**Using a Service Principal (for automation / pipelines)**

1. Create a service principal:

az ad sp create-for-rbac --name "TerraformSP" --role Contributor \

--scopes /subscriptions/<subscription-id>

Output will look like:

{

"appId": "...",

"displayName": "TerraformSP",

"password": "...",

"tenant": "..."

}

1. Configure Terraform to use it:

provider "azurerm" {

features {}

client\_id = "<appId>"

client\_secret = "<password>"

tenant\_id = "<tenant>"

subscription\_id = "<subscription-id>"

}

1. Or you can set **environment variables** instead (secure way for pipelines):

export ARM\_CLIENT\_ID="appId"

export ARM\_CLIENT\_SECRET="password"

export ARM\_SUBSCRIPTION\_ID="subscription-id"

export ARM\_TENANT\_ID="tenant"

Terraform will automatically pick these up.