

Documentation for Azure Blob Storage provisioning using Terraform

Azure Blob Storage is Microsoft's object storage solution for the cloud.

Blob Storage is optimized for storing massive amounts of unstructured data.

Unstructured data is data that doesn't adhere to a particular data model or definition, such as text or binary data.

Provisioning Steps

1. First prepare Terraform code (which can be found inside this [Repo](#))
2. Create a .zip file named *some-local-file.zip*
3. Run command *terraform apply*

```
> terraform apply
Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create
Terraform will perform the following actions:
```

4. Check if plan is correct

```
# azurem_resource_group.storage will be created
+ resource "azurem_resource_group" "storage" {
  id           = (known after apply)
  location     = "westeurope"
  name         = "hubertdz-rg"
}

# azurem_storage_account.storage will be created
+ resource "azurem_storage_account" "storage" {
  access_tier                = (known after apply)
  account_kind               = "StorageV2"
  account_replication_type   = "GAS"
  account_tier               = "Standard"
  allow_nested_items_to_be_public = true
  enable_https_traffic_only   = true
  id                         = (known after apply)
  infrastructure_encryption_enabled = false
  is_hns_enabled             = false
  large_file_share_enabled   = (known after apply)
  location                   = "westeurope"
  min_tls_version            = "TLS1.2"
  name                      = "hubertdz8strg"
  nfsv3_enabled              = false
  primary_access_key         = (sensitive value)
  primary_blob_connection_string = (sensitive value)
  primary_blob_endpoint      = (known after apply)
  primary_blob_host          = (known after apply)
  primary_connection_string  = (sensitive value)
  primary_dfs_endpoint       = (known after apply)
  primary_dfs_host           = (known after apply)
  primary_file_endpoint      = (known after apply)
  primary_file_host          = (known after apply)
  primary_location           = (known after apply)
  primary_queue_endpoint     = (known after apply)
  primary_queue_host         = (known after apply)
  primary_table_endpoint     = (known after apply)
  primary_table_host         = (known after apply)
  primary_web_endpoint       = (known after apply)
  primary_web_host           = (known after apply)
  queue_encryption_key_type   = "Service"
  resource_group_name        = "hubertdz-rg"
  secondary_access_key        = (sensitive value)
  secondary_blob_connection_string = (sensitive value)
  secondary_blob_endpoint     = (known after apply)
  secondary_blob_host         = (known after apply)
  secondary_connection_string = (sensitive value)
  secondary_dfs_endpoint      = (known after apply)
  secondary_dfs_host          = (known after apply)
  secondary_file_endpoint     = (known after apply)
  secondary_file_host         = (known after apply)
  secondary_location          = (known after apply)
  secondary_queue_endpoint    = (known after apply)
  secondary_queue_host        = (known after apply)
  secondary_table_endpoint    = (known after apply)
  secondary_table_host        = (known after apply)
  secondary_web_endpoint      = (known after apply)
  secondary_web_host          = (known after apply)
  shared_access_key_enabled   = true
  table_encryption_key_type    = "Service"
}

# azurem_storage_blob.storage will be created
+ resource "azurem_storage_blob" "storage" {
  access_tier = (known after apply)
  content_type = "application/octet-stream"
  id          = (known after apply)
  metadata    = (known after apply)
  name        = "private-blob"
  parallelism  = 8
  size        = 0
  source      = "../some-local-file.zip"
  storage_account_name = "hubertdz8strg"
  storage_container_name = "container"
  type        = "Block"
  url         = (known after apply)
}

# azurem_storage_container.storage will be created
+ resource "azurem_storage_container" "storage" {
  container_access_type = "private"
  has_immutability_policy = (known after apply)
  has_legal_hold         = (known after apply)
  id                     = (known after apply)
  metadata               = (known after apply)
  name                  = "container"
  resource_manager_id    = (known after apply)
  storage_account_name   = "hubertdz8strg"
}
```

5. Accept the plan

```
Plan: 4 to add, 0 to change, 0 to destroy.

Changes to Outputs:
+ blob_url = (known after apply)

Do you want to perform these actions?
Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.

Enter a value: yes

azure_resource_group.storage: Creating...
azure_resource_group.storage: Creation complete after 2s [id=/subscriptions/ resourceGroups/hubertdz-rg]
azure_storage_account.storage: Creating...
azure_storage_account.storage: Still creating... [10s elapsed]
azure_storage_account.storage: Still creating... [20s elapsed]
azure_storage_account.storage: Creation complete after 22s [id=/subscriptions resourceGroups/hubertdz-rg/providers/Microsoft.Storage/storageAccounts/hubertdz0strg]
azure_storage_container.storage: Creating...
azure_storage_container.storage: Creation complete after 0s [id=https://hubertdz0strg.blob.core.windows.net/container]
azure_storage_blob.storage: Creating...
azure_storage_blob.storage: Creation complete after 1s [id=https://hubertdz0strg.blob.core.windows.net/container/private-blob]

Apply complete! Resources: 4 added, 0 changed, 0 destroyed.

Outputs:
blob_url = "https://hubertdz0strg.blob.core.windows.net/container/private-blob"
```

6. Check on Azure

Home > hubertdz-rg > hubertdz0strg | Containers > container >

container

Container

Search

Upload

Change access level

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

Shared access tokens

Access policy

Properties

Metadata

Authentication method: Access key (Switch to Microsoft Entra user account)

Location: container

Search blobs by prefix (case-...

Show deleted blobs

Add filter

Name

private-blob

private-blob

Blob

Save

Discard

Download

Refresh

Delete

Cha

Overview

Versions

Snapshots

Edit

Generate SAS

Properties

URL

LAST MODIFIED

CREATION TIME

VERSION ID

TYPE

SIZE

ACCESS TIER

ACCESS TIER LAST MODIFIED

https://hubertdz0strg.bl...

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5/26/2024, 6:30:02 PM

-

Block blob

429 B

Hot (Inferred)

N/A