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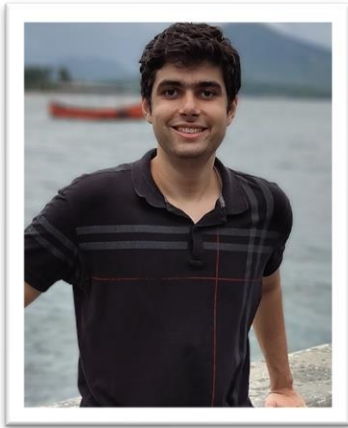


Automating configuration on FMC using FMC-Terraform Provider

Cisco Live Melbourne 2024

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GitHub: @kadadhic
DEVNET-2313

Know your speaker



Karmanya Dadhich (KD)
Technical Marketing Engineer

- Based out of Bengaluru, India
- Handles virtual firewalls and everything automation
- Enjoys
 - Food
 - Sleeping
 - Cricket

Cisco Webex App

Questions?

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How

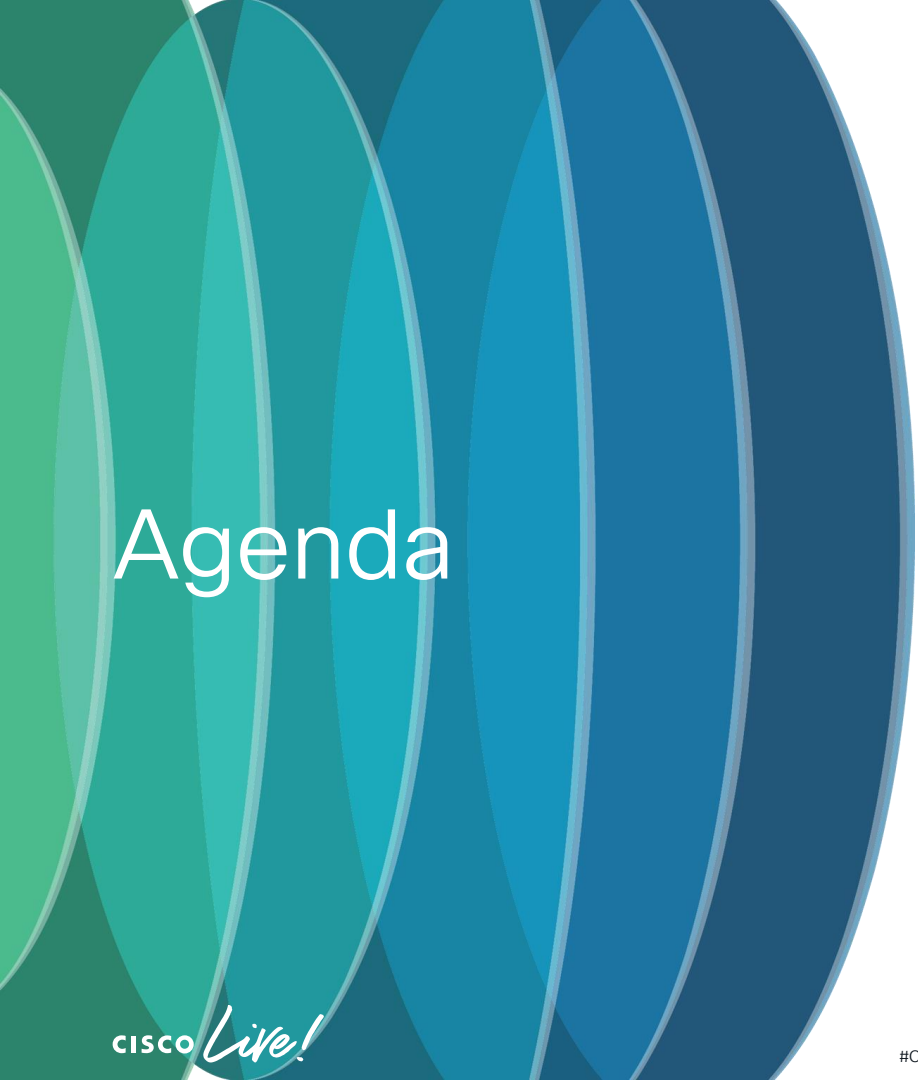
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Agenda

- Introduction
- What is Terraform?
- Demo
- Terraform v/s others
- Conclusion

How many hours are going into managing firewalls?

Introduction

What is Terraform?

Problem

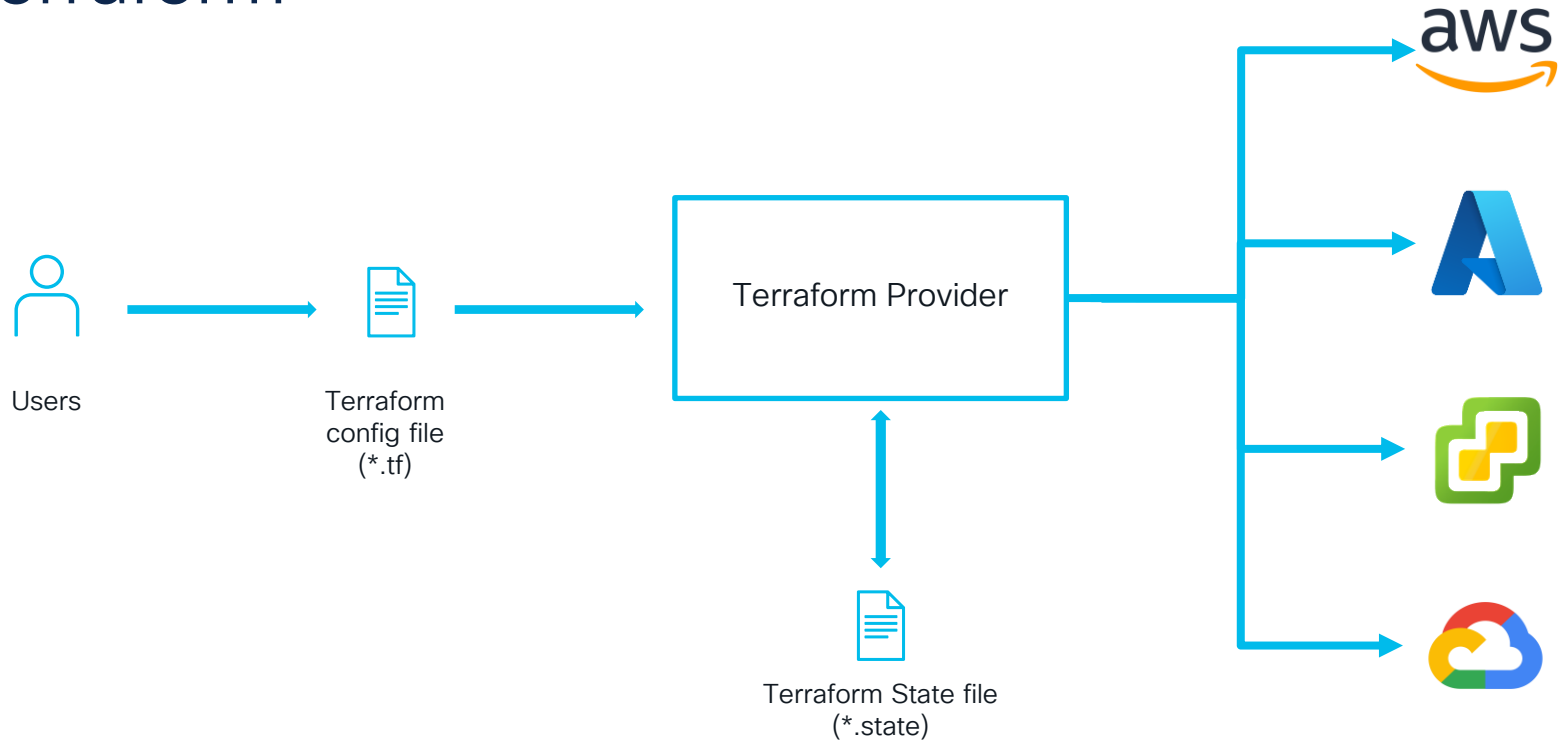
Manually configuring firewall is time-consuming, error-prone, and needs more consistency. Customers need a better way to manage their CI/CD pipeline

Solution

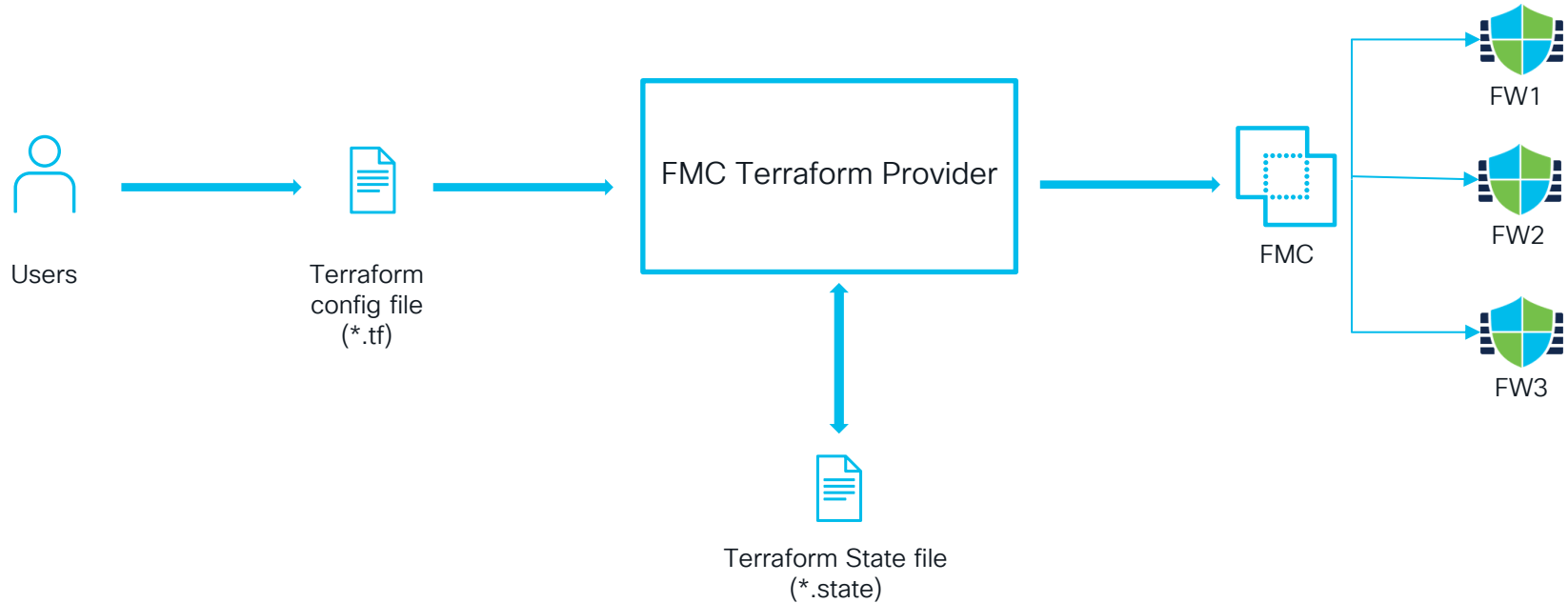
Automate firewall deployment & configuration using Terraform



Terraform

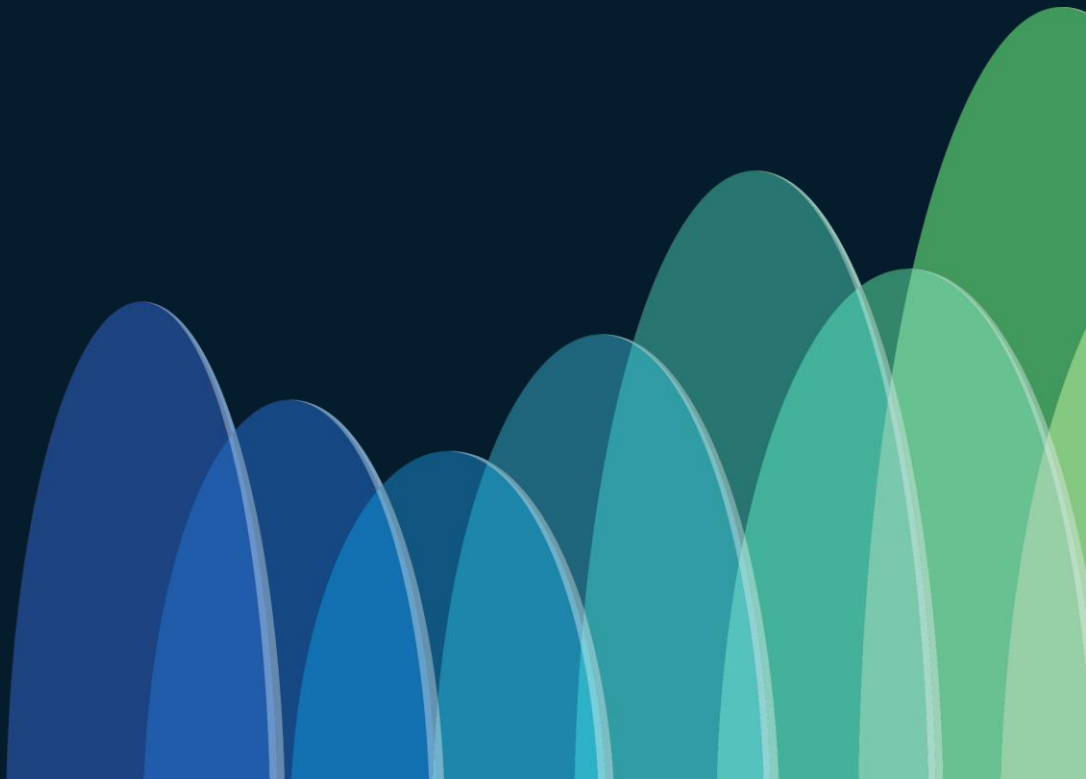


Terraform



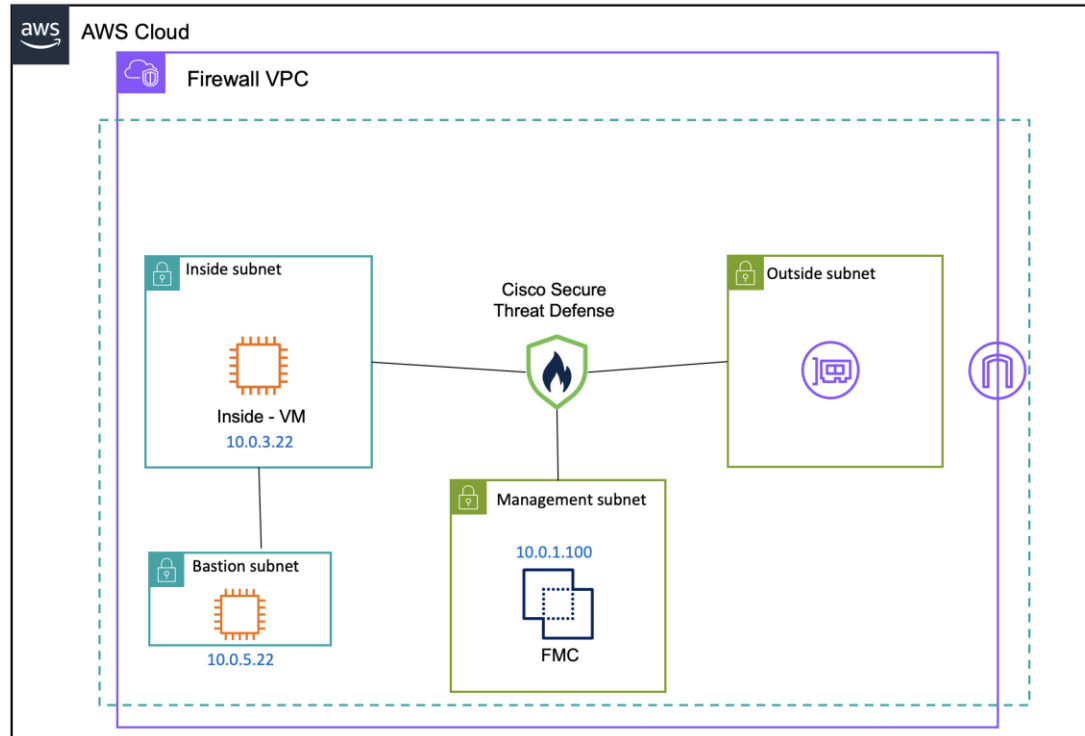
DEMO

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Aim

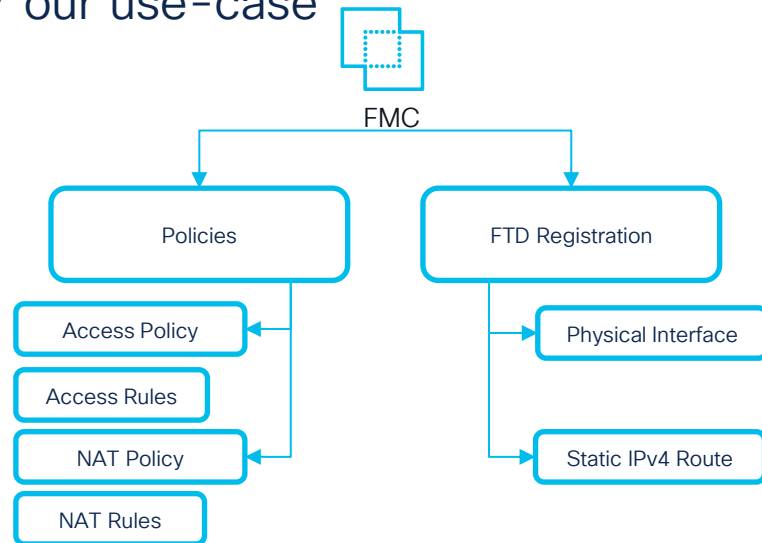
Provide internet access to the inside machine



FMC Configuration

List of things that will be configured on FMC for our use-case

1. Smart License
2. Cisco Threat Defense Registration
3. Access Policy and Access Rules
4. Host & Network Objects
5. Physical Interfaces
6. Static IPv4 Route
7. NAT Policy and NAT Rules
8. Deployment to firewall



terraform init
terraform apply

Why Terraform?

1. Declarative in nature and not procedural
2. It does not require agents
3. Creates mutable infrastructure
4. Supports deletion of any resource
5. Detailed lifecycle management

Conclusion

1. Great for configuration management
2. Saves time and human effort
3. Useful in quick demo setups
4. Less error prone
5. Makes POC and test drives easier

Continue your education



- [DevNet Learning Lab](#)
- Link to the code: [GitHub](#)
- [Video](#) Tutorial on FMC Terraform Provider
- [FMC Terraform Provider](#)
- [FMC Open API](#)
- Visit the On-Demand Library for more sessions at www.CiscoLive.com/on-demand

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Thank you

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