Azure Provider

The Azure Provider can be used to configure infrastructure in Microsoft Azure (https://azure.microsoft.com/en-us/) using the Azure Resource Manager API's. Documentation regarding the Data Sources (/docs/configuration/data-sources.html) and Resources (/docs/configuration/resources.html) supported by the Azure Provider can be found in the navigation to the left.

Interested in the provider's latest features, or want to make sure you're up to date? Check out the changelog (https://github.com/terraform-providers/terraform-provider-azurerm/blob/master/CHANGELOG.md) for version information and release notes.

Authenticating to Azure

Terraform supports a number of different methods for authenticating to Azure:

- Authenticating to Azure using the Azure CLI (/docs/providers/azurerm/auth/azure_cli.html)
- Authenticating to Azure using Managed Service Identity (/docs/providers/azurerm/auth/managed_service_identity.html)
- Authenticating to Azure using a Service Principal and a Client Certificate (/docs/providers/azurerm/auth/service_principal_client_certificate.html)
- Authenticating to Azure using a Service Principal and a Client Secret (/docs/providers/azurerm/auth/service_principal_client_secret.html)

We recommend using either a Service Principal or Managed Service Identity when running Terraform non-interactively (such as when running Terraform in a CI server) - and authenticating using the Azure CLI when running Terraform locally.

Example Usage

```
# Configure the Azure Provider
provider "azurerm" {
  # whilst the `version` attribute is optional, we recommend pinning to a given version of the Provider
  version = "=1.20.0"
# Create a resource group
resource "azurerm_resource_group" "test" {
 name = "production"
  location = "West US"
# Create a virtual network within the resource group
resource "azurerm_virtual_network" "test" {
                    = "production-network"
 resource_group_name = "${azurerm_resource_group.test.name}"
             = "${azurerm_resource_group.test.location}"
 location
  address_space
                    = ["10.0.0.0/16"]
}
```

Features and Bug Requests

The Azure provider's bugs and feature requests can be found in the GitHub repo issues (https://github.com/terraform-providers/terraform-provider-azurerm/issues). Please avoid "me too" or "+1" comments. Instead, use a thumbs up reaction (https://blog.github.com/2016-03-10-add-reactions-to-pull-requests-issues-and-comments/) on enhancement requests. Provider maintainers will often prioritize work based on the number of thumbs on an issue.

Community input is appreciated on outstanding issues! We love to hear what use cases you have for new features, and want to provide the best possible experience for you using the Azure provider.

If you have a bug or feature request without an existing issue

- if an existing resource or field is working in an unexpected way, file a bug (https://github.com/terraform-providers/terraform-provider-azurerm/issues/new?template=bug.md).
- if you'd like the provider to support a new resource or field, file an enhancement/feature request (https://github.com/terraform-providers/terraform-provider-azurerm/issues/new?template=enhancement.md).

The provider maintainers will often use the assignee field on an issue to mark who is working on it.

- An issue assigned to an individual maintainer indicates that maintainer is working on the issue
- If you're interested in working on an issue please leave a comment in that issue

If you have configuration questions, or general questions about using the provider, try checking out:

- Terraform's community resources (https://www.terraform.io/docs/extend/community/index.html)
- HashiCorp support (https://support.hashicorp.com) for Terraform Enterprise customers

Argument Reference

The following arguments are supported:

- client_id (Optional) The Client ID which should be used. This can also be sourced from the ARM_CLIENT_ID Environment Variable.
- environment (Optional) The Cloud Environment which be used. Possible values are public, usgovernment, german and china. Defaults to public. This can also be sourced from the ARM_ENVIRONMENT environment variable.
- subscription_id (Optional) The Subscription ID which should be used. This can also be sourced from the ARM_SUBSCRIPTION_ID Environment Variable.
- tenant_id (Optional) The Tenant ID which should be used. This can also be sourced from the ARM_TENANT_ID
 Environment Variable.

When authenticating as a Service Principal using a Client Certificate, the following fields can be set:

• client_certificate_password - (Optional) The password associated with the Client Certificate. This can also be sourced from the ARM_CLIENT_CERTIFICATE_PASSWORD Environment Variable.

• client_certificate_path - (Optional) The path to the Client Certificate associated with the Service Principal which should be used. This can also be sourced from the ARM CLIENT CERTIFICATE PATH Environment Variable.

More information on how to configure a Service Principal using a Client Certificate can be found in this guide (/docs/providers/azurerm/auth/service_principal_client_certificate.html).

When authenticating as a Service Principal using a Client Secret, the following fields can be set:

• client_secret - (Optional) The Client Secret which should be used. This can also be sourced from the ARM_CLIENT_SECRET Environment Variable.

More information on how to configure a Service Principal using a Client Secret can be found in this guide (/docs/providers/azurerm/auth/service_principal_client_secret.html).

When authenticating using Managed Service Identity, the following fields can be set:

- msi_endpoint (Optional) The path to a custom endpoint for Managed Service Identity in most circumstances this should be detected automatically. This can also be sourced from the ARM_MSI_ENDPOINT Environment Variable.
- use_msi (Optional) Should Managed Service Identity be used for Authentication? This can also be sourced from the ARM_USE_MSI Environment Variable. Defaults to false.

More information on how to configure a Service Principal using Managed Service Identity can be found in this guide (/docs/providers/azurerm/auth/managed_service_identity.html).

For some advanced scenarios, such as where more granular permissions are necessary - the following properties can be set:

- skip_credentials_validation (Optional) Should the AzureRM Provider skip verifying the credentials being used are valid? This can also be sourced from the ARM_SKIP_CREDENTIALS_VALIDATION Environment Variable. Defaults to false.
- skip_provider_registration (Optional) Should the AzureRM Provider skip registering any required Resource Providers? This can also be sourced from the ARM_SKIP_PROVIDER_REGISTRATION Environment Variable. Defaults to false.

It's also possible to use multiple Provider blocks within a single Terraform configuration, for example to work with resources across multiple Subscriptions - more information can be found in the documentation for Providers (https://www.terraform.io/docs/configuration/providers.html#multiple-provider-instances).

Azure Provider: Authenticating using the Azure CLI

Terraform supports a number of different methods for authenticating to Azure:

- Authenticating to Azure using the Azure CLI (which is covered in this guide)
- Authenticating to Azure using Managed Service Identity (/docs/providers/azurerm/auth/managed_service_identity.html)
- Authenticating to Azure using a Service Principal and a Client Certificate (/docs/providers/azurerm/auth/service_principal_client_certificate.html)
- Authenticating to Azure using a Service Principal and a Client Secret (/docs/providers/azurerm/auth/service_principal_client_secret.html)

We recommend using either a Service Principal or Managed Service Identity when running Terraform non-interactively (such as when running Terraform in a CI server) - and authenticating using the Azure CLI when running Terraform locally.

Important Notes about Authenticating using the Azure CLI

- Prior to version 1.20 the AzureRM Provider used a different method of authorizing via the Azure CLI where credentials reset after an hour as such we'd recommend upgrading to version 1.20 or later of the AzureRM Provider.
- Terraform only supports authenticating using the az CLI (and this must be available on your PATH) authenticating using the older azure CLI or PowerShell Cmdlets is not supported.
- Authenticating via the Azure CLI is only supported when using a User Account. If you're using a Service Principal (for example via az login --service-principal) you should instead authenticate via the Service Principal directly (either using a Client Secret (/docs/providers/azurerm/auth/service_principal_client_secret.html) or a Client Certificate (/docs/providers/azurerm/auth/service_principal_client_certificate.html)).

Logging into the Azure CLI

Note: If you're using the **China**, **German** or **Government** Azure Clouds - you'll need to first configure the Azure CLI to work with that Cloud. You can do this by running:

\$ az cloud set --name AzureChinaCloud|AzureGermanCloud|AzureUSGovernment

Firstly, login to the Azure CLI using:

\$ az login

Once logged in - it's possible to list the Subscriptions associated with the account via:

```
$ az account list
```

The output (similar to below) will display one or more Subscriptions - with the id field being the subscription_id field referenced above.

```
[
    "cloudName": "AzureCloud",
    "id": "00000000-0000-0000-00000000000",
    "isDefault": true,
    "name": "PAYG Subscription",
    "state": "Enabled",
    "tenantId": "00000000-0000-0000-0000000000",
    "user": {
        "name": "user@example.com",
        "type": "user"
    }
}
```

Should you have more than one Subscription, you can specify the Subscription to use via the following command:

```
$ az account set --subscription="SUBSCRIPTION_ID"
```

Configuring Azure CLI authentication in Terraform

Now that we're logged into the Azure CLI - we can configure Terraform to use these credentials.

To configure Terraform to use the Default Subscription defined in the Azure CLI - we can use the following Provider block:

```
provider "azurerm" {
   # Whilst version is optional, we /strongly recommend/ using it to pin the version of the Provider being
   used
   version = "=1.20.0"
}
```

More information on the fields supported in the Provider block can be found here (/docs/providers/azurerm/index.html#argument-reference).

At this point running either terraform plan or terraform apply should allow Terraform to run using the Azure CLI to authenticate.

It's also possible to configure Terraform to use a specific Subscription - for example:

```
provider "azurerm" {
    # Whilst version is optional, we /strongly recommend/ using it to pin the version of the Provider being
used
    version = "=1.20.0"

subscription_id = "00000000-0000-0000-00000000000"
}
```

More information on the fields supported in the Provider block can be found here (/docs/providers/azurerm/index.html#argument-reference).

At this point running either terraform plan or terraform apply should allow Terraform to run using the Azure CLI to authenticate.

If you're looking to use Terraform across Tenants - it's possible to do this by configuring the Tenant ID field in the Provider block, as shown below:

More information on the fields supported in the Provider block can be found here (/docs/providers/azurerm/index.html#argument-reference).

At this point running either terraform plan or terraform apply should allow Terraform to run using the Azure CLI to authenticate.

Azure Provider: Authenticating using Managed Service Identity

Terraform supports a number of different methods for authenticating to Azure:

- Authenticating to Azure using the Azure CLI (/docs/providers/azurerm/auth/azure_cli.html)
- Authenticating to Azure using Managed Service Identity (which is covered in this guide)
- Authenticating to Azure using a Service Principal and a Client Certificate (/docs/providers/azurerm/auth/service_principal_client_certificate.html)
- Authenticating to Azure using a Service Principal and a Client Secret (/docs/providers/azurerm/auth/service_principal_client_secret.html)

We recommend using either a Service Principal or Managed Service Identity when running Terraform non-interactively (such as when running Terraform in a CI server) - and authenticating using the Azure CLI when running Terraform locally.

What is Managed Service Identity?

Certain services within Azure (for example Virtual Machines and Virtual Machine Scale Sets) can be assigned an Azure Active Directory identity which can be used to access the Azure Subscription. This identity can then be assigned permissions to a Subscription, Resource Group or other resources using the Azure Identity and Access Management functionality - however by default no permissions are assigned.

Once a resource is configured with an identity, a local metadata service exposes credentials which can be used by applications such as Terraform.

Configuring Managed Service Identity

The (simplified) Terraform Configuration below configures a Virtual Machine with Managed Service Identity, and then grants it Contributor access to the Subscription:

Configuring Managed Service Identity in Terraform

At this point we assume that Managed Service Identity is configured on the resource (e.g. Virtual Machine) being used - and that permissions have been assigned via Azure's Identity and Access Management system.

Terraform can be configured to use Managed Service Identity for authentication in one of two ways: using Environment Variables or by defining the fields within the Provider block.

You can configure Terraform to use Managed Service Identity by setting the Environment Variable ARM_USE_MSI to true; as shown below:

```
$ export ARM_USE_MSI=true
```

Using a Custom MSI Endpoint? In the unlikely event you're using a custom endpoint for Managed Service Identity - this can be configured using the ARM_MSI_ENDPOINT Environment Variable - however this shouldn't need to be configured in regular use.

Whilst a Provider block is *technically* optional when using Environment Variables - we'd strongly recommend defining one to be able to pin the version of the Provider being used:

```
provider "azurerm" {
   # Whilst version is optional, we /strongly recommend/ using it to pin the version of the Provider being
   used
   version = "=1.20.0"
}
```

More information on the fields supported in the Provider block can be found here (/docs/providers/azurerm/index.html#argument-reference).

At this point running either terraform plan or terraform apply should allow Terraform to run using Managed Service

It's also possible to configure Managed Service Identity within the Provider Block:

```
provider "azurerm" {
   # Whilst version is optional, we /strongly recommend/ using it to pin the version of the Provider being
used
   version = "=1.20.0"

   use_msi = true
}
```

Using a Custom MSI Endpoint? In the unlikely event you're using a custom endpoint for Managed Service Identity - this can be configured using the msi_endpoint field - however this shouldn't need to be configured in regular use.

More information on the fields supported in the Provider block can be found here (/docs/providers/azurerm/index.html#argument-reference).

At this point running either terraform plan or terraform apply should allow Terraform to run using Managed Service Identity.

Azure Provider: Authenticating using a Service Principal with a Client Certificate

Terraform supports a number of different methods for authenticating to Azure:

- Authenticating to Azure using the Azure CLI (/docs/providers/azurerm/auth/azure_cli.html)
- Authenticating to Azure using Managed Service Identity (/docs/providers/azurerm/auth/managed_service_identity.html)
- Authenticating to Azure using a Service Principal and a Client Certificate (which is covered in this guide)
- Authenticating to Azure using a Service Principal and a Client Secret (/docs/providers/azurerm/auth/service_principal_client_secret.html)

We recommend using either a Service Principal or Managed Service Identity when running Terraform non-interactively (such as when running Terraform in a CI server) - and authenticating using the Azure CLI when running Terraform locally.

Creating a Service Principal

A Service Principal is an application within Azure Active Directory which can be used as a means of authentication, either using a Client Secret (/docs/providers/azurerm/auth/service_principal_client_secret.html) or a Client Certificate (which is documented in this guide) and can be created though the Azure Portal.

This guide will cover how to generate a client certificate, how to create a Service Principal and then how to assign the Client Certificate to the Service Principal so that it can be used for authentication. Once that's done finally we're going to grant the Service Principal permission to manage resources in the Subscription - to do this we're going to assign Contributor rights to the Subscription - however it's possible to assign other permissions (https://azure.microsoft.com/engb/documentation/articles/role-based-access-built-in-roles/) depending on your configuration.

Generating a Client Certificate

Firstly we need to create a certificate which can be used for authentication. To do that we're going to generate a Certificate Signing Request (also known as a CSR) using openss1 (this can also be achieved using PowerShell, however that's outside the scope of this document):

```
$ openssl req -newkey rsa:4096 -nodes -keyout "service-principal.key" -out "service-principal.csr"
```

During the generation of the certificate you'll be prompted for various bits of information required for the certificate signing request - at least one item has to be specified for this to complete.

We can now sign that Certificate Signing Request, in this example we're going to self-sign this certificate using the Key we just generated; however it's also possible to do this using a Certificate Authority. In order to do that we're again going to use openssl:

```
$ openssl x509 -signkey "service-principal.key" -in "service-principal.csr" -req -days 365 -out "service-principal.crt"
```

Finally we can generate a PFX file which can be used to authenticate with Azure:

```
$ openssl pkcs12 - export - out "service-principal.pfx" - inkey "service-principal.key" - in "service-principal.crt"
```

Now that we've generated a certificate, we can create the Azure Active Directory application.

Creating the Service Principal

We're going to create the Service Principal in the Azure Portal - to do this navigate to the **Azure Active Directory** overview (https://portal.azure.com/#blade/Microsoft_AAD_IAM/ActiveDirectoryMenuBlade/Overview) within the Azure Portal - then select the **App Registration** blade

(https://portal.azure.com/#blade/Microsoft_AAD_IAM/ActiveDirectoryMenuBlade/RegisteredApps/RegisteredApps/Overview) and click **Endpoints** at the top of the **App Registration** blade. A list of URIs will be displayed and you need to locate the URI for **OAUTH 2.0 AUTHORIZATION ENDPOINT** which contains a GUID. This GUID is your Tenant ID (the tenant_id field mentioned above).

Next, navigate back to the App Registration blade

(https://portal.azure.com/#blade/Microsoft_AAD_IAM/ActiveDirectoryMenuBlade/RegisteredApps/RegisteredApps/Overview) - from here we'll create the Application in Azure Active Directory. To do this click **New application registration** at the top to add a new Application within Azure Active Directory. On this page, set the following values then press **Create**:

- Name this is a friendly identifier and can be anything (e.g. "Terraform")
- Application Type this should be set to "Web app / API"
- Sign-on URL this can be anything, providing it's a valid URI (e.g. https://terra.form (https://terra.form))

At this point the newly created Azure Active Directory application should be visible on-screen - if it's not, navigate to the the **App Registration** blade

(https://portal.azure.com/#blade/Microsoft_AAD_IAM/ActiveDirectoryMenuBlade/RegisteredApps/RegisteredApps/Overview) and select the Azure Active Directory application. At the top of this page, the "Application ID" GUID is the client_id you'll need

Assigning the Client Certificate to the Service Principal

To associate the public portion of the Client Certificate (the *.crt file) with the Azure Active Directory Application - to do this select **Settings** and then **Keys**. This screen displays the Passwords (Client Secrets) and Public Keys (Client Certificates) which are associated with this Azure Active Directory Application.

The Public Key associated with the generated Certificate can be uploaded by selecting **Upload Public Key**, selecting the file which should be uploaded (in the example above, this'd be service-principal.crt) - and then hitting **Save**.

Allowing the Service Principal to manage the Subscription

Now that we've created the Application within Azure Active Directory and assigned the certificate we're using for authentication, we can now grant the Application permissions to manage the Subscription. To do this, navigate to the **Subscriptions** blade within the Azure Portal (https://portal.azure.com/#blade/Microsoft_Azure_Billing/SubscriptionsBlade), select the Subscription you wish to use, then click **Access Control (IAM)** and finally **Add role assignment**.

Firstly, specify a Role which grants the appropriate permissions needed for the Service Principal (for example, Contributor will grant Read/Write on all resources in the Subscription). More information about the built in roles can be found here (https://azure.microsoft.com/en-gb/documentation/articles/role-based-access-built-in-roles/).

Secondly, search for and select the name of the Application created in Azure Active Directory to assign it this role - then press **Save**.

At this point the newly created Azure Active Directory Application should be associated with the Certificate that we generated earlier (which can be used as a Client Certificate) - and should have permissions to the Azure Subscription.

Configuring the Service Principal in Terraform

As we've obtained the credentials for this Service Principal - it's possible to configure them in a few different ways.

When storing the credentials as Environment Variables, for example:

```
$ export ARM_CLIENT_ID="00000000-0000-0000-0000-00000000000"
$ export ARM_CLIENT_CERTIFICATE_PATH="/path/to/my/client/certificate.pfx"
$ export ARM_CLIENT_CERTIFICATE_PASSWORD="Pa55w0rd123"
$ export ARM_SUBSCRIPTION_ID="00000000-0000-0000-000000000000"
$ export ARM_TENANT_ID="00000000-0000-0000-000000000000"
```

The following Provider block can be specified - where 1.20.0 is the version of the Azure Provider that you'd like to use:

```
provider "azurerm" {
   # Whilst version is optional, we /strongly recommend/ using it to pin the version of the Provider being
   used
   version = "=1.20.0"
}
```

More information on the fields supported in the Provider block can be found here (/docs/providers/azurerm/index.html#argument-reference).

At this point running either terraform plan or terraform apply should allow Terraform to run using the Service Principal to authenticate.

It's also possible to configure these variables either in-line or from using variables in Terraform (as the client_certificate_path and client_certificate_password are in this example), like so:

NOTE: We'd recommend not defining these variables in-line since they could easily be checked into Source Control.

```
variable "client_certificate_path" {}
variable "client_certificate_password" {}

provider "azurerm" {
    # Whilst version is optional, we /strongly recommend/ using it to pin the version of the Provider being used
    version = "=1.20.0"

subscription_id = "00000000-0000-0000-000000000000"
client_id = "00000000-0000-0000-000000000000"
client_certificate_path = "${var.client_certificate_path}"
client_certificate_password = "${var.client_certificate_password}"
tenant_id = "00000000-0000-0000-0000000000000"
}
```

More information on the fields supported in the Provider block can be found here (/docs/providers/azurerm/index.html#argument-reference).

At this point running either terraform plan or terraform apply should allow Terraform to run using the Service Principal to authenticate.

Azure Provider: Authenticating using a Service Principal with a Client Secret

Terraform supports a number of different methods for authenticating to Azure:

- Authenticating to Azure using the Azure CLI (/docs/providers/azurerm/auth/azure_cli.html)
- Authenticating to Azure using Managed Service Identity (/docs/providers/azurerm/auth/managed_service_identity.html)
- Authenticating to Azure using a Service Principal and a Client Certificate (/docs/providers/azurerm/auth/service_principal_client_certificate.html)
- Authenticating to Azure using a Service Principal and a Client Secret (which is covered in this guide)

We recommend using either a Service Principal or Managed Service Identity when running Terraform non-interactively (such as when running Terraform in a CI server) - and authenticating using the Azure CLI when running Terraform locally.

Creating a Service Principal

A Service Principal is an application within Azure Active Directory whose authentication tokens can be used as the client_id, client_secret, and tenant_id fields needed by Terraform (subscription_id can be independently recovered from your Azure account details).

It's possible to complete this task in either the Azure CLI or in the Azure Portal - in both we'll create a Service Principal which has Contributor rights to the subscription. It's also possible to assign other rights (https://azure.microsoft.com/engb/documentation/articles/role-based-access-built-in-roles/) depending on your configuration.

Creating a Service Principal using the Azure CLI

Note: If you're using the **China**, **German** or **Government** Azure Clouds - you'll need to first configure the Azure CLI to work with that Cloud. You can do this by running:

\$ az cloud set --name AzureChinaCloud|AzureGermanCloud|AzureUSGovernment

Firstly, login to the Azure CLI using:

\$ az login

Once logged in - it's possible to list the Subscriptions associated with the account via:

\$ az account list

The output (similar to below) will display one or more Subscriptions - with the id field being the subscription_id field

referenced above.

```
[
    "cloudName": "AzureCloud",
    "id": "00000000-0000-0000-00000000000",
    "isDefault": true,
    "name": "PAYG Subscription",
    "state": "Enabled",
    "tenantId": "00000000-0000-0000-0000000000",
    "user": {
        "name": "user@example.com",
        "type": "user"
    }
}
```

Should you have more than one Subscription, you can specify the Subscription to use via the following command:

```
$ az account set --subscription="SUBSCRIPTION_ID"
```

We can now create the Service Principal which will have permissions to manage resources in the specified Subscription using the following command:

```
$ az ad sp create-for-rbac --role="Contributor" --scopes="/subscriptions/SUBSCRIPTION_ID"
```

This command will output 5 values:

```
{
    "appId": "00000000-0000-0000-0000-00000000000",
    "displayName": "azure-cli-2017-06-05-10-41-15",
    "name": "http://azure-cli-2017-06-05-10-41-15",
    "password": "0000-0000-0000-0000-0000000000",
    "tenant": "00000000-0000-0000-0000-0000000000"
}
```

These values map to the Terraform variables like so:

- appId is the client_id defined above.
- password is the client_secret defined above.
- tenant is the tenant_id defined above.

Finally, it's possible to test these values work as expected by first logging in:

```
$ az login --service-principal -u CLIENT_ID -p CLIENT_SECRET --tenant TENANT_ID
```

Once logged in as the Service Principal - we should be able to list the VM sizes by specifying an Azure region, for example here we use the West US region:

```
$ az vm list-sizes --location westus
```

Note: If you're using the **China**, **German** or **Government** Azure Clouds - you will need to switch westus out for another region. You can find which regions are available by running:

```
$ az account list-locations
```

Finally, since we're logged into the Azure CLI as a Service Principal we recommend logging out of the Azure CLI (but you can instead log in using your user account):

```
$ az logout
```

Information on how to configure the Provider block using the newly created Service Principal credentials can be found below.

Creating a Service Principal in the Azure Portal

There are three tasks necessary to create a Service Principal using the Azure Portal (https://portal.azure.com):

- 1. Create an Application in Azure Active Directory (which acts as a Service Principal)
- 2. Generating a Client Secret for the Azure Active Directory Application (which can be used for authentication)
- 3. Grant the Application access to manage resources in your Azure Subscription

1. Creating an Application in Azure Active Directory

Firstly navigate to the Azure Active Directory overview

(https://portal.azure.com/#blade/Microsoft_AAD_IAM/ActiveDirectoryMenuBlade/Overview) within the Azure Portal - then select the **App Registration** blade

(https://portal.azure.com/#blade/Microsoft_AAD_IAM/ActiveDirectoryMenuBlade/RegisteredApps/RegisteredApps/Overview) and click **Endpoints** at the top of the **App Registration** blade. A list of URIs will be displayed and you need to locate the URI for **OAUTH 2.0 AUTHORIZATION ENDPOINT** which contains a GUID. This GUID is your Tenant ID (the tenant_id field mentioned above).

Next, navigate back to the App Registration blade

(https://portal.azure.com/#blade/Microsoft_AAD_IAM/ActiveDirectoryMenuBlade/RegisteredApps/RegisteredApps/Overview) - from here we'll create the Application in Azure Active Directory. To do this click **New application registration** at the top to add a new Application within Azure Active Directory. On this page, set the following values then press **Create**:

- Name this is a friendly identifier and can be anything (e.g. "Terraform")
- Application Type this should be set to "Web app / API"
- Sign-on URL this can be anything, providing it's a valid URI (e.g. https://terra.form (https://terra.form))

At this point the newly created Azure Active Directory application should be visible on-screen - if it's not, navigate to the the **App Registration** blade

(https://portal.azure.com/#blade/Microsoft_AAD_IAM/ActiveDirectoryMenuBlade/RegisteredApps/RegisteredApps/Overview) and select the Azure Active Directory application. At the top of this page, the "Application ID" GUID is the client_id you'll need.

2. Generating a Client Secret for the Azure Active Directory Application

Now that the Azure Active Directory Application exists we can create a Client Secret which can be used for authentication - to do this select **Settings** and then **Keys**. This screen displays the Passwords (Client Secrets) and Public Keys (Client Certificates) which are associated with this Azure Active Directory Application.

On this screen we can generate a new Password by entering a Description and selecting an Expiry Date, and then pressing **Save**. Once the Password has been generated it will be displayed on screen - *the Password is only displayed once* so **be sure to copy it now** (otherwise you will need to regenerate a new key). This newly generated Password is the client_secret you will need.

3. Granting the Application access to manage resources in your Azure Subscription

Once the Application exists in Azure Active Directory - we can grant it permissions to modify resources in the Subscription. To do this, navigate to the **Subscriptions** blade within the Azure Portal (https://portal.azure.com/#blade/Microsoft_Azure_Billing/SubscriptionsBlade), then select the Subscription you wish to use, then click **Access Control (IAM)**, and finally **Add role assignment**.

Firstly, specify a Role which grants the appropriate permissions needed for the Service Principal (for example, Contributor will grant Read/Write on all resources in the Subscription). There's more information about the built in roles available here (https://azure.microsoft.com/en-gb/documentation/articles/role-based-access-built-in-roles/).

Secondly, search for and select the name of the Application created in Azure Active Directory to assign it this role - then press **Save**.

Configuring the Service Principal in Terraform

As we've obtained the credentials for this Service Principal - it's possible to configure them in a few different ways.

When storing the credentials as Environment Variables, for example:

```
$ export ARM_CLIENT_ID="00000000-0000-0000-0000-00000000000"
$ export ARM_CLIENT_SECRET="00000000-0000-0000-0000000000000"
$ export ARM_SUBSCRIPTION_ID="00000000-0000-0000-0000000000000"
$ export ARM_TENANT_ID="00000000-0000-0000-000000000000"
```

The following Provider block can be specified - where 1.20.0 is the version of the Azure Provider that you'd like to use:

```
provider "azurerm" {
   # Whilst version is optional, we /strongly recommend/ using it to pin the version of the Provider being
   used
   version = "=1.20.0"
}
```

More information on the fields supported in the Provider block can be found here (/docs/providers/azurerm/index.html#argument-reference).

At this point running either terraform plan or terraform apply should allow Terraform to run using the Service Principal to authenticate.

It's also possible to configure these variables either in-line or from using variables in Terraform (as the client_secret is in this example), like so:

NOTE: We'd recommend not defining these variables in-line since they could easily be checked into Source Control.

```
variable "client_secret" {}

provider "azurerm" {
    # Whilst version is optional, we /strongly recommend/ using it to pin the version of the Provider being used
    version = "=1.20.0"

subscription_id = "00000000-0000-0000-000000000000"
    client_id = "00000000-0000-0000-00000000000"
    client_secret = "${var.client_secret}"
    tenant_id = "00000000-0000-0000-00000000000"
}
```

More information on the fields supported in the Provider block can be found here (/docs/providers/azurerm/index.html#argument-reference).

At this point running either terraform plan or terraform apply should allow Terraform to run using the Service Principal to authenticate.

Data Source: azurerm_api_management

Use this data source to access information about an existing API Management Service.

Example Usage

Argument Reference

- name (Required) The name of the API Management service.
- resource_group_name (Required) The Name of the Resource Group in which the API Management Service exists.

Attributes Reference

- id The ID of the API Management Service.
- additional_location One or more additional_location blocks as defined below
- location The Azure location where the API Management Service exists.
- gateway_url The URL for the API Management Service's Gateway.
- gateway_regional_url The URL for the Gateway in the Default Region.
- hostname_configuration A hostname_configuration block as defined below.
- management_api_url The URL for the Management API.
- notification_sender_email The email address from which the notification will be sent.
- portal_url The URL of the Publisher Portal.
- public_ip_addresses The Public IP addresses of the API Management Service.
- publisher_name The name of the Publisher/Company of the API Management Service.
- publisher_email The email of Publisher/Company of the API Management Service.
- scm_url The SCM (Source Code Management) endpoint.
- sku A sku block as documented below.
- tags A mapping of tags assigned to the resource.

A additional_location block exports the following:

- location The location name of the additional region among Azure Data center regions.
- gateway_regional_url Gateway URL of the API Management service in the Region.
- public_ip_addresses Public Static Load Balanced IP addresses of the API Management service in the additional location. Available only for Basic, Standard and Premium SKU.

A hostname_configuration block exports the following:

- management One or more management blocks as documented below.
- portal One or more portal blocks as documented below.
- proxy One or more proxy blocks as documented below.
- scm One or more scm blocks as documented below.

A management block exports the following:

- host_name The Hostname used for the Management API.
- key_vault_id The ID of the Key Vault Secret which contains the SSL Certificate.
- negotiate_client_certificate Is Client Certificate Negotiation enabled?

A portal block exports the following:

- host_name The Hostname used for the Portal.
- key_vault_id The ID of the Key Vault Secret which contains the SSL Certificate.
- negotiate_client_certificate Is Client Certificate Negotiation enabled?

A proxy block exports the following:

- default_ssl_binding Is this the default SSL Binding?
- host_name The Hostname used for the Proxy.
- key_vault_id The ID of the Key Vault Secret which contains the SSL Certificate.
- negotiate_client_certificate Is Client Certificate Negotiation enabled?

A scm block exports the following:

- host_name The Hostname used for the SCM URL.
- key_vault_id The ID of the Key Vault Secret which contains the SSL Certificate.
- negotiate_client_certificate Is Client Certificate Negotiation enabled?

A sku block exports the following:

- name Specifies the plan's pricing tier.
- capacity Specifies the number of units associated with this API Management service.

Data Source: azurerm_app_service

Use this data source to access information about an existing App Service.

Example Usage

Argument Reference

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

Attributes Reference

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

connection_string supports the following:

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

• value - The value for the Connection String.

site_config supports the following:

- always_on Is the app be loaded at all times?
- app_command_line App command line to launch.
- 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?
- ftps_state State of FTP / FTPS service for this AppService.
- 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.
- linux_fx_version Linux App Framework and version for the AppService.
- 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?
- virtual_network_name The name of the Virtual Network which this App Service is attached to.

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 access information about an existing App Service Plan (formerly known as a Server Farm).

Example Usage

Argument Reference

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

Attributes Reference

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

A sku block supports the following:

- tier Specifies the plan's pricing tier.
- size Specifies the plan's instance size.
- capacity Specifies the number of workers associated with this App Service Plan.

A properties block supports the following:

- app_service_environment_id The ID of the App Service Environment where the App Service Plan is located.
- maximum_number_of_workers Maximum number of instances that can be assigned to this App Service plan.

- reserved Is this App Service Plan Reserved?
- per_site_scaling Can Apps assigned to this App Service Plan be scaled independently?

Data Source: azurerm_application_security_group

Use this data source to access information about an existing Application Security Group.

Example Usage

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_azuread_application

Use this data source to access information about an existing 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 an existing 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)

Example Usage (by Object ID)

```
data "azurerm_azuread_service_principal" "test" {
  object_id = "00000000-0000-0000-0000-00000000000"
}
```

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 information about a built-in Role Definition. To access information about a custom Role Definition, please see the azurerm_role_definition data source (/docs/providers/azurerm/d/role_definition.html) 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/Microsoft.Compute/virtualMachines/myVM.

A permissions block contains:

- actions a list of actions supported by this role
- data_actions a list of data actions supported by this role
- not_actions a list of actions which are denied by this role
- not_data_actions a list of data actions which are denied by this role

Data Source: azurerm_cdn_profile

Use this data source to access information about an existing CDN Profile.

Example Usage

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 AzureRM 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 (https://docs.microsoft.com/en-us/azure/active-directory/develop/active-directory-application-objects).

Data Source: azurerm_container_registry

Use this data source to access information about an existing Container Registry.

Example Usage

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 information about an existing CosmosDB (formally DocumentDB) Account.

Example Usage

Argument Reference

The following arguments are supported:

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

Attributes Reference

The following attributes are exported:

- id The ID of the CosmosDB Account.
- location The Azure location where the resource exists.
- tags A mapping of tags assigned to the resource.
- offer_type The Offer Type to used by this CosmosDB Account.
- kind The Kind of the CosmosDB account.
- ip_range_filter The current IP Filter for this CosmosDB account
- enable_automatic_failover If automatic failover is enabled for this CosmosDB Account.
- capabilities Capabilities enabled on this Cosmos DB account.
- is_virtual_network_filter_enabled If virtual network filtering is enabled for this Cosmos DB account.
- virtual_network_rule Subnets that are allowed to access this CosmosDB account.
- enable_multiple_write_locations If multi-master is enabled for 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.

virtual_network_rule The virtual network subnets allowed to access this Cosmos DB account with the following properties:

- id The ID of the virtual network subnet.
- 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_data_lake_store

Use this data source to access information about an existing Data Lake Store.

Example Usage

Argument Reference

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

Attributes Reference

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

Use this data source to access information about an existing Dev Test Lab.

Example Usage

Argument Reference

- name (Required) The name of the Dev Test Lab.
- resource_group_name (Required) The Name of the Resource Group where the Dev Test Lab exists.

- id The ID of the Dev Test Lab.
- artifacts_storage_account_id The ID of the Storage Account used for Artifact Storage.
- default_storage_account_id The ID of the Default Storage Account for this Dev Test Lab.
- default_premium_storage_account_id The ID of the Default Premium Storage Account for this Dev Test Lab.
- key_vault_id The ID of the Key used for this Dev Test Lab.
- location The Azure location where the Dev Test Lab exists.
- premium_data_disk_storage_account_id The ID of the Storage Account used for Storage of Premium Data Disk.
- storage_type The type of storage used by the Dev Test Lab.
- tags A mapping of tags to assign to the resource.
- unique_identifier The unique immutable identifier of the Dev Test Lab.

Data Source: azurerm_dns_zone

Use this data source to access information about an existing DNS Zone.

Example Usage

Argument Reference

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

- 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_eventhub_namespace

Use this data source to access information about an existing EventHub Namespace.

Example Usage

Argument Reference

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

Attributes Reference

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

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

- default_primary_connection_string The primary connection string for the authorization rule RootManageSharedAccessKey.
- default_secondary_connection_string The secondary connection string for the authorization rule RootManageSharedAccessKey.
- default_primary_key The primary access key for the authorization rule RootManageSharedAccessKey.
- default_secondary_key The secondary access key for the authorization rule RootManageSharedAccessKey.

Data Source: azurerm_image

Use this data source to access information about an existing Image.

Example Usage

Argument Reference

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

Attributes Reference

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

os_disk supports the following:

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

data_disk supports the following:

- blob_uri the URI in Azure storage of the blob used to create the image.
- $\bullet \ \ \text{caching the caching mode for the Data Disk, such as ReadWrite, ReadOnly, or None.}$
- 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

Use this data source to access information about an existing Key Vault.

Example Usage

Argument Reference

The following arguments are supported:

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

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

- 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_key

Use this data source to access information about an existing Key Vault Key.

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

Example Usage

Argument Reference

The following arguments are supported:

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

Attributes Reference

- id The ID of the Key Vault Key.
- e The RSA public exponent of this Key Vault Key.
- key_type Specifies the Key Type of this Key Vault Key
- key_size Specifies the Size of this Key Vault Key.
- key_opts A list of JSON web key operations assigned to this Key Vault Key
- n The RSA modulus of this Key Vault Key.
- tags A mapping of tags assigned to this Key Vault Key.
- version The current version of the Key Vault Key.

Data Source: azurerm_key_vault_secret

Use this data source to access information about an existing 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 (/docs/state/sensitive-data.html).

Example Usage

Argument Reference

The following arguments are supported:

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

Attributes Reference

- 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

Use this data source to access information about an existing 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 (/docs/state/sensitive-data.html).

Example Usage

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

- id The ID of the Kubernetes Managed Cluster.
- addon_profile A addon_profile block as documented below.
- agent_pool_profile One or more agent_profile_pool blocks as documented below.
- dns_prefix The DNS Prefix of the managed Kubernetes cluster.
- fqdn The FQDN of the Azure Kubernetes Managed Cluster.
- kube_admin_config A kube_admin_config block as defined below. This is only available when Role Based Access
 Control with Azure Active Directory is enabled.
- kube_admin_config_raw Raw Kubernetes config for the admin account to be used by kubectl
 (https://kubernetes.io/docs/reference/kubectl/overview/) and other compatible tools. This is only available when Role
 Based Access Control with Azure Active Directory is enabled.
- kube_config A kube_config block as defined below.
- kube_config_raw Base64 encoded Kubernetes configuration.
- kubernetes_version The version of Kubernetes used on the managed Kubernetes Cluster.

- location The Azure Region in which the managed Kubernetes Cluster exists.
- linux_profile A linux_profile block as documented below.
- network_profile A network_profile block as documented below.
- node_resource_group Auto-generated Resource Group containing AKS Cluster resources.
- role_based_access_control A role_based_access_control block as documented below.
- service_principal A service_principal 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:

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

A azure_active_directory block exports the following:

- client_app_id The Client ID of an Azure Active Directory Application.
- server_app_id The Server ID of an Azure Active Directory Application.
- tenant_id The Tenant ID used for Azure Active Directory Application.

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.

The kube_admin_config and kube_config blocks 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 (/docs/providers/kubernetes/index.html) like so:

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:

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

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 role_based_access_control block exports the following:

- azure_active_directory A azure_active_directory block as documented above.
- enabled Is Role Based Access Control enabled?

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

Use this data source to access information about an existing Log Analytics (formally Operational Insights) Workspace.

Example Usage

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

- 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

Use this data source to access information about an existing Logic App Workflow.

Example Usage

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

- 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 information about an existing 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 = "${azurerm_virtual_network.test.name}"
 address_prefix = "10.0.2.0/24"
resource "azurerm_network_interface" "test" {
         = "acctni"
 name
 location
                  = "West US 2"
 resource_group_name = "acctestRG"
 ip_configuration {
                              = "testconfiguration1"
   name
   subnet_id
                              = "${azurerm_subnet.test.id}"
   private_ip_address_allocation = "dynamic"
 }
}
resource "azurerm_virtual_machine" "test" {
          = "acctvm"
                    = "West US 2"
 location
 resource_group_name = "acctestRG"
 network_interface_ids = ["${azurerm_network_interface.test.id}"]
                    = "Standard_DS1_v2"
 vm_size
 storage_image_reference {
   publisher = "Canonical"
   offer = "UbuntuServer"
           = "16.04-LTS"
   version = "latest"
 storage_os_disk {
   name = "myosdisk1"
                 = "ReadWrite"
   caching
   create_option = "FromImage"
   managed_disk_type = "Standard_LRS"
 storage_data_disk {
                   = "datadisk_new"
   حصيت بلوئه لاحساجي
```

```
managea_aisk_type = "Stanaara_LkS"
   create_option = "Empty"
   lun
                   = 0
                    = "1023"
   disk_size_gb
  storage_data_disk {
                   = "${data.azurerm_managed_disk.datasourcemd.name}"
   managed_disk_id = "${data.azurerm_managed_disk.datasourcemd.id}"
   create_option = "Attach"
                   = 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.

- 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 A collection containing the availability zone the managed disk is allocated in.

Data Source: azurerm_management_group

Use this data source to access information about an existing Management Group.

Example Usage

```
data "azurerm_management_group" "test" {
   group_id = "00000000-0000-0000-000000000000"
}

output "display_name" {
   value = "${data.azurerm_management_group.test.display_name}"
}
```

Argument Reference

The following arguments are supported:

• group_id - (Required) Specifies the UUID of this Management Group.

Attributes Reference

- id The ID of the Management Group.
- display_name A friendly name for the Management Group.
- parent_management_group_id The ID of any Parent Management Group.
- subscription_ids A list of Subscription ID's which are assigned to the Management Group.

Data Source: azurerm_monitor_action_group

Use this data source to access the properties of an Action Group.

Example Usage

```
data "azurerm_monitor_action_group" "example" {
  resource_group_name = "terraform-example-rg"
  name = "tfex-actiongroup"
}

output "action_group_id" {
  value = "${data.azurerm_monitor_action_group.example.id}"
}
```

Argument Reference

- name (Required) Specifies the name of the Action Group.
- resource_group_name (Required) Specifies the name of the resource group the Action Group is located in.

Attributes Reference

- id The ID of the Action Group.
- short_name The short name of the action group.
- enabled Whether this action group is enabled.
- email_receiver One or more email_receiver blocks as defined below.
- sms_receiver One or more sms_receiver blocks as defined below.
- webhook_receiver One or more webhook_receiver blocks as defined below.

email_receiver supports the following:

- name The name of the email receiver.
- email_address The email address of this receiver.

sms_receiver supports the following:

- name The name of the SMS receiver.
- country_code The country code of the SMS receiver.
- phone_number The phone number of the SMS receiver.

 ${\tt webhook_receiver} \ {\tt supports} \ {\tt the} \ {\sf following:}$

- name The name of the webhook receiver.
- service_uri The URI where webhooks should be sent.

Data Source: azurerm_monitor_diagnostic_categories

Use this data source to access information about the Monitor Diagnostics Categories supported by an existing Resource.

Example Usage

Argument Reference

• resource_id - (Required) The ID of an existing Resource which Monitor Diagnostics Categories should be retrieved for.

- id The ID of the Resource.
- logs A list of the Log Categories supported for this Resource.
- metrics A list of the Metric Categories supported for this Resource.

Data Source: azurerm_monitor_log_profile

Use this data source to access the properties of a Log Profile.

Example Usage

```
data "azurerm_monitor_log_profile" "test" {
   name = "test-logprofile"
}

output "log_profile_storage_account_id" {
   value = "${data.azurerm_monitor_log_profile.test.storage_account_id}"
}
```

Argument Reference

• name - (Required) Specifies the Name of the Log Profile.

Attributes Reference

- id The ID of the Log Profile.
- storage_account_id The resource id of the storage account in which the Activity Log is stored.
- servicebus_rule_id The service bus (or event hub) rule ID of the service bus (or event hub) namespace in which the Activity Log is streamed to.
- locations List of regions for which Activity Log events are stored or streamed.
- categories List of categories of the logs.
- retention_policy- a retention_policy block as documented below.

The retention_policy block supports:

- enabled A boolean value indicating whether the retention policy is enabled.
- days The number of days for the retention policy.

Data Source: azurerm_network_interface

Use this data source to access information about an existing Network Interface.

Example Usage

Argument Reference

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

- 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.
- 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 information about an existing Network Security Group.

Example Usage

Argument Reference

- name (Required) Specifies the Name of the Network Security Group.
- resource_group_name (Required) Specifies the Name of the Resource Group within which the Network Security Group exists

Attributes Reference

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

The security_rule block supports:

- name The name of the security rule.
- description The description for this rule.
- protocol The network protocol this rule applies to.
- source_port_range The Source Port or Range.
- destination_port_range The Destination Port or Range.
- source_address_prefix CIDR or source IP range or * to match any IP.
- destination_address_prefix CIDR or destination IP range or * to match any IP.
- 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

Use this data source to access information about an existing Notification Hub Namespace.

Example Usage

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 information about a 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.

- 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 information about an existing Public IP Address.

Example Usage (reference an existing)

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

```
resource "azurerm_resource_group" "test" {
       = "test-resources"
  location = "West US 2"
resource "azurerm virtual network" "test" {
                     = "test-network"
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "test" {
                       = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
                    = "10.0.2.0/24"
  address_prefix
}
resource "azurerm_public_ip" "test" {
                               = "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" {
                     = "test-nic"
  name
                     = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  ip_configuration {
                                  = "testconfiguration1"
   name
                                  = "${azurerm_subnet.test.id}"
   subnet_id
    private_ip_address_allocation = "static"
    private_ip_address
                            = "${azurerm_public_ip.test.id}"
    public_ip_address_id
  }
}
resource "azurerm_virtual_machine" "test" {
                       = "test-vm"
                        = "${azurerm_resource_group.test.location}"
  location
 resource_group_name = "${azurerm_resource_group.test.name}"
 network_interface_ids = ["${azurerm_network_interface.test.id}"]
  # ...
data "azurerm_public_ip" "test" {
                     = "${azurerm_public_ip.test.name}"
  resource_group_name = "${azurerm_virtual_machine.test.resource_group_name}"
output "public_ip_address" {
  value = "${data.azurerm_public_ip.test.ip_address}"
}
```

Argument Reference

- name (Required) Specifies the name of the public IP address.
- resource_group_name (Required) Specifies the name of the resource group.

- 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.
- ip_version The IP version being used, for example IPv4 or IPv6.
- tags A mapping of tags to assigned to the resource.

Data Source: azurerm_public_ips

Use this data source to access information about a set of existing 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 information about an existing Recovery Services Vault.

Example Usage

Argument Reference

The following arguments are supported:

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

Attributes Reference

- 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 information about an existing Resource Group.

Example Usage

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.

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

azurerm_servicebus_topic_authorization_rule

Manages a ServiceBus Topic authorization Rule within a ServiceBus Topic.

Example Usage

```
resource "azurerm_resource_group" "example" {
          = "tfex-servicebus"
  location = "West US"
resource "azurerm_servicebus_namespace" "example" {
                     = "tfex servicebus namespace"
 location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
                     = "standard"
  tags {
    source = "terraform"
}
resource "azurerm_servicebus_topic" "example" {
                     = "tfex_servicebus_topic"
  resource_group_name = "${azurerm_resource_group.example.name}"
                  = "${azurerm_servicebus_namespace.example.name}"
  namespace name
}
resource "azurerm_servicebus_topic_authorization_rule" "example" {
                     = "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}"
                  = true
 listen
                     = false
  send
                     = false
  manage
```

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.

azurerm_shared_image

Manages a Shared Image within a Shared Image Gallery.

NOTE Shared Image Galleries are currently in Public Preview. You can find more information, including how to register for the Public Preview here (https://azure.microsoft.com/en-gb/blog/announcing-the-public-preview-of-shared-image-gallery/).

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "example-resources"
 location = "West Europe"
resource "azurerm_shared_image_gallery" "test" {
         = "example_image_gallery"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
 description = "Shared images and things."
 tags {
   Hello = "There"
   World = "Example"
 }
}
resource "azurerm_shared_image" "test" {
          = "my-image"
 gallery_name = "${azurerm_shared_image_gallery.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
                  = "Linux"
 os_type
 identifier {
   publisher = "PublisherName"
   offer = "OfferName"
           = "ExampleSku"
   sku
 }
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Shared Image. Changing this forces a new resource to be created.
- gallery_name (Required) Specifies the name of the Shared Image Gallery in which this Shared Image should exist. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the Shared Image Gallery exists. Changing this forces a new resource to be created.

- location (Required) Specifies the supported Azure location where the Shared Image Gallery exists. Changing this forces a new resource to be created.
- identity (Required) An identity block as defined below.
- os_type (Required) The type of Operating System present in this Shared Image. Possible values are Linux and Windows.
- description (Optional) A description of this Shared Image.
- eula (Optional) The End User Licence Agreement for the Shared Image.
- privacy_statement_uri (Optional) The URI containing the Privacy Statement associated with this Shared Image.
- release_note_uri (Optional) The URI containing the Release Notes associated with this Shared Image.
- tags (Optional) A mapping of tags to assign to the Shared Image.

A identity block supports the following:

- offer (Required) The Offer Name for this Shared Image.
- publisher (Required) The Publisher Name for this Gallery Image.
- sku (Required) The Name of the SKU for this Gallery Image.

Attributes Reference

The following attributes are exported:

• id - The ID of the Shared Image.

Import

Shared Images can be imported using the resource id, e.g.

azurerm_shared_image_gallery

Manages a Shared Image Gallery.

NOTE Shared Image Galleries are currently in Public Preview. You can find more information, including how to register for the Public Preview here (https://azure.microsoft.com/en-gb/blog/announcing-the-public-preview-of-shared-image-gallery/).

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Shared Image Gallery. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which to create the Shared Image Gallery. 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 description for this Shared Image Gallery.
- tags (Optional) A mapping of tags to assign to the Shared Image Gallery.

Attributes Reference

The following attributes are exported:

• id - The ID of the Shared Image Gallery.

Import

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

azurerm_shared_image_version

Manages a Version of a Shared Image within a Shared Image Gallery.

NOTE Shared Image Galleries are currently in Public Preview. You can find more information, including how to register for the Public Preview here (https://azure.microsoft.com/en-gb/blog/announcing-the-public-preview-of-shared-image-gallery/).

Example Usage

```
data "azurerm_image" "existing" {
          = "search-api"
  resource_group_name = "packerimages"
}
data "azurerm_shared_image" "existing" {
          = "existing-image"
  gallery_name = "existing_gallery"
  resource_group_name = "existing-resources"
}
resource "azurerm_shared_image_version" "test" {
 name = "0.0.1"
gallery_name = "${data.azurerm_shared_image.existing.gallery_name}"
image_name = "${data.azurerm_shared_image.existing.name}"
 resource_group_name = "${data.azurerm_shared_image.existing.resource_group_name}"
               = "${data.azurerm_shared_image.existing.location}"
 location
 managed_image_id = "${data.azurerm_image.existing.id}"
 target_region {
                              = "${data.azurerm_shared_image.existing.location}"
      name
      regional_replica_count = "5"
   }
}
```

Argument Reference

The following arguments are supported:

- name (Required) The version number for this Image Version, such as 1.0.0. Changing this forces a new resource to be created.
- gallery_name (Required) The name of the Shared Image Gallery in which the Shared Image exists. Changing this forces a new resource to be created.
- image_name (Required) The name of the Shared Image within the Shared Image Gallery in which this Version should be created. Changing this forces a new resource to be created.
- location (Required) The Azure Region in which the Shared Image Gallery exists. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the Resource Group in which the Shared Image Gallery exists.

Changing this forces a new resource to be created.

• managed_image_id - (Required) The ID of the Managed Image which should be used for this Shared Image Version. Changing this forces a new resource to be created.

NOTE: The ID can be sourced from the azurerm_image Data Source (https://www.terraform.io/docs/providers/azurerm/d/image.html) or Resource (https://www.terraform.io/docs/providers/azurerm/r/image.html).

- target_region (Required) One or more target_region blocks as documented below.
- exclude_from_latest (Optional) Should this Image Version be excluded from the latest filter? If set to true this Image Version won't be returned for the latest version. Defaults to false.
- tags (Optional) A collection of tags which should be applied to this resource.

The target_region block exports the following:

- name (Required) The Azure Region in which this Image Version should exist.
- regional_replica_count (Required) The number of replicas of the Image Version to be created per region.

Attributes Reference

The following attributes are exported:

• id - The ID of the Shared Image Version.

Import

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

azurerm_signalr_service

Manages an Azure SignalR service.

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) The name of the SignalR 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 SignalR service. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the SignalR service exists. Changing this forces a new resource to be created.
- sku A sku block as documented below.
- tags (Optional) A mapping of tags to assign to the resource.

A sku block supports the following:

- name (Required) Specifies which tier to use. Valid values are Free_F1 and Standard_S1.
- capacity (Required) Specifies the number of units associated with this SignalR service. Valid values are 1, 2, 5, 10, 20, 50 and 100.

Attributes Reference

The following attributes are exported:

• id - The ID of the SignalR service.

- hostname The FQDN of the SignalR service.
- ip_address The publicly accessible IP of the SignalR service.
- public_port The publicly accessible port of the SignalR service which is designed for browser/client use.
- server_port The publicly accessible port of the SignalR service which is designed for customer server side use.

Import

SignalR services can be imported using the resource id, e.g.

 $terraform\ import\ azurerm_signalr_service.example\ /subscriptions/0000000-0000-0000-0000-00000000000/reso\ urceGroups/terraform-signalr/providers/Microsoft.SignalRService/SignalR/tfex-signalr$

azurerm_snapshot

Manages a Disk Snapshot.

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "snapshot-rg"
 location = "West Europe"
resource "azurerm managed disk" "test" {
                   = "managed-disk"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_type = "Standard_LRS"
 create_option = "Empty"
                    = "10"
 disk_size_gb
resource "azurerm_snapshot" "test" {
           = "snapshot"
                   = "${azurerm_resource_group.test.location}"
 resource_group_name = "${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/resourceGroups /mygroup1/providers/Microsoft.Compute/snapshots/snapshot1

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" {
                             = "mysqlserver"
 resource_group_name
                             = "${azurerm_resource_group.test.name}"
 location
                             = "${azurerm_resource_group.test.location}"
                            = "12.0"
 version
 administrator_login = "4dm1n157r470r"
  administrator_login_password = "4-v3ry-53cr37-p455w0rd"
resource "azurerm_sql_active_directory_administrator" "test" {
              = "${azurerm_sql_server.test.name}"
 server_name
 resource_group_name = "${azurerm_resource_group.test.name}"
                  = "sqladmin"
                  = "${data.azurerm_client_config.current.tenant_id}"
 tenant_id
  object_id
                   = "${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.

azurerm_sql_database

Allows you to manage an Azure SQL Database

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
 location = "West US"
resource "azurerm_sql_server" "test" {
                            = "mysqlserver"
 resource_group_name = "${azurerm_resource_group.test.name}"
                           = "West US"
 location
                            = "12.0"
 version
 administrator_login = "4dm1n157r470r"
 administrator_login_password = "4-v3ry-53cr37-p455w0rd"
resource "azurerm_sql_database" "test" {
         = "mysqldatabase"
 resource_group_name = "${azurerm_resource_group.test.name}"
                  = "West US"
 location
 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
 (https://azure.microsoft.com/en-gb/documentation/articles/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 (https://azure.microsoft.com/en-gb/documentation/articles/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 (https://azure.microsoft.com/engb/documentation/articles/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 (https://azure.microsoft.com/en-gb/documentation/articles/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.
- threat_detection_policy (Optional) Threat detection policy configuration. The threat_detection_policy block supports fields documented below.
- 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.

threat_detection_policy supports the following:

- state (Required) The State of the Policy. Possible values are Enabled, Disabled or New.
- disabled_alerts (Optional) Specifies a list of alerts which should be disabled. Possible values include Access_Anomaly, Sql_Injection and Sql_Injection_Vulnerability.

- email_account_admins (Optional) Should the account administrators be emailed when this alert is triggered?
- email_addresses (Optional) A list of email addresses which alerts should be sent to.
- retention_days (Optional) Specifies the number of days to keep in the Threat Detection audit logs.
- storage_account_access_key (Optional) Specifies the identifier key of the Threat Detection audit storage account. Required if state is Enabled.
- storage_endpoint (Optional) Specifies the blob storage endpoint (e.g. https://MyAccount.blob.core.windows.net
 (https://MyAccount.blob.core.windows.net)). This blob storage will hold all Threat Detection audit logs. Required if
 state is Enabled.
- use_server_default (Optional) Should the default server policy be used? Defaults to Disabled.

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/00000000-0000-0000-0000-000000000000/resourceGroups/myresourcegroup/providers/Microsoft.Sql/servers/myserver/databases/database1

azurerm_sql_elasticpool

Allows you to manage an Azure SQL Elastic Pool.

NOTE: - This version of the Elasticpool resource is being **deprecated** and should no longer be used. Please use the azurerm_mssql_elasticpool (/docs/providers/azurerm/r/mssql_elasticpool.html) version instead.

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "my-resource-group"
  location = "West US"
resource "azurerm_sql_server" "test" {
                                                                     # NOTE: needs to be globally u
                           = "my-sql-server"
nique
 resource_group_name
                        = "${azurerm_resource_group.test.name}"
                           = "${azurerm_resource_group.test.location}"
 location
 version
                            = "12.0"
 administrator_login
                            = "4dm1n157r470r"
 administrator_login_password = "4-v3ry-53cr37-p455w0rd"
resource "azurerm_sql_elasticpool" "test" {
                   = "test"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
                  = "${azurerm_sql_server.test.name}"
 server_name
                  = "Basic"
 edition
                   = 50
 db_dtu_min
                  = O
                   = 5
 db_dtu_max
  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 (https://docs.microsoft.com/en-gb/azure/sql-database/sql-database-service-tiers#elastic-pool-service-tiers-and-performance-in-edtus). 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 (https://docs.microsoft.com/en-gb/azure/sql-database/sql-database-service-tiers#elastic-pool-service-tiers-and-performance-in-edtus) 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 (https://docs.microsoft.com/en-gb/azure/sql-database/sql-database-service-tiers#elastic-pool-service-tiers-and-performance-in-edtus) 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 (https://docs.microsoft.com/en-gb/azure/sql-database/sql-database-service-tiers#elastic-pool-service-tiers-andperformance-in-edtus). If not defined when creating an elastic pool, the value is set to the size implied by edition and
 dtu.
- tags (Optional) A mapping of tags to assign to the resource.

Attributes Reference

The following attributes are exported:

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

azurerm_sql_firewall_rule

Allows you to manage an Azure SQL Firewall Rule

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_sql_server" "test" {
                            = "mysqlserver"
 resource_group_name = "${azurerm_resource_group.test.name}"
                            = "West US"
 location
                            = "12.0"
 version
 administrator_login = "4dm1n157r470r"
  administrator_login_password = "4-v3ry-53cr37-p455w0rd"
resource "azurerm_sql_firewall_rule" "test" {
                   = "FirewallRule1"
 resource_group_name = "${azurerm_resource_group.test.name}"
 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 (https://docs.microsoft.com/en-us/rest/api/sql/firewallrules/createorupdate)).

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.

 $terraform\ import\ azurerm_sql_firewall_rule.rule1\ /subscriptions/0000000-0000-0000-0000-000000000000/reso\ urceGroups/myresourcegroup/providers/Microsoft.Sql/servers/myserver/firewallRules/rule1$

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 (/docs/state/sensitive-data.html).

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "database-rg"
  location = "West US"
resource "azurerm_sql_server" "test" {
                            = "mysqlserver"
                           = "${azurerm_resource_group.test.name}"
 resource_group_name
                            = "${azurerm_resource_group.test.location}"
 location
                             = "12.0"
  version
 administrator login
                             = "mradministrator"
 administrator_login_password = "thisIsDog11"
   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 (https://msdn.microsoft.com/library/ms161959.aspx)
- 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.

 $terraform\ import\ azurerm_sql_server.test\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGroups/myresourcegroup/providers/Microsoft.Sql/servers/myserver$

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" {
         = "example-vnet"
 address_space = ["10.7.29.0/29"]
location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
resource "azurerm_subnet" "subnet" {
         = "example-subnet"
 resource_group_name = "${azurerm_resource_group.example.name}"
 virtual_network_name = "${azurerm_virtual_network.vnet.name}"
 address_prefix = "10.7.29.0/29"
 service_endpoints = ["Microsoft.Sql"]
}
resource "azurerm_sql_server" "sqlserver" {
                            = "unqiueazuresqlserver"
 resource_group_name = "${azurerm_resource_group.example.name}"
                           = "${azurerm_resource_group.example.location}"
 location
 administrator_login_password = "4-v3ry-53cr37-p455w0rd"
resource "azurerm_sql_virtual_network_rule" "sqlvnetrule" {
                  = "sql-vnet-rule"
 resource_group_name = "${azurerm_resource_group.example.name}"
 server_name = "${azurerm_sql_server.sqlserver.name}"
                  = "${azurerm_subnet.subnet.id}"
 subnet_id
}
```

Argument Reference

The following arguments are supported:

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

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

- resource_group_name (Required) The name of the resource group where the SQL server resides. Changing this forces a new resource to be created.
- server_name (Required) The name of the SQL Server to which this SQL virtual network rule will be applied to. Changing this forces a new resource to be created.
- subnet_id (Required) The ID of the subnet that the SQL server will be connected to.
- ignore_missing_vnet_service_endpoint (Optional) Create the virtual network rule before the subnet has the virtual network service endpoint enabled. The default value is false.

NOTE: If ignore_missing_vnet_service_endpoint is false, and the target subnet does not contain the Microsoft.SQL endpoint in the service_endpoints array, the deployment will fail when it tries to create the SQL virtual network rule.

Attributes Reference

The following attributes are exported:

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

Import

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

azurerm_storage_account

Manage an Azure Storage Account.

Example Usage

Example Usage with Network Rules

```
resource "azurerm_resource_group" "testrg" {
 name = "resourceGroupName"
  location = "westus"
}
resource "azurerm virtual network" "test" {
            = "virtnetname"
 name
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.testrg.location}"
  resource_group_name = "${azurerm_resource_group.testrg.name}"
}
resource "azurerm_subnet" "test" {
                      = "subnetname"
 resource_group_name = "${azurerm_resource_group.testrg.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
 address prefix = "10.0.2.0/24"
  service_endpoints = ["Microsoft.Sql", "Microsoft.Storage"]
}
resource "azurerm_storage_account" "testsa" {
          = "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 (https://azure.microsoft.com/en-us/documentation/articles/storage-service-encryption/) for more information. Defaults to true.
- enable_file_encryption (Optional) Boolean flag which controls if Encryption Services are enabled for File storage, see here (https://azure.microsoft.com/en-us/documentation/articles/storage-service-encryption/) for more information. Defaults to true.
- enable_https_traffic_only (Optional) Boolean flag which forces HTTPS if enabled, see here (https://docs.microsoft.com/en-us/azure/storage/storage-require-secure-transfer/) 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 (https://docs.microsoft.com/en-gb/azure/storage/blobs/storage-custom-domain-name)

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.

azurerm_storage_blob

Manage an Azure Storage Blob.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acctestRG-d"
  location = "westus"
resource "azurerm_storage_account" "test" {
                         = "acctestaccs"
 resource_group_name = "${azurerm_resource_group.test.name}"
                         = "westus"
 location
 account_tier = "Standard"
 account_replication_type = "LRS"
resource "azurerm_storage_container" "test" {
  resource_group_name = "${azurerm_resource_group.test.name}"
  storage_account_name = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}
resource "azurerm_storage_blob" "testsb" {
 name = "sample.vhd"
                        = "${azurerm_resource_group.test.name}"
 resource_group_name
 storage_account_name = "${azurerm_storage_account.test.name}"
 storage_container_name = "${azurerm_storage_container.test.name}"
 type = "page"
  size = 5120
}
```

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 ID of the Storage Blob.
- url The URL of the blob

Import

Storage Blob's can be imported using the resource id, e.g.

terraform import azurerm_storage_blob.blob1 https://example.blob.core.windows.net/container/blob.vhd

azurerm_storage_container

Manage an Azure Storage Container.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acctestRG"
  location = "westus"
resource "azurerm_storage_account" "test" {
                        = "accteststorageaccount"
 resource_group_name = "${azurerm_resource_group.test.name}"
                        = "westus"
 location
 account_tier = "Standard"
 account_replication_type = "LRS"
  tags {
   environment = "staging"
  }
}
resource "azurerm_storage_container" "test" {
                      = "vhds"
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_name = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}
```

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.

Attributes Reference

The following attributes are exported in addition to the arguments listed above:

• id - The ID of the Storage Container.

• properties - Key-value definition of additional properties associated to the storage container

Import

Storage Containers can be imported using the $\ensuremath{\operatorname{\textbf{resource}}}$ id, e.g.

 $terraform\ import\ azurerm_storage_container.container1\ https://example.blob.core.windows.net/container.container$

azurerm_storage_queue

Manage an Azure Storage Queue.

Example Usage

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 ID of the Storage Queue.

Import

Storage Queue's can be imported using the resource id, e.g.

 $terraform\ import\ azurerm_storage_queue.queue1\ https://example.queue.core.windows.net/queue1$

azurerm_storage_share

Manage an Azure Storage File Share.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "azuretest"
  location = "westus"
resource "azurerm_storage_account" "test" {
                        = "azureteststorage"
 resource_group_name = "${azurerm_resource_group.test.name}"
                         = "westus"
 location
 account_tier = "Standard"
 account_replication_type = "LRS"
resource "azurerm_storage_share" "testshare" {
 name = "sharename"
  resource_group_name = "${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.

 $terraform\ import\ azurerm_storage_share.testShare\ storageShareName/resourceGroupName/storageAccoutName$

NOTE: This identifier is unique to Terraform

azurerm_storage_table

Manage 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 ID of the Storage Table.

Import

Storage Table's can be imported using the resource id, e.g.

 $terraform\ import\ azurerm_storage_table.table1\ https://example.table.core.windows.net/table1$

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 (/docs/providers/azurerm/r/subnet.html), and allows for Subnets to be defined in-line within the Virtual Network resource (/docs/providers/azurerm/r/virtual_network.html). 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

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.
- $\bullet \;\; \mbox{address_prefix}$ (Required) The address prefix to use for the subnet.
- network_security_group_id (Optional / Deprecated) The ID of the Network Security Group to associate with the subnet.

NOTE: At this time Subnet <-> Network Security Group associations need to be configured both using this field (which is now Deprecated) and/or using the azurerm_subnet_network_security_group_association resource. This field field is deprecated and will be removed in favour of that resource in the next major version (2.0) of the AzureRM Provider.

• route_table_id - (Optional / Deprecated) The ID of the Route Table to associate with the subnet.

NOTE: At this time Subnet <-> Route Table associations need to be configured both using this field (which is now Deprecated) and/or using the azurerm_subnet_route_table_association resource. This field is deprecated and will be removed in favour of that resource in the next major version (2.0) of the AzureRM Provider.

• service_endpoints - (Optional) The list of Service endpoints to associate with the subnet. Possible values include: Microsoft.AzureActiveDirectory, Microsoft.AzureCosmosDB, Microsoft.EventHub, Microsoft.KeyVault, Microsoft.ServiceBus, Microsoft.Sql and Microsoft.Storage.

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/00000000-0000-0000-0000-000000000000/resourceGr oups/mygroup1/providers/Microsoft.Network/virtualNetworks/myvnet1/subnets/mysubnet1

azurerm_subnet_network_security_group_association

Associates a Network Security Group (/docs/providers/azurerm/r/network_security_group.html) with a Subnet (/docs/providers/azurerm/r/subnet.html) within a Virtual Network (/docs/providers/azurerm/r/virtual_network.html).

NOTE: Subnet <-> Network Security Group associations currently need to be configured on both this resource and using the network_security_group_id field on the azurerm_subnet resource. The next major version of the AzureRM Provider (2.0) will remove the network_security_group_id field from the azurerm_subnet resource such that this resource is used to link resources in future.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "West Europe"
resource "azurerm_virtual_network" "test" {
         = "example-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" {
 virtual_network_name = "${azurerm_virtual_network.test.name}"
address_prefix = "10.0.2.0/24"
 network_security_group_id = "${azurerm_network_security_group.test.id}"
resource "azurerm_network_security_group" "test" {
          = "example-nsg"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  security_rule {
                            = "test123"
   name
   priority
                             = 100
                            = "Inbound"
   direction
   access
                           = "Allow"
   protocol
                           = "Tcp"
   source_port_range = "*"
   destination_port_range = "*"
source_address_prefix = "*"
   destination address prefix = "*"
  }
}
resource "azurerm_subnet_network_security_group_association" "test" {
                          = "${azurerm_subnet.test.id}"
  subnet id
  network_security_group_id = "${azurerm_network_security_group.test.id}"
}
```

Argument Reference

The following arguments are supported:

- network_security_group_id (Required) The ID of the Network Security Group which should be associated with the Subnet. Changing this forces a new resource to be created.
- subnet_id (Required) The ID of the Subnet. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The ID of the Subnet.

Import

Subnet <-> Network Security Group Associations can be imported using the resource id of the Subnet, e.g.

azurerm_subnet_route_table_association

Associates a Route Table (/docs/providers/azurerm/r/route_table.html) with a Subnet (/docs/providers/azurerm/r/subnet.html) within a Virtual Network (/docs/providers/azurerm/r/virtual_network.html).

NOTE: Subnet <-> Route Table associations currently need to be configured on both this resource and using the route_table_id field on the azurerm_subnet resource. The next major version of the AzureRM Provider (2.0) will remove the route_table_id field from the azurerm_subnet resource such that this resource is used to link resources in future.

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "example-resources"
  location = "West Europe"
resource "azurerm_virtual_network" "test" {
          = "example-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" {
          = "frontend"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
 address_prefix = "10.0.2.0/24"
  route_table_id
                      = "${azurerm_route_table.test.id}"
resource "azurerm_route_table" "test" {
 name = "example-routetable"
location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 route {
   name = "example"
address_prefix = "10.100.0.0/14"
next_hop_type = "VirtualAppliance"
    next_hop_in_ip_address = "10.10.1.1"
  }
}
resource "azurerm_subnet_route_table_association" "test" {
  subnet id = "${azurerm subnet.test.id}"
  route_table_id = "${azurerm_route_table.test.id}"
}
```

Argument Reference

- route_table_id (Required) The ID of the Route Table which should be associated with the Subnet. Changing this forces a new resource to be created.
- subnet_id (Required) The ID of the Subnet. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The ID of the Subnet.

Import

Subnet Route Table Associations can be imported using the resource id of the Subnet, e.g.

azurerm_template_deployment

Manage 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 (https://docs.microsoft.com/en-us/resources/deployments#Deployments_Delete).

Example Usage

Note: This example uses Storage Accounts (/docs/providers/azurerm/r/storage_account.html) and Public IP's (/docs/providers/azurerm/r/public_ip.html) which are natively supported by Terraform - we'd highly recommend using the Native Resources where possible instead rather than an ARM Template, for the reasons outlined above.

```
resource "azurerm_resource_group" "test" {
          = "acctestRG-01"
  location = "West US"
resource "azurerm template deployment" "test" {
                     = "acctesttemplate-01"
  resource_group_name = "${azurerm_resource_group.test.name}"
  template body = <<DEPLOY
  "$schema": "https://schema.management.azure.com/schemas/2015-01-01/deploymentTemplate.json#",
  "contentVersion": "1.0.0.0",
  "parameters": {
    "storageAccountType": {
      "type": "string",
      "defaultValue": "Standard LRS",
      "allowedValues": [
        "Standard_LRS",
        "Standard_GRS",
        "Standard_ZRS"
      "metadata": {
        "description": "Storage Account type"
      }
   }
  },
  "variables": {
    "location": "[resourceGroup().location]",
    "storageAccountName": "[concat(uniquestring(resourceGroup().id), 'storage')]",
    "publicIPAddressName": "[concat('myPublicIp', uniquestring(resourceGroup().id))]",
    "publicIPAddressType": "Dynamic",
    "apiVersion": "2015-06-15",
    "dnsLabelPrefix": "terraform-acctest"
  }.
  "resources": [
```

```
"type": "Microsoft.Storage/storageAccounts",
      "name": "[variables('storageAccountName')]",
      "apiVersion": "[variables('apiVersion')]",
      "location": "[variables('location')]",
      "properties": {
        "accountType": "[parameters('storageAccountType')]"
   },
   {
      "type": "Microsoft.Network/publicIPAddresses",
      "apiVersion": "[variables('apiVersion')]",
      "name": "[variables('publicIPAddressName')]",
      "location": "[variables('location')]",
      "properties": {
        "publicIPAllocationMethod": "[variables('publicIPAddressType')]",
        "dnsSettings": {
          "domainNameLabel": "[variables('dnsLabelPrefix')]"
     }
   }
  "outputs": {
    "storageAccountName": {
      "type": "string",
      "value": "[variables('storageAccountName')]"
   }
  }
}
DEPLOY
  # these key-value pairs are passed into the ARM Template's `parameters` block
    "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. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which to create the template deployment.
- deployment_mode (Required) Specifies the mode that is used to deploy resources. This value could be either Incremental or Complete. Note that you will almost *always* want this to be set to Incremental otherwise the deployment will destroy all infrastructure not specified within the template, and Terraform will not be aware of this.
- template_body (Optional) Specifies the JSON definition for the template.

Note: There's an file interpolation function available

(https://www.terraform.io/docs/configuration/interpolation.html#file-path-) 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

(https://www.terraform.io/docs/configuration/interpolation.html#file-path-) 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 (https://docs.microsoft.com/en-us/rest/api/resources/deployments#Deployments_Delete).

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" {
                    = "${random_id.server.hex}"
  resource_group_name = "${azurerm_resource_group.test.name}"
 traffic_routing_method = "Weighted"
 dns_config {
   relative_name = "${random_id.server.hex}"
               = 100
  }
 monitor_config {
   protocol = "http"
         = 80
           = "/"
   path
 tags {
   environment = "Production"
  }
}
resource "azurerm_traffic_manager_endpoint" "test" {
                    = "${random_id.server.hex}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 profile_name = "${azurerm_traffic_manager_profile.test.name}"
                   = "terraform.io"
 target
                   = "externalEndpoints"
  type
  weight
                    = 100
}
```

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 (https://docs.microsoft.com/en-us/rest/api/trafficmanager/geographichierarchies/getdefault).

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.

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" {
         = "trafficmanagerProfile"
  location = "West US"
resource "azurerm_traffic_manager_profile" "test" {
                        = "${random_id.server.hex}"
  resource_group_name = "${azurerm_resource_group.test.name}"
 traffic_routing_method = "Weighted"
 dns_config {
   relative_name = "${random_id.server.hex}"
                = 100
   ttl
 monitor_config {
   protocol = "http"
   port
           = 80
            = "/"
   path
   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.
- 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.

azurerm_user_assigned_identity

Manages a user assigned identity.

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) The name of the user assigned identity. Changing this forces a new identity to be created.
- resource_group_name (Required) The name of the resource group in which to create the user assigned identity.
- location (Required) The location/region where the user assigned identity is created.
- tags (Optional) A mapping of tags to assign to the resource.

Attributes Reference

The following attributes are exported:

- id The user assigned identity ID.
- principal_id Service Principal ID associated with the user assigned identity.
- client_id Client ID associated with the user assigned identity.

Import

User Assigned Identitites can be imported using the resource id, e.g.

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 (https://github.com/terraform-provider-azurerm/tree/master/examples/virtual-machines)

```
variable "prefix" {
  default = "tfvmex"
resource "azurerm_resource_group" "main" {
 name = "${var.prefix}-resources"
  location = "West US 2"
}
resource "azurerm_virtual_network" "main" {
            = "${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" {
                   = "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" {
 resource_group_name = "${azurerm_resource_group.main.name}"
 ip_configuration {
                                = "testconfiguration1"
   name
   subnet_id
                                = "${azurerm_subnet.internal.id}"
   private_ip_address_allocation = "dynamic"
  }
}
resource "azurerm_virtual_machine" "main" {
                   = "${var.prefix}-vm"
                      = "${azurerm_resource_group.main.location}"
 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"
          = "UbuntuServer"
   sku
             = "16.04-LTS"
   version = "latest"
  }
  storage_os_disk {
                   = "myosdisk1"
                   = "ReadWrite"
   caching
   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 (https://azure.microsoft.com/en-us/documentation/articles/virtual-machines-size-specs/).
- 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 (/docs/providers/azurerm/r/virtual_machine_data_disk_attachment.html) - 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 only supported in several regions at this time (https://docs.microsoft.com/en-us/azure/availability-zones/az-overview).

For more information on the different example configurations, please check out the Azure documentation (https://docs.microsoft.com/en-gb/rest/api/compute/virtualmachines/createorupdate#examples)

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), UserAssigned (where you can specify the Service Principal ID's) to be used by this Virtual Machine using the identity_ids field, and SystemAssigned, UserAssigned which assigns both a system managed identity as well as the specified user assigned identities.

NOTE: Managed Service Identity previously required the installation of a VM Extension, but this information is now available via the Azure Instance Metadata Service (https://docs.microsoft.com/en-us/azure/active-directory/managed-service-identity/overview#how-does-it-work).

NOTE: When type is set to SystemAssigned, identity the Principal ID can be retrieved after the virtual machine has been created. See documentation (https://docs.microsoft.com/en-us/azure/active-directory/managed-service-identity/overview) 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.

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 (http://jackstromberg.com/2017/01/list-of-time-zones-consumed-by-azure/).
- 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 (https://www.terraform.io/docs/configuration/interpolation.html#file_path_) - 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/from-custom-image directory within the Github Repository (https://github.com/terraform-providers/terraform-provider-azurerm/tree/master/examples/virtual-machines/managed-disks/from-custom-image)

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 (/docs/providers/azurerm/r/virtual_machine_data_disk_attachment.html) - 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 (https://docs.microsoft.com/en-us/azure/virtual-machines/workloads/sap/how-to-enable-write-accelerator). 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, StandardSSD 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 (https://azure.microsoft.com/en-us/documentation/articles/virtual-machines-linux-cli-deploy-templates/#create-a-custom-vm-image) 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 (https://docs.microsoft.com/en-us/azure/virtual-machines/workloads/sap/how-to-enable-write-accelerator). 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, StandardSSD_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.

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 = "${azurerm_resource_group.main.name}"
resource "azurerm_subnet" "internal" {
                     = "internal"
  resource_group_name = "${azurerm_resource_group.main.name}"
 virtual_network_name = "${azurerm_virtual_network.main.name}"
                     = "10.0.2.0/24"
  address_prefix
}
resource "azurerm_network_interface" "main" {
          = "${var.prefix}-nic"
 location = "${azurerm_resource_group.main.location}"
 resource_group_name = "${azurerm_resource_group.main.name}"
  ip_configuration {
                                 = "internal"
   name
                                 = "${azurerm_subnet.internal.id}"
   subnet id
   private_ip_address_allocation = "dynamic"
  }
}
resource "azurerm_virtual_machine" "test" {
  name
         = "${local.vm_name}"
                      = "${azurerm_resource_group.main.location}"
  location
  resource_group_name = "${azurerm_resource_group.main.name}"
```

```
network_interface_ids = ["${azurerm_network_interface.main.id}"]
                     = "Standard_F2"
  vm_size
  storage_image_reference {
   publisher = "Canonical"
   offer = "UbuntuServer"
            = "16.04-LTS"
   version = "latest"
  storage_os_disk {
                   = "myosdisk1"
                  = "ReadWrite"
   caching
   create_option = "FromImage"
   managed_disk_type = "Standard_LRS"
  os_profile {
   computer_name = "${local.vm_name}"
   admin_username = "testadmin"
   admin_password = "Password1234!"
  os_profile_linux_config {
   disable_password_authentication = false
}
resource "azurerm_managed_disk" "test" {
 name
                   = "${local.vm_name}-disk1"
                     = "${azurerm_resource_group.main.location}"
  location
  resource_group_name = "${azurerm_resource_group.main.name}"
 storage_account_type = "Standard_LRS"
 create_option = "Empty"
                     = 10
  disk_size_gb
}
resource "azurerm_virtual_machine_data_disk_attachment" "test" {
  managed_disk_id = "${azurerm_managed_disk.test.id}"
  virtual_machine_id = "${azurerm_virtual_machine.windows.id}"
                   = "10"
 lun
                    = "ReadWrite"
  caching
}
```

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 (https://docs.microsoft.com/en-us/azure/virtual-machines/workloads/sap/how-to-enable-write-accelerator). 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/0000000-0000-0000-0000
-000000000000/resourceGroups/mygroup1/providers/microsoft.compute/virtualMachines/machine1/dataDisks/disk
1

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" {
          = "acctestRG"
  location = "West US"
resource "azurerm_virtual_network" "test" {
                   = "acctvn"
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "test" {
                      = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
                 = "10.0.2.0/24"
  address_prefix
resource "azurerm_network_interface" "test" {
                = "acctni"
                    = "${azurerm resource group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 ip_configuration {
   name
                                 = "testconfiguration1"
                                 = "${azurerm_subnet.test.id}"
   subnet_id
   private_ip_address_allocation = "dynamic"
  }
}
resource "azurerm_storage_account" "test" {
                        = "accsa"
                         = "${azurerm_resource_group.test.name}"
 resource_group_name
 location
                         = "${azurerm_resource_group.test.location}"
 account_tier
                          = "Standard"
 account_replication_type = "LRS"
 tags {
   environment = "staging"
  }
}
resource "azurerm_storage_container" "test" {
                       = "vhds"
  racolirca drolin nama = "${azilrarm racolirca drolin tact nama}"
```

```
resource_group_name - #[azurerm_resource_group.cesc.name]
  storage_account_name = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
resource "azurerm_virtual_machine" "test" {
                       = "acctvm"
                       = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 network_interface_ids = ["${azurerm_network_interface.test.id}"]
                      = "Standard_F2"
  storage_image_reference {
   publisher = "Canonical"
          = "UbuntuServer"
             = "16.04-LTS"
   sku
   version = "latest"
  storage_os_disk {
                 = "myosdisk1"
   name
   vhd_uri
                 = "${azurerm_storage_account.test.primary_blob_endpoint}${azurerm_storage_container.tes
t.name}/myosdisk1.vhd"
             = "ReadWrite"
   caching
   create_option = "FromImage"
  os_profile {
   computer_name = "hostname"
   admin_username = "testadmin"
   admin_password = "Password1234!"
  }
 os_profile_linux_config {
   disable_password_authentication = false
 tags {
   environment = "staging"
  }
}
resource "azurerm_virtual_machine_extension" "test" {
  name
                      = "hostname"
                      = "${azurerm_resource_group.test.location}"
  location
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_machine_name = "${azurerm_virtual_machine.test.name}"
                   = "Microsoft.Azure.Extensions"
 publisher
                      = "CustomScript"
 type
  type_handler_version = "2.0"
  settings = <<SETTINGS</pre>
        "commandToExecute": "hostname && uptime"
SETTINGS
  tags {
   environment = "Production"
  }
}
```

Argument Reference

The following arguments are supported:

- name (Required) The name of the virtual machine extension peering. Changing this forces a new resource to be created.
- location (Required) The location where the extension is created. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which to create the virtual network. Changing this forces a new resource to be created.
- virtual_machine_name (Required) The name of the virtual machine. Changing this forces a new resource to be created.
- publisher (Required) The publisher of the extension, available publishers can be found by using the Azure CLI.
- type (Required) The type of extension, available types for a publisher can be found using the Azure CLI.

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

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

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

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

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

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

Attributes Reference

The following attributes are exported:

• id - The Virtual Machine Extension ID.

Import

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

azurerm_virtual_machine_scale_set

Manage 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 (/docs/state/sensitive-data.html).

Example Usage with Managed Disks (Recommended)

```
resource "azurerm_resource_group" "test" {
 name = "acctestRG"
  location = "West US 2"
resource "azurerm_virtual_network" "test" {
          = "acctvn"
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "test" {
                      = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.2.0/24"
resource "azurerm_public_ip" "test" {
 name
                             = "${azurerm_resource_group.test.location}"
 location
 resource_group_name
                             = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "static"
 domain_name_label
                              = "${azurerm_resource_group.test.name}"
 tags {
   environment = "staging"
resource "azurerm_lb" "test" {
                    = "test"
  name
                    = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 frontend_ip_configuration {
                        = "PublicIPAddress"
   public_ip_address_id = "${azurerm_public_ip.test.id}"
resource "azurerm_lb_backend_address_pool" "bpepool" {
  resource_group_name = "${azurerm_resource_group.test.name}"
  loadbalancer_id = "${azurerm_lb.test.id}"
                     = "BackEndAddressPool"
  name
resource "azurerm_lb_nat_pool" "lbnatpool" {
```

```
count
                               = 3
                               = "${azurerm_resource_group.test.name}"
  resource_group_name
                               = "ssh"
 loadbalancer_id
                               = "${azurerm_lb.test.id}"
 protocol
                               = "Tcp"
                               = 50000
 frontend_port_start
  frontend_port_end
                               = 50119
 backend_port
                               = 22
  frontend_ip_configuration_name = "PublicIPAddress"
}
resource "azurerm_lb_probe" "test" {
  resource_group_name = "${azurerm_resource_group.test.name}"
  loadbalancer_id = "${azurerm_lb.test.id}"
 name = "http-probe"
request_path = "/health"
port = 8080
}
resource "azurerm_virtual_machine_scale_set" "test" {
  name
                   = "mytestscaleset-1"
                    = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  # automatic rolling upgrade
  automatic_os_upgrade = true
  upgrade_policy_mode = "Rolling"
  rolling_upgrade_policy {
   max_batch_instance_percent
                                        = 20
   max_unhealthy_instance_percent = 20
   max_unhealthy_upgraded_instance_percent = 5
                                         = "PT0S"
   pause_time_between_batches
  # required when using rolling upgrade policy
  health_probe_id = "${azurerm_lb_probe.test.id}"
  sku {
            = "Standard_F2"
         = "Standard"
   tier
   capacity = 2
  storage_profile_image_reference {
   publisher = "Canonical"
   offer = "UbuntuServer"
            = "16.04-LTS"
   sku
   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"
 os_profile_linux_config {
   disable_password_authentication = true
   ssh_keys {
            = "/home/myadmin/.ssh/authorized_keys"
     key_data = "${file("~/.ssh/demo_key.pub")}"
 }
 network_profile {
   name = "terraformnetworkprofile"
   primary = true
   ip_configuration {
                                           = "TestIPConfiguration"
     name
     primary
     subnet id
                                            = "${azurerm_subnet.test.id}"
     load_balancer_backend_address_pool_ids = ["${azurerm_lb_backend_address_pool.bpepool.id}"]
     load_balancer_inbound_nat_rules_ids = ["${element(azurerm_lb_nat_pool.lbnatpool.*.id, count.inde
x)}"]
 }
   environment = "staging"
```

Example Usage with Unmanaged Disks

```
resource "azurerm_resource_group" "test" {
         = "acctestRG"
  location = "West US"
resource "azurerm_virtual_network" "test" {
                  = "acctvn"
                  = ["10.0.0.0/16"]
 address_space
 location = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "test" {
                  = "acctsub"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.2.0/24"
resource "azurerm_storage_account" "test" {
                        = "accsa"
                       = "${azurerm_resource_group.test.name}"
 resource_group_name
                        = "westus"
 location
                 = "Standard"
 account_tier
 account_replication_type = "LRS"
  ---- ſ
```

```
τags {
   environment = "staging"
  }
}
resource "azurerm_storage_container" "test" {
                   = "vhds"
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_name = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
}
resource "azurerm_virtual_machine_scale_set" "test" {
                    = "mytestscaleset-1"
 name
 location
                    = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
 upgrade_policy_mode = "Manual"
  sku {
   name
           = "Standard_F2"
   tier
           = "Standard"
   capacity = 2
  os_profile {
   computer_name_prefix = "testvm"
   admin_username
                   = "myadmin"
 os_profile_linux_config {
   disable password authentication = true
   ssh_keys {
            = "/home/myadmin/.ssh/authorized_keys"
     key_data = "${file("~/.ssh/demo_key.pub")}"
   }
  }
  network_profile {
   name = "TestNetworkProfile"
   primary = true
   ip_configuration {
           = "TestIPConfiguration"
     primary = true
     subnet_id = "${azurerm_subnet.test.id}"
   }
  }
 storage_profile_os_disk {
             = "osDiskProfile"
   name
                 = "ReadWrite"
   create option = "FromImage"
   vhd_containers = ["${azurerm_storage_account.test.primary_blob_endpoint}${azurerm_storage_container.t
est.name}"]
 }
  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.
- network_profile (Required) A collection of network profile block as documented below.
- os_profile (Required) A Virtual Machine OS Profile block 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.
- sku (Required) A sku block as documented below.
- storage_profile_os_disk (Required) A storage profile os disk block as documented below
- upgrade_policy_mode (Required) Specifies the mode of an upgrade to virtual machines in the scale set. Possible values, Rolling, Manual, or Automatic. When choosing Rolling, you will need to set a health probe.
- automatic_os_upgrade (Optional) Automatic OS patches can be applied by Azure to your scaleset. This is particularly useful when upgrade_policy_mode is set to Rolling. Defaults to false.
- boot_diagnostics (Optional) A boot diagnostics profile block as referenced below.
- extension (Optional) Can be specified multiple times to add extension profiles to the scale set. Each extension block supports the fields documented below.
- eviction_policy (Optional) Specifies the eviction policy for Virtual Machines in this Scale Set. Possible values are Deallocate and Delete.

NOTE: eviction_policy can only be set when priority is set to Low.

- health_probe_id (Optional) Specifies the identifier for the load balancer health probe. Required when using Rolling as your upgrade_policy_mode.
- 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_secrets (Optional) A collection of Secret blocks as documented below.
- overprovision (Optional) Specifies whether the virtual machine scale set should be overprovisioned.
- 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.

- rolling_upgrade_policy (Optional) A rolling_upgrade_policy block as defined below. This is only applicable
 when the upgrade_policy_mode is Rolling.
- 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. Default is true. Changing this forces a new resource to be created. See documentation (http://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/virtual-machine-scale-sets-placement-groups) for more information.
- 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.
- 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 only supported in several regions at this time (https://docs.microsoft.com/en-us/azure/availability-zones/az-overview).

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.

rolling_upgrade_policy supports the following:

- max_batch_instance_percent (Optional) The maximum percent of total virtual machine instances that will be upgraded simultaneously by the rolling upgrade in one batch. As this is a maximum, unhealthy instances in previous or future batches can cause the percentage of instances in a batch to decrease to ensure higher reliability. Defaults to 20.
- max_unhealthy_instance_percent (Optional) The maximum percentage of the total virtual machine instances in the scale set that can be simultaneously unhealthy, either as a result of being upgraded, or by being found in an unhealthy state by the virtual machine health checks before the rolling upgrade aborts. This constraint will be checked prior to starting any batch. Defaults to 20.
- max_unhealthy_upgraded_instance_percent (Optional) The maximum percentage of upgraded virtual machine instances that can be found to be in an unhealthy state. This check will happen after each batch is upgraded. If this percentage is ever exceeded, the rolling update aborts. Defaults to 20.
- pause_time_between_batches (Optional) The wait time between completing the update for all virtual machines in
 one batch and starting the next batch. The time duration should be specified in ISO 8601 format for duration
 (https://en.wikipedia.org/wiki/ISO_8601#Durations)). Defaults to 0
 seconds represented as PT0S.

identity supports the following:

• type - (Required) Specifies the identity type to be assigned to the scale set. Allowable values are SystemAssigned, UserAssigned, and SystemAssigned, UserAssigned. For the SystemAssigned identity the scale set's Service Principal ID (SPN) can be retrieved after the scale set has been created. See documentation

(https://docs.microsoft.com/en-us/azure/active-directory/managed-service-identity/overview) 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" {
                    = "vm-scaleset"
  resource_group_name = "${azurerm_resource_group.test.name}"
                    = "${azurerm_resource_group.test.location}"
 location
 sku {
           = "${var.vm_sku}"
   name
   tier = "Standard"
   capacity = "${var.instance_count}"
  }
  identity {
   type = "systemAssigned"
  extension {
   name
                       = "MSILinuxExtension"
                       = "Microsoft.ManagedIdentity"
   publisher
   type
                       = "ManagedIdentityExtensionForLinux"
   type_handler_version = "1.0"
                      = "{\"port\": 50342}"
   settings
  }
 # ...
}
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 (Optional) Specifies whether password authentication should be disabled. Defaults to false. 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 gateways. A scale set can reference backend address pools of one application gateway. Multiple
 scale sets cannot use the same application gateway.
- load_balancer_backend_address_pool_ids (Optional) Specifies an array of references to backend address pools of load balancers. A scale set can reference backend address pools of one public and one internal load balancer. Multiple scale sets cannot use the same load balancer.
- load_balancer_inbound_nat_rules_ids (Optional) Specifies an array of references to inbound NAT rules for load balancers.
- primary (Required) Specifies if this ip_configuration is the primary one.
- application_security_group_ids (Optional) Specifies up to 20 application security group IDs.
- 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, StandardSSD_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,
 StandardSSD_LRS or Premium_LRS.

storage_profile_image_reference supports the following:

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

boot_diagnostics supports the following:

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

extension supports the following:

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

plan supports the following:

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

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

Example of storage_profile_image_reference with id

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

# ...
}

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

# ...

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

# ...
}
```

Attributes Reference

The following attributes are exported:

• id - The virtual machine scale set ID.

Import

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

terraform import azurerm_virtual_machine_scale_set.scaleset1 /subscriptions/0000000-0000-0000-0000-00000 00000000/resourceGroups/mygroup1/providers/Microsoft.Compute/virtualMachineScaleSets/scaleset1

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 (/docs/providers/azurerm/r/subnet.html), and allows for Subnets to be defined in-line within the Virtual Network resource (/docs/providers/azurerm/r/virtual_network.html). 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" {
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_virtual_network" "test" {
 resource_group_name = "${azurerm_resource_group.test.name}"
 address_space = ["10.0.0.0/16"]
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 {
             = "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.
- subnet- One or more subnet blocks as defined below.

The subnet block exports:

• id - The ID of this subnet.

Import

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" {
        = "test"
 location = "West US"
resource "azurerm_virtual_network" "test" {
                 = "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" {
         = "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"
                 = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 public_ip_address_allocation = "Dynamic"
resource "azurerm_virtual_network_gateway" "test" {
                 = "test"
 resource_group_name = "${azurerm_resource_group.test.name}"
 type = "Vpn"
 vpn_type = "RouteBased"
 active_active = false
 enable_bgp = false
             = "Basic"
 sku
 ip_configuration {
   private_ip_address_allocation = "Dynamic"
                            = "${azurerm_subnet.test.id}"
   subnet_id
 }
 vpn_client_configuration {
   address_space = ["10.2.0.0/24"]
   root_certificate {
     name = "DigiCert-Federated-ID-Root-CA"
```

public cert data = <<EOF</pre>

MIIDuzCCAqOgAwIBAgIQCHTZWCM+IlfFIRXIvyKSrjANBgkqhkiG9w0BAQsFADBn MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3 d3cuZGlnaWNlcnQuY29tMSYwJAYDVQQDEx1EaWdpQ2VydCBGZWRlcmF0ZWQgSUQg Um9vdCBDQTAeFw0xMzAxMTUxMjAwMDBaFw0zMzAxMTUxMjAwMDBaMGcxCzAJBgNV ${\tt BAYTAlVTMRUwEwYDVQQKEwxEaWdpQ2VydCBJbmMxGTAXBgNVBAsTEHd3dy5kaWdp}$ Y2VydC5jb20xJjAkBgNVBAMTHURpZ2lDZXJ0IEZlZGVyYXRlZCBJRCBSb290IENB MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAvAEB4pcCqnNNOWE6Ur5j QPUH+1y1F9KdHTRSza6k5iDlXq1kGS1qAkuKtw9JsiNRrjltmFnzMZRBbX8Tlfl8 zAhBmb6dDduDGED01kBsTkgywYPxXVTKec0WxYEEF0oMn4wSYNl0lt2eJAKHXjNf GTwiibdP8CUR2ghSM2sUTI8Nt10mfc4SMHhGhYD64uJMbX98THQ/4LMGuYegou+d GTiahfHtjn7AboSEknwAMJHCh5RlYZZ6B104QbKJ+34Q0eKgnI3X6Vc9u0zf6DH8 Dk+4zQDYRRTqTnV03VT8jzqDlCRuNtq6YvryOWN74/dq8LQhUnXHvFyrsdMaE1X2 DwIDAQABo2MwYTAPBgNVHRMBAf8EBTADAQH/MA4GA1UdDwEB/wQEAwIBhjAdBgNV HQ4EFgQUGRdkFnbGt1EWjKwbUne+50aZvRYwHwYDVR0jBBgwFoAUGRdkFnbGt1EW jKwbUne+50aZvRYwDQYJKoZIhvcNAQELBQADggEBAHcqsHkrjpESqfuVTRiptJfP 9JbdtWqRTmOf6uJi2c8YVqI6XlKXsD8C1dUUaaHKLUJzvKiazibVuBwMIT84AyqR QELn3e0BtgEymEygMU569b01ZPxoFSnNXc7qDZBDef8WfqAV/sxkTi8L9BkmFYfL uGLOhRJOFprPdoDIUBB+tmCl3oDcBy3vnUeOEioz8zAkprcb3GHwHAK+vHmmfgcn WsfMLH4JCLa/tRYL+Rw/N3ybCkDp00s0WUZ+AoDywSl0Q/ZEnNY0MsFiw6LyIdbq M/s/1JRt03bDSzD9TazRVzn2oBqzSa8VgIo5C1nOnoAKJTlsClJKvIhnRlaLQqk= EOF } revoked_certificate { = "Verizon-Global-Root-CA"

```
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 (https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-forced-tunneling-rm). 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, ErGw1AZ, ErGw2AZ, ErGw3AZ, 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,
 IkeV2 and OpenVPN.

NOTE: Support for OpenVPN as a Client Protocol is currently in Public Preview - you can register for this Preview using this link (https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-howto-openvpn).

The bgp_settings block supports:

- asn (Optional) The Autonomous System Number (ASN) to use as part of the BGP.
- peering_address (Optional) The BGP peer IP address of the virtual network gateway. This address is needed to configure the created gateway as a BGP Peer on the on-premises VPN devices. The IP address must be part of the subnet of the Virtual Network Gateway. Changing this forces a new resource to be created.
- peer_weight (Optional) The weight added to routes which have been learned through BGP peering. Valid values can be between 0 and 100.

The root_certificate block supports:

- name (Required) A user-defined name of the root certificate.
- public_cert_data (Required) The public certificate of the root certificate authority. The certificate must be provided in Base-64 encoded X.509 format (PEM). In particular, this argument *must not* include the ----BEGIN CERTIFICATE---- or ----END CERTIFICATE-----markers.

The root_revoked_certificate block supports:

- name (Required) A user-defined name of the revoked certificate.
- public_cert_data (Required) The SHA1 thumbprint of the certificate to be revoked.

Attributes Reference

The following attributes are exported:

• id - The ID of the Virtual Network Gateway.

Import

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

azurerm_virtual_network_gateway_connection

Manages a connection in an existing Virtual Network Gateway.

Example Usage

Site-to-Site connection

The following example shows a connection between an Azure virtual network and an on-premises VPN device and network.

```
resource "azurerm_resource_group" "test" {
 name = "test"
  location = "West US"
resource "azurerm virtual network" "test" {
                   = "test"
 name
 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" {
                      = "GatewaySubnet"
  resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
                   = "10.0.1.0/24"
  address prefix
resource "azurerm_local_network_gateway" "onpremise" {
            = "onpremise"
                   = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 gateway_address = "168.62.225.23"
  address_space = ["10.1.1.0/24"]
}
resource "azurerm_public_ip" "test" {
 name
 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" {
                    = "test"
                    = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
         = "Vpn"
  vpn_type = "RouteBased"
 active_active = false
  enable_bgp = false
               = "Basic"
  ip configuration {
                                = "${azurerm_public_ip.test.id}"
   public_ip_address_id
```

VNet-to-VNet connection

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

```
resource "azurerm_resource_group" "us" {
          = "us"
 name
  location = "East US"
resource "azurerm_virtual_network" "us" {
                     = "us"
 name
                    = "${azurerm_resource_group.us.location}"
 resource_group_name = "${azurerm_resource_group.us.name}"
 address_space = ["10.0.0.0/16"]
}
resource "azurerm_subnet" "us_gateway" {
                      = "GatewaySubnet"
  resource_group_name = "${azurerm_resource_group.us.name}"
  virtual_network_name = "${azurerm_virtual_network.us.name}"
                     = "10.0.1.0/24"
  address_prefix
}
resource "azurerm_public_ip" "us" {
 name
                               = "${azurerm_resource_group.us.location}"
  location
                              = "${azurerm resource group.us.name}"
  resource group name
  public_ip_address_allocation = "Dynamic"
resource "azurerm_virtual_network_gateway" "us" {
                     = "us-gateway"
                     = "${azurerm_resource_group.us.location}"
 resource group name = "${azurerm resource group.us.name}"
          = "Vpn"
 tvpe
  vpn_type = "RouteBased"
         = "Basic"
  sku
  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" {
         = "europe"
 name
 location = "West Europe"
resource "azurerm_virtual_network" "europe" {
                     = "europe"
                     = "${azurerm_resource_group.europe.location}"
  location
  resource_group_name = "${azurerm_resource_group.europe.name}"
                  = ["10.1.0.0/16"]
  address_space
resource "azurerm_subnet" "europe_gateway" {
                      = "GatewaySubnet"
  resource_group_name = "${azurerm_resource_group.europe.name}"
  virtual_network_name = "${azurerm_virtual_network.europe.name}"
                    = "10.1.1.0/24"
  address prefix
}
resource "azurerm_public_ip" "europe" {
                              = "europe"
 name
                              = "${azurerm_resource_group.europe.location}"
 location
                              = "${azurerm_resource_group.europe.name}"
 resource_group_name
 public_ip_address_allocation = "Dynamic"
}
resource "azurerm_virtual_network_gateway" "europe" {
                     = "europe-gateway"
  name
                     = "${azurerm_resource_group.europe.location}"
  location
 resource_group_name = "${azurerm_resource_group.europe.name}"
          = "Vpn"
  type
 vpn_type = "RouteBased"
          = "Basic"
 sku
 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" {
                     = "us-to-europe"
  location
                     = "${azurerm_resource_group.us.location}"
 resource_group_name = "${azurerm_resource_group.us.name}"
                                 = "Vnet2Vnet"
                               = "${azurerm_virtual_network_gateway.us.id}"
 virtual_network_gateway_id
 peer_virtual_network_gateway_id = "${azurerm_virtual_network_gateway.europe.id}"
  shared_key = "4-v3ry-53cr37-1p53c-5h4r3d-k3y"
}
resource "azurerm_virtual_network_gateway_connection" "europe_to_us" {
                     = "europe-to-us"
 name
                     = "${azurerm_resource_group.europe.location}"
  location
 resource_group_name = "${azurerm_resource_group.europe.name}"
                                 = "Vnet2Vnet"
 type
                                = "${azurerm_virtual_network_gateway.europe.id}"
 virtual_network_gateway_id
 peer_virtual_network_gateway_id = "${azurerm_virtual_network_gateway.us.id}"
  shared kev = "4-v3rv-53cr37-1n53c-5h4r3d-k3v"
```

}

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 (https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-ipsecikepolicy-rm-powershell).
- 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.

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 = "${azurerm_resource_group.test.name}"
  address_space = ["10.0.1.0/24"]
                      = "West US"
  location
resource "azurerm_virtual_network" "test2" {
 name = "peternetwork2"
 resource_group_name = "${azurerm_resource_group.test.name}"
  address_space = ["10.0.2.0/24"]
location = "West US"
resource "azurerm_virtual_network_peering" "test1" {
                          = "peer1to2"
 resource_group_name = "${azurerm_resource_group.test.name}"
virtual_network_name = "${azurerm_virtual_network.test1.name}"
  remote_virtual_network_id = "${azurerm_virtual_network.test2.id}"
resource "azurerm_virtual_network_peering" "test2" {
                          = "peer2to1"
 resource_group_name = "${azurerm_resource_group.test.name}"
virtual_network_name = "${azurerm_virtual_network.test2.name}"
  remote_virtual_network_id = "${azurerm_virtual_network.test1.id}"
}
```

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)}"
                     = "vnet-${count.index}"
  resource_group_name = "${element(azurerm_resource_group.vnet.*.name, count.index)}"
                  = ["${element(var.vnet_address_space, count.index)}"]
  address_space
                     = "${element(azurerm_resource_group.vnet.*.location, count.index)}"
  location
resource "azurerm_subnet" "nva" {
                      = "${length(var.location)}"
                      = "nva"
 name
 resource_group_name = "${element(azurerm_resource_group.vnet.*.name, count.index)}"
  virtual_network_name = "${element(azurerm_virtual_network.vnet.*.name, count.index)}"
                    = "${cidrsubnet("${element(azurerm_virtual_network.vnet.*.address_space[count.inde
x], count.index)}", 13, 0)}" # /29
# enable global peering between the two virtual network
resource "azurerm_virtual_network_peering" "peering" {
                              = "${length(var.location)}"
  count
  name
                              = "peering-to-${element(azurerm_virtual_network.vnet.*.name, 1 - count.ind
ex)}"
                             = "${element(azurerm_resource_group.vnet.*.name, count.index)}"
 resource_group_name
 virtual_network_name
                            = "${element(azurerm_virtual_network.vnet.*.name, count.index)}"
 remote_virtual_network_id = "${element(azurerm_virtual_network.vnet.*.id, 1 - count.index)}"
  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.

Data Source: azurerm_role_definition

Use this data source to access information about an existing Custom Role Definition. To access information about a built-in Role Definition, please see the azurerm_builtin_role_definition data source (/docs/providers/azurerm/d/builtin_role_definition.html) instead.

Example Usage

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

data "azurerm_role_definition" "custom" {
    role_definition_id = "00000000-0000-0000-00000000000"
    scope = "${data.azurerm_subscription.primary.id}" # /subscriptions/000000000-0000-0000
-000000000000
}

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/Microsoft.Compute/virtualMachines/myVM.

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

Use this data source to access information about an existing Route Table.

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) The name of the Route Table.
- resource_group_name (Required) The name of the Resource Group in which the Route Table exists.

Attributes Reference

The following attributes are exported:

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

The route block exports the following:

- name The name of the Route.
- address_prefix The destination CIDR to which the route applies.
- next_hop_type The type of Azure hop the packet should be sent to.
- next_hop_in_ip_address Contains the IP address packets should be forwarded to.

Data Source: azurerm_scheduler_job_collection

Use this data source to access information about an existing Scheduler Job Collection.

NOTE: Support for Scheduler Job Collections has been deprecated by Microsoft in favour of Logic Apps (more information can be found at this link (https://docs.microsoft.com/en-us/azure/scheduler/migrate-from-scheduler-to-logic-apps)) - as such we plan to remove support for this data source as a part of version 2.0 of the AzureRM Provider.

Example Usage

Argument Reference

The following arguments are supported:

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

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.

 $\bullet \ \ \text{max_retry_interval}$ - The maximum interval between retries.

Data Source: azurerm_shared_image

Use this data source to access information about an existing Shared Image within a Shared Image Gallery.

NOTE Shared Image Galleries are currently in Public Preview. You can find more information, including how to register for the Public Preview here (https://azure.microsoft.com/en-gb/blog/announcing-the-public-preview-of-shared-image-gallery/).

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) The name of the Shared Image.
- gallery_name (Required) The name of the Shared Image Gallery in which the Shared Image exists.
- resource_group_name (Required) The name of the Resource Group in which the Shared Image Gallery exists.

Attributes Reference

The following attributes are exported:

- id The Resource ID of the Shared Image.
- description The description of this Shared Image.
- eula The End User Licence Agreement for the Shared Image.
- location The supported Azure location where the Shared Image Gallery exists.
- identity An identity block as defined below.
- os_type The type of Operating System present in this Shared Image.
- privacy_statement_uri The URI containing the Privacy Statement for this Shared Image.
- release_note_uri The URI containing the Release Notes for this Shared Image.
- tags A mapping of tags assigned to the Shared Image.

A identity block exports the following:

- offer The Offer Name for this Shared Image.
- publisher The Publisher Name for this Gallery Image.
- $\bullet \;\;$ sku The Name of the SKU for this Gallery Image.

Data Source: azurerm_shared_image_gallery

Use this data source to access information about an existing Shared Image Gallery.

NOTE Shared Image Galleries are currently in Public Preview. You can find more information, including how to register for the Public Preview here (https://azure.microsoft.com/en-gb/blog/announcing-the-public-preview-of-shared-image-gallery/).

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) The name of the Shared Image Gallery.
- resource_group_name (Required) The name of the Resource Group in which the Shared Image Gallery exists.

Attributes Reference

The following attributes are exported:

- id The Resource ID of the Shared Image Gallery.
- description A description for the Shared Image Gallery.
- unique_name The unique name assigned to the Shared Image Gallery.
- tags A mapping of tags which are assigned to the Shared Image Gallery.

Data Source: azurerm_shared_image_version

Use this data source to access information about an existing Version of a Shared Image within a Shared Image Gallery.

NOTE Shared Image Galleries are currently in Public Preview. You can find more information, including how to register for the Public Preview here (https://azure.microsoft.com/en-gb/blog/announcing-the-public-preview-of-shared-image-gallery/).

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) The name of the Image Version.
- image_name (Required) The name of the Shared Image in which this Version exists.
- gallery_name (Required) The name of the Shared Image in which the Shared Image exists.
- resource_group_name (Required) The name of the Resource Group in which the Shared Image Gallery exists.

Attributes Reference

The following attributes are exported:

- id The Resource ID of the Shared Image.
- exclude_from_latest Is this Image Version excluded from the latest filter?
- location The supported Azure location where the Shared Image Gallery exists.
- managed_image_id The ID of the Managed Image which was the source of this Shared Image Version.
- target_region One or more target_region blocks as documented below.
- tags A mapping of tags assigned to the Shared Image.

The target_region block exports the following:

• name - The Azure Region in which this Image Version exists.

• regional_replica_count - The number of replicas of the Image Version to be created per region.						

Data Source: azurerm_storage_account

Use this data source to access information about an existing Storage Account.

Example Usage

Argument Reference

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

Attributes Reference

- id The ID of the Storage Account.
- location The Azure location where the Storage Account exists
- account_kind 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 (https://azure.microsoft.com/en-us/documentation/articles/storage-service-encryption/) for more information.
- enable_file_encryption Are Encryption Services are enabled for File storage? See here (https://azure.microsoft.com/en-us/documentation/articles/storage-service-encryption/) for more information.
- enable_https_traffic_only Is traffic only allowed via HTTPS? See here (https://docs.microsoft.com/en-us/azure/storage/storage-require-secure-transfer/) 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 obtain a Shared Access Signature (SAS Token) for an existing 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 (https://docs.microsoft.com/en-us/rest/api/storageservices/constructing-an-account-sas) and *not* a Service SAS (https://docs.microsoft.com/en-us/rest/api/storageservices/constructing-a-service-sas).

Example Usage

```
resource "azurerm_resource_group" "testrg" {
 name = "resourceGroupName"
 location = "westus"
resource "azurerm_storage_account" "testsa" {
 location
                      = "westus"
                     = "Standard"
 account_tier
 account_replication_type = "GRS"
 tags {
   environment = "staging"
 }
}
data "azurerm_storage_account_sas" "test" {
 connection_string = "${azurerm_storage_account.testsa.primary_connection_string}"
 https_only
 resource_types {
   service = true
   container = false
   object = false
 }
 services {
   blob = true
   queue = false
   table = false
   file = false
 }
 start = "2018-03-21"
 expiry = "2020-03-21"
 permissions {
   read = true
   write = true
   delete = false
   list = false
   add
         = true
   create = true
   update = false
   process = false
 }
}
output "sas_url_query_string" {
  value = "${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 (https://docs.microsoft.com/en-us/rest/api/storageservices/constructing-an-account-sas) for additional details on the fields above.

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

Data Source: azurerm_subnet

Use this data source to access information about an existing Subnet within a Virtual Network.

Example Usage

Argument Reference

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

- 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 information about an existing 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.

- id The ID of the Subscription.
- 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 information about all the 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

- display_name_prefix (Optional) A case-insensitive prefix which can be used to filter on the display_name field
- display_name_contains (Optional) A case-insensitive value which must be contained within the display_name field,
 used to filter the results

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 information about an existing Virtual Network.

Example Usage

Argument Reference

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

- 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 information about an existing Virtual Network Gateway.

Example Usage

Argument Reference

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

Attributes Reference

- id The ID of the Virtual Network Gateway.
- location The location/region where the Virtual Network Gateway is located.
- type The type of the Virtual Network Gateway.
- vpn_type The routing type of the Virtual Network Gateway.
- enable_bgp Will BGP (Border Gateway Protocol) will be enabled for this Virtual Network Gateway.
- active_active (Optional) Is this an Active-Active Gateway?
- default_local_network_gateway_id The ID of the local network gateway through which outbound Internet traffic
 from the virtual network in which the gateway is created will be routed (forced tunneling). Refer to the Azure
 documentation on forced tunneling (https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-forcedtunneling-rm).
- 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, IkeV2 and OpenVPN.

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 ${\tt root_revoked_certificate}$ block supports:

- name The user-defined name of the revoked certificate.
- public_cert_data The SHA1 thumbprint of the certificate to be revoked.

azurerm_api_management

Manages an API Management Service.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "West Europe"
resource "azurerm_api_management" "test" {
                    = "example-apim"
                   = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 publisher_name = "My Company"
 publisher_email
                    = "company@terraform.io"
  sku {
            = "Developer"
   capacity = 1
  }
}
```

Argument Reference

The following arguments are supported:

- name (Required) The name of the API Management Service. Changing this forces a new resource to be created.
- location (Required) The Azure location where the API Management Service exists. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the Resource Group in which the API Management Service should be exist. Changing this forces a new resource to be created.
- publisher_name (Required) The name of publisher/company.
- publisher_email (Required) The email of publisher/company.
- sku (Required) A sku block as documented below.
- additional_location (Optional) One or more additional_location blocks as defined below.
- certificate (Optional) One or more (up to 10) certificate blocks as defined below.
- identity (Optional) An identity block is documented below.
- hostname_configuration (Optional) A hostname_configuration block as defined below.
- notification_sender_email (Optional) Email address from which the notification will be sent.
- security (Optional) A security block as defined below.

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

A additional_location block supports the following:

• location - (Required) The name of the Azure Region in which the API Management Service should be expanded to.

A certificate block supports the following:

- encoded_certificate (Required) The Base64 Encoded PFX Certificate.
- certificate_password (Required) The password for the certificate.
- store_name (Required) The name of the Certificate Store where this certificate should be stored. Possible values are CertificateAuthority and Root.

A identity block supports the following:

• type - (Required) Specifies the type of Managed Service Identity that should be configured on this API Management Service. At this time the only supported value isSystemAssigned.

A security block supports the following:

• disable_backend_ssl30 - (Optional) Should SSL 3.0 be disabled on the backend of the gateway? Defaults to false.

info: This maps to the Microsoft.WindowsAzure.ApiManagement.Gateway.Security.Backend.Protocols.Ssl30
field

• disable_backend_tls10 - (Optional) Should TLS 1.0 be disabled on the backend of the gateway? Defaults to false.

info: This maps to the Microsoft.WindowsAzure.ApiManagement.Gateway.Security.Backend.Protocols.Tls10
field

• disable_backend_tls11 - (Optional) Should TLS 1.1 be disabled on the backend of the gateway? Defaults to false.

info: This maps to the Microsoft.WindowsAzure.ApiManagement.Gateway.Security.Backend.Protocols.Tls11
field

• disable_frontend_ssl30 - (Optional) Should SSL 3.0 be disabled on the frontend of the gateway? Defaults to false.

info: This maps to the Microsoft.WindowsAzure.ApiManagement.Gateway.Security.Protocols.Ssl30 field

• disable_frontend_tls10 - (Optional) Should TLS 1.0 be disabled on the frontend of the gateway? Defaults to false.

info: This maps to the Microsoft.WindowsAzure.ApiManagement.Gateway.Security.Protocols.Tls10 field

• disable_frontend_tls11 - (Optional) Should TLS 1.1 be disabled on the frontend of the gateway? Defaults to false.

info: This maps to the Microsoft.WindowsAzure.ApiManagement.Gateway.Security.Protocols.Tls11 field

• disable_triple_des_chipers - (Optional) Should the TLS_RSA_WITH_3DES_EDE_CBC_SHA cipher be disabled for alL TLS versions (1.0, 1.1 and 1.2)? Defaults to false.

info: This maps to the Microsoft.WindowsAzure.ApiManagement.Gateway.Security.Ciphers.TripleDes168 field

A sku block supports the following:

- name (Required) Specifies the Pricing Tier for the API Management Service. Possible values include: Developer, Basic, Standard and Premium.
- capacity (Required) Specifies the Pricing Capacity for the API Management Service.

A hostname_configuration block supports the following:

- management (Optional) One or more management blocks as documented below.
- portal (Optional) One or more portal blocks as documented below.
- proxy (Optional) One or more proxy blocks as documented below.
- scm (Optional) One or more scm blocks as documented below.

A management, portal and scm block supports the following:

- host_name (Required) The Hostname to use for the Management API.
- key_vault_id (Optional) The ID of the Key Vault Secret containing the SSL Certificate, which must be should be of the type application/x-pkcs12.

NOTE: Setting this field requires the identity block to be specified, since this identity is used for to retrieve the Key Vault Certificate. Auto-updating the Certificate from the Key Vault requires the Secret version isn't specified.

- certificate (Optional) The Base64 Encoded Certificate.
- certificate_password (Optional) The password associated with the certificate provided above.

NOTE: Either key_vault_id or certificate and certificate_password must be specified.

negotiate_client_certificate - (Optional) Should Client Certificate Negotiation be enabled for this Hostname?
 Defaults to false.

A proxy block supports the following:

- default_ssl_binding (Optional) Is the certificate associated with this Hostname the Default SSL Certificate? This is used when an SNI header isn't specified by a client. Defaults to false.
- host_name (Required) The Hostname to use for the Management API.

key_vault_id - (Optional) The ID of the Key Vault Secret containing the SSL Certificate, which must be should be of the
type application/x-pkcs12.

NOTE: Setting this field requires the identity block to be specified, since this identity is used for to retrieve the Key Vault Certificate. Auto-updating the Certificate from the Key Vault requires the Secret version isn't specified.

- certificate (Optional) The Base64 Encoded Certificate.
- certificate_password (Optional) The password associated with the certificate provided above.

NOTE: Either key_vault_id or certificate and certificate_password must be specified.

negotiate_client_certificate - (Optional) Should Client Certificate Negotiation be enabled for this Hostname?
 Defaults to false.

Attributes Reference

In addition to all arguments above, the following attributes are exported:

- id The ID of the API Management Service.
- gateway_url The URL of the Gateway for the API Management Service.
- gateway_regional_url The Region URL for the Gateway of the API Management Service.
- management_api_url The URL for the Management API associated with this API Management service.
- portal_url The URL for the Publisher Portal associated with this API Management service.
- public_ip_addresses The Public IP addresses of the API Management Service.
- scm_url The URL for the SCM (Source Code Management) Endpoint associated with this API Management service.
- identity An identity block as defined below.
- additional_location One or more additional_location blocks as documented below.

An identity block exports the following:

- principal_id The Principal ID associated with this Managed Service Identity.
- tenant_id The Tenant ID associated with this Managed Service Identity.

An additional_location block exports the following:

- gateway_regional_url The URL of the Regional Gateway for the API Management Service in the specified region.
- public_ip_addresses Public Static Load Balanced IP addresses of the API Management service in the additional location. Available only for Basic, Standard and Premium SKU.

Import

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

azurerm_app_service

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

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

Example Usage (.net 4.x)

```
resource "random_id" "server" {
 keepers = {
   azi_id = 1
  byte_length = 8
resource "azurerm_resource_group" "test" {
          = "some-resource-group"
  location = "West Europe"
resource "azurerm_app_service_plan" "test" {
           = "some-app-service-plan"
= "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
    tier = "Standard"
    size = "S1"
  }
}
resource "azurerm_app_service" "test" {
          = "${random_id.server.hex}"
= "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
  site_config {
    dotnet_framework_version = "v4.0"
                            = "LocalGit"
    scm_type
  app_settings {
    "SOME_KEY" = "some-value"
  connection_string {
    name = "Database"
    type = "SQLServer"
    value = "Server=some-server.mydomain.com;Integrated Security=SSPI"
  }
}
```

Example Usage (Java 1.8)

```
resource "random_id" "server" {
  keepers = {
   azi_id = 1
  byte_length = 8
resource "azurerm_resource_group" "test" {
        = "some-resource-group"
  location = "West Europe"
resource "azurerm_app_service_plan" "test" {
 name
                     = "some-app-service-plan"
                     = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
   tier = "Standard"
   size = "S1"
  }
}
resource "azurerm_app_service" "test" {
                     = "${random_id.server.hex}"
  name
                    = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  app_service_plan_id = "${azurerm_app_service_plan.test.id}"
  site_config {
   java_version
                          = "1.8"
   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.
- app_command_line (Optional) App command line to launch, e.g. /sbin/myserver -b 0.0.0.0.
- 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 (https://en.wikipedia.org/wiki/.NET_Framework_version_history#Overview). Defaults to v4.0.
- http2_enabled (Optional) Is HTTP2 Enabled on this App Service? Defaults to false.
- ftps_state (Optional) State of FTP / FTPS service for this AppService. Possible values include: AllAllowed, FtpsOnly and Disabled.
- 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 (/docs/providers/azurerm/r/mysql_database.html).

- linux_fx_version (Optional) Linux App Framework and version for the AppService, e.g. DOCKER (golang:latest).
- 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, 7.1 and 7.2.
- 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.

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

• 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.

- virtual_network_name (Optional) The name of the Virtual Network which this App Service should be attached to.
- websockets_enabled (Optional) Should WebSockets be enabled?

ip_restriction supports the following:

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

Attributes Reference

The following attributes are exported:

- id The ID of the App Service.
- 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.

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_app_service_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" {
                    = "some-app-service-plan"
                     = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
   tier = "Standard"
   size = "S1"
  }
}
resource "azurerm_app_service" "test" {
                    = "${random_id.server.hex}"
 location
                     = "${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" {
               = "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.

azurerm_app_service_plan

Manage an App Service Plan component.

Example Usage (Dedicated)

Example Usage (Shared / Consumption Plan)

Example Usage (Linux)

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

- 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.
- 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.

Attributes Reference

The following attributes are exported:

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

Import

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

azurerm_app_service_slot

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

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

Example Usage (.net 4.x)

```
resource "random_id" "server" {
 keepers = {
   azi_id = 1
 byte_length = 8
resource "azurerm_resource_group" "test" {
          = "some-resource-group"
  location = "West Europe"
resource "azurerm_app_service_plan" "test" {
                    = "some-app-service-plan"
                    = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
   tier = "Standard"
    size = "S1"
  }
}
resource "azurerm_app_service" "test" {
  name
                     = "${random_id.server.hex}"
                     = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
 app_service_plan_id = "${azurerm_app_service_plan.test.id}"
 site_config {
    dotnet_framework_version = "v4.0"
 app_settings {
    "SOME_KEY" = "some-value"
  connection_string {
    name = "Database"
    type = "SQLServer"
    value = "Server=some-server.mydomain.com; Integrated Security=SSPI"
  }
}
resource "azurerm_app_service_slot" "test" {
                     = "${random_id.server.hex}"
  app_service_name = "${azurerm_app_service.test.name}"
```

Example Usage (Java 1.8)

```
resource "random_id" "server" {
 keepers = {
   azi_i = 1
 byte length = 8
resource "azurerm_resource_group" "test" {
          = "some-resource-group"
  location = "West Europe"
resource "azurerm_app_service_plan" "test" {
                    = "some-app-service-plan"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
   tier = "Standard"
   size = "S1"
  }
}
resource "azurerm_app_service" "test" {
             = "${random_id.server.hex}"
              = "${azurerm_resource_group.test.location}"
  location
 resource_group_name = "${azurerm_resource_group.test.name}"
 app_service_plan_id = "${azurerm_app_service_plan.test.id}"
 site_config {
    java_version
                          = "1.8"
    java_container = "JETTY"
    java_container_version = "9.3"
  }
}
resource "azurerm_app_service_slot" "test" {
                    = "${random_id.server.hex}"
 app_service_name = "${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 {
                          = "1.8"
    java_version
    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.
- app_command_line (Optional) App command line to launch, e.g. /sbin/myserver -b 0.0.0.0.
- 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 (https://en.wikipedia.org/wiki/.NET_Framework_version_history#Overview). 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 (/docs/providers/azurerm/r/mysql_database.html).

- 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, 7.1 and 7.2.
- 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.

- virtual_network_name (Optional) The name of the Virtual Network which this App Service Slot should be attached to.
- 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.

 $terraform\ import\ azurerm_app_service_slot.instance1\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGroups/mygroup1/providers/Microsoft.Web/sites/website1/slots/instance1$

azurerm_application_gateway

Manages an Application Gateway.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "West US"
resource "azurerm_virtual_network" "test" {
                    = "example-network"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
address_space = ["10.254.0.0/16"]
resource "azurerm_subnet" "frontend" {
          = "frontend"
 resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.254.0.0/24"
resource "azurerm_subnet" "backend" {
                      = "backend"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
                 = "10.254.2.0/24"
  address_prefix
}
resource "azurerm_public_ip" "test" {
                             = "example-pip"
                             = "${azurerm_resource_group.test.name}"
 resource_group_name
                              = "${azurerm_resource_group.test.location}"
 location
  public_ip_address_allocation = "dynamic"
# since these variables are re-used - a locals block makes this more maintainable
 backend_address_pool_name = "${azurerm_virtual_network.test.name}-beap"
  frontend_port_name = "${azurerm_virtual_network.test.name}-feport"
  frontend_ip_configuration_name = "${azurerm_virtual_network.test.name}-feip"
 http_setting_name = "${azurerm_virtual_network.test.name}-be-htst"
  listener_name = "${azurerm_virtual_network.test.name}-httplstn"
request_routing_rule_name = "${azurerm_virtual_network.test.name}-rqrt"
 listener_name
resource "azurerm_application_gateway" "network" {
          = "example-appgateway"
  resource_group_name = "${azurerm_resource_group.test.name}"
 location
                    = "${azurerm_resource_group.test.location}"
  sku {
           = "Standard_Small"
   tier = "Standard"
   capacity = 2
```

```
gateway_ip_configuration {
           = "my-gateway-ip-configuration"
   subnet_id = "${azurerm_subnet.frontend.id}"
 frontend_port {
   name = "${local.frontend_port_name}"
   port = 80
 }
 frontend_ip_configuration {
                       = "${local.frontend_ip_configuration_name}"
   public_ip_address_id = "${azurerm_public_ip.test.id}"
 backend_address_pool {
   name = "${local.backend_address_pool_name}"
 backend_http_settings {
                        = "${local.http setting name}"
   cookie_based_affinity = "Disabled"
                       = 80
                      = "Http"
   protocol
   request_timeout
                      = 1
 http_listener {
                                = "${local.listener_name}"
   name
   frontend_ip_configuration_name = "${local.frontend_ip_configuration_name}"
   = "Http"
   protocol
 }
 request_routing_rule {
                            = "${local.request_routing_rule_name}"
   name
                           = "Basic"
   rule_type
   http_listener_name
                          = "${local.listener_name}"
   backend_address_pool_name = "${local.backend_address_pool_name}"
   backend_http_settings_name = "${local.http_setting_name}"
}
```

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 the Application Gateway should exist. Changing this forces a new resource to be created.
- location (Required) The Azure region where the Application Gateway should exist. Changing this forces a new resource to be created.
- backend_address_pool (Required) One or more backend_address_pool blocks as defined below.
- backend_http_settings (Required) One or more backend_http_settings blocks as defined below.
- frontend_ip_configuration (Required) One or more frontend_ip_configuration blocks as defined below.

- frontend_port (Required) One or more frontend_port blocks as defined below.
- gateway_ip_configuration (Required) One or more gateway_ip_configuration blocks as defined below.
- http_listener (Required) One or more http_listener blocks as defined below.
- request_routing_rule (Required) One or more request_routing_rule blocks as defined below.
- sku (Required) A sku block as defined below.
- authentication_certificate (Optional) One or more authentication_certificate blocks as defined below.
- disabled_ssl_protocols (Optional) A list of SSL Protocols which should be disabled on this Application Gateway. Possible values are TLSv1_0, TLSv1_1 and TLSv1_2.
- probe (Optional) One or more probe blocks as defined below.
- tags (Optional) A mapping of tags to assign to the resource.
- url_path_map (Optional) One or more url_path_map blocks as defined below.
- waf_configuration (Optional) A waf_configuration block as defined below.

A authentication_certificate block supports the following:

- name (Required) The Name of the Authentication Certificate to use.
- data (Required) The contents of the Authentication Certificate which should be used.

A authentication_certificate block, within the backend_http_settings block supports the following:

• name - (Required) The name of the Authentication Certificate.

A backend_address_pool block supports the following:

- name (Required) The name of the Backend Address Pool.
- fqdn_list (Optional) A list of FQDN's which should be part of the Backend Address Pool.
- ip_address_list (Optional) A list of IP Addresses which should be part of the Backend Address Pool.

A backend_http_settings block supports the following:

- cookie_based_affinity (Required) Is Cookie-Based Affinity enabled? Possible values are Enabled and Disabled.
- name (Required) The name of the Backend HTTP Settings Collection.
- port- (Required) The port which should be used for this Backend HTTP Settings Collection.
- probe_name (Required) The name of an associated HTTP Probe.
- protocol- (Required) The Protocol which should be used. Possible values are Http and Https.
- request_timeout (Required) The request timeout in seconds, which must be between 1 and 86400 seconds.

• authentication_certificate - (Optional) One or more authentication_certificate blocks.

A frontend_ip_configuration block supports the following:

- name (Required) The name of the Frontend IP Configuration.
- subnet_id (Required) The ID of the Subnet which the Application Gateway should be connected to.
- private_ip_address (Optional) The Private IP Address to use for the Application Gateway.
- public_ip_address_id (Optional) The ID of a Public IP Address which the Application Gateway should use.

NOTE: The Allocation Method for this Public IP Address should be set to Dynamic.

private_ip_address_allocation - (Optional) The Allocation Method for the Private IP Address. Possible values are
Dynamic and Static.

A frontend_port block supports the following:

- name (Required) The name of the Frontend Port.
- port (Required) The port used for this Frontend Port.

A gateway_ip_configuration block supports the following:

- name (Required) The Name of this Gateway IP Configuration.
- subnet_id (Required) The ID of a Subnet.

A http_listener block supports the following:

- name (Required) The Name of the HTTP Listener.
- frontend_ip_configuration_name (Required) The Name of the Frontend IP Configuration used for this HTTP Listener.
- frontend_port_name (Required) The Name of the Frontend Port use for this HTTP Listener.
- host_name (Optional) The Hostname which should be used for this HTTP Listener.
- protocol (Required) The Protocol to use for this HTTP Listener. Possible values are Http and Https.
- require_sni (Optional) Should Server Name Indication be Required? Defaults to false.
- ssl_certificate_name (Optional) The name of the associated SSL Certificate which should be used for this HTTP Listener.

A match block supports the following:

- body (Optional) A snippet from the Response Body which must be present in the Response. Defaults to *.
- status_code (Optional) A list of allowed status codes for this Health Probe.

A path_rule block supports the following:

- name (Required) The Name of the Path Rule.
- paths (Required) A list of Paths used in this Path Rule.
- backend_address_pool_name (Required) The Name of the Backend Address Pool to use for this Path Rule.
- backend_http_settings_name (Required) The Name of the Backend HTTP Settings Collection to use for this Path Rule.

A probe block support the following:

- host (Required) The Hostname used for this Probe. If the 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) The Interval between two consecutive probes in seconds. Possible values range from 1 second to a maximum of 86,400 seconds.
- name (Required) The Name of the Probe.
- protocol (Required) The Protocol used for this Probe. Possible values are Http and Https.
- path (Required) The Path used for this Probe.
- timeout (Required) The Timeout used for this Probe, which indicates when a probe becomes unhealthy. Possible values range from 1 second to a maximum of 86,400 seconds.
- unhealthy_threshold (Required) The Unhealthy Threshold for this Probe, which indicates the amount of retries which should be attempted before a node is deemed unhealthy. Possible values are from 1 20 seconds.
- match (Optional) A match block as defined above.
- minimum_servers (Optional) The minimum number of servers that are always marked as healthy. Defaults to 0.

A request_routing_rule block supports the following:

- name (Required) The Name of this Request Routing Rule.
- rule_type (Required) The Type of Routing that should be used for this Rule. Possible values are Basic and PathBasedRouting.
- http_listener_name (Required) The Name of the HTTP Listener which should be used for this Routing Rule.
- backend_address_pool_name (Optional) The Name of the Backend Address Pool which should be used for this Routing Rule.
- backend_http_settings_name (Optional) The Name of the Backend HTTP Settings Collection which should be used for this Routing Rule.
- url_path_map_name (Optional) The Name of the URL Path Map which should be associated with this Routing Rule.

A sku block supports the following:

- name (Required) The Name of the SKU to use for this Application Gateway. Possible values are Standard_Small, Standard_Medium, Standard_Large, Standard_v2, WAF_Medium, WAF_Large, and WAF_v2.
- tier (Required) The Tier of the SKU to use for this Application Gateway. Possible values are Standard, Standard_v2, WAF and WAF_v2.
- capacity (Required) The Capacity of the SKU to use for this Application Gateway which must be between 1 and 10.

A url_path_map block supports the following:

- name (Required) The Name of the URL Path Map.
- default_backend_address_pool_name (Required) The Name of the Default Backend Address Pool which should be used for this URL Path Map.
- default_backend_http_settings_name (Required) The Name of the Default Backend HTTP Settings Collection
 which should be used for this URL Path Map.
- path_rule (Required) One or more path_rule blocks as defined above.

Awaf_configuration block supports the following:

- enabled (Required) Is the Web Application Firewall be enabled?
- firewall_mode (Required) The Web Application Firewall Mode. Possible values are Detection and Prevention.
- rule_set_type (Required) The Type of the Rule Set used for this Web Application Firewall.
- rule_set_version (Required) The Version of the Rule Set used for this Web Application Firewall.

Attributes Reference

The following attributes are exported:

- id The ID of the Application Gateway.
- authentication_certificate A list of authentication_certificate blocks as defined below.
- backend_address_pool A list of backend_address_pool blocks as defined below.
- backend_http_settings A list of backend_http_settings blocks as defined below.
- frontend_ip_configuration A list of frontend_ip_configuration blocks as defined below.
- frontend_port A list of frontend_port blocks as defined below.
- gateway_ip_configuration A list of gateway_ip_configuration blocks as defined below.
- http_listener A list of http_listener blocks as defined below.
- probe A probe block as defined below.
- request_routing_rule A list of request_routing_rule blocks as defined below.
- ssl_certificate A list of ssl_certificate blocks as defined below.

• url_path_map - A list of url_path_map blocks as defined below.

A authentication_certificate block exports the following:

• id - The ID of the Authentication Certificate.

A authentication_certificate block, within the backend_http_settings block exports the following:

• id - The ID of the Authentication Certificate.

A backend_address_pool block exports the following:

• id - The ID of the Backend Address Pool.

A backend_http_settings block exports the following:

- id The ID of the Backend HTTP Settings Configuration.
- probe id The ID of the associated Probe.

A frontend_ip_configuration block exports the following:

• id - The ID of the Frontend IP Configuration.

A frontend_port block exports the following:

• id - The ID of the Frontend Port.

A gateway_ip_configuration block exports the following:

• id - The ID of the Gateway IP Configuration.

A http_listener block exports the following:

- id The ID of the HTTP Listener.
- frontend_ip_configuration_id The ID of the associated Frontend Configuration.
- frontend_port_id The ID of the associated Frontend Port.
- $\bullet \ \mbox{ssl_certificate_id}$ The ID of the associated SSL Certificate.

A path_rule block exports the following:

- id The ID of the Path Rule.
- backend_address_pool_id The ID of the Backend Address Pool used in this Path Rule.
- backend_http_settings_id The ID of the Backend HTTP Settings Collection used in this Path Rule.

A probe block exports the following:

• id - The ID of the Probe.

A request_routing_rule block exports the following:

- id The ID of the Request Routing Rule.
- http_listener_id The ID of the associated HTTP Listener.
- backend_address_pool_id The ID of the associated Backend Address Pool.
- backend_http_settings_id The ID of the associated Backend HTTP Settings Configuration.
- url_path_map_id The ID of the associated URL Path Map.

A ssl_certificate block exports the following:

- id The ID of the SSL Certificate.
- public_cert_data The Public Certificate Data associated with the SSL Certificate.

A url_path_map block exports the following:

- id The ID of the URL Path Map.
- default_backend_address_pool_id The ID of the Default Backend Address Pool.
- default_backend_http_settings_id The ID of the Default Backend HTTP Settings Collection.
- path_rule A list of path_rule blocks as defined above.

Import

Application Gateway's can be imported using the resource id, e.g.

terraform import azurerm_application_gateway.test /subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/mygroup1/providers/Microsoft.Network/applicationGateways/myGateway1

azurerm_application_insights

Manage an Application Insights component.

Example Usage

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 Java, iOS,
 MobileCenter, Other, Phone, Store and Web.
- 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.

 $\bullet \ \ \text{instrumentation_key} \ \text{-} \ \text{The Instrumentation Key for this Application Insights component.}$

Import

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

azurerm_application_security_group

Manage an Application Security Group.

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Application Security Group. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which to create the Application Security Group.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.

Attributes Reference

The following attributes are exported:

• id - The ID of the Application Security Group.

Import

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

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.
- dsc_server_endpoint The DSC Server Endpoint associated with this Automation Account.

- dsc_primary_access_key The Primary Access Key for the DSC Endpoint associated with this Automation Account.
- dsc_secondary_access_key The Secondary Access Key for the DSC Endpoint associated with this Automation Account.

Import

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

azurerm_automation_credential

Manages a Automation Credential.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "resourceGroup1"
 location = "West Europe"
resource "azurerm_automation_account" "example" {
                   = "account1"
 location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
 sku {
   name = "Basic"
 }
}
resource "azurerm_automation_credential" "example" {
                   = "credential1"
 resource_group_name = "${azurerm_resource_group.example.name}"
 account_name = "${azurerm_automation_account.example.name}"
                  = "example_user"
                  = "example_pwd"
 password
 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.

azurerm_automation_dsc_configuration

Manages a Automation DSC Configuration.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "resourceGroup1"
  location = "West Europe"
resource "azurerm_automation_account" "example" {
                    = "account1"
 location = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  sku {
   name = "Basic"
  }
}
resource "azurerm_automation_dsc_configuration" "example" {
                         = "test"
                        = "${azurerm_resource_group.example.name}"
  resource_group_name
 automation_account_name = "${azurerm_automation_account.example.name}"
                       = "${azurerm_resource_group.example.location}"
  content_embedded = "configuration test {}"
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the DSC Configuration. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the DSC Configuration is created. Changing this forces a new resource to be created.
- automation_account_name (Required) The name of the automation account in which the DSC Configuration is created. Changing this forces a new resource to be created.
- content_embedded (Required) The PowerShell DSC Configuration script.
- location (Required) Must be the same location as the Automation Account.
- log_verbose (Optional) Verbose log option.
- description (Optional) Description to go with DSC Configuration.

Attributes Reference

• id - The DSC Configuration ID.

azurerm_automation_dsc_nodeconfiguration

Manages a Automation DSC Node Configuration.

Example Usage

```
resource "azurerm_resource_group" "example" {
          = "resourceGroup1"
  location = "West Europe"
resource "azurerm_automation_account" "example" {
                     = "account1"
  location = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  sku {
    name = "Basic"
  }
}
resource "azurerm_automation_dsc_configuration" "example" {
                         = "test"
  resource_group_name
                         = "${azurerm_resource_group.example.name}"
  automation_account_name = "${azurerm_automation_account.example.name}"
                       = "${azurerm_resource_group.example.location}"
  content_embedded
                       = "configuration test {}"
}
resource "azurerm_automation_dsc_nodeconfiguration" "example" {
                         = "test.localhost"
  name
                         = "${azurerm_resource_group.example.name}"
  resource_group_name
  automation_account_name = "${azurerm_automation_account.example.name}"
                        = ["azurerm_automation_dsc_configuration.example"]
 depends_on
  content_embedded = <<mofcontent</pre>
instance of MSFT_FileDirectoryConfiguration as $MSFT_FileDirectoryConfiguration1ref
 ResourceID = "[File]bla";
 Ensure = "Present";
  Contents = "bogus Content";
 DestinationPath = "c:\\bogus.txt";
 ModuleName = "PSDesiredStateConfiguration";
  SourceInfo = "::3::9::file";
 ModuleVersion = "1.0";
 ConfigurationName = "bla";
instance of OMI_ConfigurationDocument
{
 Version="2.0.0";
 MinimumCompatibleVersion = "1.0.0";
  CompatibleVersionAdditionalProperties= {"Omi_BaseResource:ConfigurationName"};
 Author="bogusAuthor";
 GenerationDate="06/15/2018 14:06:24";
 GenerationHost="bogusComputer";
  Name="test";
};
mofcontent
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the DSC Node Configuration. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the DSC Node Configuration is created. Changing this forces a new resource to be created.
- automation_account_name (Required) The name of the automation account in which the DSC Node Configuration is created. Changing this forces a new resource to be created.
- content_embedded (Required) The PowerShell DSC Node Configuration (mof content).

Attributes Reference

The following attributes are exported:

• id - The DSC Node Configuration ID.

azurerm_automation_module

Manages a Automation Module.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "resourceGroup1"
  location = "West Europe"
resource "azurerm_automation_account" "example" {
                    = "account1"
 location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
 sku {
   name = "Basic"
  }
}
resource "azurerm_automation_module" "example" {
                         = "xActiveDirectory"
                         = "${azurerm_resource_group.example.name}"
 resource_group_name
 automation_account_name = "${azurerm_automation_account.example.name}"
 module_link = {
   uri = "https://devopsgallerystorage.blob.core.windows.net/packages/xactivedirectory.2.19.0.nupkg"
  }
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Module. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the Module is created. Changing this forces a new resource to be created.
- automation_account_name (Required) The name of the automation account in which the Module is created. Changing this forces a new resource to be created.
- module_link (Required) The published Module link.

module link supports the following:

• uri - (Required) The uri of the module content (zip or nupkg).

Attributes Reference

The following attributes are exported:

• id - The Automation Module ID.

azurerm_automation_runbook

Manages a Automation Runbook.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "resourceGroup1"
  location = "West Europe"
resource "azurerm_automation_account" "example" {
                    = "account1"
 location = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
  sku {
   name = "Basic"
  }
}
resource "azurerm_automation_runbook" "example" {
                 = "Get-AzureVMTutorial"
  location
                    = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
 account_name = "${azurerm_automation_account.example.name}"
                   = "true"
 log_verbose
                   = "true"
 log_progress
               = "This is an example runbook"
= "PowerShellWorkflow"
  description
 runbook_type
  publish_content_link {
   uri = "https://raw.githubusercontent.com/Azure/azure-quickstart-templates/master/101-automation-runbo
ok-getvms/Runbooks/Get-AzureVMTutorial.ps1"
  }
}
```

Example Usage - custom content

```
resource "azurerm_resource_group" "example" {
 name = "resourceGroup1"
 location = "West Europe"
}
resource "azurerm automation account" "example" {
                     = "account1"
 name
 location
                     = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
 sku {
   name = "Basic"
}
data "local_file" "example" {
  filename = "${path.module}/example.ps1"
}
resource "azurerm_automation_runbook" "example" {
              = "Get-AzureVMTutorial"
= "${azurerm_resource_group.example.location}"
 location
 resource_group_name = "${azurerm_resource_group.example.name}"
 account_name = "${azurerm_automation_account.example.name}"
                    = "true"
 log_verbose
                     = "true"
 log_progress
 description
                     = "This is an example runbook"
                     = "PowerShell"
 runbook_type
 publish_content_link {
   uri = "https://raw.githubusercontent.com/Azure/azure-quickstart-templates/master/101-automation-runbo
ok-getvms/Runbooks/Get-AzureVMTutorial.ps1"
 }
 content = "${data.local_file.example.content}"
}
```

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.
- log_verbose (Required) Verbose log option.

- publish_content_link (Required) The published runbook content link.
- description (Optional) A description for this credential.
- content (Optional) The desired content of the runbook.

NOTE The Azure API requires a publish_content_link to be supplied even when specifying your own content.

NOTE Setting content to an empty string will revert the runbook to the publish_content_link.

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

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.

azurerm_automation_schedule

Manages a Automation Schedule.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "tfex-automation-account"
  location = "West Europe"
resource "azurerm_automation_account" "example" {
                    = "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" {
                         = "tfex-automation-schedule"
                         = "${azurerm_resource_group.example.name}"
  resource_group_name
 automation_account_name = "${azurerm_automation_account.example.name}"
                       = "Week"
 interval
                       = 1
                       = "Central Europe Standard Time"
 timezone
                       = "2014-04-15T18:00:15+02:00"
 start_time
 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 frequencys 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 (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.
- 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.

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" {
         = "autoscalingTest"
  location = "West US"
resource "azurerm_virtual_machine_scale_set" "test" {
resource "azurerm_autoscale_setting" "test" {
                   = "myAutoscaleSetting"
 resource_group_name = "${azurerm_resource_group.test.name}"
                   = "${azurerm_resource_group.test.location}"
 target_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
 profile {
   name = "defaultProfile"
   capacity {
     default = 1
     minimum = 1
     maximum = 10
   }
   rule {
     metric_trigger {
                        = "Percentage CPU"
       metric_name
       metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
       time_grain = "PT1M"
                       = "Average"
       statistic
       time_window = "PT5M"
       time_aggregation = "Average"
                         = "GreaterThan"
       operator
       threshold
                         = 75
     scale_action {
       direction = "Increase"
       type = "ChangeCount"
               = "1"
       cooldown = "PT1M"
   }
   rule {
     metric_trigger {
                       = "Percentage CPU"
       metric_name
       metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
       time_grain = "PT1M"
       statistic
                        = "Average"
       time_window
                       = "PT5M"
       time_aggregation = "Average"
                         = "LessThan"
       operator
```

```
threshold
                        = 25
     scale_action {
       direction = "Decrease"
             = "ChangeCount"
       type
               = "1"
       value
       cooldown = "PT1M"
   }
 notification {
   email {
     send_to_subscription_administrator
                                        = true
     send_to_subscription_co_administrator = true
                                          = ["admin@contoso.com"]
     custom_emails
   }
 }
}
```

Example Usage (repeating on weekends)

```
resource "azurerm_resource_group" "test" {
          = "autoscalingTest"
  location = "West US"
resource "azurerm_virtual_machine_scale_set" "test" {
}
resource "azurerm_autoscale_setting" "test" {
                    = "myAutoscaleSetting"
  resource_group_name = "${azurerm_resource_group.test.name}"
                = "${azurerm resource group.test.location}"
 target_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
  profile {
   name = "Weekends"
   capacity {
     default = 1
     minimum = 1
     maximum = 10
   }
   rule {
     metric_trigger {
                    = "Percentage CPU"
       metric_name
       metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
                    = "PT1M"
       time_grain
                        = "Average"
       statistic
       time_window
                       = "PT5M"
       time_aggregation = "Average"
                         = "GreaterThan"
       operator
                         = 90
       threshold
     scale_action {
       direction = "Increase"
```

```
= "ChangeCount"
       type
              = "2"
       value
       cooldown = "PT1M"
     }
   }
   rule {
     metric_trigger {
                        = "Percentage CPU"
       metric_name
       metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
       time_grain
                         = "PT1M"
                         = "Average"
       statistic
                       = "PT5M"
       time_window
       time_aggregation = "Average"
                       = "LessThan"
       operator
                         = 10
       threshold
     scale_action {
       direction = "Decrease"
       type = "ChangeCount"
               = "2"
       value
       cooldown = "PT1M"
   }
   recurrence {
     frequency = "Week"
     timezone = "Pacific Standard Time"
              = ["Saturday", "Sunday"]
     hours
              = [12]
     minutes = [0]
   }
  }
 notification {
   email {
     send_to_subscription_administrator = true
     send_to_subscription_co_administrator = true
     custom_emails
                                         = ["admin@contoso.com"]
   }
 }
}
```

Example Usage (for fixed dates)

```
target_resource_id = ${azurerm_virtuai_macnine_scale_set.test.id}
  profile {
   name = "forJuly"
   capacity {
     default = 1
     minimum = 1
     maximum = 10
   }
   rule {
     metric_trigger {
                       = "Percentage CPU"
       metric name
       metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
                     = "PT1M"
       time_grain
       statistic
                        = "Average"
                        = "PT5M"
       time_window
       time_aggregation = "Average"
                         = "GreaterThan"
       operator
       threshold
                         = 90
     scale_action {
       direction = "Increase"
                = "ChangeCount"
       type
                = "2"
       value
       cooldown = "PT1M"
     }
   }
   rule {
     metric_trigger {
                        = "Percentage CPU"
       metric_name
       metric_resource_id = "${azurerm_virtual_machine_scale_set.test.id}"
       time_grain
                         = "PT1M"
       statistic
                         = "Average"
                        = "PT5M"
       time_window
       time_aggregation = "Average"
                         = "LessThan"
       operator
                         = 10
       threshold
     }
     scale_action {
       direction = "Decrease"
       type = "ChangeCount"
                = "2"
       value
       cooldown = "PT1M"
     }
   }
   fixed_date {
     timezone = "Pacific Standard Time"
     start = "2020-07-01T00:00:00Z"
            = "2020-07-31T23:59:59Z"
     end
 notification {
   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 predefined 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 (https://msdn.microsoft.com/en-us/library/azure/dn931928.aspx). 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 (https://msdn.microsoft.com/en-us/library/azure/dn931928.aspx). 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/00000000-0000-0000-0000-000000000000/resourceGroups/group1/providers/microsoft.insights/autoscalesettings/setting1

azurerm_availability_set

Manages an availability set for virtual machines.

Example Usage

Argument Reference

The following arguments are supported:

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

NOTE: The number of Update Domains varies depending on which Azure Region you're using - a list can be found here (https://github.com/MicrosoftDocs/azure-docs/blob/master/includes/managed-disks-common-fault-domain-region-list.md).

• 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 (https://github.com/MicrosoftDocs/azure-docs/blob/master/includes/managed-disks-common-fault-domain-region-list.md).

- 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.

 $terraform\ import\ azurerm_availability_set.group1\ /subscriptions/0000000-0000-0000-0000-000000000000/reso\ urceGroups/mygroup1/providers/Microsoft.Compute/availabilitySets/webAvailSet$

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

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 https://{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.

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

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.

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" {
                            = "example"
                            = "http://homepage"
 homepage
                           = ["http://uri"]
 identifier uris
 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#"
                     = "2020-01-01T01:02:03Z"
  end_date
}
```

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.

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_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.

Example Usage

```
resource "random id" "server" {
 keepers = {
   azi_id = 1
  byte_length = 8
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_cdn_profile" "test" {
                     = "exampleCdnProfile"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
                     = "Standard_Verizon"
resource "azurerm_cdn_endpoint" "test" {
          = "${random_id.server.hex}"
 profile_name = "${azurerm_cdn_profile.test.name}"
location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 origin {
              = "exampleCdnOrigin"
   name
   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.

 $terraform\ import\ azurerm_cdn_endpoint.test\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGr\ oups/mygroup1/providers/Microsoft.Cdn/profiles/myprofile1/endpoints/myendpoint1$

azurerm_cdn_profile

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

Example Usage

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.

 $terraform\ import\ azurerm_cdn_profile.test\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGro\ ups/mygroup1/providers/Microsoft.Cdn/profiles/myprofile1$

azurerm_cognitive_account

Manages a Cognitive Services Account.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "West Europe"
resource "azurerm_cognitive_account" "test" {
                    = "example-account"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                    = "Face"
 kind
 sku {
   name = "S0"
   tier = "Standard"
  }
 tags {
   Acceptance = "Test"
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Cognitive Service Account. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the Cognitive Service 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.
- kind (Required) Specifies the type of Cognitive Service Account that should be created. Possible values are Academic, Bing.Autosuggest, Bing.Autosuggest.v7, Bing.CustomSearch, Bing.Search, Bing.Search.v7, Bing.Speech, Bing.SpellCheck, Bing.SpellCheck.v7, ComputerVision, ContentModerator, CustomSpeech, Emotion, Face, LUIS, Recommendations, SpeakerRecognition, Speech, SpeechTranslation, TextAnalytics, TextTranslation and WebLM. 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.

- name (Required) Specifies the Name of the Sku. Possible values are F0, S0, S1, S2, S3, S4, S5, S6, P0, P1 and P2.
- tier (Required) Specifies the Tier of the Sku. Possible values include Free, Standard and Premium.

Attributes Reference

The following attributes are exported:

- id The ID of the Cognitive Service Account.
- endpoint The endpoint used to connect to the Cognitive Service Account.

Import

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

 $terraform\ import\ azurerm_cognitive_account. account1\ /subscriptions/0000000-0000-0000-0000-00000000000/resourceGroups/group1/providers/Microsoft. CognitiveServices/accounts/account1$

azurerm_container_group

Manage as an Azure Container Group instance.

Example Usage

```
resource "azurerm_resource_group" "aci-rg" {
        = "aci-test"
 location = "west us"
resource "azurerm_storage_account" "aci-sa" {
                 = "acistorageacct"
 resource_group_name = "${azurerm_resource_group.aci-rg.name}"
 account_replication_type = "LRS"
resource "azurerm_storage_share" "aci-share" {
 name = "aci-test-share"
 resource_group_name = "${azurerm_resource_group.aci-rg.name}"
 storage_account_name = "${azurerm_storage_account.aci-sa.name}"
 quota = 50
}
resource "azurerm_container_group" "aci-helloworld" {
           = "aci-hw"
 name
                 = "${azurerm_resource_group.aci-rg.location}"
 location
 resource_group_name = "${azurerm_resource_group.aci-rg.name}"
 ip_address_type = "public"
 dns_name_label = "aci-label"
                  = "Linux"
 os_type
 container {
   name = "hw"
   image = "seanmckenna/aci-hellofiles"
   cpu = 0.5
   memory = "1.5"
   port = "80"
   environment_variables {
     "NODE_ENV" = "testing'
   secure_environment_variables {
     "ACCESS_KEY" = "secure_testing"
   commands = ["/bin/bash", "-c", "'/path to/myscript.sh'"]
   volume {
              = "logs"
     mount_path = "/aci/logs"
     read_only = false
     share_name = "${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.
- protocol (Optional) The protocol associated with port for the container. Allowed values are TCP and UDP.
- 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.
- secure_environment_variables (Optional) A list of sensitive 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.

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.
- 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.

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 (/docs/state/sensitive-data.html).

Example Usage

Classic (unmanaged) Container Registry

When using the Classic SKU, you need to provide the Azure storage account.

Managed Container Registry

When using a SKU other than Classic, Azure Container Registry manages the storage account for you.

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.
- georeplication_locations (Optional) A list of Azure locations where the container registry should be georeplicated.

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.

 $terraform\ import\ azurerm_container_registry. test\ /subscriptions/0000000-0000-0000-0000-00000000000/reso\ urcegroups/mygroup1/providers/Microsoft. ContainerRegistry/registries/myregistry1$

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 (/docs/state/sensitive-data.html).

DEPRECATED: Azure Container Service (ACS) has been deprecated by Azure in favour of Azure (Managed) Kubernetes Service (AKS) (https://azure.microsoft.com/en-us/updates/azure-container-service-will-retire-on-january-31-2020/). Support for ACS will be removed in the next major version of the AzureRM Provider (2.0) - and we **strongly recommend** you consider using Azure Kubernetes Service (AKS) (/docs/providers/azurerm/r/kubernetes_cluster.html) for new deployments.

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 {
          dns_prefix = "acctestmaster1"
     linux profile {
           admin_username = "acctestuser1"
           ssh_key {
                 key_data = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCqaZoyiz1qbdOQ8xEf6uEu1cCwYowo5FHtsBhqLoDnnp7KUTE
BN+L2NxRIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySlxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySlxV6Iq5jSav6b2Q8z5KiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChi
{\tt OJcM7e90oeTqo+7HTcWfdu0qQqPWY5ujyMw/llas8tsXY85LFqRnr3gJ02bAscjc477+X+j/gkpFoN1QEmt\ terraform@demo.tld"}
          }
      }
     agent_pool_profile {
                                = "default"
          name
                                     = 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" {
                                                              = "acctestcontservice1"
    name
    location
                                                             = "${azurerm_resource_group.test.location}"
    resource_group_name = "${azurerm_resource_group.test.name}"
    orchestration_platform = "Kubernetes"
    master_profile {
         dns_prefix = "acctestmaster1"
    linux profile {
         admin_username = "acctestuser1"
         ssh_key {
               key_data = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCqaZoyiz1qbdOQ8xEf6uEu1cCwYowo5FHtsBhqLoDnnp7KUTE
BN+L2NxRIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySlxVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySlxVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8xiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChise
{\tt OJcM7e90oeTqo+7HTcWfdu0qQqPWY5ujyMw/llas8tsXY85LFqRnr3gJ02bAscjc477+X+j/gkpFoN1QEmt\ terraform@demo.tld"}
         }
     }
    agent_pool_profile {
                             = "default"
         name
                                = 1
         dns_prefix = "acctestagent1"
         vm_size = "Standard_F2"
     }
    service_principal {
         client_id = "00000000-0000-0000-0000-00000000000"
         diagnostics_profile {
         enabled = false
         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 {
          dns_prefix = "acctestmaster1"
     linux profile {
           admin_username = "acctestuser1"
           ssh_key {
                 key_data = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCqaZoyiz1qbd0Q8xEf6uEu1cCwYowo5FHtsBhqLoDnnp7KUTE
BN+L2NxRIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhLmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySLKVVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySlxVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8z5KiseOlvKA/RF2wqU0UPYqQviQhlmW6THTpmrv/YkUCuzxDpsH7DUDhZcwySlxVe0Qm3+5N2TPhysRel2N2RIfQ781rxV6Iq5jSav6b2Q8xiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChiseOlvChise
a6UYH3lsDf9R9wTP2K/+vAnflKebuypNlmocIvakFWoZda18FOmsOoIVXQ8HWFNCuw9ZCunMSN62QGamCe3dL5cXlkgHYv7ekJE15IA9a
OJcM7e90oeTqo+7HTcWfdu0qQqPWY5ujyMw/llas8tsXY85LFqRnr3gJ02bAscjc477+X+j/gkpFoN1QEmt terraform@demo.tld"
          }
      }
     agent_pool_profile {
          name = "default"
                                     = 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) A 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_cosmosdb_account

Manages a CosmosDB (formally DocumentDB) Account.

Example Usage

```
resource "azurerm_resource_group" "rg" {
         = "${var.resource_group_name}"
  location = "${var.resource_group_location}"
resource "random_integer" "ri" {
 min = 10000
 max = 99999
resource "azurerm_cosmosdb_account" "db" {
            = "tfex-cosmos-db-${random_integer.ri.result}"
  name
 location
                   = "${azurerm_resource_group.rg.location}"
 resource_group_name = "${azurerm_resource_group.rg.name}"
 offer_type = "Standard"
                    = "GlobalDocumentDB"
 kind
 enable_automatic_failover = true
 consistency_policy {
   consistency_level
                      = "BoundedStaleness"
   max_interval_in_seconds = 10
   max_staleness_prefix
                         = 200
  geo_location {
   location
                    = "${var.failover_location}"
   failover_priority = 1
  geo_location {
   prefix
                    = "tfex-cosmos-db-${random_integer.ri.result}-customid"
                   = "${azurerm_resource_group.rg.location}"
   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.
- is_virtual_network_filter_enabled (Optional) Enables virtual network filtering for this Cosmos DB account.
- virtual_network_rule (Optional) Specifies a virtual_network_rules resource, used to define which subnets are allowed to access this CosmosDB account.
- enable_multiple_write_locations (Optional) Enable multi-master support for this Cosmos DB account.

consistency_policy Configures the database consistency and supports the following:

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

Note: max_interval_in_seconds and max_staleness_prefix can only be set to custom values when consistency_level is set to BoundedStaleness - otherwise they will return the default values shown above.

geo_location Configures the geographic locations the data is replicated to and supports the following:

- prefix (Optional) The string used to generate the document endpoints for this region. If not specified it defaults to \${cosmosdb_account.name}-\${location}. Changing this causes the location to be deleted and re-provisioned and cannot be changed for the location with failover priority 0.
- location (Required) The name of the Azure region to host replicated data.
- failover_priority (Required) The failover priority of the region. A failover priority of 0 indicates a write region. The

maximum value for a failover priority = (total number of regions - 1). Failover priority values must be unique for each of the regions in which the database account exists. Changing this causes the location to be re-provisioned and cannot be changed for the location with failover priority 0.

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

virtual_network_rule Configures the virtual network subnets allowed to access this Cosmos DB account and supports the following:

• id - (Required) The ID of the virtual network subnet.

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.

 $terraform\ import\ azurerm_cosmosdb_account. account1\ /subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/group1/providers/Microsoft. DocumentDB/databaseAccounts/account1$

azurerm_data_lake_analytics_account

Manage an Azure Data Lake Analytics Account.

Example Usage

```
resource "azurerm_resource_group" "example" {
    name = "tfex-datalake-account"
    location = "northeurope"
}

resource "azurerm_data_lake_store" "example" {
    name = "tfexdatalakestore"
    resource_group_name = "${azurerm_resource_group.example.name}"
    location = "${azurerm_resource_group.example.location}"
}

resource "azurerm_data_lake_analytics_account" "example" {
    name = "tfexdatalakeaccount"
    resource_group_name = "${azurerm_resource_group.example.name}"
    location = "${azurerm_resource_group.example.name}"
    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_1000AUHours, Commitment_1000AUHours, Commitment_50000AUHours, Commitment_5000AUHours, Or Commitment_500AUHours.
- tags (Optional) A mapping of tags to assign to the resource.

Attributes Reference

• id - The Date Lake Store ID.

Import

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

azurerm_data_lake_analytics_firewall_rule

Manage a Azure Data Lake Analytics Firewall Rule.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "tfex_datalake_fw_rule"
  location = "northeurope"
resource "azurerm_data_lake_store" "example" {
                    = "tfexdatalakestore"
  resource_group_name = "${azurerm_resource_group.example.name}"
  location = "${azurerm_resource_group.example.location}"
resource "azurerm_data_lake_analytics_account" "example" {
                     = "tfexdatalakeaccount"
  resource_group_name = "${azurerm_resource_group.example.name}"
                    = "${azurerm_resource_group.example.location}"
 location
  default_store_account_name = "${azurerm_data_lake_store.example.name}"
}
resource "azurerm_data_lake_analytics_firewall_rule" "example" {
 name
                   = "office-ip-range"
                 = "${azurerm_data_lake_analytics.example.name}"
 account_name
  resource_group_name = "${azurerm_resource_group.example.name}"
  start_ip_address = "1.2.3.4"
                    = "2.3.4.5"
  end_ip_address
}
```

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.

azurerm_data_lake_store

Manage an Azure Data Lake Store.

Example Usage

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_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.
- endpoint The Endpoint for the Data Lake Store.

Import

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

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/00000000-0000-0000-0000-00000
0000000/resourceGroups/mygroup1/providers/Microsoft.DataLakeStore/accounts/mydatalakeaccount/firewallRule
s/rule1

azurerm_databricks_workspace

Manages a Databricks Workspace

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Databricks Workspace resource. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the Resource Group in which the Databricks Workspace should exist. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource has to be created. Changing this forces a new resource to be created.
- sku (Required) The sku to use for the Databricks Workspace. Possible values are Standard or Premium. Changing this forces a new resource to be created.
- managed_resource_group_name (Optional) The name of the resource group where Azure should place the managed Databricks resources. Changing this forces a new resource to be created.

NOTE Azure requires that this Resource Group does not exist in this Subscription (and that the Azure API creates it) - otherwise the deployment will fail.

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

Attributes Reference

The following attributes are exported:

- id The ID of the Databricks Workspace.
- managed_resource_group_id The ID of the Managed Resource Group created by the Databricks Workspace.

Import

Databrick Workspaces can be imported using the resource id, e.g.

azurerm_dev_test_lab

Manages a Dev Test Lab.

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Dev Test Lab. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group under which the Dev Test Lab resource has to be created. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the Dev Test Lab should exist. Changing this forces a new resource to be created.
- storage_type (Optional) The type of storage used by the Dev Test Lab. Possible values are Standard and Premium. Defaults to Premium. 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 Dev Test Lab.
- artifacts_storage_account_id The ID of the Storage Account used for Artifact Storage.
- $\bullet \ \ \mathsf{default_storage_account_id} \mathsf{The} \ \mathsf{ID} \ \mathsf{of} \ \mathsf{the} \ \mathsf{Default} \ \mathsf{Storage} \ \mathsf{Account} \ \mathsf{for} \ \mathsf{this} \ \mathsf{Dev} \ \mathsf{Test} \ \mathsf{Lab}.$
- default_premium_storage_account_id The ID of the Default Premium Storage Account for this Dev Test Lab.
- key_vault_id The ID of the Key used for this Dev Test Lab.

- $\bullet \ \ premium_data_disk_storage_account_id The \ ID \ of the \ Storage \ Account \ used \ for \ Storage \ of \ Premium \ Data \ Disk.$
- unique_identifier The unique immutable identifier of the Dev Test Lab.

Import

Dev Test Labs can be imported using the resource id, e.g.

 $terraform\ import\ azurerm_dev_test_lab.lab1\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGr\ oups/group1/providers/Microsoft.DevTestLab/labs/lab1$

azurerm_dev_test_linux_virtual_machine

Manages a Linux Virtual Machine within a Dev Test Lab.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "West US"
resource "azurerm_dev_test_lab" "test" {
                   = "example-devtestlab"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 tags {
    "Sydney" = "Australia"
  }
}
resource "azurerm_dev_test_virtual_network" "test" {
 name
                    = "example-network"
  lab name
                    = "${azurerm_dev_test_lab.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 subnet {
   use_public_ip_address
                                 = "Allow"
   use_in_virtual_machine_creation = "Allow"
}
resource "azurerm_dev_test_linux_virtual_machine" "test" {
              = "example-vm03"
                      = "${azurerm_dev_test_lab.test.name}"
 lab_name
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = "${azurerm_resource_group.test.location}"
 location
 size
                       = "Standard_DS2"
                      = "exampleuser99"
 username
                      = "${file("~/.ssh/id_rsa.pub")}"
 ssh_key
 lab_virtual_network_id = "${azurerm_dev_test_virtual_network.test.id}"
 lab_subnet_name = "${azurerm_dev_test_virtual_network.test.subnet.0.name}"
                      = "Premium"
 storage_type
                      = "Some notes about this Virtual Machine."
 notes
  gallery_image_reference {
   offer = "UbuntuServer"
   publisher = "Canonical"
   sku = "18.04-LTS"
   version = "latest"
  }
}
```

Argument Reference

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

NOTE: The validation requirements for the Name change based on the os_type used in this Virtual Machine. For a Linux VM the name must be between 1-62 characters, and for a Windows VM the name must be between 1-15 characters. It must begin and end with a letter or number, and cannot be all numbers.

- lab_name (Required) Specifies the name of the Dev Test Lab in which the Virtual Machine should be created. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the Dev Test Lab resource exists. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the Dev Test Lab exists. Changing this forces a new resource to be created.
- gallery_image_reference (Required) A gallery_image_reference block as defined below.
- lab_subnet_name (Required) The name of a Subnet within the Dev Test Virtual Network where this machine should exist. Changing this forces a new resource to be created.
- lab_virtual_network_id (Required) The ID of the Dev Test Virtual Network where this Virtual Machine should be created. Changing this forces a new resource to be created.
- size (Required) The Machine Size to use for this Virtual Machine, such as Standard_F2. Changing this forces a new resource to be created.
- storage_type (Required) The type of Storage to use on this Virtual Machine. Possible values are Standard and Premium.
- username (Required) The Username associated with the local administrator on this Virtual Machine. Changing this forces a new resource to be created.
- allow_claim (Optional) Can this Virtual Machine be claimed by users? Defaults to true.
- disallow_public_ip_address (Optional) Should the Virtual Machine be created without a Public IP Address? Changing this forces a new resource to be created.
- inbound_nat_rule (Optional) One or more inbound_nat_rule blocks as defined below. Changing this forces a new resource to be created.

NOTE: If any inbound_nat_rule blocks are specified then disallow_public_ip_address must be set to true.

- notes (Optional) Any notes about the Virtual Machine.
- password (Optional) The Password associated with the username used to login to this Virtual Machine. Changing this forces a new resource to be created.
- ssh_key (Optional) The SSH Key associated with the username used to login to this Virtual Machine. Changing this forces a new resource to be created.

NOTE: One or either password or ssh_key must be specified.

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

A gallery_image_reference block supports the following:

- offer (Required) The Offer of the Gallery Image. Changing this forces a new resource to be created.
- publisher (Required) The Publisher of the Gallery Image. Changing this forces a new resource to be created.
- sku (Required) The SKU of the Gallery Image. Changing this forces a new resource to be created.
- version (Required) The Version of the Gallery Image. Changing this forces a new resource to be created.

A inbound_nat_rule block supports the following:

- protocol (Required) The Protocol used for this NAT Rule. Possible values are Tcp and Udp. Changing this forces a new resource to be created.
- backend_port (Required) The Backend Port associated with this NAT Rule. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

- id The ID of the Virtual Machine.
- fqdn The FQDN of the Virtual Machine.
- inbound_nat_rule One or more inbound_nat_rule blocks as defined below.
- unique_identifier The unique immutable identifier of the Virtual Machine.

A inbound_nat_rule block exports the following:

• frontend_port - The frontend port associated with this Inbound NAT Rule.

Import

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

azurerm_dev_test_policy

Manages a Policy within a Dev Test Policy Set.

Example Usage

```
resource "azurerm_resource_group" "test" {
        = "example-resources"
 location = "West US"
resource "azurerm_dev_test_lab" "test" {
                   = "example-devtestlab"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 tags {
   "Sydney" = "Australia"
 }
}
resource "azurerm_dev_test_policy" "test" {
                   = "LabVmCount"
 policy_set_name = "default"
                  = "${azurerm_dev_test_lab.test.name}"
 lab_name
 resource_group_name = "${azurerm_resource_group.test.name}"
                = ""
 fact_data
                  = "999"
 threshold
 evaluator_type = "MaxValuePolicy"
 tags {
   "Acceptance" = "Test"
 }
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Dev Test Policy. Possible values are GalleryImage, LabPremiumVmCount, LabTargetCost, LabVmCount, LabVmSize, UserOwnedLabPremiumVmCount, UserOwnedLabVmCount and UserOwnedLabVmCountInSubnet. Changing this forces a new resource to be created.
- policy_set_name (Required) Specifies the name of the Policy Set within the Dev Test Lab where this policy should be created. Changing this forces a new resource to be created.
- lab_name (Required) Specifies the name of the Dev Test Lab in which the Policy should be created. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the Dev Test Lab resource exists. Changing this forces a new resource to be created.

- location (Required) Specifies the supported Azure location where the Dev Test Lab exists. Changing this forces a new resource to be created.
- description (Optional) A description for the Policy.
- evaluator_type (Required) The Evaluation Type used for this Policy. Possible values include: 'AllowedValuesPolicy', 'MaxValuePolicy'. Changing this forces a new resource to be created.
- threshold (Required) The Threshold for this Policy.
- fact_data (Optional) The Fact Data for this Policy.
- tags (Optional) A mapping of tags to assign to the resource.

Attributes Reference

The following attributes are exported:

• id - The ID of the Dev Test Policy.

Import

Dev Test Policies can be imported using the resource id, e.g.

azurerm_dev_test_virtual_network

Manages a Virtual Network within a Dev Test Lab.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "West US"
resource "azurerm_dev_test_lab" "test" {
                    = "example-devtestlab"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  tags {
    "Sydney" = "Australia"
  }
}
resource "azurerm_dev_test_virtual_network" "test" {
 name
                    = "example-network"
  lab name
                     = "${azurerm_dev_test_lab.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 subnet {
   use_public_ip_address
                                  = "Allow"
   use_in_virtual_machine_creation = "Allow"
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Dev Test Virtual Network. Changing this forces a new resource to be created.
- lab_name (Required) Specifies the name of the Dev Test Lab in which the Virtual Network should be created. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the Dev Test Lab resource exists. Changing this forces a new resource to be created.
- description (Optional) A description for the Virtual Network.
- subnet (Optional) A subnet block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

A subnet block supports the following:

- use_public_ip_address (Required) Can Virtual Machines in this Subnet use Public IP Addresses? Possible values are
 Allow, Default and Deny.
- use_in_virtual_machine_creation (Required) Can this subnet be used for creating Virtual Machines? Possible values are Allow, Default and Deny.

Attributes Reference

The following attributes are exported:

- id The ID of the Dev Test Virtual Network.
- subnet A subnet block as defined below.
- unique_identifier The unique immutable identifier of the Dev Test Virtual Network.

A subnet block exports the following:

• name - The name of the Subnet for this Virtual Network.

Import

Dev Test Virtual Networks can be imported using the resource id, e.g.

azurerm_dev_test_windows_virtual_machine

Manages a Windows Virtual Machine within a Dev Test Lab.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "West US"
resource "azurerm_dev_test_lab" "test" {
                   = "example-devtestlab"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 tags {
    "Sydney" = "Australia"
  }
}
resource "azurerm_dev_test_virtual_network" "test" {
 name
                    = "example-network"
  lab name
                    = "${azurerm_dev_test_lab.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 subnet {
   use_public_ip_address
                                 = "Allow"
   use_in_virtual_machine_creation = "Allow"
}
resource "azurerm_dev_test_windows_virtual_machine" "test" {
             = "example-vm03"
- "*'
                      = "${azurerm_dev_test_lab.test.name}"
 lab_name
 resource_group_name = "${azurerm_resource_group.test.name}"
                      = "${azurerm_resource_group.test.location}"
 location
 size
                       = "Standard_DS2"
                      = "exampleuser99"
 username
                      = "Pa$$w0rd1234!"
 password
 lab_virtual_network_id = "${azurerm_dev_test_virtual_network.test.id}"
 lab_subnet_name = "${azurerm_dev_test_virtual_network.test.subnet.0.name}"
                      = "Premium"
 storage_type
                      = "Some notes about this Virtual Machine."
 notes
  gallery_image_reference {
   offer = "UbuntuServer"
   publisher = "Canonical"
   sku = "18.04-LTS"
   version = "latest"
  }
}
```

Argument Reference

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

NOTE: The validation requirements for the Name change based on the os_type used in this Virtual Machine. For a Linux VM the name must be between 1-62 characters, and for a Windows VM the name must be between 1-15 characters. It must begin and end with a letter or number, and cannot be all numbers.

- lab_name (Required) Specifies the name of the Dev Test Lab in which the Virtual Machine should be created. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the Dev Test Lab resource exists. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the Dev Test Lab exists. Changing this forces a new resource to be created.
- gallery_image_reference (Required) A gallery_image_reference block as defined below.
- lab_subnet_name (Required) The name of a Subnet within the Dev Test Virtual Network where this machine should exist. Changing this forces a new resource to be created.
- lab_virtual_network_id (Required) The ID of the Dev Test Virtual Network where this Virtual Machine should be created. Changing this forces a new resource to be created.
- password (Required) The Password associated with the username used to login to this Virtual Machine. Changing this forces a new resource to be created.
- size (Required) The Machine Size to use for this Virtual Machine, such as Standard_F2. Changing this forces a new resource to be created.
- storage_type (Required) The type of Storage to use on this Virtual Machine. Possible values are Standard and Premium.
- username (Required) The Username associated with the local administrator on this Virtual Machine. Changing this forces a new resource to be created.
- allow_claim (Optional) Can this Virtual Machine be claimed by users? Defaults to true.
- disallow_public_ip_address (Optional) Should the Virtual Machine be created without a Public IP Address?
 Changing this forces a new resource to be created.
- inbound_nat_rule (Optional) One or more inbound_nat_rule blocks as defined below. Changing this forces a new resource to be created.

NOTE: If any inbound_nat_rule blocks are specified then disallow_public_ip_address must be set to true.

- notes (Optional) Any notes about the Virtual Machine.
- tags (Optional) A mapping of tags to assign to the resource.

A gallery_image_reference block supports the following:

• offer - (Required) The Offer of the Gallery Image. Changing this forces a new resource to be created.

- publisher (Required) The Publisher of the Gallery Image. Changing this forces a new resource to be created.
- sku (Required) The SKU of the Gallery Image. Changing this forces a new resource to be created.
- version (Required) The Version of the Gallery Image. Changing this forces a new resource to be created.

A inbound_nat_rule block supports the following:

- protocol (Required) The Protocol used for this NAT Rule. Possible values are Tcp and Udp. Changing this forces a new resource to be created.
- backend_port (Required) The Backend Port associated with this NAT Rule. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

- id The ID of the Virtual Machine.
- fqdn The FQDN of the Virtual Machine.
- inbound_nat_rule One or more inbound_nat_rule blocks as defined below.
- unique_identifier The unique immutable identifier of the Virtual Machine.

A inbound_nat_rule block exports the following:

• frontend_port - The frontend port associated with this Inbound NAT Rule.

Import

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

azurerm_devspace_controller

Manages a DevSpace Controller.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acctestRG1"
  location = "westeurope"
resource "azurerm_kubernetes_cluster" "test" {
                  = "acctestaks1"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 dns_prefix
               = "acctestaks1"
 agent_pool_profile {
   name = "default"
   count = "1"
   vm_size = "Standard_DS2_v2"
 service_principal {
   client_id = "00000000-0000-0000-0000-00000000000"
   }
}
resource "azurerm_devspace_controller" test {
              = "acctestdsc1"
 name
                  = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
     name = "S1"
     tier = "Standard"
 host_suffix = "suffix"
 target_container_host_resource_id = "${azurerm_kubernetes_cluster.test.id}"
 target_container_host_credentials_base64 = "${base64encode(azurerm_kubernetes_cluster.test.kube_config_
raw)}"
  tags {
   Environment = "Testing"
  }
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the DevSpace Controller. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group under which the DevSpace Controller resource

has to be created. Changing this forces a new resource to be created.

- location (Required) Specifies the supported location where the DevSpace Controller should exist. Changing this forces a new resource to be created.
- sku (Required) A sku block as documented below. Changing this forces a new resource to be created.
- host_suffix (Required) The host suffix for the DevSpace Controller. Changing this forces a new resource to be created.
- target_container_host_resource_id (Required) The resource id of Azure Kubernetes Service cluster. Changing this forces a new resource to be created.
- target_container_host_credentials_base64 (Required) Base64 encoding of kube_config_raw of Azure Kubernetes Service cluster. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.

A sku block supports the following:

- name (Required) The name of the SKU for DevSpace Controller. Currently the only supported value is S1. Changing this forces a new resource to be created.
- tier (Required) The tier of the SKU for DevSpace Controller. Currently the only supported value is Standard. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

- id The ID of the DevSpace Controller.
- data_plane_fqdn DNS name for accessing DataPlane services.

Import

DevSpace Controller's can be imported using the resource id, e.g.

azurerm_dns_a_record

Enables you to manage DNS A Records within Azure DNS.

Example Usage

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 in seconds.
- 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.

 $terraform\ import\ azurerm_dns_a_record.test\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGr\ oups/mygroup1/providers/Microsoft.Network/dnsZones/zone1/A/myrecord1$

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 in seconds.
- 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 $\ensuremath{\text{resource}}$ id, e.g.

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" {
         = "mydomain.com"
 resource_group_name = "${azurerm_resource_group.test.name}"
 zone_name = "test"
resource "azurerm_dns_caa_record" "test" {
                   = "${azurerm_dns_zone.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                   = 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 in seconds.
- 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/00000000-0000-0000-0000-000000000000/resource Groups/mygroup1/providers/Microsoft.Network/dnsZones/zone1/CAA/myrecord1

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_dns_zone.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 in seconds.
- 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 $\ensuremath{\texttt{resource}}$ id, e.g.

azurerm_dns_mx_record

Enables you to manage DNS MX Records within Azure DNS.

Example Usage

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

Argument Reference

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 in seconds.
- 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.

 $terraform\ import\ azurerm_dns_mx_record.test\ /subscriptions/00000000-0000-0000-0000-000000000000/resourceG\ roups/mygroup1/providers/Microsoft.Network/dnsZones/zone1/MX/myrecord1$

azurerm_dns_ns_record

Enables you to manage DNS NS Records within Azure DNS.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_dns_zone" "test" {
                    = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_dns_ns_record" "test" {
 name
                     = "test"
 zone_name
                    = "${azurerm_dns_zone.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = 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 in seconds.
- 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.

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 in seconds.
- 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 $\ensuremath{\texttt{resource}}$ id, e.g.

azurerm_dns_srv_record

Enables you to manage DNS SRV Records within Azure DNS.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_dns_zone" "test" {
          = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_dns_srv_record" "test" {
                   = "test"
 name
 zone_name
                   = "${azurerm_dns_zone.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                   = 300
 record {
   priority = 1
   weight = 5
           = 8080
   target = "target1.contoso.com"
   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 in seconds.
- record (Required) A list of values that make up the SRV record. Each record block supports fields documented below.
- tags (Optional) A mapping of tags to assign to the resource.

The record block supports:

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

Attributes Reference

The following attributes are exported:

• id - The DNS SRV Record ID.

Import

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

azurerm_dns_txt_record

Enables you to manage DNS TXT Records within Azure DNS.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_dns_zone" "test" {
          = "mydomain.com"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_dns_txt_record" "test" {
                    = "test"
 name
 zone_name
                    = "${azurerm_dns_zone.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                    = 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 in seconds.
- record (Required) A list of values that make up the txt record. Each record block supports fields documented below.
- tags (Optional) A mapping of tags to assign to the resource.

The record block supports:

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

Attributes Reference

The following attributes are exported:

• id - The DNS TXT Record ID.

Import

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

azurerm_dns_zone

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

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) The name of the DNS Zone. Must be a valid domain name.
- resource_group_name (Required) Specifies the resource group where the resource exists. Changing this forces a new resource to be created.
- 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.
- 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.

 $terraform\ import\ azurerm_dns_zone.zone1\ /subscriptions/00000000-0000-0000-0000-000000000000/resourceGroup\ s/mygroup1/providers/Microsoft.Network/dnsZones/zone1$

azurerm_eventgrid_topic

Manages an EventGrid Topic

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

Example Usage

Argument Reference

The following arguments are supported:

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

Attributes Reference

The following attributes are exported:

- id The EventGrid Topic ID.
- endpoint The Endpoint associated with the EventGrid Topic.
- primary_access_key The Primary Shared Access Key associated with the EventGrid Topic.
- secondary_access_key The Secondary Shared Access Key associated with the EventGrid Topic.

Import

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

 $terraform\ import\ azurerm_eventgrid_topic.topic1\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGroups/group1/providers/Microsoft.EventGrid/topics/topic1$

azurerm_eventhub

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

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "resourceGroup1"
  location = "West US"
resource "azurerm_eventhub_namespace" "test" {
                    = "acceptanceTestEventHubNamespace"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                    = "Standard"
 capacity
  tags {
   environment = "Production"
  }
}
resource "azurerm_eventhub" "test" {
                   = "acceptanceTestEventHub"
 name
 namespace_name = "${azurerm_eventhub_namespace.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  partition_count
                   = 2
  message_retention = 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. Changing this forces a new resource to be created.
- 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 (https://github.com/Azure/azure-rest-apispecs/issues/2255).

- 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/00000000-0000-0000-0000-000000000000/resourceGroups/group1/providers/Microsoft.EventHub/namespaces/namespace1/eventhubs/eventhub1

azurerm_eventhub_authorization_rule

Manages a Event Hubs authorization Rule within an Event Hub.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "resourceGroup1"
  location = "West US"
resource "azurerm_eventhub_namespace" "test" {
                    = "acceptanceTestEventHubNamespace"
 location = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
                = "Basic"
 capacity
  tags {
    environment = "Production"
  }
}
resource "azurerm_eventhub" "test" {
            = "acceptanceTestEventHub"
 name
 namespace_name = "${azurerm_eventhub_namespace.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  partition_count = 2
  message_retention = 2
resource "azurerm_eventhub_authorization_rule" "test" {
                   = "navi"
 namespace_name = "${azurerm_eventhub_namespace.test.name}"
eventhub_name = "${azurerm_eventhub.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
                     = true
  send
                     = false
                     = false
 manage
}
```

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.

azurerm_eventhub_consumer_group

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

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "resourceGroup1"
  location = "West US"
resource "azurerm_eventhub_namespace" "test" {
                   = "acceptanceTestEventHubNamespace"
 location = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
                    = "Basic"
 capacity
  tags {
   environment = "Production"
  }
}
resource "azurerm_eventhub" "test" {
                   = "acceptanceTestEventHub"
 name
  namespace_name = "${azurerm_eventhub_namespace.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  partition_count = 2
  message_retention = 2
resource "azurerm_eventhub_consumer_group" "test" {
                   = "acceptanceTestEventHubConsumerGroup"
 namespace_name = "${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.

azurerm_eventhub_namespace

Manage an EventHub Namespace.

Example Usage

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

• 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.

azurerm_express_route_circuit

Manages an ExpressRoute circuit.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "exprtTest"
  location = "West US"
resource "azurerm_express_route_circuit" "test" {
                     = "expressRoute1"
 resource_group_name = "${azurerm_resource_group.test.name}"
               = "${azurerm_resource_group.test.location}"
 location
 service_provider_name = "Equinix"
 peering_location = "Silicon Valley"
                     = 50
 bandwidth_in_mbps
 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.

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" {
                     = "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" {
                         = "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.

azurerm_express_route_circuit_peering

Manages an ExpressRoute Circuit Peering.

Example Usage (Creating a Microsoft Peering)

```
resource "azurerm_resource_group" "test" {
         = "exprtTest"
  location = "West US"
resource "azurerm_express_route_circuit" "test" {
         = "expressRoute1"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
 service_provider_name = "Equinix"
 peering_location = "Silicon Valley"
                     = 50
 bandwidth_in_mbps
 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}"
                             = 100
 peer_asn
 primary_peer_address_prefix = "123.0.0.0/30"
 secondary_peer_address_prefix = "123.0.0.4/30"
 vlan_id
 microsoft_peering_config {
   advertised_public_prefixes = ["123.1.0.0/24"]
  }
}
```

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 ExpressRoute Circuit in which to create the Peering.
- resource_group_name (Required) The name of the resource group in which to create the Express Route Circuit Peering. Changing this forces a new resource to be created.
- primary_peer_address_prefix (Optional) A /30 subnet for the primary link.
- secondary_peer_address_prefix (Optional) A /30 subnet for the secondary link.
- vlan_id (Optional) A valid VLAN ID to establish this peering on.
- shared_key (Optional) The shared key. Can be a maximum of 25 characters.
- peer_asn (Optional) The Either a 16-bit or a 32-bit ASN. Can either be public or private..
- microsoft_peering_config (Optional) A microsoft_peering_config block as defined below. Required when peering_type is set to MicrosoftPeering.

A microsoft_peering_config block contains:

advertised_public_prefixes - (Required) A list of Advertised Public Prefixes

Attributes Reference

The following attributes are exported:

- id The Resource ID of the ExpressRoute Circuit Peering.
- azure_asn The ASN used by Azure.
- primary_azure_port The Primary Port used by Azure for this Peering.
- secondary_azure_port The Secondary Port used by Azure for this Peering.

Import

ExpressRoute Circuit Peerings can be imported using the resource id, e.g.

azurerm_firewall

Manages an Azure Firewall.

NOTE Azure Firewall is currently in Public Preview.

Example Usage

```
resource "azurerm_resource_group" "test" {
          = "example-resources"
  location = "North Europe"
resource "azurerm_virtual_network" "test" {
                    = "testvnet"
 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" {
            = "AzureFirewallSubnet"
  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
                               = "testpip"
                              = "${azurerm_resource_group.test.location}"
  location
 resource_group_name = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "Static"
  sku
                               = "Standard"
}
resource "azurerm_firewall" "test" {
                    = "testfirewall"
  name = "testfirewall"
location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
 ip_configuration {
                                  = "configuration"
   name
                                  = "${azurerm_subnet.test.id}"
    internal_public_ip_address_id = "${azurerm_public_ip.test.id}"
  }
}
```

Argument Reference

The following arguments are supported:

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

- resource_group_name (Required) The name of the resource group in which to create the resource. 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_configuration (Required) A ip_configuration block as documented below.
- tags (Optional) A mapping of tags to assign to the resource.

A ip_configuration block supports the following:

- name (Required) Specifies the name of the IP Configuration.
- subnet_id (Required) Reference to the subnet associated with the IP Configuration.

NOTE The Subnet used for the Firewall must have the name AzureFirewallSubnet and the subnet mask must be at least /25.

• internal_public_ip_address_id - (Required) The Resource ID of the Public IP Address associated with the firewall.

NOTE The Public IP must have a Static allocation and Standard sku.

Attributes Reference

The following attributes are exported:

- id The Resource ID of the Azure Firewall.
- ip_configuration A ip_configuration block as defined below.

A ip_configuration block exports the following:

• private_ip_address - The private IP address of the Azure Firewall.

Import

Azure Firewalls can be imported using the resource id, e.g.

terraform import azurerm_firewall.test /subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/group1/providers/Microsoft.Network/azureFirewalls/testfirewall

azurerm_firewall_network_rule_collection

Manages a Network Rule Collection within an Azure Firewall.

NOTE Azure Firewall is currently in Public Preview.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "North Europe"
resource "azurerm_virtual_network" "test" {
                   = "testvnet"
 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" {
           = "AzureFirewallSubnet"
  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
                              = "testpip"
                              = "${azurerm_resource_group.test.location}"
 location
  resource_group_name = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "Static"
 sku
                              = "Standard"
resource "azurerm_firewall" "test" {
                    = "testfirewall"
 name = "testfirewall"
location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 ip_configuration {
                                 = "configuration"
   name
                                 = "${azurerm_subnet.test.id}"
   internal_public_ip_address_id = "${azurerm_public_ip.test.id}"
  }
}
resource "azurerm_firewall_network_rule_collection" "test" {
                     = "testcollection"
 azure_firewall_name = "${azurerm_firewall.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
              = 100
 priority
                    = "Allow"
 action
 rule {
   name = "testrule"
   source_addresses = [
      "10.0.0.0/16".
```

```
destination_ports = [
    "53",
]

destination_addresses = [
    "8.8.8.8",
    "8.8.4.4",
]

protocols = [
    "TCP",
    "UDP",
]

}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Network Rule Collection which must be unique within the Firewall. Changing this forces a new resource to be created.
- azure_firewall_name (Required) Specifies the name of the Firewall in which to the Network Rule Collection should be created. Changing this forces a new resource to be created.
- resource_group_name (Required) Specifies the name of the Resource Group in which the Firewall exists. Changing this forces a new resource to be created.
- priority (Required) Specifies the priority of the rule collection. Possible values are between 100 65000.
- action (Required) Specifies the action the rule will apply to matching traffic. Possible values are Allow and Deny.
- rule (Required) One or more rule blocks as defined below.

A rule block supports the following:

- name (Required) Specifies the name of the rule.
- description (Optional) Specifies a description for the rule.
- source_addresses (Required) A list of source IP addresses and/or IP ranges.
- destination_addresses (Required) A list of destination IP addresses and/or IP ranges.
- destination_ports (Required) A list of destination ports.
- protocols (Required) A list of protocols. Possible values are Any, ICMP, TCP and UDP.

Import

 $terraform\ import\ azurerm_firewall_network_rule_collection.test\ /subscriptions/00000000-0000-0000-0000\\000000000/resourceGroups/mygroup1/providers/Microsoft.Network/azureFirewalls/myfirewall/networkRuleCollections/mycollection$

azurerm_function_app

Manages a Function App.

Example Usage (with App Service Plan)

```
resource "azurerm_resource_group" "test" {
 name = "azure-functions-test-rg"
  location = "westus2"
resource "azurerm_storage_account" "test" {
          = "functionsapptestsa"
 resource_group_name = "${azurerm_resource_group.test.name}"
                        = "${azurerm_resource_group.test.location}"
 location
 account_tier = "Standard"
 account_replication_type = "LRS"
resource "azurerm_app_service_plan" "test" {
            = "azure-functions-test-service-plan"
                    = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
   tier = "Standard"
   size = "S1"
  }
}
resource "azurerm_function_app" "test" {
                = "test-azure-functions"
 location
                         = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
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" {
                     = "functionsapptestsa"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location
                         = "${azurerm_resource_group.test.location}"
                       = "Standard"
 account tier
  account_replication_type = "LRS"
resource "azurerm_app_service_plan" "test" {
                    = "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" {
                            = "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.
- enable_builtin_logging (Optional) Should the built-in logging of this Function App be enabled? Defaults to true.
- 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. 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.

 $terraform\ import\ azurerm_function_app.functionapp1\ /subscriptions/00000000-0000-0000-0000-00000000000/re\ sourceGroups/mygroup1/providers/Microsoft.Web/sites/functionapp1$

azurerm_image

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

Example Usage Creating from VHD

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

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.
- size_gb (Optional) Specifies the size of the image to be created. The target size can't be smaller than the source size.

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.

azurerm_iothub

Manages an lotHub

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "resourceGroup1"
  location = "West US"
resource "azurerm_storage_account" "test" {
                         = "teststa"
 resource_group_name = "${azurerm_resource_group.test.name}"
                  = "${azurerm_resource_group.test.location}"
= "Standard"
 location
 account_tier
  account_replication_type = "LRS"
resource "azurerm_storage_container" "test" {
                      = "test"
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_name = "${azurerm_storage_account.test.name}"
  container_access_type = "private"
resource "azurerm_iothub" "test" {
                    = "test"
  resource_group_name = "${azurerm_resource_group.test.name}"
                 = "${azurerm_resource_group.test.location}"
  sku {
   name
            = "S1"
   tier = "Standard"
   capacity = "1"
  endpoint {
                             = "AzureIotHub.StorageContainer"
   connection_string
                             = "${azurerm_storage_account.test.primary_blob_connection_string}"
                             = "export"
   name
   batch_frequency_in_seconds = 60
   max_chunk_size_in_bytes = 10485760
   container_name = "test"
                            = "Avro"
   encoding
                          = "{iothub}/{partition}_{YYYY}_{MM}_{DD}_{HH}_{mm}"
   file_name_format
 route {
                = "export"
   source = "DeviceMessages"
condition = "true"
   endpoint_names = ["export"]
   enabled
             = true
  tags {
   "purpose" = "testing"
  }
}
```

Argument Reference

The following arguments are supported:

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

- resource_group_name (Required) The name of the resource group under which the lotHub 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.
- endpoint (Optional) An endpoint block as defined below.
- route (Optional) A route 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.

NOTE: Only one lotHub can be on the Free tier per subscription.

• capacity - (Required) The number of provisioned IoT Hub units.

An endpoint block supports the following:

- type (Required) The type of the endpoint. Possible values are AzureIotHub.StorageContainer, AzureIotHub.ServiceBusQueue, AzureIotHub.ServiceBusTopic or AzureIotHub.EventHub.
- connection_string (Required) The connection string for the endpoint.
- name (Required) The name of the endpoint. The name must be unique across endpoint types. The following names are reserved: events, operationsMonitoringEvents, fileNotifications and \$default.
- batch_frequency_in_seconds (Optional) Time interval at which blobs are written to storage. Value should be between 60 and 720 seconds. Default value is 300 seconds. This attribute is mandatory for endpoint type AzureIotHub.StorageContainer.
- max_chunk_size_in_bytes (Optional) Maximum number of bytes for each blob written to storage. Value should be between 10485760(10MB) and 524288000(500MB). Default value is 314572800(300MB). This attribute is mandatory for endpoint type AzureIotHub.StorageContainer.
- container_name (Optional) The name of storage container in the storage account. This attribute is mandatory for endpoint type AzureIotHub.StorageContainer.
- encoding (Optional) Encoding that is used to serialize messages to blobs. Supported values are 'avro' and
 'avrodeflate'. Default value is 'avro'. This attribute is mandatory for endpoint type AzureIotHub.StorageContainer.
- file_name_format (Optional) File name format for the blob. Default format is {iothub}/{partition}/{YYYY}/{MM}/{DD}/{HH}/{mm}. All parameters are mandatory but can be reordered. This attribute is mandatory for endpoint type AzureIotHub.StorageContainer.

- name (Required) The name of the route. The name can only include alphanumeric characters, periods, underscores, hyphens, has a maximum length of 64 characters, and must be unique.
- source (Required) The source that the routing rule is to be applied to, such as DeviceMessages. Possible values
 include: RoutingSourceInvalid, RoutingSourceDeviceMessages, RoutingSourceTwinChangeEvents,
 RoutingSourceDeviceLifecycleEvents, RoutingSourceDeviceJobLifecycleEvents.
- condition (Optional) The condition that is evaluated to apply the routing rule. If no condition is provided, it evaluates to true by default. For grammar, see: https://docs.microsoft.com/azure/iot-hub/iot-hub-devguide-query-language (https://docs.microsoft.com/azure/iot-hub/iot-hub-devguide-query-language).
- endpoint_names (Required) The list of endpoints to which messages that satisfy the condition are routed.
- enabled (Required) Used to specify whether a route is enabled.

Attributes Reference

The following attributes are exported:

- id The ID of the IoTHub.
- event_hub_events_endpoint The EventHub compatible endpoint for events data
- event_hub_events_path The EventHub compatible path for events data
- event_hub_operations_endpoint The EventHub compatible endpoint for operational data
- event_hub_operations_path The EventHub compatible path for operational data

NOTE: These fields can be used in conjunction with the shared_access_policy block to build a connection string

- hostname The hostname of the lotHub 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.

 $terraform\ import\ azurerm_iothub.hub1\ /subscriptions/00000000-0000-0000-0000-00000000000/resource Groups/mygroup1/providers/Microsoft.Devices/IotHubs/hub1$

azurerm_iothub_consumer_group

Manages a Consumer Group within an IotHub

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "resourceGroup1"
  location = "West US"
resource "azurerm_iothub" "test" {
                    = "test"
 resource_group_name = "${azurerm_resource_group.test.name}"
             = "${azurerm_resource_group.test.location}"
 location
 sku {
           = "S1"
   name
   tier = "Standard"
   capacity = "1"
  tags {
    "purpose" = "testing"
  }
}
resource "azurerm_iothub_consumer_group" "test" {
                       = "terraform"
  name
                      = "${azurerm_iothub.test.name}"
  iothub_name
  eventhub_endpoint_name = "events"
  resource_group_name = "${azurerm_resource_group.foo.name}"
```

Argument Reference

The following arguments are supported:

- name (Required) The name of this Consumer Group. Changing this forces a new resource to be created.
- iothub_name (Required) The name of the IoT Hub. Changing this forces a new resource to be created.
- eventhub_endpoint_name (Required) The name of the Event Hub-compatible endpoint in the IoT hub. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group that contains the IoT hub. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The ID of the IoTHub Consumer Group.

Import

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

azurerm_key_vault

Manages a Key Vault.

NOTE: It's possible to define Key Vault Access Policies both within the azurerm_key_vault resource (/docs/providers/azurerm/r/key_vault.html) via the access_policy block and by using the azurerm_key_vault_access_policy resource (/docs/providers/azurerm/r/key_vault_access_policy.html). 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
                            = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 enabled_for_disk_encryption = true
                            = "d6e396d0-5584-41dc-9fc0-268df99bc610"
 tenant_id
 sku {
   name = "standard"
  access_policy {
   tenant_id = "d6e396d0-5584-41dc-9fc0-268df99bc610"
   object_id = "d746815a-0433-4a21-b95d-fc437d2d475b"
   key_permissions = [
     "get",
   secret_permissions = [
      "get",
  }
 network_acls {
   default_action
                           = "Deny"
                            = "AzureServices"
   bypass
  }
   environment = "Production"
  }
}
```

Argument Reference

- 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 (/docs/providers/azurerm/r/key_vault.html) via the access_policy block and by using the azurerm_key_vault_access_policy resource (/docs/providers/azurerm/r/key_vault_access_policy.html). 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.
- network_acls (Optional) A network_acls block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

A access_policy block 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.

A network_acls block supports the following:

- bypass (Required) Specifies which traffic can bypass the network rules. Possible values are AzureServices and None.
- default_action (Required) The Default Action to use when no rules match from ip_rules / virtual_network_subnet_ids. Possible values are Allow and Deny.
- ip_rules (Optional) One or more IP Addresses, or CIDR Blocks which should be able to access thie Key Vault.
- virtual_network_subnet_ids (Optional) One or more Subnet ID's which should be able to access this Key Vault.

A sku block supports the following:

• name - (Required) The Name of the SKU used for this Key Vault. Possible values are Standard and Premium.

Attributes Reference

The following attributes are exported:

- id The ID of the Key Vault.
- vault_uri The URI of the Key Vault, used 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/resourceGroup s/mygroup1/providers/Microsoft.KeyVault/vaults/vault1

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 (/docs/providers/azurerm/r/key_vault.html) via the access_policy block and by using the azurerm_key_vault_access_policy resource (/docs/providers/azurerm/r/key_vault_access_policy.html). 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 (https://docs.microsoft.com/en-us/azure/key-vault/key-vault-secure-your-key-vault#data-plane-access-control).

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "resourceGroup1"
 location = "${azurerm_resource_group.test.location}"
resource "azurerm_key_vault" "test" {
                   = "testvault"
                  = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
   name = "standard"
 tenant_id = "22222222-2222-2222-2222-222222222"
 enabled_for_disk_encryption = true
 tags {
   environment = "Production"
}
resource "azurerm_key_vault_access_policy" "test" {
 vault_name = "${azurerm_key_vault.test.name}"
 resource_group_name = "${azurerm_key_vault.test.resource_group_name}"
 object_id = "11111111-1111-1111-1111-11111111111"
 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:

Access Policies with an object_id but no application_id can be imported using the following command:

where 11111111-1111-1111-111111111111 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" {
                     = "keyvaultcertexample"
  location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                  = "${data.azurerm_client_config.current.tenant_id}"
 sku {
   name = "standard"
  access_policy {
    tenant_id = "${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",
      "unwrapKey",
      "undate".
```

```
upuuce ,
      "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)

```
resource_group_name = "${azurerm_resource_group.test.name}"
                     = "${data.azurerm_client_config.current.tenant_id}"
  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" {
           = "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 {
      # Server Authentication = 1.3.6.1.5.5.7.3.1
```

```
# Client Authentication = 1.3.6.1.5.5.7.3.2
      extended_key_usage = [ "1.3.6.1.5.5.7.3.1" ]
      key_usage = [
        "cRLSign",
        "dataEncipherment",
        "digitalSignature",
        "keyAgreement",
        "keyCertSign",
        "keyEncipherment",
      subject_alternative_names {
        dns_names = ["internal.contoso.com", "domain.hello.world"]
      }
      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:

- extended_key_usage (Optional) A list of Extended/Enhanced Key Usages. Changing this forces a new resource to be created.
- 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.
- subject_alternative_names (Optional) A subject_alternative_names block as defined below.
- validity_in_months (Required) The Certificates Validity Period in Months. Changing this forces a new resource to be created.

subject_alternative_names supports the following:

- dns_names (Optional) A list of alternative DNS names (FQDNs) identified by the Certificate. Changing this forces a new resource to be created.
- emails (Optional) A list of email addresses identified by this Certificate. Changing this forces a new resource to be

created.

• upns - (Optional) A list of User Principal Names identified by the Certificate. Changing this forces a new resource to be

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.
- thumbprint The X509 Thumbprint of the Key Vault Certificate returned as hex string.

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/certificates/example/fdf067c93bbb4b22bff4d8b7a9a56217

azurerm_key_vault_key

Manages a Key Vault Key.

Example Usage

```
data "azurerm_client_config" "current" {}
resource "azurerm_resource_group" "test" {
        = "my-resource-group"
  location = "West US"
resource "random_id" "server" {
 keepers = {
   ami_id = 1
 }
 byte_length = 8
resource "azurerm_key_vault" "test" {
                     = "${format("%s%s", "kv", random_id.server.hex)}"
                     = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
                   = "${data.azurerm_client_config.current.tenant_id}"
 tenant_id
 sku {
  name = "premium"
  access_policy {
   tenant_id = "${data.azurerm_client_config.current.tenant_id}"
   object_id = "${data.azurerm_client_config.current.service_principal_object_id}"
   key_permissions = [
     "create",
      "get",
   ]
   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/example/fdf067c93bbb4b22bff4d8b7a9a56217

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 (/docs/state/sensitive-data.html).

Example Usage

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

Argument Reference

- 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/secrets/example/fdf067c93bbb4b22bff4d8b7a9a56217

azurerm_kubernetes_cluster

Manages a Managed Kubernetes Cluster (also known as AKS / Azure Kubernetes Service)

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

Example Usage

This example provisions a basic Managed Kubernetes Cluster. Other examples of the azurerm_kubernetes_cluster resource can be found in the ./examples/kubernetes directory within the Github Repository (https://github.com/terraform-providers/terraform-provider-azurerm/tree/master/examples/kubernetes)

```
resource "azurerm_resource_group" "test" {
 name = "acctestRG1"
 location = "East US"
}
resource "azurerm_kubernetes_cluster" "test" {
 resource_group_name = "${azurerm_resource_group.test.name}"
 dns_prefix = "acctestagent1"
 agent_pool_profile {
  name = "default"
  count
             = 1
  os_disk_size_gb = 30
 service principal {
          client id
  tags {
  Environment = "Production"
}
output "client_certificate" {
 value = "${azurerm_kubernetes_cluster.test.kube_config.0.client_certificate}"
output "kube_config" {
 value = "${azurerm_kubernetes_cluster.test.kube_config_raw}"
```

Argument Reference

- name (Required) The name of the Managed Kubernetes Cluster to create. Changing this forces a new resource to be created.
- location (Required) The location where the Managed Kubernetes Cluster should be created. Changing this forces a new resource to be created.
- resource_group_name (Required) Specifies the Resource Group where the Managed Kubernetes Cluster should exist. Changing this forces a new resource to be created.
- agent_pool_profile (Required) One or more agent_pool_profile blocks as documented below.
- dns_prefix (Required) DNS prefix specified when creating the managed cluster.
- 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).
- linux_profile (Optional) A linux_profile block.
- network_profile (Optional) A network_profile block.

NOTE: If network_profile is not defined, kubenet profile will be used by default.

- role_based_access_control (Optional) A role_based_access_control block. Changing this forces a new resource to be created.
- 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. For more details, please visit How to onboard Azure Monitor for containers
 (https://docs.microsoft.com/en-us/azure/monitoring/monitoring-container-insights-onboard).

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 100 (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.
- max_pods (Optional) The maximum number of pods that can run on each agent.
- os_disk_size_gb (Optional) The Agent Operating System disk size in GB. Changing this forces a new resource to be created.

- os_type (Optional) The Operating System used for the Agents. Possible values are Linux and Windows. Changing this forces a new resource to be created. Defaults to Linux.
- vnet_subnet_id (Optional) The ID of the Subnet where the Agents in the Pool should be provisioned. Changing this forces a new resource to be created.

NOTE: A route table should be configured on this Subnet.

A azure_active_directory block supports the following:

- client_app_id (Required) The Client ID of an Azure Active Directory Application. Changing this forces a new resource to be created.
- server_app_id (Required) The Server ID of an Azure Active Directory Application. Changing this forces a new resource to be created.
- server_app_secret (Required) The Client Secret of an Azure Active Directory Application. Changing this forces a new resource to be created.
- tenant_id (Optional) The Tenant ID used for Azure Active Directory Application. If this isn't specified the Tenant ID of the current Subscription is used. Changing this forces a new resource to be created.

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) One or more ssh_key blocks. Changing this forces a new resource to be created.

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.

- 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. This field can only be set when network_plugin is set to kubenet. Changing this forces a new resource to be created.

• 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.

Examples of how to use AKS with Advanced Networking (https://docs.microsoft.com/en-us/azure/aks/networking-overview#advanced-networking) can be found in the ./examples/kubernetes/ directory in the Github repository (https://github.com/terraform-providers/terraform-provider-azurerm/tree/master/examples/kubernetes).

A oms_agent block supports the following:

- enabled (Required) Is the OMS Agent Enabled?
- log_analytics_workspace_id (Required) The ID of the Log Analytics Workspace which the OMS Agent should send data to.

A role_based_access_control block supports the following:

- azure_active_directory (Required) An azure_active_directory block. Changing this forces a new resource to be created.
- enabled (Required) Is Role Based Access Control Enabled? 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. Changing this forces a new resource to be created.
- client_secret (Required) The Client Secret for the Service Principal. 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.

Attributes Reference

The following attributes are exported:

- id The Kubernetes Managed Cluster ID.
- fqdn The FQDN of the Azure Kubernetes Managed Cluster.
- kube_admin_config A kube_admin_config block as defined below. This is only available when Role Based Access
 Control with Azure Active Directory is enabled.

- kube_admin_config_raw Raw Kubernetes config for the admin account to be used by kubectl (https://kubernetes.io/docs/reference/kubectl/overview/) and other compatible tools. This is only available when Role Based Access Control with Azure Active Directory is enabled.
- kube_config A kube_config block as defined below.
- kube_config_raw Raw Kubernetes config to be used by kubectl
 (https://kubernetes.io/docs/reference/kubectl/overview/) and other compatible tools
- http_application_routing A http_application_routing block as defined below.
- node_resource_group The auto-generated Resource Group which contains the resources for this Managed Kubernetes Cluster.

A http_application_routing block exports the following:

http_application_routing_zone_name - The Zone Name of the HTTP Application Routing.

The kube_admin_config and kube_config blocks export 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 (/docs/providers/kubernetes/index.html) like so:

Import

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

azurerm_lb

Manage a Load Balancer Resource.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "LoadBalancerRG"
  location = "West US"
resource "azurerm_public_ip" "test" {
                             = "PublicIPForLB"
 location
                             = "West US"
                        = "${azurerm_resource_group.test.name}"
  resource_group_name
  public_ip_address_allocation = "static"
resource "azurerm_lb" "test" {
          = "TestLoadBalancer"
                    = "West US"
 location
  resource_group_name = "${azurerm_resource_group.test.name}"
 frontend_ip_configuration {
                        = "PublicIPAddress"
   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 only supported in several regions at this time (https://docs.microsoft.com/en-us/azure/availability-zones/az-overview).

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.

 $terraform\ import\ azurerm_lb.test\ /subscriptions/00000000-0000-0000-0000-00000000000/resource Groups/group\ 1/providers/Microsoft.Network/loadBalancers/lb1$

azurerm_lb_backend_address_pool

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

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" {
        = "LoadBalancerRG"
 location = "West US"
resource "azurerm_public_ip" "test" {
                          = "PublicIPForLB"
 location
                          = "West US"
 resource_group_name = "${azurerm_resource_group.test.name}"
 public_ip_address_allocation = "static"
resource "azurerm_lb" "test" {
 resource_group_name = "${azurerm_resource_group.test.name}"
 frontend_ip_configuration {
                     = "PublicIPAddress"
   public_ip_address_id = "${azurerm_public_ip.test.id}"
 }
}
resource "azurerm_lb_nat_pool" "test" {
 resource_group_name = "${azurerm_resource_group.test.name}"
                           = "${azurerm_lb.test.id}"
 loadbalancer_id
 name
                           = "SampleApplicationPool"
 = "Tcp"
                            = 80
                            = 81
 backend_port
                             = 8080
 frontend_ip_configuration_name = "PublicIPAddress"
}
```

Argument Reference

- 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.

 $terraform\ import\ azurerm_lb_nat_pool.test\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGroups/group1/providers/Microsoft.Network/loadBalancers/lb1/inboundNatPools/pool1$

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

Argument Reference

- 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.

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" {
         = "LoadBalancerRG"
  location = "West US"
resource "azurerm_public_ip" "test" {
                             = "PublicIPForLB"
 location
                              = "West US"
  resource_group_name = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "static"
resource "azurerm_lb" "test" {
          = "TestLoadBalancer"
= "West US"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
 frontend_ip_configuration {
                        = "PublicIPAddress"
   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"
                    = 22
  port
}
```

Argument Reference

- 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.

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

Argument Reference

- name (Required) Specifies the name of the LB Rule.
- resource_group_name (Required) The name of the resource group in which to create the resource.
- loadbalancer_id (Required) The ID of the 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 0 and 65534, inclusive.
- backend_port (Required) The port used for internal connections on the endpoint. Possible values range between 0 and 65535, inclusive.
- backend_address_pool_id (Optional) A reference to a Backend Address Pool over which this Load Balancing Rule
 operates.
- probe_id (Optional) A reference to a Probe used by this Load Balancing Rule.
- enable_floating_ip (Optional) Floating IP is pertinent to failover scenarios: a "floating" IP is reassigned to a secondary server in case the primary server fails. Floating IP is required for SQL AlwaysOn.
- idle_timeout_in_minutes (Optional) Specifies the timeout for the Tcp idle connection. The value can be set between 4 and 30 minutes. The default value is 4 minutes. This element is only used when the protocol is set to Tcp.
- load_distribution (Optional) Specifies the load balancing distribution type to be used by the Load Balancer.
 Possible values are: Default The load balancer is configured to use a 5 tuple hash to map traffic to available servers.
 SourceIP The load balancer is configured to use a 2 tuple hash to map traffic to available servers.
 SourceIPProtocol The load balancer is configured to use a 3 tuple hash to map traffic to available servers. Also known as Session Persistence, where the options are called None, Client IP and Client IP and Protocol respectively.

Attributes Reference

The following attributes are exported:

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

Import

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

 $terraform\ import\ azurerm_lb_rule.test\ /subscriptions/00000000-0000-0000-0000-000000000000/resource Groups/group1/providers/Microsoft.Network/loadBalancers/lb1/loadBalancingRules/rule1$

azurerm_local_network_gateway

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

Example Usage

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.

 $terraform\ import\ azurerm_local_network_gateway.lng1\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGroups/mygroup1/providers/Microsoft.Network/localNetworkGateways/lng1$

azurerm_log_analytics_solution

Manages a Log Analytics (formally Operational Insights) Solution.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "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 = "${azurerm_resource_group.test.name}"
  byte_length = 8
resource "azurerm_log_analytics_workspace" "test" {
             = "k8s-workspace-${random_id.workspace.hex}"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
                    = "PerGB2018"
}
resource "azurerm_log_analytics_solution" "test" {
 solution_name = "ContainerInsights"
location = "${azurerm resource
                       = "${azurerm_resource_group.test.location}"
  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/ContainerInsights"
  }
}
```

Argument Reference

- solution_name (Required) Specifies the name of the solution to be deployed. See here for options (https://docs.microsoft.com/en-us/azure/log-analytics/log-analytics-add-solutions). 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_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 (Required) A plan block as documented below.

A plan block includes:

- publisher (Required) The publisher of the solution. For example Microsoft. Changing this forces a new resource to be created.
- product (Required) The product name of the solution. For example OMSGallery/Containers. Changing this forces a new resource to be created.
- promotion_code (Optional) A promotion code to be used with the solution.

Import

Log Analytics Solutions can be imported using the resource id, e.g.

azurerm_log_analytics_workspace

Manages a Log Analytics (formally Operational Insights) Workspace.

Example Usage

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 (http://aka.ms/PricingTierWarning).

- 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.
- $\bullet \ \ workspace_id \ \ The \ Workspace \ (or \ Customer) \ ID \ for \ the \ Log \ Analytics \ Workspace.$
- portal_url The Portal URL for the Log Analytics Workspace.

Import

Log Analytics Workspaces can be imported using the resource id, e.g.

azurerm_log_analytics_workspace_linked_service

Links a Log Analytics (formally Operational Insights) Workspace to another resource. The (currently) only linkable service is an Azure Automation Account.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "resourcegroup-01"
  location = "West Europe"
resource "azurerm_automation_account" "test" {
                   = "automation-01"
                    = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
   name = "Basic"
 tags {
   environment = "development"
}
resource "azurerm_log_analytics_workspace" "test" {
                    = "workspace-01"
 location
                   = "${azurerm resource group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                     = "PerGB2018"
  retention_in_days = 30
resource "azurerm_log_analytics_workspace_linked_service" "test" {
  resource_group_name = "${azurerm_resource_group.test.name}"
                   = "${azurerm_log_analytics_workspace.test.name}"
 workspace_name
 linked_service_properties {
   resource id = "${azurerm automation account.test.id}"
  }
}
```

Argument Reference

- resource_group_name (Required) The name of the resource group in which the Log Analytics Linked Service is created. Changing this forces a new resource to be created.
- workspace_name (Required) Name of the Log Analytics Workspace that will contain the linkedServices resource. Changing this forces a new resource to be created.

- linked_service_name (Optional) Name of the type of linkedServices resource to connect to the Log Analytics Workspace specified in workspace_name. Currently it defaults to and only supports automation as a value. Changing this forces a new resource to be created.
- linked_service_properties (Required) A linked_service_properties block as defined below.
- tags (Optional) A mapping of tags to assign to the resource.

linked_service_properties supports the following:

• resource_id - (Required) The resource id of the resource that will be linked to the workspace.

Attributes Reference

The following attributes are exported:

- id The Log Analytics Linked Service ID.
- name The automatically generated name of the Linked Service. This cannot be specified. The format is always <workspace_name>/<linked_service_name> e.g. workspace1/Automation

Import

Log Analytics Workspaces can be imported using the resource id, e.g.

azurerm_logic_app_action_custom

Manages a Custom Action within a Logic App Workflow

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "workflow-resources"
  location = "East US"
resource "azurerm_logic_app_workflow" "test" {
                    = "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 negative numbe
r. Default is -30 (30 days old).",
    "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 Custom Action.

NOTE: To make the Action more readable, you may wish to consider using HEREDOC syntax (as shown above) or the local_file resource (https://www.terraform.io/docs/providers/local/d/file.html) 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.

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:

 $\bullet \;\; \mbox{id}$ - 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.

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" {
         = "workflow-resources"
  location = "East US"
resource "azurerm_logic_app_workflow" "test" {
                    = "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 (https://www.terraform.io/docs/providers/local/d/file.html) 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.

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" {
          = "workflow-resources"
  location = "East US"
resource "azurerm_logic_app_workflow" "test" {
                    = "workflow1"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_logic_app_trigger_http_request" "test" {
              = "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 (https://www.terraform.io/docs/providers/local/d/file.html) 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.

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/0000000-0000-0000-0000-00000 000000/resourceGroups/mygroup1/providers/Microsoft.Logic/workflows/workflow1/triggers/daily

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

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/schemas/2016-06-01/workflowdefinition.json#. 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.

azurerm_managed_disk

Manage a managed disk.

Example Usage with Create Empty

Example Usage with Create Copy

```
resource "azurerm_resource_group" "test" {
 name = "acctestRG"
 location = "West US 2"
resource "azurerm managed disk" "source" {
                    = "acctestmd1"
 name
                     = "West US 2"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_type = "Standard_LRS"
 create_option = "Empty"
                    = "1"
 disk_size_gb
 tags {
   environment = "staging"
  }
}
resource "azurerm_managed_disk" "copy" {
          = "acctestmd2"
  name
 location
                     = "West US 2"
 resource_group_name = "${azurerm_resource_group.test.name}"
 storage_account_type = "Standard_LRS"
                   = "Copy"
 create_option
 source_resource_id = "${azurerm_managed_disk.source.id}"
                     = "1"
 disk_size_gb
 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, Premium_LRS, StandardSSD_LRS or UltraSSD_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 only supported in several regions at this time (https://docs.microsoft.com/en-us/azure/availability-zones/az-overview).

For more information on managed disks, such as sizing options and pricing, please check out the azure documentation (https://docs.microsoft.com/en-us/azure/storage/storage-managed-disks-overview).

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.

 $terraform\ import\ azurerm_managed_disk.test\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGr\ oups/mygroup1/providers/microsoft.compute/disks/manageddisk1$

azurerm_management_group

Manages a Management Group.

Example Usage

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

resource "azurerm_management_group" "test" {
   subscription_ids = [
        "${data.azurerm_subscription.current.id}",
   ]
}
```

Argument Reference

The following arguments are supported:

- group_id (Optional) The UUID for this Management Group, which needs to be unique across your tenant which will be generated if not provided. Changing this forces a new resource to be created.
- display_name (Optional) A friendly name for this Management Group. If not specified, this'll be the same as the group_id.
- parent_management_group_id (Optional) The ID of the Parent Management Group. Changing this forces a new resource to be created.
- subscription_ids (Optional) A list of Subscription ID's which should be assigned to the Management Group.

Attributes Reference

The following attributes are exported:

• id - The ID of the Management Group.

Import

Management Groups can be imported using the management group resource id, e.g.

 $terraform\ import\ azurerm_management_group. test\ /providers/Microsoft. Management/ManagementGroups/group1$

azurerm_management_lock

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

Example Usage (Subscription Level Lock)

Example Usage (Resource Group Level Lock)

Example Usage (Resource Level Lock)

```
resource "azurerm_resource_group" "test" {
 name = "locked-resource-group"
 location = "West Europe"
resource "azurerm_public_ip" "test" {
 name
                         = "locked-publicip"
 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.

 notes - (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.

 $terraform\ import\ azurerm_management_lock.lock1\ /subscriptions/00000000-0000-0000-0000-000000000000/resour\ ceGroups/mygroup1/providers/Microsoft.Authorization/locks/lock1$

azurerm_mariadb_database

Manages a MariaDB Database within a MariaDB Server

Example Usage

```
resource "azurerm_resource_group" "example" {
 name = "tfex-mariadb-database-RG"
  location = "westeurope"
resource "azurerm_mariadb_server" "example" {
                  = "mariadb-svr"
 location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
 sku {
   name = "B_Gen5_2"
   capacity = 2
  tier = "Basic"
   family = "Gen5"
 storage_profile {
                    = 51200
   storage_mb
   backup_retention_days = 7
   geo_redundant_backup = "Disabled"
  administrator_login = "acctestun"
  administrator_login_password = "H@Sh1CoR3!"
                   = "10.2"
 version
  ssl_enforcement
                           = "Enabled"
resource "azurerm_mariadb_database" "example" {
         = "mariadb_database"
 resource_group_name = "${azurerm_resource_group.example.name}"
 server_name = "${azurerm_mariadb_server.example.name}"
                  = "utf8"
 charset
                  = "utf8_general_ci"
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the MariaDB Database, which needs to be a valid MariaDB identifier (https://mariadb.com/kb/en/library/identifier-names/). Changing this forces a new resource to be created.
- server_name (Required) Specifies the name of the MariaDB Server. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the MariaDB Server exists. Changing this forces a new resource to be created.

- charset (Required) Specifies the Charset for the MariaDB Database, which needs to be a valid MariaDB Charset (https://mariadb.com/kb/en/library/setting-character-sets-and-collations). Changing this forces a new resource to be created.
- collation (Required) Specifies the Collation for the MariaDB Database, which needs to be a valid MariaDB Collation (https://mariadb.com/kb/en/library/setting-character-sets-and-collations). Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The ID of the MariaDB Database.

Import

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

terraform import azurerm_mariadb_database.database1 /subscriptions/00000000-0000-0000-0000-00000000000/resourceGroups/mygroup1/providers/Microsoft.DBforMariaDB/servers/server1/databases/database1

azurerm_mariadb_server

Manages a MariaDB Server.

NOTE MariaDB Server is currently in Public Preview. You can find more information, including how to register for the Public Preview here (https://azure.microsoft.com/en-us/updates/mariadb-public-preview/).

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "api-rg-pro"
 location = "West Europe"
resource "azurerm_mariadb_server" "test" {
          = "mariadb-server-1"
                   = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
           = "B Gen5 2"
   name
   capacity = 2
   tier = "Basic"
   family = "Gen5"
 storage_profile {
                        = 5120
   storage mb
   backup_retention_days = 7
   geo_redundant_backup = "Disabled"
 administrator_login
                           = "mariadbadmin"
  administrator_login_password = "H@Sh1CoR3!"
  version
  ssl_enforcement
                            = "Enabled"
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the MariaDB 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 MariaDB 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 MariaDB Server. Changing this forces a new resource to be created.
- administrator_login_password (Required) The Password associated with the administrator_login for the MariaDB Server.
- version (Required) Specifies the version of MariaDB to use. The valid value is 10.2. 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.

A sku block supports the following:

- name (Required) Specifies the SKU Name for this MariaDB Server. The name of the SKU, follows the tier + family + cores pattern (e.g. B_Gen5_1, GP_Gen5_8). For more information see the product documentation (https://docs.microsoft.com/en-us/rest/api/mariadb/servers/create#sku).
- capacity (Required) The scale up/out capacity, representing server's compute units.
- tier (Required) The tier of the particular SKU. Possible values are Basic, General Purpose, and MemoryOptimized. For more information see the product documentation (https://docs.microsoft.com/en-us/azure/mariadb/concepts-pricing-tiers).
- family (Required) The family of the hardware (e.g. Gen5), before selecting your family check the product documentation (https://docs.microsoft.com/en-us/azure/mariadb/concepts-pricing-tiers#compute-generations-vcores-and-memory) for availability in your region.

A storage_profile block supports the following:

- storage_mb (Required) Max storage allowed for a server. Possible values are between 5120 MB (5GB) and 1024000MB (1TB) for the Basic SKU and between 5120 MB (5GB) and 4096000 MB (4TB) for General Purpose/Memory Optimized SKUs. For more information see the product documentation (https://docs.microsoft.com/en-us/rest/api/mariadb/servers/create#storageprofile).
- 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.

NOTE: Geo Redundant Backups cannot be configured when using the Basic tier.

Attributes Reference

The following attributes are exported:

• id - The ID of the MariaDB Server.

• fqdn - The FQDN of the MariaDB Server.

Import

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

 $terraform\ import\ azurerm_mariadb_server.server1\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGroups/mygroup1/providers/Microsoft.DBforMariaDB/servers/server1$

azurerm_metric_alertrule

Manages a metric-based alert rule (https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitor-quick-resource-metric-alert-portal) in Azure Monitor.

Example Usage (CPU Percentage of a virtual machine)

```
resource "azurerm_metric_alertrule" "test" {
                    = "${azurerm_virtual_machine.test.name}-cpu"
  resource_group_name = "${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" {
                    = "${azurerm_sql_database.test.name}-storage"
 resource_group_name = "${azurerm_resource_group.test.name}"
                    = "${azurerm_resource_group.test.location}"
 location
  description = "An alert rule to watch the metric Storage"
  enabled = true
  resource_id = "${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",
   1
  }
 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 (https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-supported-metrics) 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 (https://en.wikipedia.org/wiki/ISO_8601#Durations) 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.

azurerm_monitor_action_group

Manages an Action Group within Azure Monitor.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "monitoring-resources"
  location = "West US"
resource "azurerm_monitor_action_group" "test" {
                   = "CriticalAlertsAction"
 resource_group_name = "${azurerm_resource_group.test.name}"
  short_name = "p0action"
 email_receiver {
   name = "sendtoadmin"
   email_address = "admin@contoso.com"
 email_receiver {
           = "sendtodevops"
   email_address = "devops@contoso.com"
 sms_receiver {
               = "oncallmsg"
   country_code = "1"
   phone_number = "1231231234"
 webhook_receiver {
         = "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.

 $terraform\ import\ azurerm_monitor_action_group.test\ /subscriptions/00000000-0000-0000-0000-00000000000/resourceGroups/group1/providers/Microsoft.Insights/actionGroups/myagname$

azurerm_monitor_activity_log_alert

Manages an Activity Log Alert within Azure Monitor.

Example Usage

```
resource "azurerm_resource_group" "main" {
  name = "example-resources"
  location = "West US"
resource "azurerm_monitor_action_group" "main" {
  name = "example-actiongroup"
  resource_group_name = "${azurerm_resource_group.main.name}"
  short_name = "p0action"
  webhook_receiver {
    name = "callmyapi"
    service_uri = "http://example.com/alert"
  }
}
resource "azurerm_storage_account" "to_monitor" {
 name = "examplesa"
resource_group_name = "${azurerm_resource_group.main.name}"
location = "${azurerm_resource_group.main.location}"
  account_tier = "Standard"
  account_replication_type = "GRS"
}
resource "azurerm_monitor_activity_log_alert" "main" {
             = "example-activitylogalert"
  resource_group_name = "${azurerm_resource_group.main.name}"
 scopes = ["${azurerm_resource_group.main.id}"]
description = "This alert will monitor a specific storage account updates."
  criteria {
    resource_id = "${azurerm_storage_account.to_monitor.id}"
    operation_name = "Microsoft.Storage/storageAccounts/write"
    category = "Recommendation"
  }
  action {
    action_group_id = "${azurerm_monitor_action_group.main.id}"
    webhook_properties {
      from = "terraform"
  }
}
```

Argument Reference

The following arguments are supported:

• name - (Required) The name of the activity log alert. Changing this forces a new resource to be created.

- resource_group_name (Required) The name of the resource group in which to create the activity log alert instance.
- scopes (Required) The Scope at which the Activity Log should be applied, for example a the Resource ID of a Subscription or a Resource (such as a Storage Account).
- criteria (Required) A criteria block as defined below.
- action (Optional) One or more action blocks as defined below.
- enabled (Optional) Should this Activity Log Alert be enabled? Defaults to true.
- description (Optional) The description of this activity log alert.
- tags (Optional) A mapping of tags to assign to the resource.

An action block supports the following:

- action_group_id (Required) The ID of the Action Group can be sourced from the azurerm_monitor_action_group resource (/docs/providers/azurerm/r/monitor_action_group.html).
- webhook_properties (Optional) The map of custom string properties to include with the post operation. These data are appended to the webhook payload.

A criteria block supports the following:

- category (Required) The category of the operation. Possible values are Administrative, Autoscale, Policy, Recommendation, Security and Service Health.
- operation_name (Optional) The Resource Manager Role-Based Access Control operation name. Supported operation should be of the form: <resourceProvider>/<resourceType>/<operation>.
- resource_provider (Optional) The name of the resource provider monitored by the activity log alert.
- resource_type (Optional) The resource type monitored by the activity log alert.
- resource_group (Optional) The name of resource group monitored by the activity log alert.
- resource_id (Optional) The specific resource monitored by the activity log alert. It should be within one of the scopes.
- caller (Optional) The email address or Azure Active Directory identifier of the user who performed the operation.
- level (Optional) The severity level of the event. Possible values are Verbose, Informational, Warning, Error, and Critical.
- status (Optional) The status of the event. For example, Started, Failed, or Succeeded.
- sub_status (Optional) The sub status of the event.

Attributes Reference

The following attributes are exported:

• id - The ID of the activity log alert.

Import

Activity log alerts can be imported using the resource id, e.g.

azurerm_monitor_diagnostic_setting

Manages a Diagnostic Setting for an existing Resource.

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "example-resources"
 location = "West Europe"
data "azurerm_storage_account" "test" {
 name = "examplestoracc"
 resource_group_name = "${azurerm_resource_group.test.name}"
data "azurerm_key_vault" "test" {
         = "example-vault"
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_monitor_diagnostic_setting" "test" {
          = "example"
 target_resource_id = "${data.azurerm_key_vault.test.id}"
 storage_account_id = "${data.azurerm_storage_account.test.id}"
 log {
   category = "AuditEvent"
   enabled = false
   retention_policy {
     enabled = false
   }
 }
 metric {
   category = "AllMetrics"
   retention_policy {
     enabled = false
   }
 }
}
```

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Diagnostic Setting. Changing this forces a new resource to be created.
- target_resource_id (Required) The ID of an existing Resource on which to configure Diagnostic Settings. Changing this forces a new resource to be created.
- event_hub_name (Optional) Specifies the name of the Event Hub where Diagnostics Data should be sent. Changing this forces a new resource to be created.

NOTE: If this isn't specified then the default Event Hub will be used.

• event_hub_authorization_rule_id - (Optional) Specifies the ID of an Event Hub Namespace Authorization Rule used to send Diagnostics Data. Changing this forces a new resource to be created.

NOTE: One of event_hub_authorization_rule_id, log_analytics_workspace_id and storage_account_id must be specified.

• log - (Optional) One or more log blocks as defined below.

NOTE: At least one log or metric block must be specified.

• log_analytics_workspace_id - (Optional) Specifies the ID of a Log Analytics Workspace where Diagnostics Data should be sent. Changing this forces a new resource to be created.

NOTE: One of event_hub_authorization_rule_id, log_analytics_workspace_id and storage_account_id must be specified.

• metric - (Optional) One or more metric blocks as defined below.

NOTE: At least one log or metric block must be specified.

• storage_account_id - (Optional) With this parameter you can specify a storage account which should be used to send the logs to. Parameter must be a valid Azure Resource ID. Changing this forces a new resource to be created.

NOTE: One of event_hub_authorization_rule_id, log_analytics_workspace_id and storage_account_id must be specified.

A log block supports the following:

• category - (Required) The name of a Diagnostic Log Category for this Resource.

NOTE: The Log Categories available vary depending on the Resource being used. You may wish to use the azurerm_monitor_diagnostic_categories Data Source

(/docs/providers/azurerm/d/monitor_diagnostic_categories.html) to identify which categories are available for a given Resource.

- retention_policy (Required) A retention_policy block as defined below.
- enabled (Optional) Is this Diagnostic Log enabled? Defaults to true.

A metric block supports the following:

• category - (Required) The name of a Diagnostic Metric Category for this Resource.

NOTE: The Metric Categories available vary depending on the Resource being used. You may wish to use the azurerm_monitor_diagnostic_categories Data Source

(/docs/providers/azurerm/d/monitor_diagnostic_categories.html) to identify which categories are available for a given Resource.

- retention_policy (Required) A retention_policy block as defined below.
- enabled (Optional) Is this Diagnostic Metric enabled? Defaults to true.

A retention_policy block supports the following:

- enabled (Required) Is this Retention Policy enabled?
- days (Optional) The number of days for which this Retention Policy should apply.

NOTE: Setting this to 0 will retain the events indefinitely.

Attributes Reference

The following attributes are exported:

• id - The ID of the Diagnostic Setting.

Import

Diagnostic Settings can be imported using the resource id, e.g.

 $terraform\ import\ azurerm_monitor_diagnostics.test\ /subscriptions/XXX/resourcegroups/resource_group/provid\ ers/microsoft.keyvault/vaults/vault|logMonitoring$

NOTE: This is a Terraform specific Resource ID which uses the format {resourceId}|{diagnosticSettingName}

azurerm_monitor_log_profile

Manages a Log Profile (https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-overview-activity-logs#export-the-activity-log-with-a-log-profile). A Log Profile configures how Activity Logs are exported.

NOTE: It's only possible to configure one Log Profile per Subscription. If you are trying to create more than one Log Profile, an error with StatusCode=409 will occur.

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "logprofiletest-rg"
 location = "eastus"
resource "azurerm_storage_account" "test" {
                  = "afscsdfytw"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location
                      = "${azurerm_resource_group.test.location}"
                = "Standard"
 account_tier
 account_replication_type = "GRS"
resource "azurerm_eventhub_namespace" "test" {
 resource_group_name = "${azurerm_resource_group.test.name}"
               = "Standard"
 sku
  capacity
}
resource "azurerm_monitor_log_profile" "test" {
 name = "default"
  categories = [
   "Action",
   "Delete",
   "Write",
  ]
  locations = [
   "westus",
   "global",
  # RootManageSharedAccessKey is created by default with listen, send, manage permissions
  servicebus_rule_id = "${azurerm_eventhub_namespace.test.id}/authorizationrules/RootManageSharedAccessKe
  storage_account_id = "${azurerm_storage_account.test.id}"
  retention_policy {
   enabled = true
   days = 7
  }
}
```

Argument Reference

The following arguments are supported:

- name (Required) The name of the Log Profile. Changing this forces a new resource to be created.
- categories (Required) List of categories of the logs.
- locations (Required) List of regions for which Activity Log events are stored or streamed.
- storage_account_id (Optional) The resource ID of the storage account in which the Activity Log is stored. At least one of storage_account_id or servicebus_rule_id must be set.
- servicebus_rule_id (Optional) The service bus (or event hub) rule ID of the service bus (or event hub) namespace in which the Activity Log is streamed to. At least one of storage_account_id or servicebus_rule_id must be set.
- retention_policy (Required) A retention_policy block as documented below. A retention policy for how long Activity Logs are retained in the storage account.

The retention_policy block supports:

- enabled (Required) A boolean value to indicate whether the retention policy is enabled.
- days (Optional) The number of days for the retention policy. Defaults to 0.

Attributes Reference

The following attributes are exported:

• id - The Log Profile resource ID.

Import

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

azurerm_monitor_metric_alert

Manages a Metric Alert within Azure Monitor.

Example Usage

```
resource "azurerm_resource_group" "main" {
         = "example-resources"
  location = "West US"
resource "azurerm_storage_account" "to_monitor" {
                       = "examplestorageaccount"
 resource_group_name = "${azurerm_resource_group.main.name}"
                        = "${azurerm_resource_group.main.location}"
 location
 account_tier = "Standard"
 account_replication_type = "LRS"
resource "azurerm_monitor_action_group" "main" {
                   = "example-actiongroup"
  resource_group_name = "${azurerm_resource_group.main.name}"
  short_name
                   = "exampleact"
 webhook_receiver {
   name = "callmyapi"
   service_uri = "http://example.com/alert"
  }
}
resource "azurerm_monitor_metric_alert" "test" {
                   = "example-metricalert"
  resource_group_name = "${azurerm_resource_group.main.name}"
 scopes = ["${azurerm_storage_account.to_monitor.id}"]
 description
                   = "Action will be triggered when Transactions count is greater than 50."
  criteria {
   metric_namespace = "Microsoft.Storage/storageAccounts"
   metric_name = "Transactions"
   aggregation = "Total"

operator = "GreaterThan"
                  = 50
   threshold
   dimension {
               = "ApiName"
      "operator" = "Include"
      "values" = ["*"]
   }
  }
   action_group_id = "${azurerm_monitor_action_group.main.id}"
  }
}
```

Argument Reference

The following arguments are supported:

- name (Required) The name of the Metric Alert. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which to create the Metric Alert instance.
- scopes (Required) The resource ID at which the metric criteria should be applied.
- criteria (Required) One or more criteria blocks as defined below.
- action (Optional) One or more action blocks as defined below.
- enabled (Optional) Should this Metric Alert be enabled? Defaults to true.
- auto_mitigate (Optional) Should the alerts in this Metric Alert be auto resolved? Defaults to false.
- description (Optional) The description of this Metric Alert.
- frequency (Optional) The evaluation frequency of this Metric Alert, represented in ISO 8601 duration format. Possible values are PT1M, PT5M, PT3M, and PT1H. Defaults to PT1M.
- severity (Optional) The severity of this Metric Alert. Possible values are 0, 1, 2, 3 and 4. Defaults to 3.
- window_size (Optional) The period of time that is used to monitor alert activity, represented in ISO 8601 duration format. This value must be greater than frequency. Possible values are PT1M, PT5M, PT15M, PT30M, PT1H, PT6H, PT12H and P1D. Defaults to PT5M.
- tags (Optional) A mapping of tags to assign to the resource.

An action block supports the following:

- action_group_id (Required) The ID of the Action Group can be sourced from the azurerm_monitor_action_group resource (/docs/providers/azurerm/r/monitor_action_group.html)
- webhook_properties (Optional) The map of custom string properties to include with the post operation. These data are appended to the webhook payload.

A criteria block supports the following:

- metric_namespace (Required) One of the metric namespaces to be monitored.
- metric_name (Required) One of the metric names to be monitored.
- aggregation (Required) The statistic that runs over the metric values. Possible values are Average, Minimum, Maximum
 and Total.
- operator (Required) The criteria operator. Possible values are Equals, NotEquals, GreaterThan,
 GreaterThanOrEqual, LessThan and LessThanOrEqual.
- threshold (Required) The criteria threshold value that activates the alert.
- dimension (Optional) One or more dimension blocks as defined below.

A dimension block supports the following:

• name - (Required) One of the dimension names.

- operator (Required) The dimension operator. Possible values are Include and Exclude.
- values (Required) The list of dimension values.

Attributes Reference

The following attributes are exported:

• id - The ID of the metric alert.

Import

Metric Alerts can be imported using the resource id, e.g.

 $terraform\ import\ azurerm_monitor_metric_alert.main\ /subscriptions/0000000-0000-0000-0000-000000000000/re\ sourceGroups/example-resources/providers/microsoft.insights/metricalerts/example-metricalert$

azurerm_mssql_elasticpool

Allows you to manage an Azure SQL Elastic Pool via the 2017-10-01-preview API which allows for vCore and DTU based configurations.

Example Usage

```
resource "azurerm_resource_group" "test" {
          = "my-resource-group"
  location = "westeurope"
resource "azurerm_sql_server" "test" {
                                = "my-sql-server"
                                = "${azurerm_resource_group.test.name}"
   resource_group_name
                                = "${azurerm_resource_group.test.location}"
   location
                                 = "12.0"
    version
    administrator login
                                 = "4dm1n157r470r"
    administrator_login_password = "4-v3ry-53cr37-p455w0rd"
}
resource "azurerm_mssql_elasticpool" "test" {
                     = "test-epool"
  resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
server_name = "${azurerm_sql_server.test.name}"
 server_name
  sku {
          = "GP Gen5"
   capacity = 4
   tier = "GeneralPurpose"
    family = "Gen5"
  per_database_settings {
   min_capacity = 0.25
    max_capacity = 4
  }
}
```

Argument Reference

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

sku supports the following:

- name (Required) Specifies the SKU Name for this Elasticpool. The name of the SKU, will be either vCore based tier + family pattern (e.g. GP_Gen4, BC_Gen5) or the DTU based BasicPool, StandardPool, or PremiumPool pattern.
- capacity (Required) The scale up/out capacity, representing server's compute units. For more information see the
 documentation for your Elasticpool configuration: vCore-based (https://docs.microsoft.com/en-us/azure/sqldatabase/sql-database-vcore-resource-limits-elastic-pools) or DTU-based (https://docs.microsoft.com/en-us/azure/sqldatabase/sql-database-dtu-resource-limits-elastic-pools).
- tier (Required) The tier of the particular SKU. Possible values are General Purpose, Business Critical, Basic, Standard, or Premium. For more information see the documentation for your Elasticpool configuration: vCore-based (https://docs.microsoft.com/en-us/azure/sql-database/sql-database-vcore-resource-limits-elastic-pools) or DTU-based (https://docs.microsoft.com/en-us/azure/sql-database/sql-database-dtu-resource-limits-elastic-pools).
- family (Required) The family of hardware Gen4 or Gen5.

per_database_settings supports the following:

- min_capacity (Required) The minimum capacity all databases are guaranteed.
- max_capacity (Required) The maximum capacity any one database can consume.

Attributes Reference

The following attributes are exported:

- id The MsSQL Elastic Pool ID.
- max_size_bytes The storage limit for the database elastic pool in bytes.
- zone_redundant Whether or not this elastic pool is zone redundant.

Import

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

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" {
                  = "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 {
                      = 5120
   storage_mb
   backup_retention_days = 7
   geo_redundant_backup = "Disabled"
  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
                           = "5.7"
  version
  ssl_enforcement
                            = "Enabled"
resource "azurerm_mysql_configuration" "test" {
         = "interactive_timeout"
 resource_group_name = "${azurerm_resource_group.test.name}"
 server_name = "${azurerm_mysql_server.test.name}"
                  = "600"
  value
}
```

Argument Reference

- name (Required) Specifies the name of the MySQL Configuration, which needs to be a valid MySQL configuration name (https://dev.mysql.com/doc/refman/5.7/en/server-configuration.html). 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.

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" {
                  = "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 {
                      = 5120
   storage_mb
   backup_retention_days = 7
   geo_redundant_backup = "Disabled"
  administrator_login = "mysqladminun"
  administrator_login_password = "H@Sh1CoR3!"
                          = "5.7"
  version
  ssl_enforcement
                           = "Enabled"
resource "azurerm_mysql_database" "test" {
         = "exampledb"
 resource_group_name = "${azurerm_resource_group.test.name}"
 server_name = "${azurerm_mysql_server.test.name}"
                  = "utf8"
 charset
                  = "utf8_unicode_ci"
}
```

Argument Reference

- name (Required) Specifies the name of the MySQL Database, which needs to be a valid MySQL identifier (https://dev.mysql.com/doc/refman/5.7/en/identifiers.html). 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 (https://dev.mysql.com/doc/refman/5.7/en/charset-charsets.html). 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 (https://dev.mysql.com/doc/refman/5.7/en/charset-mysql.html). 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.

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)

Argument Reference

- name (Required) Specifies the name of the MySQL Firewall Rule. Changing this forces a new resource to be created.
- server_name (Required) Specifies the name of the MySQL Server. Changing this forces a new resource to be created.

- resource_group_name (Required) The name of the resource group in which the MySQL Server exists. Changing this forces a new resource to be created.
- start_ip_address (Required) Specifies the Start IP Address associated with this Firewall Rule. Changing this forces a new resource to be created.
- end_ip_address (Required) Specifies the End IP Address associated with this Firewall Rule. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The ID of the MySQL Firewall Rule.

Import

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

azurerm_mysql_server

Manages a MySQL Server.

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "api-rg-pro"
 location = "West Europe"
resource "azurerm_mysql_server" "test" {
                   = "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 {
                      = 5120
   storage_mb
   backup_retention_days = 7
   geo_redundant_backup = "Disabled"
 administrator_login
                     = "mysqladminun"
 administrator_login_password = "H@Sh1CoR3!"
                           = "5.7"
 version
 ssl_enforcement
                            = "Enabled"
```

Argument Reference

- 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 (https://docs.microsoft.com/en-us/rest/api/mysql/servers/create#sku).
- 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 (https://docs.microsoft.com/en-us/azure/mysql/concepts-pricing-tiers).
- family (Required) The family of hardware Gen4 or Gen5, before selecting your family check the product documentation (https://docs.microsoft.com/en-us/azure/mysql/concepts-pricing-tiers#compute-generations-vcores-and-memory) 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 (https://docs.microsoft.com/en-us/rest/api/mysql/servers/create#StorageProfile).
- 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 ${\tt resource}\>\>$ id, e.g.

 $terraform\ import\ azurerm_mysql_server.server1\ /subscriptions/00000000-0000-0000-0000-000000000000/resourc\ eGroups/mygroup1/providers/Microsoft.DBforMySQL/servers/server1$

azurerm_mysql_virtual_network_rule

Manages a MySQL Virtual Network Rule.

NOTE: MySQL Virtual Network Rules can only be used with SKU Tiers of GeneralPurpose or MemoryOptimized (https://docs.microsoft.com/en-us/azure/mysql/concepts-data-access-and-security-vnet)

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "example-resources"
  location = "West Europe"
resource "azurerm virtual network" "test" {
            = "example-vnet"
  name
 address_space = ["10.7.29.0/29"]
location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "internal" {
                       = "internal"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
 address prefix = "10.7.29.0/29"
  service_endpoints = ["Microsoft.Sql"]
}
resource "azurerm_mysql_server" "test" {
                = "mysql-server-1"
 name
 location
                             = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
administrator_login = "mysqladminun"
 administrator_login_password = "H@Sh1CoR3!"
                               = "5.7"
 ssl_enforcement
                               = "Enabled"
 sku {
   name = "GP_Gen5_2"
   capacity = 2
   tier = "GeneralPurpose"
    family = "Gen5"
 storage_profile {
   storage_mb
    backup_retention_days = 7
    geo_redundant_backup = "Disabled"
  }
}
resource "azurerm_mysql_virtual_network_rule" "test" {
            = "mysql-vnet-rule"
 resource_group_name = "${azurerm_resource_group.test.name}"
  server_name = "${azurerm_mysql_server.test.name}"
subnet_id = "${azurerm_subnet.internal.id}"
 subnet_id
```

Argument Reference

The following arguments are supported:

• name - (Required) The name of the MySQL Virtual Network Rule. Cannot be empty and must only contain alphanumeric characters and hyphens. Cannot start with a number, and cannot start or end with a hyphen. Changing this forces a new resource to be created.

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 MySQL server resides. Changing this forces a new resource to be created.
- server_name (Required) The name of the SQL Server to which this MySQL 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 MySQL server will be connected to.

NOTE: Due to a bug in the Azure API (https://github.com/Azure/azure-rest-api-specs/issues/3719) this resource currently doesn't expose the ignore_missing_vnet_service_endpoint field and defaults this to false. Terraform will check during the provisioning of the Virtual Network Rule that the Subnet contains the Service Rule to verify that the Virtual Network Rule can be created.

Attributes Reference

The following attributes are exported:

• id - The ID of the MySQL Virtual Network Rule.

Import

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

azurerm_network_interface

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

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_virtual_network" "test" {
                   = "acceptanceTestVirtualNetwork1"
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "test" {
          = "testsubnet"
 resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
  address_prefix = "10.0.2.0/24"
}
resource "azurerm_network_interface" "test" {
 name
                    = "acceptanceTestNetworkInterface1"
                    = "${azurerm_resource_group.test.location}"
 location
  resource_group_name = "${azurerm_resource_group.test.name}"
 ip_configuration {
                                 = "testconfiguration1"
   name
   subnet_id
                                 = "${azurerm_subnet.test.id}"
   private_ip_address_allocation = "dynamic"
 tags {
   environment = "staging"
  }
}
```

Argument Reference

- 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 (https://docs.microsoft.com/en-us/azure/virtual-network/create-vm-accelerated-networking-cli). 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 / Deprecated) List of Application Gateway Backend
 Address Pool IDs references to which this NIC belongs

NOTE: At this time Network Interface <Application Gateway Backend Address Pool associations need to be configured both using this field (which is now Deprecated) and/or using the azurerm_network_interface_application_gateway_backend_address_pool_association resource. This field is deprecated and will be removed in favour of that resource in the next major version (2.0) of the AzureRM Provider.

• load_balancer_backend_address_pools_ids - (Optional / **Deprecated**) List of Load Balancer Backend Address Pool IDs references to which this NIC belongs

NOTE: At this time Network Interface <Load Balancer Backend Address Pool associations need to be configured both using this field (which is now Deprecated) and/or using the azurerm_network_interface_backend_address_pool_association resource. This field is deprecated and will be removed in favour of that resource in the next major version (2.0) of the AzureRM Provider.

• load_balancer_inbound_nat_rules_ids - (Optional / **Deprecated**) List of Load Balancer Inbound Nat Rules IDs involving this NIC

NOTE: At this time Network Interface <Load Balancer Inbound NAT Rule associations need to be configured both using this field (which is now Deprecated) and/or using the azurerm_network_interface_nat_rule_association resource. This field is deprecated and will be removed in favour of that resource in the next major version (2.0) of the AzureRM Provider.

- 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

Import

Network Interfaces can be imported using the resource id, e.g.

azurerm_network_interface_application_gateway_backend_address_pool_association

Manages the association between a Network Interface and a Application Gateway's Backend Address Pool.

Example Usage

```
resource "azurerm_resource_group" "test" {
 name
         = "example-resources"
 location = "West Europe"
resource "azurerm_virtual_network" "test" {
               = "example-network"
= ["10.0.0.0/16"]
 address_space
                   = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "frontend" {
                    = "frontend"
 name
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
address_prefix = "10.254.0.0/24"
resource "azurerm_subnet" "backend" {
                    = "backend"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
 address_prefix
                    = "10.254.2.0/24"
resource "azurerm_public_ip" "test" {
                            = "example-pip"
 name
                   = "${azurerm_resource_group.test.location}"
 location
                            = "${azurerm_resource_group.test.name}"
 resource group name
 public_ip_address_allocation = "dynamic"
# since these variables are re-used - a locals block makes this more maintainable
 backend_address_pool_name = "${azurerm_virtual_network.test.name}-beap"
                              = "${azurerm_virtual_network.test.name}-feport"
 frontend port name
 frontend_ip_configuration_name = "${azurerm_virtual_network.test.name}-feip"
 = "${azurerm_virtual_network.test.name}-httplstn"
 listener name
                            = "${azurerm_virtual_network.test.name}-rqrt
 request routing rule name
resource "azurerm_application_gateway" "network" {
                    = "example-appgateway"
 resource_group_name = "${azurerm_resource_group.test.name}"
                   = "${azurerm_resource_group.test.location}"
 location
         = "Standard_Small"
= "Standard"
  name
   tier
   capacity = 2
 gateway_ip_configuration {
           = "my-gateway-ip-configuration"
   name
   subnet_id = "${azurerm_subnet.frontend.id}"
  frontend_port {
   name = "${local.frontend_port_name}"
 frontend\_ip\_configuration~\{
                      = "${local.frontend_ip_configuration_name}"
   public_ip_address_id = "${azurerm_public_ip.test.id}"
 backend_address_pool {
   name = "${local.backend_address_pool_name}"
 backend_http_settings {
                        = "${local.http_setting_name}"
   cookie_based_affinity = "Disabled"
            = 80
                        = "Http
   request_timeout
 http_listener {
                                 _ ##[].col lictorow name]#
```

```
= $\tucat.tistemer_mamer
    frontend_ip_configuration_name = "${local.frontend_ip_configuration_name}"
                                  = "${local.frontend_port_name}"
    frontend_port_name
                                    = "Http"
   protocol
  request_routing_rule {
                               = "${local.request_routing_rule_name}"
   name
                               = "Basic"
    rule type
                             = "${local.listener_name}"
    http_listener_name
    backend_address_pool_name = "${local.backend_address_pool_name}"
    backend_http_settings_name = "${local.http_setting_name}"
resource "azurerm_network_interface" "test" {
 name = "example-nic"
location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  ip_configuration {
                                  = "testconfiguration1"
    subnet_id
                                  = "${azurerm_subnet.frontend.id}"
    private_ip_address_allocation = "dynamic"
resource \ "azurerm\_network\_interface\_backend\_address\_pool\_association" \ "test" \ \{
 network_interface_id = "${azurerm_network_interface.test.id}"
ip_configuration_name = "testconfiguration1"
  backend_address_pool_id = "${azurerm_application_gateway.test.backend_address_pool.0.id}"
```

Argument Reference

The following arguments are supported:

- network_interface_id (Required) The ID of the Network Interface. Changing this forces a new resource to be created.
- ip_configuration_name (Required) The Name of the IP Configuration within the Network Interface which should be connected to the Backend Address Pool. Changing this forces a new resource to be created.
- backend_address_pool_id (Required) The ID of the Application Gateway's Backend Address Pool which this Network Interface which should be connected to. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The (Terraform specific) ID of the Association between the Network Interface and the Load Balancers Backend Address Pool.

Import

Associations between Network Interfaces and Load Balancer Backend Address Pools can be imported using the resource id, e.g.

 $\textbf{NOTE:} \ This\ ID\ is\ specific\ to\ Terraform\ -\ and\ is\ of\ the\ format\ \{networkInterfaceId\}/ipConfigurations/\{ipConfigurationName\}\ |\ \{backendAddressPoolId\}.$

azurerm_network_interface_backend_address_pool_association

Manages the association between a Network Interface and a Load Balancer's Backend Address Pool.

Example Usage

```
resource "azurerm_resource_group" "test" {
  name = "example-resources"
  location = "West Europe"
resource "azurerm_virtual_network" "test" {
                  = "example-network"
 name
 address_space = ["10.0.0.0/16"]
location = "${azurerm_resource_group.test.location}"
 location
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "test" {
                      = "internal"
 name
  resource_group_name = "${azurerm_resource_group.test.name}"
  virtual_network_name = "${azurerm_virtual_network.test.name}"
                     = "10.0.2.0/24"
  address_prefix
resource "azurerm_public_ip" "test" {
                              = "example-pip"
 name
                              = "${azurerm_resource_group.test.location}"
 location
                             = "${azurerm_resource_group.test.name}"
 resource_group_name
  public_ip_address_allocation = "static"
resource "azurerm_lb" "test" {
                    = "example-lb"
 name
                    = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
 frontend_ip_configuration {
                        = "primary"
   name
    public_ip_address_id = "${azurerm_public_ip.test.id}"
  }
}
resource "azurerm_lb_backend_address_pool" "test" {
  resource_group_name = "${azurerm_resource_group.test.name}"
  loadbalancer_id = "${azurerm_lb.test.id}"
                     = "acctestpool"
  name
resource "azurerm_network_interface" "test" {
            = "example-nic"
  name
 location
                     = "${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_network_interface_backend_address_pool_association" "test" {
 network_interface_id = "${azurerm_network_interface.test.id}"
ip_configuration_name = "testconfiguration1"
  backend_address_pool_id = "${azurerm_lb_backend_address_pool.test.id}"
```

Argument Reference

- network_interface_id (Required) The ID of the Network Interface. Changing this forces a new resource to be created.
- ip_configuration_name (Required) The Name of the IP Configuration within the Network Interface which should be connected to the Backend Address Pool. Changing this forces a new resource to be created.
- backend_address_pool_id (Required) The ID of the Load Balancer Backend Address Pool which this Network Interface which should be connected to. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The (Terraform specific) ID of the Association between the Network Interface and the Load Balancers Backend Address Pool.

Import

Associations between Network Interfaces and Load Balancer Backend Address Pools can be imported using the resource id, e.g.

NOTE: This ID is specific to Terraform - and is of the format

 $\{networkInterface Id\}/ipConfigurations/\{ipConfigurationName\}| \{backendAddressPoolId\}.$

azurerm_network_interface_nat_rule_association

Manages the association between a Network Interface and a Load Balancer's NAT Rule.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "West Europe"
resource "azurerm_virtual_network" "test" {
                   = "example-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" {
          = "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_public_ip" "test" {
 name
                             = "example-pip"
                             = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  public_ip_address_allocation = "static"
resource "azurerm_lb" "test" {
                    = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
  frontend_ip_configuration {
                       = "primary"
   public_ip_address_id = "${azurerm_public_ip.test.id}"
  }
}
resource "azurerm_lb_nat_rule" "test" {
                               = "${azurerm_resource_group.test.name}"
 resource_group_name
 loadbalancer_id
                               = "${azurerm_lb.test.id}"
                               = "RDPAccess"
 name
 protocol
                               = "Tcp"
 frontend_port
                               = 3389
  backend_port
                               = 3389
  frontend_ip_configuration_name = "primary"
resource "azurerm_network_interface" "test" {
  name
                 = "example-nic"
                    = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
  ip_configuration {
                                = "testconfiguration1"
   name
```

Argument Reference

The following arguments are supported:

- network_interface_id (Required) The ID of the Network Interface. Changing this forces a new resource to be created.
- ip_configuration_name (Required) The Name of the IP Configuration within the Network Interface which should be connected to the NAT Rule. Changing this forces a new resource to be created.
- nat_rule_id (Required) The ID of the Load Balancer NAT Rule which this Network Interface which should be connected to. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The (Terraform specific) ID of the Association between the Network Interface and the Load Balancers NAT Rule.

Import

Associations between Network Interfaces and Load Balancer NAT Rule can be imported using the resource id, e.g.

NOTE: This ID is specific to Terraform - and is of the format {networkInterfaceId}/ipConfigurations/{ipConfigurationName}|{natRuleId}.

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 (/docs/providers/azurerm/r/network_security_rule.html), and allows for Network Security Rules to be defined in-line within the Network Security Group resource (/docs/providers/azurerm/r/network_security_group.html). 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"
                             = 100
   priority
                             = "Inbound"
   direction
                             = "Allow"
   access
   protocol
                             = "Tcp"
   source_port_range
                            = "*"
   destination_port_range = "*"
   source_address_prefix
                           = "*"
   destination_address_prefix = "*"
 }
 tags {
   environment = "Production"
  }
}
```

Argument Reference

- 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_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

• id - The Network Security Group ID.

Import

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

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 (/docs/providers/azurerm/r/network_security_rule.html), and allows for Network Security Rules to be defined in-line within the Network Security Group resource (/docs/providers/azurerm/r/network_security_group.html). 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" {
            = "acceptanceTestSecurityGroup1"
 name
                   = "${azurerm_resource_group.test.location}"
 location
 resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_network_security_rule" "test" {
                           = "test123"
 priority
                           = 100
                           = "Outbound"
 direction
                           = "Allow"
 access
                           = "Tcp"
 protocol
 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

- 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_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.

 $terraform\ import\ azurerm_network_security_rule.rule1\ /subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/mygroup1/providers/Microsoft.Network/networkSecurityGroups/mySecurityGroup/securityRules/rule1$

azurerm_network_watcher

Manages a Network Watcher.

Example Usage

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.

 $terraform\ import\ azurerm_network_watcher.watcher1\ /subscriptions/0000000-0000-0000-0000-00000000000/res\ ourceGroups/mygroup1/providers/Microsoft.Network/networkWatchers/watcher1$

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" {
                 = "myappnamespace"
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
   name = "Free"
}
resource "azurerm_notification_hub" "test" {
                 = "mynotificationhub"
 namespace_name = "${azurerm_notification_hub_namespace.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                 = "${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 (https://github.com/Azure/azure-sdk-for-go/issues/2246) - 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 (https://github.com/Azure/azure-sdk-for-go/issues/2246) - 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 (https://developer.apple.com/account/ios/authkey/) 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.

 $terraform\ import\ azurerm_notification_hub.hub1\ /subscriptions/0000000-0000-0000-0000-0000000000000/resour\ ceGroups/mygroup1/providers/Microsoft.NotificationHubs/namespaces/{namespaceName}/notificationHubs/hub1$

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" {
                  = "myappnamespace"
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
   name = "Free"
}
resource "azurerm_notification_hub" "test" {
              = "mynotificationhub"
 namespace_name = "${azurerm_notification_hub_namespace.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
                 = "${azurerm_resource_group.test.location}"
}
resource "azurerm_notification_hub_authorization_rule" "test" {
            = "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}"
                    = true
 manage
 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:

- 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.

azurerm_notification_hub_namespace

Manages a Notification Hub Namespace.

Example Usage

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.

azurerm_packet_capture

Configures Packet Capturing against a Virtual Machine using a Network Watcher.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "packet-capture-rg"
  location = "West Europe"
resource "azurerm_network_watcher" "test" {
                    = "network-watcher"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_virtual_network" "test" {
                   = "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" {
                      = "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" {
            = "pctest-nic"
= "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
 ip_configuration {
   name
                                 = "testconfiguration1"
    subnet_id
                                  = "${azurerm_subnet.test.id}"
    private_ip_address_allocation = "dynamic"
  }
}
resource "azurerm_virtual_machine" "test" {
 location
                       = "${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"
            = "16.04-LTS"
    sku
    version = "latest"
  storage_os_disk {
                     = "osdisk"
                    = "ReadWrite"
    caching
```

```
create_option = "Fromimage"
   managed_disk_type = "Standard_LRS"
  }
 os_profile {
   computer_name = "pctest-vm"
   admin_username = "testadmin"
   admin_password = "Password1234!"
 }
 os_profile_linux_config {
   disable_password_authentication = false
}
resource "azurerm_virtual_machine_extension" "test" {
                           = "network-watcher"
                           = "${azurerm_resource_group.test.location}"
 location
                           = "${azurerm_resource_group.test.name}"
 resource_group_name
 virtual_machine_name
                            = "${azurerm_virtual_machine.test.name}"
 publisher
                            = "Microsoft.Azure.NetworkWatcher"
                            = "NetworkWatcherAgentLinux"
 type
                           = "1.4"
 type_handler_version
 auto_upgrade_minor_version = true
}
resource "azurerm_storage_account" "test" {
                          = "pctestsa"
 resource_group_name = "${azurerm_resource_group.test.name}"
                       = "${azurerm_resource_group.test.location}"
= "Standard"
 location
 account tier
  account_replication_type = "LRS"
resource "azurerm_packet_capture" "test" {
                      = "pctestcapture"
 network_watcher_name = "${azurerm_network_watcher.test.name}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 target_resource_id = "${azurerm_virtual_machine.test.id}"
  storage_location {
   storage account id = "${azurerm storage account.test.id}"
  depends_on = ["azurerm_virtual_machine_extension.test"]
```

NOTE: This Resource requires that the Network Watcher Virtual Machine Extension

(https://docs.microsoft.com/azure/network-watcher/network-watcher-packet-capture-manage-portal#before-you-begin) is installed on the Virtual Machine before capturing can be enabled which can be installed via the azurerm_virtual_machine_extension resource (/docs/providers/azurerm/r/virtual_machine_extension.html).

Argument Reference

The following arguments are supported:

• name - (Required) The name to use for this Packet Capture. Changing this forces a new resource to be created.

- network_watcher_name (Required) The name of the Network Watcher. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which the Network Watcher exists. Changing this forces a new resource to be created.
- target_resource_id (Required) The ID of the Resource to capture packets from. Changing this forces a new resource to be created.

NOTE: Currently only Virtual Machines ID's are supported.

- maximum_bytes_per_packet (Optional) The number of bytes captured per packet. The remaining bytes are truncated. Defaults to 0 (Entire Packet Captured). Changing this forces a new resource to be created.
- maximum_bytes_per_session (Optional) Maximum size of the capture in Bytes. Defaults to 1073741824 (1GB). Changing this forces a new resource to be created.
- maximum_capture_duration (Optional) The maximum duration of the capture session in seconds. Defaults to 18000 (5 hours). Changing this forces a new resource to be created.
- storage_location (Required) A storage_location block as defined below. Changing this forces a new resource to be created.
- filter (Optional) One or more filter blocks as defined below. Changing this forces a new resource to be created.

A storage_location block contains:

- file_path (Optional) A valid local path on the targeting VM. Must include the name of the capture file (*.cap). For linux virtual machine it must start with /var/captures.
- storage_account_id (Optional) The ID of the storage account to save the packet capture session

NOTE: At least one of file_path or storage_account_id must be specified.

A filter block contains:

- local_ip_address (Optional) The local IP Address to be filtered on. Notation: "127.0.0.1" for single address entry.
 "127.0.0.1-127.0.0.255" for range. "127.0.0.1;127.0.0.5" for multiple entries. Multiple ranges not currently supported.
 Mixing ranges with multiple entries not currently supported. Changing this forces a new resource to be created.
- local_port (Optional) The local port to be filtered on. Notation: "80" for single port entry."80-85" for range. "80;443;" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported. Changing this forces a new resource to be created.
- protocol (Required) The Protocol to be filtered on. Possible values include Any, TCP and UDP. Changing this forces a new resource to be created.
- remote_ip_address (Optional) The remote IP Address to be filtered on. Notation: "127.0.0.1" for single address entry. "127.0.0.1-127.0.0.255" for range. "127.0.0.1;127.0.0.5;" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not currently supported. Changing this forces a new resource to be created.
- remote_port (Optional) The remote port to be filtered on. Notation: "80" for single port entry."80-85" for range. "80;443;" for multiple entries. Multiple ranges not currently supported. Mixing ranges with multiple entries not

currently supported. Changing this forces a new resource to be created.

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.

azurerm_policy_assignment

Configures the specified Policy Definition at the specified Scope.

Example Usage

```
resource "azurerm_policy_definition" "test" {
       = "my-policy-definition"
 policy_type = "Custom"
 mode = "All"
 display_name = "acctestpol-%d"
  policy_rule = <<POLICY_RULE</pre>
    "if": {
      "not": {
       "field": "location",
       "in": "[parameters('allowedLocations')]"
     }
   },
    "then": {
     "effect": "audit"
  }
POLICY_RULE
  parameters = <<PARAMETERS</pre>
    "allowedLocations": {
      "type": "Array",
      "metadata": {
        "description": "The list of allowed locations for resources.",
        "displayName": "Allowed locations",
        "strongType": "location"
     }
   }
 }
PARAMETERS
}
resource "azurerm_resource_group" "test" {
          = "test-resources"
  location = "West Europe"
resource "azurerm_policy_assignment" "test" {
                      = "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"
                     = "Acceptance Test Run %d"
 display_name
  parameters = <<PARAMETERS</pre>
  "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, which must be a Resource ID (such as Subscription e.g. /subscriptions/00000000-0000-0000-000000000000 or a Resource Group e.g./subscriptions/00000000-0000-0000-0000000000/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/00000000-0000-0000-00000000000/providers/Microsoft.Authorization/policyAssignments/assignment1

azurerm_policy_definition

Manages a policy rule definition. Policy definitions do not take effect until they are assigned to a scope using a Policy Assignment.

Example Usage

```
resource "azurerm_policy_definition" "policy" {
             = "accTestPolicy"
 policy_type = "Custom"
 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</pre>
    "allowedLocations": {
      "type": "Array",
       "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 additional metadata that should be stored with the policy definition.
- 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>/providers/Microso ft.Authorization/policyDefinitions/<POLICY_NAME>

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" {
                  = "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 {
                      = 5120
   storage_mb
   backup_retention_days = 7
   geo_redundant_backup = "Disabled"
  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
                           = "9.5"
  version
  ssl_enforcement
                            = "Enabled"
resource "azurerm_postgresql_configuration" "test" {
          = "backslash_quote"
 resource_group_name = "${azurerm_resource_group.test.name}"
 server_name = "${azurerm_postgresql_server.test.name}"
                   = "on"
  value
}
```

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 (https://www.postgresql.org/docs/current/static/sql-syntax-lexical.html#SQL-SYNTAX-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.
- 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.

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 {
                   = 5120
   storage_mb
   backup_retention_days = 7
   geo_redundant_backup = "Disabled"
  administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
               = "9.5"
 version
  ssl_enforcement
                          = "Enabled"
resource "azurerm_postgresql_database" "test" {
         = "exampledb"
 resource_group_name = "${azurerm_resource_group.test.name}"
 server_name = "${azurerm_postgresql_server.test.name}"
                 = "UTF8"
 charset
                 = "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 (https://www.postgresql.org/docs/current/static/sql-syntax-lexical.html#SQL-SYNTAX-IDENTIFIERS). 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 (https://www.postgresql.org/docs/current/static/multibyte.html). 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 (https://www.postgresql.org/docs/current/static/collation.html). Note that Microsoft uses different notation
 (https://msdn.microsoft.com/library/windows/desktop/dd373814.aspx) en-US instead of en_US. Changing this forces
 a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The ID of the PostgreSQL Database.

Import

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

azurerm_postgresql_firewall_rule

Manages a Firewall Rule for a PostgreSQL Server

Example Usage (Single IP Address)

```
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)

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 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.

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 (https://docs.microsoft.com/en-us/rest/api/sql/firewallrules/createorupdate)).

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.

azurerm_postgresql_server

Manage a PostgreSQL Server.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "api-rg-pro"
 location = "West Europe"
resource "azurerm_postgresql_server" "test" {
                   = "postgresql-server-1"
 location = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
 sku {
          = "B_Gen4_2"
   name
   capacity = 2
   tier = "Basic"
   family = "Gen4"
 storage_profile {
                        = 5120
   storage_mb
   backup_retention_days = 7
   geo_redundant_backup = "Disabled"
 administrator_login
                      = "psqladminun"
 administrator_login_password = "H@Sh1CoR3!"
                            = "9.5"
 version
 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 (https://docs.microsoft.com/en-us/rest/api/postgresql/servers/create#sku).
- capacity (Required) The scale up/out capacity, representing server's compute units.
- tier (Required) The tier of the particular SKU. Possible values are Basic, General Purpose, and MemoryOptimized. For more information see the product documentation (https://docs.microsoft.com/en-us/azure/postgresql/concepts-pricing-tiers).
- family (Required) The family of hardware Gen4 or Gen5, before selecting your family check the product documentation (https://docs.microsoft.com/en-us/azure/postgresql/concepts-pricing-tiers#compute-generations-vcores-and-memory) 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 (https://docs.microsoft.com/en-us/rest/api/postgresql/servers/create#StorageProfile).
- 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 $\mbox{resource}\ \mbox{id},\mbox{e.g.}$

azurerm_postgresql_virtual_network_rule

Manages a PostgreSQL Virtual Network Rule.

NOTE: PostgreSQL Virtual Network Rules can only be used with SKU Tiers of GeneralPurpose or MemoryOptimized (https://docs.microsoft.com/en-us/azure/postgresql/concepts-data-access-and-security-vnet)

Example Usage

```
resource "azurerm_resource_group" "test" {
 name = "example-resources"
  location = "West US"
resource "azurerm virtual network" "test" {
            = "example-vnet"
 address_space = ["10.7.29.0/29"]
location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_subnet" "internal" {
                      = "internal"
 resource_group_name = "${azurerm_resource_group.test.name}"
 virtual_network_name = "${azurerm_virtual_network.test.name}"
 address prefix = "10.7.29.0/29"
  service_endpoints = ["Microsoft.Sql"]
}
resource "azurerm_postgresql_server" "test" {
           = "postgresql-server-1"
  name
 location
                   = "${azurerm_resource_group.test.location}"
 resource_group_name = "${azurerm_resource_group.test.name}"
  sku {
           = "GP_Gen5_2"
   capacity = 2
   tier = "GeneralPurpose"
   family = "Gen5"
  storage_profile {
                     = 5120
   storage_mb
   backup_retention_days = 7
   geo_redundant_backup = "Disabled"
 }
 administrator_login = "psqladminun"
  administrator_login_password = "H@Sh1CoR3!"
                            = "9.5"
  version
  ssl_enforcement
                            = "Enabled"
resource "azurerm_postgresql_virtual_network_rule" "test" {
                                     = "postgresql-vnet-rule"
                                      = "${azurerm_resource_group.test.name}"
 resource_group_name
                                      = "${azurerm_postgresql_server.test.name}"
 server_name
                                      = "${azurerm_subnet.internal.id}"
  subnet_id
  ignore_missing_vnet_service_endpoint = true
```

Argument Reference

The following arguments are supported:

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

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 PostgreSQL server resides. Changing this forces a new resource to be created.
- server_name (Required) The name of the SQL Server to which this PostgreSQL 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 PostgreSQL server will be connected to.
- ignore_missing_vnet_service_endpoint (Optional) Should the Virtual Network Rule be created before the Subnet has the Virtual Network Service Endpoint enabled? Defaults to false.

Attributes Reference

The following attributes are exported:

• id - The ID of the PostgreSQL Virtual Network Rule.

Import

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

 $terraform\ import\ azurerm_postgresql_virtual_network_rule.rule1\ /subscriptions/00000000-0000-0000-0000\\000000000/resourceGroups/myresourcegroup/providers/Microsoft.DBforPostgreSQL/servers/myserver/virtualNetworkRules/vnetrulename$

azurerm_public_ip

Manage a Public IP Address.

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Public IP resource. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which to create the public ip.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- sku (Optional) The SKU of the Public IP. Accepted values are Basic and Standard. Defaults to Basic.

Note Public IP Standard SKUs require public_ip_address_allocation to be set to static.

Note: The Standard SKU is currently in Public Preview on an opt-in basis. More information, including how you can register for the Preview, and which regions Standard SKU's are available in are available here (https://docs.microsoft.com/en-us/azure/load-balancer/load-balancer-standard-overview)

• 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.

• ip_version - (Optional) The IP Version to use, IPv6 or IPv4.

Note Only dynamic IP address allocation is supported for IPv6.

- 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 only supported in several regions at this time (https://docs.microsoft.com/en-us/azure/availability-zones/az-overview).

Attributes Reference

The following attributes are exported:

- id The Public IP ID.
- ip_address The IP address value that was allocated.

Note Dynamic Public IP Addresses aren't allocated until they're attached to a device (e.g. a Virtual Machine/Load Balancer). Instead you can obtain the IP Address once the Public IP has been assigned via the azurerm_public_ip Data Source (/docs/providers/azurerm/d/public_ip.html).

• 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.

azurerm_recovery_services_protected_vm

Manages an Recovery Protected VM.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "tfex-recovery_vault"
  location = "West US"
resource "azurerm_recovery_services_vault" "example" {
                    = "tfex-recovery-vault"
 location = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
                    = "Standard"
resource "azurerm_recovery_services_protection_policy_vm" "test" {
          = "tfex-recovery-vault-policy"
 resource_group_name = "${azurerm_resource_group.test.name}"
  recovery_vault_name = "${azurerm_recovery_services_vault.test.name}"
 backup = {
   frequency = "Daily"
           = "23:00"
  }
}
resource "azurerm_recovery_services_protected_vm" "example" {
  resource_group_name = "${azurerm_resource_group.example.name}"
  recovery_vault_name = "${azurerm_recovery_services_vault.example.name}"
  source_vm_id
                = "${azurerm_virtual_machine.example.id}"
  backup_policy_id = "${azurerm_recovery_services_protection_policy_vm.example.id}"
}
```

Argument Reference

The following arguments are supported:

- resource_group_name (Required) The name of the resource group in which to create the Recovery Services Protected VM. Changing this forces a new resource to be created.
- recovery_vault_name (Required) Specifies the name of the Recovery Services Vault to use. Changing this forces a new resource to be created.
- source_vm_id (Required) Specifies the ID of the VM to backup. Changing this forces a new resource to be created.
- backup_policy_id (Required) Specifies the id of the backup policy to use. 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 Recovery Services Vault.

Import

Recovery Services Protected VMs can be imported using the resource id, e.g.

terraform import azurerm_recovery_services_protected_vm.item1 "/subscriptions/00000000-0000-0000-0000-0000 000000000/resourceGroups/group1/providers/Microsoft.RecoveryServices/vaults/example-recovery-vault/backup Fabrics/Azure/protectionContainers/iaasvmcontainer;iaasvmcontainerv2;group1;vm1/protectedItems/vm;iaasvmcontainerv2;group1;vm1"

Note the ID requires quoting as there are semicolons

azurerm_recovery_services_protection_policy

Manages an Recovery Services VM Protection Policy.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "tfex-recovery_vault"
 location = "West US"
resource "azurerm_recovery_services_vault" "example" {
                   = "tfex-recovery-vault"
 location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
                 = "Standard"
resource "azurerm_recovery_services_protection_policy_vm" "test" {
         = "tfex-recovery-vault-policy"
 resource_group_name = "${azurerm_resource_group.test.name}"
 recovery_vault_name = "${azurerm_recovery_services_vault.test.name}"
 timezone = "UTC"
 backup = {
   frequency = "Daily"
   time = "23:00"
 retention_daily = {
   count = 10
 retention_weekly = {
   count = 42
   weekdays = ["Sunday", "Wednesday", "Friday", "Saturday"]
 retention_monthly = {
   count = 7
   weekdays = ["Sunday", "Wednesday"]
   weeks = ["First", "Last"]
 }
 retention_yearly = {
   count = 77
   weekdays = ["Sunday"]
   weeks = ["Last"]
   months = ["January"]
  }
}
```

Argument Reference

- name (Required) Specifies the name of the Recovery Services Vault Policy. 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 Protected VM. Changing this forces a new resource to be created.
- recovery_vault_name (Required) Specifies the name of the Recovery Services Vault to use. Changing this forces a new resource to be created.
- backup (Required) Configures the Policy backup frequecent, times & days as documented in the backup block below.
- timezone (Optional) Specifies the timezone. Defaults to UTC
- retention_daily (Optional) Configures the policy daily retention as documented in the retention_daily block below. Required when backup frequency is Daily.
- retention_weekly (Optional) Configures the policy weekly retention as documented in the retention_weekly block below. Required when backup frequency is Weekly.
- retention_monthly (Optional) Configures the policy monthly retention as documented in the retention_monthly block below
- retention_yearly (Optional) Configures the policy yearly retention as documented in the retention_yearly block below.

The backup block supports:

- frequency (Required) Sets the backup frequency. Must be either Daily orWeekly.
- times (Required) The time of day to preform the backup in 24hour format.
- weekdays (Optional) The days of the week to perform backups on. Must be one of Sunday, Monday, Tuesday, Wednesday, Thursday, Friday or Saturday.

The retention_daily block supports:

• count - (Required) The number of daily backups to keep. Must be between 1 and 9999

The retention_weekly block supports:

- count (Required) The number of weekly backups to keep. Must be between 1 and 9999
- weekdays (Required) The weekday backups to retain. Must be one of Sunday, Monday, Tuesday, Wednesday, Thursday,
 Friday or Saturday.

The retention_monthly block supports:

- count (Required) The number of monthly backups to keep. Must be between 1 and 9999
- weekdays (Required) The weekday backups to retain . Must be one of Sunday, Monday, Tuesday, Wednesday, Thursday, Friday or Saturday.
- weeks (Required) The weeks of the month to retain backups of. Must be one of First, Second, Third, Fourth, Last.

The retention_yearly block supports:

- count (Required) The number of yearly backups to keep. Must be between 1 and 9999
- weekdays (Required) The weekday backups to retain . Must be one of Sunday, Monday, Tuesday, Wednesday, Thursday, Friday or Saturday.
- weeks (Required) The weeks of the month to retain backups of. Must be one of First, Second, Third, Fourth, Last.
- months (Required) The months of the year to retain backups of. Must be one of January, Febuary, March, April, May, June, July, Augest, September, October, November and December.

Attributes Reference

The following attributes are exported:

• id - The ID of the Recovery Services VM Protection Policy.

Import

Recovery Services VM Protection Policy can be imported using the resource id, e.g.

azurerm_recovery_services_vault

Manage an Recovery Services Vault.

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) Specifies the name of the Recovery Services Vault. Changing this forces a new resource to be created.
- resource_group_name (Required) The name of the resource group in which to create the Recovery Services Vault. Changing this forces a new resource to be created.
- location (Required) Specifies the supported Azure location where the resource exists. Changing this forces a new resource to be created.
- tags (Optional) A mapping of tags to assign to the resource.
- sku (Required) Sets the vault's SKU. Possible values include: Standard, 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.

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)

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" \ \{
                          = "redissa"
= "${azurerm_resource_group.test.name}"
  name
  resource_group_name
  location
                            = "${azurerm_resource_group.test.location}"
                             = "Standard"
  account tier
  account_replication_type = "GRS"
# NOTE: the Name used for Redis needs to be globally unique resource "azurerm_redis_cache" "test" {
                       = "tf-redis-pbkup'
  name
                     = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}'
  capacity = 3
family = "P"
                      = "Premium"
  sku name
  enable non ssl port = false
  redis_configuration {
    rdb backup enabled
                                    = true
    rdb_backup_frequency
    rdb_backup_max_snapshot_count = 1
    rdb_storage_connection_string = "DefaultEndpointsProtocol=https;BlobEndpoint=${azurerm_storage_account.test.primary_blob_endpoint};AccountName=${azurerm_storage_account.t
est.name};AccountKey=${azurerm_storage_account.test.primary_access_key}
}
```

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.

- $\bullet~$ 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.
- $\bullet \ \ \mathsf{rdb_backup_enabled} \cdot \mathsf{(Optional)} \ \mathsf{Is} \ \mathsf{Backup} \ \mathsf{Enabled?} \ \mathsf{Only} \ \mathsf{supported} \ \mathsf{on} \ \mathsf{Premium} \ \mathsf{SKU's}.$
- rdb_backup_frequency (Optional) The Backup Frequency in Minutes. Only supported on Premium SKU's. Possible values are: 15, 30, 60, 360, 720 and 1440.
- rdb_backup_max_snapshot_count (Optional) The maximum number of snapshots to create as a backup. Only supported for Premium SKU's.
- rdb_storage_connection_string (Optional) The Connection String to the Storage Account. Only supported for Premium SKU's. In the format:

 DefaultEndpointsProtocol=https;BlobEndpoint=\${azurerm_storage_account.test.primary_blob_endpoint};AccountName=\${azurerm_storage_account.test.name};AccountKey=\${azurerm_storage_account.test.primary_blob_endpoint}}.

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 (https://github.com/Azure/azure-rest-api-specs/issues/3037). In the interim you can use the ignore_changes attribute to ignore changes to this field (https://www.terraform.io/docs/configuration/resources.html#ignore_changes) 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 (https://redis.io/topics/notifications#configuration)

```
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
- $\bullet~\mbox{port}$ 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
- $\bullet \ \ \text{redis_configuration-A redis_configuration block as defined below:}$

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 (https://azure.microsoft.com/en-us/documentation/articles/cache-configure/#advanced-settings)
- Redis: Available Configuration Settings (http://redis.io/topics/config)

Import

Redis Cache's can be imported using the $\ensuremath{\texttt{resource}}$ id, e.g.

 $terraform\ import\ azurerm_redis_cache.\ (achel\ /subscriptions/00000000-0000-0000-00000000000/resource Groups/group1/providers/Microsoft.\ (Cache/Redis/cachel) and the providers of the provi$

azurerm_redis_firewall_rule

Manages a Firewall Rule associated with a Redis Cache.

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" {
                    = "redis${random_id.server.hex}"
                     = "${azurerm_resource_group.test.location}"
  location
  resource_group_name = "${azurerm_resource_group.test.name}"
 capacity
                    = 1
                    = "P"
 family
 sku_name
                   = "Premium"
 enable_non_ssl_port = false
  redis_configuration {
   maxclients
   maxmemory\_reserved = 2
   maxmemory_delta = 2
   maxmemory_policy = "allkeys-lru"
  }
}
resource "azurerm_redis_firewall_rule" "test" {
 name
                   = "someIPrange"
 redis_cache_name = "${azurerm_redis_cache.test.name}"
  resource_group_name = "${azurerm_resource_group.test.name}"
                   = "1.2.3.4"
  start_ip
                    = "2.3.4.5"
  end_ip
}
```

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.

 $terraform\ import\ azurerm_redis_firewall_rule.rule1\ /subscriptions/00000000-0000-0000-0000-00000000000/re\ sourceGroups/group1/providers/Microsoft.Cache/Redis/cache1/firewallRules/rule1$

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.

azurerm_resource_group

Manages a resource group on Azure.

Example Usage

Argument Reference

The following arguments are supported:

- name (Required) The name of the resource group. Must be unique on your Azure subscription.
- location (Required) The location where the resource group should be created. For a list of all Azure locations, please consult this link (http://azure.microsoft.com/en-us/regions/) 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.

 $terraform\ import\ azurerm_resource_group.mygroup\ /subscriptions/00000000-0000-0000-0000-000000000000/resource Groups/myresource group$

azurerm_role_assignment

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

Example Usage (using a built-in Role)

Example Usage (Custom Role & Service Principal)

```
data "azurerm_subscription" "primary" {}
data "azurerm_client_config" "test" {}
resource "azurerm_role_definition" "test" {
 = "my-custom-role-definition"
 scope
                = "${data.azurerm_subscription.primary.id}"
 permissions {
           = ["Microsoft.Resources/subscriptions/resourceGroups/read"]
   actions
   not_actions = []
 assignable_scopes = [
   "${data.azurerm_subscription.primary.id}",
 1
}
resource "azurerm_role_assignment" "test" {
               name
                 = "${data.azurerm_subscription.primary.id}"
 role_definition_id = "${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" {
 name
                 = "my-custom-role-definition"
                = "${data.azurerm_subscription.primary.id}"
 scope
 permissions {
           = ["Microsoft.Resources/subscriptions/resourceGroups/read"]
   actions
   not_actions = []
 assignable_scopes = [
   "${data.azurerm_subscription.primary.id}",
}
resource "azurerm_role_assignment" "test" {
                 scope
                 = "${data.azurerm_subscription.primary.id}"
 role_definition_id = "${azurerm_role_definition.test.id}"
                = "${data.azurerm_client_config.test.client_id}"
 principal_id
}
```

Argument Reference

The following arguments are supported:

- name (Optional) A unique UUID/GUID for this Role Assignment one will be generated if not specified. Changing this forces a new resource to be created.
- scope (Required) The scope at which the Role Assignment applies too, such as /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333, /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup, or /subscriptions/0b1f6471-1bf0-4dda-aec3-111122223333/resourceGroups/myGroup/providers/Microsoft.Compute/virtualMachines/myVM. Changing this forces a new resource to be created.
- role_definition_id (Optional) The Scoped-ID of the Role Definition. Changing this forces a new resource to be created. Conflicts with role_definition_name.
- role_definition_name (Optional) The name of a built-in Role. Changing this forces a new resource to be created. Conflicts with role_definition_id.
- principal_id (Required) The ID of the Principal (User or Application) to assign the Role Definition to. Changing this forces a new resource to be created.

Attributes Reference

The following attributes are exported:

• id - The Role Assignment ID.

Import

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

azurerm_role_definition

Manages a custom Role Definition, used to assign Roles to Users/Principals. See 'Understand role definitions' (https://docs.microsoft.com/en-us/azure/role-based-access-control/role-definitions) in the Azure documentation for more details.

Example Usage

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/Microsoft.Compute/virtualMachines/myVM. 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-aec3111122223333/resourceGroups/myGroup, or /subscriptions/0b1f6471-1bf0-4dda-aec3111122223333/resourceGroups/myGroup/providers/Microsoft.Compute/virtualMachines/myVM.

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' (https://docs.microsoft.com/en-us/azure/role-based-access-control/resource-provider-operations) for details.

- data_action (Optional) One or more Allowed Data Actions, such as *,
 Microsoft.Storage/storageAccounts/blobServices/containers/blobs/read. See 'Azure Resource Manager resource provider operations' (https://docs.microsoft.com/en-us/azure/role-based-access-control/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' (https://docs.microsoft.com/en-us/azure/role-based-access-control/resource-provider-operations) for details.
- not_data_action (Optional) One or more Disallowed Data Actions, such as *,
 Microsoft.Resources/subscriptions/resourceGroups/read. See 'Azure Resource Manager resource provider operations' (https://docs.microsoft.com/en-us/azure/role-based-access-control/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.

azurerm_route

Manages a Route within a Route Table.

Example Usage

```
resource "azurerm_resource_group" "test" {
          = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_route_table" "test" {
                   = "acceptanceTestRouteTable1"
  location = "${azurerm_resource_group.test.location}"
  resource_group_name = "${azurerm_resource_group.test.name}"
resource "azurerm_route" "test" {
                    = "acceptanceTestRoute1"
  resource_group_name = "${azurerm_resource_group.test.name}"
 route_table_name = "${azurerm_route_table.test.name}"
                    = "10.1.0.0/16"
  address_prefix
  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.

 $terraform\ import\ azurerm_route. testRoute\ /subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/mygroup1/providers/Microsoft. Network/routeTables/mytable1/routes/myroute1$

azurerm_route_table

Manages a Route Table

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "acceptanceTestResourceGroup1"
  location = "West US"
resource "azurerm_route_table" "test" {
                               = "acceptanceTestSecurityGroup1"
 location
                              = "${azurerm_resource_group.test.location}"
                      = "${azurerm_resource_group.test.name}"
 resource_group_name
 disable_bgp_route_propagation = false
 route {
                  = "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.

 $terraform\ import\ azurerm_route_table.test\ /subscriptions/00000000-0000-0000-0000-000000000000/resourceGro\ ups/mygroup1/providers/Microsoft.Network/routeTables/mytable1$

azurerm_scheduler_job

Manages a Scheduler Job.

NOTE: Support for Scheduler Job has been deprecated by Microsoft in favour of Logic Apps (more information can be found at this link (https://docs.microsoft.com/en-us/azure/scheduler/migrate-from-scheduler-to-logic-apps)) - as such we plan to remove support for this resource as a part of version 2.0 of the AzureRM Provider.

Example Usage (single web get now)

Example Usage (recurring daily with retry and basic authentication)

```
resource "azurerm_scheduler_job" "web-recurring-daily" {
                   = "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" {
                    = "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 {
            = "${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" {
                        = "tfexstorageaccount"
 resource_group_name = "${azurerm_resource_group.example.name}"
                        = "${azurerm_resource_group.example.location}"
 location
                 = "Standard"
  account_tier
 account replication type = "LRS"
}
resource "azurerm_storage_queue" "example" {
                      = "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" {
                    = "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}"
                      = "${azurerm_storage_account.example.primary_access_key}"
                      = "storage message"
   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.
- 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.

 ${\tt action_storage_queue} \ \& \ {\tt error_action_storage_queue} \ block \ supports \ the \ following:$

- $\bullet \;$ 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/0000000-0000-0000-0000-0000000000000/resourceGroups/resourceGroup1/providers/Microsoft.Scheduler/jobCollections/jobCollection1/jobs/job1

azurerm_scheduler_job_collection

Manages a Scheduler Job Collection.

NOTE: Support for Scheduler Job Collections has been deprecated by Microsoft in favour of Logic Apps (more information can be found at this link (https://docs.microsoft.com/en-us/azure/scheduler/migrate-from-scheduler-to-logic-apps)) - as such we plan to remove support for this resource as a part of version 2.0 of the AzureRM Provider.

Example Usage

```
resource "azurerm_resource_group" "rg" {
 name = "tfex-job_collection"
  location = "West US"
resource "azurerm_scheduler_job_collection" "jobs" {
 name
                    = "example_job_collection"
                   = "${azurerm_resource_group.rg.location}"
 location
 resource_group_name = "${azurerm_resource_group.rg.name}"
                    = "free"
                     = "enabled"
 state
 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.
- 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.

azurerm_search_service

Allows you to manage an Azure Search Service.

Example Usage

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.
- primary_key The Search Service Administration primary key.
- secondary_key The Search Service Administration secondary key.

Import

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

terraform import azurerm_search_service.service1 /subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/mygroup1/providers/Microsoft.Search/searchServices/service1

azurerm_security_center_contact

Manages the subscription's Security Center Contact.

NOTE: Owner access permission is required.

Example Usage

```
resource "azurerm_security_center_contact" "example" {
  email = "contact@example.com"
  phone = "+1-555-555-5555"

  alert_notifications = true
  alerts_to_admins = true
}
```

Argument Reference

The following arguments are supported:

- email (Required) The email of the Security Center Contact.
- phone (Required) The phone number of the Security Center Contact.
- alert_notifications (Required) Whether to send security alerts notifications to the security contact.
- alerts_to_admins (Required) Whether to send security alerts notifications to subscription admins.

Attributes Reference

The following attributes are exported:

• id - The Security Center Contact ID.

Import

The contact can be imported using the resource id, e.g.

azurerm_security_center_subscription_pricing

Manages the Pricing Tier for Azure Security Center in the current subscription.

NOTE: This resource requires the Owner permission on the Subscription.

NOTE: Deletion of this resource does not change or reset the pricing tier to Free

Example Usage

```
resource "azurerm_security_center_subscription_pricing" "example" {
  tier = "Standard"
}
```

Argument Reference

The following arguments are supported:

• tier - (Required) The pricing tier to use. Possible values are Free and Standard.

NOTE: Changing the pricing tier to Standard affects all resources in the subscription and could be quite costly.

Attributes Reference

The following attributes are exported:

• id - The subscription pricing ID.

Import

The pricing tier can be imported using the resource id, e.g.

azurerm_security_center_workspace

Manages the subscription's Security Center Workspace.

NOTE: Owner access permission is required.

NOTE: The subscription's pricing model can not be Free for this to have any affect.

Example Usage

Argument Reference

The following arguments are supported:

- scope (Required) The scope of VMs to send their security data to the desired workspace, unless overridden by a setting with more specific scope.
- workspace_id (Required) The ID of the Log Analytics Workspace to save the data in.

Attributes Reference

The following attributes are exported:

• id - The Security Center Workspace ID.

Import

The contact can be imported using the resource id, e.g.

azurerm_service_fabric_cluster

Manage a Service Fabric Cluster.

Example Usage

```
resource "azurerm_resource_group" "test" {
         = "example-resources"
  location = "West Europe"
resource "azurerm_service_fabric_cluster" "test" {
                     = "example-servicefabric"
 resource_group_name = "${azurerm_resource_group.test.name}"
 location = "${azurerm_resource_group.test.location}"
 reliability_level = "Bronze"
upgrade_mode = "Manual"
 cluster_code_version = "6.3.176.9494"
              = "Windows"
 management_endpoint = "https://example:80"
 node_type {
                        = "first"
   instance_count
   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.
- cluster_code_version (Optional) Required if Upgrade Mode set to Manual, Specifies the Version of the Cluster Code of the cluster.
- 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) One or two client_certificate_thumbprint blocks 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.

azurerm_servicebus_namespace

Manage a ServiceBus Namespace.

Example Usage

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.

azurerm_servicebus_namespace_authorization_rule

Manages a ServiceBus Namespace authorization Rule within a ServiceBus.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "terraform-servicebus"
  location = "West US"
resource "azurerm_servicebus_namespace" "example" {
                   = "tfex sevicebus namespace"
 location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
                    = "standard"
 tags {
   source = "terraform"
}
resource "azurerm_servicebus_namespace_authorization_rule" "example" {
                    = "examplerule"
                   = "${azurerm_servicebus_namespace.example.name}"
 namespace_name
 resource_group_name = "${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.

azurerm_servicebus_queue

Manage and manage a ServiceBus Queue.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "terraform-servicebus"
  location = "West Europe"
resource "azurerm_servicebus_namespace" "example" {
                   = "tfex sevicebus namespace"
 location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
                    = "standard"
 tags {
   source = "terraform"
}
resource "azurerm_servicebus_queue" "example" {
                    = "tfex_servicebus_queue"
 resource_group_name = "${azurerm_resource_group.example.name}"
                 = "${azurerm_servicebus_namespace.example.name}"
  enable_partitioning = true
}
```

Argument Reference

- 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 ISO 8601 timespan duration of the idle interval after which the Queue is automatically deleted, minimum of 5 minutes.
- default_message_ttl (Optional) The ISO 8601 timespan duration of the TTL of messages sent to this queue. This is the default value used when TTL is not set on message itself.

- duplicate_detection_history_time_window (Optional) The ISO 8601 timespan duration during which duplicates can be detected. Default value is 10 minutes. (PT10M)
- 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 (https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-partitioning) 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 (https://docs.microsoft.com/enus/azure/service-bus-messaging/service-bus-quotas).
- 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-infirst-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.
- max_delivery_count (Optional) Integer value which controls when a message is automatically deadlettered. Defaults
 to 10.

Attributes Reference

The following attributes are exported:

• id - The ServiceBus Queue ID.

Import

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

azurerm_servicebus_queue_authorization_rule

Manages an Authorization Rule for a ServiceBus Queue.

Example Usage

```
resource "azurerm_resource_group" "example" {
          = "terraform-servicebus"
  location = "West US"
resource "azurerm_servicebus_namespace" "example" {
                     = "tfex sevicebus namespace"
  location = "${azurerm_resource_group.example.location}"
  resource_group_name = "${azurerm_resource_group.example.name}"
                     = "standard"
  tags {
    source = "terraform"
}
resource "azurerm_servicebus_queue" "example" {
                     = "tfex_servicebus_queue"
  resource_group_name = "${azurerm_resource_group.example.name}"
  namespace_name = "${azurerm_servicebus_namespace.example.name}"
  enable_partitioning = true
}
resource "azurerm_servicebus_queue_authorization_rule" "example" {
                    = "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

- 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.

azurerm_servicebus_subscription

Manage a ServiceBus Subscription.

Example Usage

```
resource "azurerm_resource_group" "example" {
         = "tfex-servicebus-subscription"
  location = "West Europe"
resource "azurerm_servicebus_namespace" "example" {
                   = "tfex sevicebus namespace"
 location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
                    = "standard"
 tags {
   source = "terraform"
}
resource "azurerm_servicebus_topic" "example" {
                    = "tfex_sevicebus_topic"
  resource_group_name = "${azurerm_resource_group.example.name}"
                 = "${azurerm_servicebus_namespace.example.name}"
  enable_partitioning = true
}
resource "azurerm_servicebus_subscription" "example" {
                    = "tfex_sevicebus_subscription"
  resource_group_name = "${azurerm_resource_group.example.name}"
 namespace_name = "${azurerm_servicebus_namespace.example.name}"
                   = "${azurerm_servicebus_topic.example.name}"
 topic_name
  max_delivery_count = 1
```

Argument Reference

- 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 (https://msdn.microsoft.com/en-us/library/se73z7b9(v=vs.110).aspx#Anchor_2)

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.

azurerm_servicebus_subscription_rule

Manage a ServiceBus Subscription Rule.

Example Usage (SQL Filter)

```
resource "azurerm_resource_group" "example" {
         = "tfex-servicebus-subscription-rule-sql"
  location = "West Europe"
resource "azurerm_servicebus_namespace" "example" {
                   = "tfex sevicebus namespace"
 location = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
                    = "standard"
 tags {
   source = "terraform"
resource "azurerm_servicebus_topic" "example" {
                   = "tfex_sevicebus_topic"
 resource_group_name = "${azurerm_resource_group.example.name}"
 namespace_name = "${azurerm_servicebus_namespace.example.name}"
  enable_partitioning = true
}
resource "azurerm_servicebus_subscription" "example" {
                    = "tfex_sevicebus_subscription"
 resource_group_name = "${azurerm_resource_group.example.name}"
 namespace_name = "${azurerm_servicebus_namespace.example.name}"
                  = "${azurerm_servicebus_topic.example.name}"
 topic_name
  max_delivery_count = 1
resource "azurerm_servicebus_subscription_rule" "example" {
          = "tfex_sevicebus_rule"
 resource_group_name = "${azurerm_resource_group.example.name}"
 namespace_name = "${azurerm_servicebus_namespace.example.name}"
 topic_name = "${azurerm_servicebus_topic.example.name}"
  subscription_name = "${azurerm_servicebus_subscription.example.name}"
 filter_type = "SqlFilter"
                    = "color = 'red'"
 sql_filter
```

Example Usage (Correlation Filter)

```
resource "azurerm_resource_group" "example" {
 name = "tfex-servicebus-subscription-rule-cor"
 location = "West Europe"
}
resource "azurerm servicebus namespace" "example" {
 location = "${azurearra}
                  = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
                   = "standard"
 sku
 tags {
   source = "terraform"
 }
}
resource "azurerm servicebus topic" "example" {
            = "tfex sevicebus topic"
 resource_group_name = "${azurerm_resource_group.example.name}"
 namespace_name = "${azurerm_servicebus_namespace.example.name}"
 enable_partitioning = true
resource "azurerm_servicebus_subscription" "example" {
                   = "tfex_sevicebus_subscription"
 resource_group_name = "${azurerm_resource_group.example.name}"
 namespace_name = "${azurerm_servicebus_namespace.example.name}"
 topic_name = "${azurerm_servicebus_topic.example.name}"
 max_delivery_count = 1
resource "azurerm_servicebus_subscription_rule" "example" {
                   = "tfex_sevicebus_rule"
 resource_group_name = "${azurerm_resource_group.example.name}"
 namespace_name = "${azurerm_servicebus_namespace.example.name}"
 topic_name
                  = "${azurerm_servicebus_topic.example.name}"
 subscription_name = "${azurerm_servicebus_subscription.example.name}"
                  = "CorrelationFilter"
 filter_type
 correlation_filter = {
   correlation_id = "high"
   label
          = "red"
 }
}
```

Argument Reference

- 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.

azurerm_servicebus_topic

Manage a ServiceBus Topic.

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

Example Usage

```
resource "azurerm_resource_group" "example" {
  name = "tfex-servicebus-topic"
  location = "West Europe"
}
resource "azurerm_servicebus_namespace" "example" {
                    = "tfex_sevicebus_namespace"
 location
                    = "${azurerm_resource_group.example.location}"
 resource_group_name = "${azurerm_resource_group.example.name}"
                    = "standard"
 tags {
   source = "terraform"
  }
}
resource "azurerm_servicebus_topic" "example" {
                    = "tfex_sevicebus_topic"
  resource_group_name = "${azurerm_resource_group.example.name}"
                 = "${azurerm_servicebus_namespace.example.name}"
 namespace_name
  enable_partitioning = true
}
```

Argument Reference

- 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 ISO 8601 timespan duration of the idle interval after which the Topic is automatically deleted, minimum of 5 minutes.

- default_message_ttl (Optional) The ISO 8601 timespan duration of TTL of messages sent to this topic if no TTL value is set on the message itself.
- duplicate_detection_history_time_window (Optional) The ISO 8601 timespan duration during which duplicates can be detected. Defaults to 10 minutes. (PT10M)
- 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 (https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-partitioning) 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 (https://docs.microsoft.com/enus/azure/service-bus-messaging/service-bus-quotas).
- 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.

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/00000000-0000-0000-0000-000000000000/resour ceGroups/mygroup1/providers/microsoft.servicebus/namespaces/sbns1/topics/sntopic1