

A high-resolution image of Earth from space, showing the continents of Africa and Europe. The Earth is illuminated from the right, creating a bright blue glow along its horizon. The background is a deep black space filled with numerous small, distant stars.

# SAP BTP AUTOMATION WITH TERRAFORM

by Mauricio Lauffer

# INFRASTRUCTURE AS CODE (IAC)

- Manages IT infrastructure in a human-readable configuration file (source code);
- Uses git repositories to host and track source code versions;
- Automates IT infrastructure provisioning;
- Ensures the same environment is generated every time;
- Is a key DevOps practice;
- Increases speed, reduces costs and minimizes risks when provisioning IT infrastructure;

# TERRAFORM

- Is a free open-source IaC tool provided by HashiCorp;
- Is the defacto standard in the IaC area;
- Is platform-agnostic, can manage multi-cloud and on-premise resources;
- Manages configuration drift;
- Can be extended via plugins (called providers);
- Providers can be found in Terraform Registry;

# TERRAFORM USE CASES FOR SAP BTP

- Managing Cloud Foundry (CF) environment;
- Managing Kyma (Kubernetes) environment;
- Real automation and reusability;
- Configuration drift;
- Auto-generating disposable environments;
- Advanced CI/CD pipelines;

# TERRAFORM LIMITATIONS IN SAP BTP

- No specific Terraform providers for SAP BTP;
- No support for Global Account and Subaccount operations;
- No support for Entitlements;
- No support for Role Collections;

\* Don't worry, Terraform Provisioners can help here, wait for the demo :)

# SAP BTP AUTOMATION TODAY

- SAP BTP Boosters
  - It's manual ͇\_(ツ)\_/͇
- SAP Automation Pilot
  - SAP BTP only, a bit hard to use, not CI/CD friendly
- SAP BTP Setup Automator
  - SAP BTP only, ultra complicated, very limited, not CI/CD friendly

# DEMO

- AWS S3 bucket + log
- Managing SAP BTP Cloud Foundry spaces
- Create SAP BTP Subaccount
- Managing SAP BTP Trial account
- Google Bard and ChatGPT generating Terraform scripts

# THANK YOU

- [Automating SAP BTP setup with Terraform – Infrastructure as Code for Cloud Foundry and Kyma Environments](#)
- [Automating SAP BTP setup with Terraform – A workaround for Global Account, Directories and Subaccounts with btp CLI](#)
- [btp CLI](#)
- [Terraform use cases](#)
- [Terraform Cloud Foundry Provider](#)
- [SAP Inside Track Brisbane – Terraform templates](#)