

# Introduction to Terraform with Azure

Get to grips with using Terraform to deploy Azure resources.

## Overview

This is a set of short labs to introduce you to the Terraform workflow, the basics of the HCL2 file format and where to find documentation for the azure provider types.

The labs are based on the Terraform v1.x and azure provider v3.x.

## Pre-reqs

Everything will be run within the bash version of the Azure Cloud Shell which already has Terraform installed and maintained for you, so all you need for these labs is an active Azure subscription – provided by your Instructor .

### Initialise - Lab 1.0

Use ``terraform init`` to initialise a terraform environment, downloading providers and modules.

### Format – Lab 1.1

Create a `variables.tf` and `main.tf`. Use ``terraform fmt`` to automatically format the files.

### Validate – Lab 1.2

Use ``terraform validate`` to confirm that the files are syntactically and logically sound. Add a new variable to `variables.tf`.

### Plan – Lab 1.3

Start working with `terraform.tfvars` to specify your variable values and then use ``terraform plan`` to display the actions that Terraform will take.

### Apply – Lab 1.4

Apply your configuration to create resources and then examine the state file.

## **Adding resources – Lab 1.5**

Use the `azurerm` documentation to add a resource to your configuration.

## **Locals and outputs – Lab 1.6**

Use locals and functions to generate a unique value, and add a couple of outputs.

## **Managing state – Lab 1.7**

Common lifecycle management areas that deal with state with refresh, ignore, move and taint.

## **Importing resources – Lab 1.8**

Step through an example of importing an existing resource into Terraform.

## **Destroy – Lab 1.9**

Short lab to tear down the environment.