account_tier             = "Standard"
  account_replication_type = "LRS"
}

resource "azurerm_storage_container" "test" {
  name                  = "vhds"
  resource_group_name   = "${azurerm_resource_group.test.name}"
  storage_account_name  = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}

resource "azurerm_storage_blob" "testsb" {
  name = "sample.vhd"

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

```
      storage_container_name = "${azurerm_storage_container.test.name}"

  type = "page"
  size = 5120
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the storage blob. Must be unique within the storage container the blob is located.

- `resource_group_name` - (Required) The name of the resource group in which to create the storage container. Changing this forces a new resource to be created.

- `storage_account_name` - (Required) Specifies the storage account in which to create the storage container. Changing this forces a new resource to be created.

- `storage_container_name` - (Required) The name of the storage container in which this blob should be created.

- `type` - (Optional) The type of the storage blob to be created. One of either `block` or `page`. When not copying from an existing blob, this becomes required.

- `size` - (Optional) Used only for `page` blobs to specify the size in bytes of the blob to be created. Must be a multiple of 512. Defaults to 0.

- `content_type` - (Optional) The content type of the storage blob. Cannot be defined if `source_uri` is defined. Defaults to `application/octet-stream`.

- `source` - (Optional) An absolute path to a file on the local system. Cannot be defined if `source_uri` is defined.

- `source_uri` - (Optional) The URI of an existing blob, or a file in the Azure File service, to use as the source contents for the blob to be created. Changing this forces a new resource to be created. Cannot be defined if `source` is defined.

- `parallelism` - (Optional) The number of workers per CPU core to run for concurrent uploads. Defaults to `8`.

- `attempts` - (Optional) The number of attempts to make per page or block when uploading. Defaults to `1`.

» Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- `id` - The storage blob Resource ID.
- `url` - The URL of the blob

» azurerm_storage_queue

Create an Azure Storage Queue.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG-%d"
  location = "westus"
}

resource "azurerm_storage_account" "test" {
  name                     = "acctestacc%s"
  resource_group_name      = "${azurerm_resource_group.test.name}"
  location                 = "westus"
  account_tier             = "Standard"
  account_replication_type = "LRS"
}

resource "azurerm_storage_queue" "test" {
  name                 = "mysamplequeue"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  storage_account_name = "${azurerm_storage_account.test.name}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the storage queue. Must be unique within the storage account the queue is located.

- `resource_group_name` - (Required) The name of the resource group in which to create the storage queue. Changing this forces a new resource to be created.

- `storage_account_name` - (Required) Specifies the storage account in which to create the storage queue. Changing this forces a new resource to be created.

» Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- `id` - The storage queue Resource ID.

» azurerm_storage_share

Create an Azure Storage File Share.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "azuretest"
  location = "westus"
}

resource "azurerm_storage_account" "test" {
  name                     = "azureteststorage"
  resource_group_name      = "${azurerm_resource_group.test.name}"
  location                 = "westus"
  account_tier             = "Standard"
  account_replication_type = "LRS"
}

resource "azurerm_storage_share" "testshare" {
  name = "sharename"

  resource_group_name  = "${azurerm_resource_group.test.name}"
  storage_account_name = "${azurerm_storage_account.test.name}"

  quota = 50
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the share. Must be unique within the storage account where the share is located.

- `resource_group_name` - (Required) The name of the resource group in which to create the share. Changing this forces a new resource to be created.

- `storage_account_name` - (Required) Specifies the storage account in which to create the share. Changing this forces a new resource to be created.

- `quota` - (Optional) The maximum size of the share, in gigabytes. Must be greater than 0, and less than or equal to 5 TB (5120 GB). Default is 5120.

» Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- `id` - The storage share Resource ID.
- `url` - The URL of the share

» Import

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

```
terraform import azurerm_storage_share.testShare storageShareName/resourceGroupName/storage/
```

NOTE: This identifier is unique to Terraform

» azurerm_storage_table

Create an Azure Storage Table.

» Example Usage

```
resource "azurerm_resource_group" "test" {
  name     = "azuretest"
  location = "westus"
}

resource "azurerm_storage_account" "test" {
  name                     = "azureteststorage1"
  resource_group_name      = "${azurerm_resource_group.test.name}"
```

```
  location                = "westus"
  account_tier            = "Standard"
  account_replication_type = "LRS"
}

resource "azurerm_storage_table" "test" {
  name                 = "mysampletable"
  resource_group_name  = "${azurerm_resource_group.test.name}"
  storage_account_name = "${azurerm_storage_account.test.name}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the storage table. Must be unique within the storage account the table is located.

- `resource_group_name` - (Required) The name of the resource group in which to create the storage table. Changing this forces a new resource to be created.

- `storage_account_name` - (Required) Specifies the storage account in which to create the storage table. Changing this forces a new resource to be created.

» Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- `id` - The storage table Resource ID.

» azurerm_template_deployment

Create a template deployment of resources

Note on ARM Template Deployments: Due to the way the underlying Azure API is designed, Terraform can only manage the deployment of the ARM Template - and not any resources which are created by it. This means that when deleting the `azurerm_template_deployment` resource, Terraform will only remove the reference to the deployment, whilst leaving any resources created by that ARM Template Deployment. One workaround for this is to use a unique Resource Group for each ARM Template Deployment, which means deleting the Resource Group would contain any resources created within it - however this isn't ideal. More information.

» Example Usage

Note: This example uses Storage Accounts and Public IP's which are natively supported by Terraform - we'd highly recommend using the Native Resources where possible instead rather than an ARM Template, for the reasons outlined above.

```
resource "azurerm_resource_group" "test" {
  name     = "acctestRG-01"
  location = "West US"
}

resource "azurerm_template_deployment" "test" {
  name                = "acctesttemplate-01"
  resource_group_name = "${azurerm_resource_group.test.name}"

  template_body = <<DEPLOY
{
  "$schema": "https://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json
  "contentVersion": "1.0.0.0",
  "parameters": {
    "storageAccountType": {
      "type": "string",
      "defaultValue": "Standard_LRS",
      "allowedValues": [
        "Standard_LRS",
        "Standard_GRS",
        "Standard_ZRS"
      ],
      "metadata": {
        "description": "Storage Account type"
      }
    }
  },
  "variables": {
    "location": "[resourceGroup().location]",
    "storageAccountName": "[concat(uniquestring(resourceGroup().id), 'storage')]",
    "publicIPAddressName": "[concat('myPublicIp', uniquestring(resourceGroup().id))]",
    "publicIPAddressType": "Dynamic",
    "apiVersion": "2015-06-15",
    "dnsLabelPrefix": "terraform-acctest"
  },
  "resources": [
    {
      "type": "Microsoft.Storage/storageAccounts",
      "name": "[variables('storageAccountName')]",
```

```
      "apiVersion": "[variables('apiVersion')]",
      "location": "[variables('location')]",
      "properties": {
        "accountType": "[parameters('storageAccountType')]"
      }
    },
    {
      "type": "Microsoft.Network/publicIPAddresses",
      "apiVersion": "[variables('apiVersion')]",
      "name": "[variables('publicIPAddressName')]",
      "location": "[variables('location')]",
      "properties": {
        "publicIPAllocationMethod": "[variables('publicIPAddressType')]",
        "dnsSettings": {
          "domainNameLabel": "[variables('dnsLabelPrefix')]"
        }
      }
    }
  ],
  "outputs": {
    "storageAccountName": {
      "type": "string",
      "value": "[variables('storageAccountName')]"
    }
  }
}
DEPLOY

  # these key-value pairs are passed into the ARM Template's `parameters` block
  parameters {
    "storageAccountType" = "Standard_GRS"
  }

  deployment_mode = "Incremental"
}

output "storageAccountName" {
  value = "${azurerm_template_deployment.test.outputs["storageAccountName"]}"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Specifies the name of the template deployment. Chang-

ing this forces a new resource to be created.

- `resource_group_name` - (Required) The name of the resource group in which to create the template deployment.
- `deployment_mode` - (Required) Specifies the mode that is used to deploy resources. This value could be either `Incremental` or `Complete`. Note that you will almost *always* want this to be set to `Incremental` otherwise the deployment will destroy all infrastructure not specified within the template, and Terraform will not be aware of this.
- `template_body` - (Optional) Specifies the JSON definition for the template.

Note: There's an `file` interpolation function available which allows you to read this from an external file, which helps makes this more resource more readable.

- `parameters` - (Optional) Specifies the name and value pairs that define the deployment parameters for the template.

- `parameters_body` - (Optional) Specifies a valid Azure JSON parameters file that define the deployment parameters. It can contain KeyVault references

Note: There's an `file` interpolation function available which allows you to read this from an external file, which helps makes this more resource more readable.

» Attributes Reference

The following attributes are exported:

- `id` - The Template Deployment ID.

- `outputs` - A map of supported scalar output types returned from the deployment (currently, Azure Template Deployment outputs of type String, Int and Bool are supported, and are converted to strings - others will be ignored) and can be accessed using `.outputs["name"]`.

» Note

Terraform does not know about the individual resources created by Azure using a deployment template and therefore cannot delete these resources during a destroy. Destroying a template deployment removes the associated deployment operations, but will not delete the Azure resources created by the deployment. In order to delete these resources, the containing resource group must also be destroyed. More information.