TerraTest Installation

Step-by-step guide on how to install and configure Terratest and the AWS SDK in a Go environment:

1. Install Go:
   1. Download and install the latest version of Go from the official Go website ([https://golang.org/dl/). ↗](https://golang.org/dl/).)
   2. Follow the installation instructions specific to your operating system.
2. Set up your Go workspace:
   1. Create a directory to serve as your Go workspace. This directory will typically have the following structure:

**/workspace**

**|- /src**

**|- /bin**

**|- /pkg**

Set the GOPATH environment variable to point to your workspace directory. For example, if your workspace directory is /Users/yourusername/workspace, you can set the GOPATH variable by adding the following line to your shell profile (e.g., .bash\_profile or .bashrc):

**export GOPATH="/Users/yourusername/workspace"**

Add the Go bin directory to your PATH environment variable. Add the following line to your shell profile:

**export PATH="$PATH:$GOPATH/bin"**

1. Install Terratest:

* Open a terminal or command prompt and navigate to your Go workspace directory.
* Run the following command to install Terratest:

**go get github.com/gruntwork-io/terratest/modules/terraform**

1. Install the AWS SDK:

* Run the following command to install the AWS SDK for Go:

**go get github.com/aws/aws-sdk-go**

1. Set up AWS credentials:

* Obtain your AWS access key ID and secret access key. You can generate them in the AWS Management Console by going to "My Security Credentials" under your account name.
* Run the following command to configure your AWS credentials:

**aws configure**

* Enter your AWS access key ID, secret access key, default region name, and default output format when prompted.

1. Verify the installation:

* To ensure that Terratest and the AWS SDK are installed correctly, create a new Go file (e.g., test\_setup.go) and paste the following code:

**package main**

**import (**

**"fmt"**

**"github.com/aws/aws-sdk-go/aws/session"**

**"github.com/gruntwork-io/terratest/modules/aws"**

**)**

**func main() {**

**sess, err := session.NewSessionWithOptions(session.Options{**

**SharedConfigState: session.SharedConfigEnable,**

**})**

**if err != nil {**

**fmt.Println("Failed to create AWS session:", err)**

**return**

**}**

**vpcs, err := aws.GetVpcIdsE(sess, nil)**

**if err != nil {**

**fmt.Println("Failed to get VPCs:", err)**

**return**

**}**

**fmt.Println("VPC IDs:")**

**for \_, vpc := range vpcs {**

**fmt.Println(vpc)**

**}**

**}**

* Save the file and run the following command in the same directory:

**go run test\_setup.go**

* If everything is configured correctly, it should list the VPC IDs associated with your AWS account.