**Terraform Configuration Steps**

**Sources:**

**Hashi Corp Introduction to Terraform:** [**https://developer.hashicorp.com/terraform/intro**](https://developer.hashicorp.com/terraform/intro)

**Hashi Corp Getting Started with Azure:** [**https://developer.hashicorp.com/terraform/tutorials/azure-get-started**](https://developer.hashicorp.com/terraform/tutorials/azure-get-started)

**Hashi Corp Azure Provider Registry Documentation: https://registry.terraform.io/providers/hashicorp/azurerm/latest/docs**

**Udemy: Alan Rodriguez – Azure Infrastructure with Terraform:** [**https://www.udemy.com/share/106ENQ3@tPJMWulAzYAf9rKtgDvw\_SGdO2-HsqWD\_dWNUGXDNgYATTJ\_FhEjI2MMn3UbOqnH/**](https://www.udemy.com/share/106ENQ3@tPJMWulAzYAf9rKtgDvw_SGdO2-HsqWD_dWNUGXDNgYATTJ_FhEjI2MMn3UbOqnH/)

**Terraform Installation for Windows**

* Download Windows Terraform File: [Install | Terraform | HashiCorp Developer](https://developer.hashicorp.com/terraform/install)
  + Unzip and copy Terraform file to new directory
* Download Visual Studio Code: [Download Visual Studio Code - Mac, Linux, Windows](https://code.visualstudio.com/download)

**Configuration**

* Install Azure Terraform Extension for VS Code
* Get Provider code from Provider Registry Documentation
* Create new App Registration in Entra ID authorizing Terraform to create resources in tenant
  + Add Subscription ID, Client ID, and App Secret to provider configuration
* Solution consists of two files (locals.tf & coalfire\_tech\_challenge.tf)

**Issues**

* Within the tenant there the address space for 10.0.0.0/16 was used so I went with 10.1.0.0/16
* Unable to obtain solution script installation of Apache to VM3 within allotted time. I tried a few examples from various GitHub instructions and a few videos but it seems the examples are out of date syntax wise. I also could not find syntax examples from the official Hashicorp documentation. With more time, I could have trial and errored it thru leveraging IntelliSense 😉.
* With SSH only allowing traffic from internal VNET and no public IP, I configured a Bastion instance in order to access a sub 1 instance as outlined in the instructions.
* A VM with 32GB Disk seems to not be possible to create for sub3 VM DS1\_V2 (errored out)

**Terminal Screenshot on VM1**

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