Day 9 - IAAC

ARM TEMPLATE [BICEP]

- You define your infrastructure.
- You user Azure Resource Manager Template.
- .json fromat.
- You can store your ARM in your source code or any storage of your choice and link it with your release pipeline.

Demo - ARM - WebApp

1. We will use the same dotnet 8.0 app that we have been playing with.
2. Using the ARM template we will deploy the WebApps from the release pipeline itself.
3. Followed up by our CI/CD.

- Web App
  - WebApp itself
  - Web App Service Plan

4. Next I need the ARM template to be installed on my VS CODE.
5. Deploy the code on azure portal using the templates.

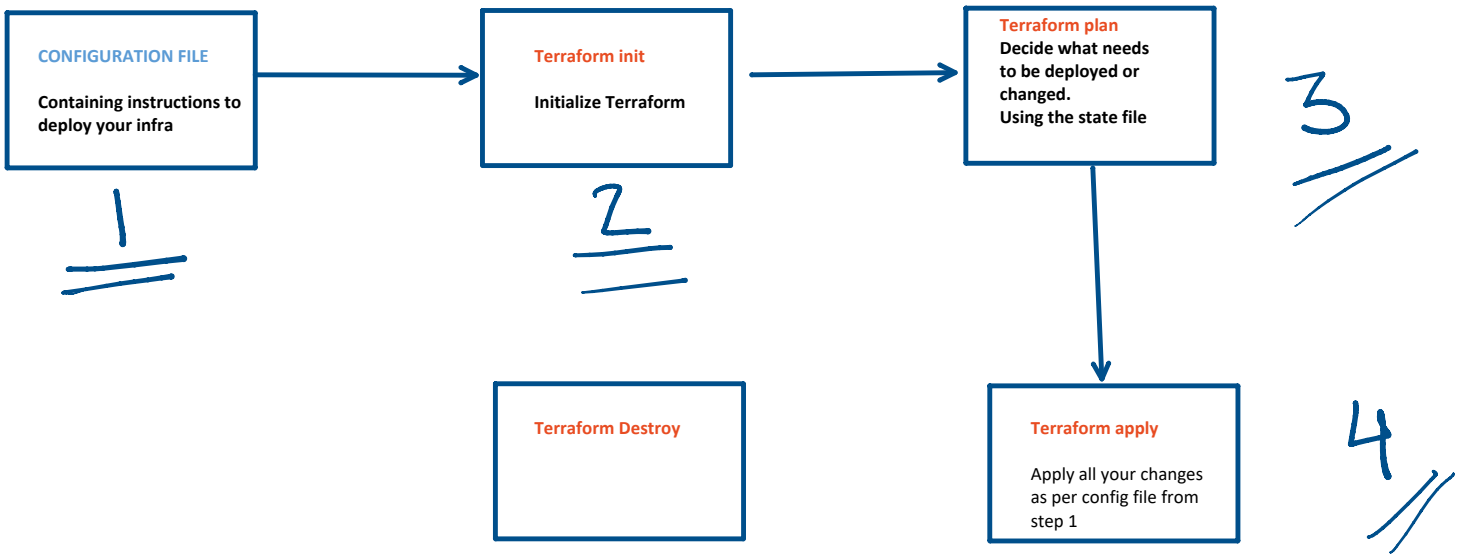
Demo - ARM Release Pipeline

- We have the IAAC code ready to deploy the webapp.
- Inside my solutions folder I will create a folder "Manifest" and put my IAAC for WebApp inside it.
- Push the code to azure repos.

Terraform

- IAAC tool.
- Hashicorp.
- Open source tool.

4 Important Steps in Terraform



Terraform Install

Install terraform.

Add terraform path folder in the environment variable in control panel.

Demo Terraform - Manual

1. Created a .tf file on my visual studio.
2. Added the important Values -

```
subscription_id = "f7d5015d-9293-4898-9641-ff73bf16b7fc"
tenant_id = "6d64142b-0352-4747-a98a-1c6a474c044c"
client_id = "3af03289-c89c-4e80-9a59-c0943db1e43e"
client_secret = "I.58Q~dRerlqGV1zqDcKCMFnPmlw9k.JYLFSpb54"
```

3. We registered terraform in app registration copied the values..
4. Add contributor role in IAM for terraform application that you just added.