## » Data Source: 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 (or owned by) applications and Sign in and read user profile within the Windows Azure Active Directory API.

## » Example Usage

```
data "azuread_application" "example" {
  name = "My First AzureAD Application"
}

output "azure_ad_object_id" {
  value = "${data.azuread_application.example.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.
- group\_membership\_claims The groups claim issued in a user or OAuth 2.0 access token that the app expects.
- required resource access A collection of required resource access blocks as documented below.
- oauth2\_permissions A collection of OAuth 2.0 permission scopes that the web API (resource) app exposes to client apps. Each permission is covered by a oauth2\_permission block as documented below.
- app\_roles A collection of app\_role blocks as documented below. For more information https://docs.microsoft.com/en-us/azure/architecture/ multitenant-identity/app-roles

required\_resource\_access block exports the following:

- resource\_app\_id The unique identifier for the resource that the application requires access to.
- resource\_access A collection of resource\_access blocks as documented below

resource access block exports the following:

- id The unique identifier for one of the OAuth2Permission or AppRole instances that the resource application exposes.
- type Specifies whether the id property references an OAuth2Permission or an AppRole.

oauth2\_permission block exports the following:

- id The unique identifier for one of the OAuth2Permission
- type The type of the permission
- admin\_consent\_description The description of the admin consent
- admin\_consent\_display\_name The display name of the admin consent
- is enabled Is this permission enabled?
- user consent description The description of the user consent
- user\_consent\_display\_name The display name of the user consent

• value - The name of this permission

app\_role block exports the following:

- id The unique identifier of the app\_role.
- allowed\_member\_types Specifies whether this app role definition can be assigned to users and groups, or to other applications (that are accessing this application in daemon service scenarios). Possible values are: User and Application, or both.
- description Permission help text that appears in the admin app assignment and consent experiences.
- display\_name Display name for the permission that appears in the admin consent and app assignment experiences.
- is\_enabled Determines if the app role is enabled.
- value Specifies the value of the roles claim that the application should expect in the authentication and access tokens.

## » Data Source: azuread domains

Use this data source to access information about an existing Domains within Azure Active Directory.

**NOTE:** If you're authenticating using a Service Principal then it must have permissions to Directory.Read.All within the Windows Azure Active Directory API.

### » Example Usage

```
data "azuread_domains" "aad_domains" {}

output "domains" {
  value = "${data.azuread_domains.aad_domains.domains}"
}
```

#### » Argument Reference

- include\_unverified (Optional) Set to true if unverified Azure AD Domains should be included. Defaults to false.
- only\_default (Optional) Set to true to only return the default domain.

• only\_initial - (Optional) Set to true to only return the initial domain, which is your primary Azure Active Directory tenant domain. Defaults to false.

NOTE: If include\_unverified is set to true you cannot specify only\_default or only\_initial. Additionally you cannot combine only\_default with only\_initial.

#### » Attributes Reference

• domains - One or more domain blocks as defined below.

The domain block contains:

- $\bullet\,$  domain\_name The name of the domain.
- authentication\_type The authentication type of the domain (Managed or Federated).
- is\_default True if this is the default domain that is used for user creation.
- is\_initial True if this is the initial domain created by Azure Activie Directory.
- is\_verified True if the domain has completed domain ownership verification.

# » Data Source: azuread\_group

Gets information about an Azure Active Directory group.

**NOTE:** If you're authenticating using a Service Principal then it must have permissions to Read directory data within the Windows Azure Active Directory API.

## » Example Usage (by Group Display Name)

```
data "azuread_group" "example" {
  name = "A-AD-Group"
}
```

## » Argument Reference

The following arguments are supported:

• name - (Optional) The Name of the AD Group we want to lookup.

• object\_id - (Optional) Specifies the Object ID of the AD Group within Azure Active Directory.

NOTE: Either a name or an object\_id must be specified.

#### » Attributes Reference

The following attributes are exported:

• id - The Object ID of the Azure AD Group.

## » Data Source: 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 "azuread_service_principal" "example" {
    display_name = "my-awesome-application"
}

** Example Usage (by Application ID)

data "azuread_service_principal" "example" {
    application_id = "00000000-0000-0000-00000000000"
}

** Example Usage (by Object ID)
```

object\_id = "00000000-0000-0000-0000-00000000000"

data "azuread\_service\_principal" "example" {

## » Argument Reference

The following arguments are supported:

- application\_id (Optional) The ID of the Azure AD Application.
- 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.

- app\_roles A collection of app\_role blocks as documented below. For more information https://docs.microsoft.com/en-us/azure/architecture/multitenant-identity/app-roles
- oauth2\_permissions A collection of OAuth 2.0 permissions exposed by the associated application. Each permission is covered by a oauth2\_permission block as documented below.

## » Attributes Reference

The following attributes are exported:

• id - The Object ID for the Service Principal.

\_\_\_\_

oauth2\_permission block exports the following:

- id The unique identifier for one of the OAuth2Permission
- type The type of the permission
- admin\_consent\_description The description of the admin consent
- admin\_consent\_display\_name The display name of the admin consent
- is\_enabled Is this permission enabled?
- user\_consent\_description The description of the user consent
- user\_consent\_display\_name The display name of the user consent
- value The name of this permission

app\_role block exports the following:

• id - The unique identifier of the app\_role.

- allowed\_member\_types Specifies whether this app role definition can be assigned to users and groups, or to other applications (that are accessing this application in daemon service scenarios). Possible values are: User and Application, or both.
- description Permission help text that appears in the admin app assignment and consent experiences.
- display\_name Display name for the permission that appears in the admin consent and app assignment experiences.
- is\_enabled Determines if the app role is enabled.
- value Specifies the value of the roles claim that the application should expect in the authentication and access tokens.

## » Data Source: azuread user

Gets information about an Azure Active Directory user.

**NOTE:** If you're authenticating using a Service Principal then it must have permissions to Read directory data within the Windows Azure Active Directory API.

#### » Example Usage

```
data "azuread_user" "example" {
  user_principal_name = "user@hashicorp.com"
}
```

## » Argument Reference

The following arguments are supported:

- user\_principal\_name (Required) The User Principal Name of the Azure AD User.
- object\_id (Optional) Specifies the Object ID of the Application within Azure Active Directory.
- mail\_nickname (Optional) The email alias of the Azure AD User.

**NOTE:** Either user\_principal\_name, object\_id or mail\_nickname must be specified.

#### » Attributes Reference

The following attributes are exported:

- id The Object ID of the Azure AD User.
- user\_principal\_name The User Principal Name of the Azure AD User.
- account\_enabled True if the account is enabled; otherwise False.
- display\_name The Display Name of the Azure AD User.
- mail The primary email address of the Azure AD User.
- mail\_nickname The email alias of the Azure AD User.
- usage\_location The usage location of the Azure AD User.

## » Data Source: azuread user

Gets Object IDs or UPNs for multiple Azure Active Directory users.

**NOTE:** If you're authenticating using a Service Principal then it must have permissions to Read directory data within the Windows Azure Active Directory API.

## » Example Usage

```
data "azuread_users" "users" {
  user_principal_names = ["kat@hashicorp.com", "byte@hashicorp.com"]
}
```

#### » Argument Reference

The following arguments are supported:

- user\_principal\_names (optional) The User Principal Names of the Azure AD Users.
- object\_ids (Optional) The Object IDs of the Azure AD Users.
- mail\_nicknames (Optional) The email aliases of the Azure AD Users.

**NOTE:** Either user\_principal\_names, object\_ids or mail\_nicknames must be specified.

#### » Attributes Reference

The following attributes are exported:

• object\_ids - The Object IDs of the Azure AD Users.

- user\_principal\_names The User Principal Names of the Azure AD Users
- mail\_nicknames The email aliases of the Azure AD Users.

## » 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 owned by applications and Sign in and read user profile within the Windows Azure Active Directory API.

### » Example Usage

```
resource "azuread_application" "example" {
                            = "example"
 name
                            = "https://homepage"
 homepage
  identifier_uris
                            = ["https://uri"]
                            = ["https://replyurl"]
 reply_urls
 available_to_other_tenants = false
  oauth2_allow_implicit_flow = true
                             = "webapp/api"
  type
 required_resource_access {
   resource_app_id = "00000003-0000-0000-c000-00000000000"
   resource_access {
     id = "..."
      type = "Role"
   resource_access {
     id = "..."
      type = "Scope"
    }
   resource_access {
     id = "..."
      type = "Scope"
   }
 }
 required_resource_access {
   resource_app_id = "00000002-0000-0000-c000-00000000000"
```

```
resource_access {
   id = "..."
   type = "Scope"
}

app_role {
   allowed_member_types = [
    "User",
    "Application",
]

description = "Admins can manage roles and perform all task actions"
   display_name = "Admin"
   is_enabled = true
   value = "Admin"
}
```

### » 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.
- public\_client (Optional) Is this Azure AD Application a public client? Defaults to false.
- oauth2\_allow\_implicit\_flow (Optional) Does this Azure AD Application allow OAuth2.0 implicit flow tokens? Defaults to false.
- group\_membership\_claims (Optional) Configures the groups claim issued in a user or OAuth 2.0 access token that the app expects. Defaults to SecurityGroup. Possible values are None, SecurityGroup or All.

- required\_resource\_access (Optional) A collection of required\_resource\_access blocks as documented below.
- type (Optional) Type of an application: webapp/api or native. Defaults to webapp/api. For native apps type identifier\_uris property can not not be set.
- app\_role (Optional) A collection of app\_role blocks as documented below. For more information https://docs.microsoft.com/en-us/azure/ architecture/multitenant-identity/app-roles

## required\_resource\_access supports the following:

- resource\_app\_id (Required) The unique identifier for the resource that the application requires access to. This should be equal to the appld declared on the target resource application.
- resource\_access (Required) A collection of resource\_access blocks as documented below.

#### resource\_access supports the following:

- id (Required) The unique identifier for one of the OAuth2Permission or AppRole instances that the resource application exposes.
- type (Required) Specifies whether the id property references an OAuth2Permission or an AppRole. Possible values are Scope or Role.

#### app\_role supports the following:

- id The unique identifier of the app\_role.
- allowed\_member\_types (Required) Specifies whether this app role definition can be assigned to users and groups by setting to User, or to other applications (that are accessing this application in daemon service scenarios) by setting to Application, or to both.
- description (Required) Permission help text that appears in the admin app assignment and consent experiences.
- display\_name (Required) Display name for the permission that appears in the admin consent and app assignment experiences.
- is\_enabled (Optional) Determines if the app role is enabled: Defaults to true.
- value (Optional) Specifies the value of the roles claim that the application should expect in the authentication and access tokens.

#### » Attributes Reference

The following attributes are exported:

- application\_id The Application ID.
- object\_id The Application's Object ID.
- oauth2\_permissions A collection of OAuth 2.0 permission scopes that the web API (resource) app exposes to client apps. Each permission is covered by a oauth2\_permission block as documented below.

oauth2\_permission block exports the following:

- id The unique identifier for one of the OAuth2Permission.
- type The type of the permission.
- admin\_consent\_description The description of the admin consent.
- admin\_consent\_display\_name The display name of the admin consent.
- is\_enabled Is this permission enabled?
- user\_consent\_description The description of the user consent.
- user\_consent\_display\_name The display name of the user consent.
- $\bullet\,$  value The name of this permission.

#### » Import

# » azuread\_application\_password

Manages a Password associated with an Application within Azure Active Directory.

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

## » Example Usage

```
resource "azuread_application" "example" {
                             = "example"
  name
 homepage
                             = "http://homepage"
                             = ["http://uri"]
 identifier_uris
                             = ["http://replyurl"]
 reply_urls
  available to other tenants = false
  oauth2_allow_implicit_flow = true
}
resource "azuread_application_password" "example" {
  application_id = "${azuread_application.example.id}"
               = "VT=uSgbTanZhyz@%nL9Hpd+Tfay_MRV#"
  end_date
                = "2020-01-01T01:02:03Z"
}
```

## » Argument Reference

The following arguments are supported:

- application\_object\_id (Required) The Object ID of the Application for which this password should be created. Changing this field forces a new resource to be created.
- value (Required) The Password for this Application .
- end\_date (Optional) 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.
- end\_date\_relative (Optional) A relative duration for which the Password is valid until, for example 240h (10 days) or 2400h30m. Changing this field forces a new resource to be created.

**NOTE:** One of end\_date or end\_date\_relative must be set.

- key\_id (Optional) A GUID used to uniquely identify this Password. 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 Password.

## » Import

Passwords can be imported using the object id of an Application, e.g.

terraform import azuread\_application\_password.test 00000000-0000-0000-0000-00000000000/1112

**NOTE:** This ID format is unique to Terraform and is composed of the Application's Object ID and the Password's Key ID in the format {ObjectId}/{PasswordKeyId}.

## » azuread\_group

Manages a Group within Azure Active Directory.

NOTE: If you're authenticating using a Service Principal then it must have permissions to Read and write all groups within the Windows Azure Active Directory API. In addition it must also have either the Company Administrator or User Account Administrator Azure Active Directory roles assigned in order to be able to delete groups. You can assign one of the required Azure Active Directory Roles with the AzureAD PowerShell Module, which is available for Windows PowerShell or in the Azure Cloud Shell. Please refer to this documentation for more details.

## » Example Usage

```
Basic example
resource "azuread_group" "example" {
  name = "A-AD-Group"
}

A group with members
resource "azuread_user" "example" {
  display_name = "J Doe"
  password = "notSecure123"
  user_principal_name = "j.doe@terraform.onmicrosoft.com"
}
resource "azuread_group" "example" {
```

```
name = "MyGroup"
members = [ "${azuread_user.example.object_id}" /*, more users */ ]
}
```

## » Argument Reference

The following arguments are supported:

- name (Required) The display name for the Group. Changing this forces a new resource to be created.
- members (Optional) A set of members who should be present in this Group. Supported Object types are Users, Groups or Service Principals.
- owners (Optional) A set of owners who own this Group. Supported Object types are Users or Service Principals.

**NOTE:** Group names are not unique within Azure Active Directory.

**NOTE:** Do not use azuread\_group\_member at the same time as the members argument.

**NOTE:** Do not use azuread\_group\_owner at the same time as the owners argument.

#### » Attributes Reference

The following attributes are exported:

- id The Object ID of the Group.
- name The Display Name of the Group.
- members The Members of the Group.
- owners The Members of the Group.

#### » Import

## » azuread\_group\_member

Manages a single Group Membership within Azure Active Directory.

NOTE: Do not use this resource at the same time as azuread\_group.members.

## » Example Usage

```
data "azuread_user" "example" {
   user_principal_name = "jdoe@hashicorp.com"
}

resource "azuread_group" "example" {
   name = "my_group"
}

resource "azuread_group_member" "example" {
   group_object_id = "${azuread_group.example.id}"
   member_object_id = "${data.azuread_user.example.id}"
}
```

### » Argument Reference

The following arguments are supported:

- group\_object\_id (Required) The Object ID of the Azure AD Group you want to add the Member to. Changing this forces a new resource to be created.
- member\_object\_id (Required) The Object ID of the Azure AD Object you want to add as a Member to the Group. Supported Object types are Users, Groups or Service Principals. Changing this forces a new resource to be created.

**NOTE:** The Member object has to be present in your Azure Active Directory, either as a Member or a Guest.

#### » Attributes Reference

The following attributes are exported:

• id - The ID of the Azure AD Group Member.

#### » Import

Azure Active Directory Group Members can be imported using the object id, e.g.

terraform import azuread\_group\_member.test 00000000-0000-0000-0000-00000000000/member/1111

**NOTE:** This ID format is unique to Terraform and is composed of the Azure AD Group Object ID and the target Member Object ID in the format {GroupObjectID}/member/{MemberObjectID}.

## » 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. Please see The Granting a Service Principal permission to manage AAD for the required steps.

## » Example Usage

```
resource "azuread_application" "example" {
                             = "example"
 name
                             = "http://homepage"
 homepage
  identifier_uris
                             = ["http://uri"]
 reply_urls
                             = ["http://replyurl"]
 available_to_other_tenants = false
  oauth2_allow_implicit_flow = true
}
resource "azuread_service_principal" "example" {
                               = "${azuread_application.example.application_id}"
  application_id
  app_role_assignment_required = false
 tags = ["example", "tags", "here"]
```

#### » Argument Reference

The following arguments are supported:

- application\_id (Required) The ID of the Azure AD Application for which to create a Service Principal.
- app\_role\_assignment\_required (Optional) Does this Service Principal require an AppRoleAssignment to a user or group before Azure AD will issue a user or access token to the application? Defaults to false.
- tags (Optional) A list of tags to apply to the Service Principal.

#### » Attributes Reference

The following attributes are exported:

- id The Object ID (internal ID) for the Service Principal.
- application\_id The Application ID (appId) for the Service Principal.
- object\_id The Service Principal's Object ID.
- display\_name The Display Name of the Azure Active Directory Application associated with this Service Principal.
- app\_role\_assignment\_required Whether this Service Principal requires an AppRoleAssignment to a user or group before Azure AD will issue a user or access token to the application.
- oauth2\_permissions A collection of OAuth 2.0 permissions exposed by the associated application. Each permission is covered by a oauth2\_permission block as documented below.

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oauth2\_permission block exports the following:

- id The unique identifier for one of the OAuth2Permission.
- type The type of the permission.
- admin\_consent\_description The description of the admin consent.
- admin\_consent\_display\_name The display name of the admin consent.
- is\_enabled Is this permission enabled?
- user\_consent\_description The description of the user consent.
- user\_consent\_display\_name The display name of the user consent.
- value The name of this permission.

### » Import

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

# » 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 "azuread_application" "example" {
                             = "example"
  name
 homepage
                             = "http://homepage"
                             = ["http://uri"]
 identifier_uris
                             = ["http://replyurl"]
 reply_urls
  available to other tenants = false
  oauth2_allow_implicit_flow = true
}
resource "azuread_service_principal" "example" {
  application_id = "${azuread_application.example.application_id}"
}
resource "azuread_service_principal_password" "example" {
  service_principal_id = "${azuread_service_principal.test.id}"
                      = "VT=uSgbTanZhyz@%nL9Hpd+Tfay_MRV#"
  value
                       = "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 (Optional) 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.
- end\_date\_relative (Optional) A relative duration for which the Password is valid until, for example 240h (10 days) or 2400h30m. Valid time units are "ns", "us" (or "µs"), "ms", "s", "m", "h". Changing this field forces a new resource to be created.

**NOTE:** One of end\_date or end\_date\_relative must be set.

- 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}.

## » azuread user

Manages a User within Azure Active Directory.

**NOTE:** If you're authenticating using a Service Principal then it must have permissions to Directory.ReadWrite.All within the Windows Azure Active Directory API.

#### » Example Usage

```
resource "azuread_user" "example" {
  user_principal_name = "jdo@hashicorp.com"
  display_name = "J. Doe"
  mail_nickname = "jdoe"
  password = "SecretP@sswd99!"
}
```

## » Argument Reference

The following arguments are supported:

 user\_principal\_name - (Required) The User Principal Name of the Azure AD User.

- display\_name (Required) The name to display in the address book for the user.
- account\_enabled (Optional) true if the account should be enabled, otherwise false. Defaults to true.
- mail\_nickname- (Optional) The mail alias for the user. Defaults to the user name part of the User Principal Name.
- password (Required) The password for the User. The password must satisfy minimum requirements as specified by the password policy. The maximum length is 256 characters.
- force\_password\_change (Optional) true if the User is forced to change the password during the next sign-in. Defaults to false.
- usage\_location (Optional) The usage location of the User. Required for users that will be assigned licenses due to legal requirement to check for availability of services in countries. The usage location is a two letter country code (ISO standard 3166). Examples include: NO, JP, and GB. Cannot be reset to null once set.

#### » Attributes Reference

The following attributes are exported:

- object\_id The Object ID of the Azure AD User.
  - id The Object ID of the Azure AD User.
  - mail The primary email address of the Azure AD User.

## » Import

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