# API Driven Workflows

# Hello!

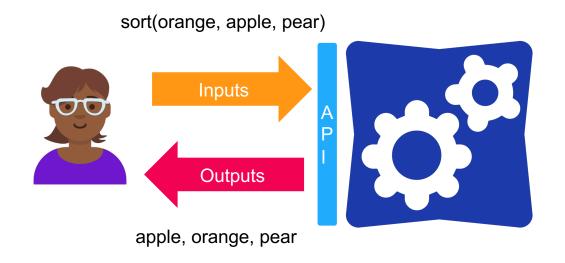
## **API Driven Workflows**

Orchestrating the process of creating and maintaining infrastructure by leveraging APIs to perform actions.



An Application Programming Interface is a way to interact with software using well-defined instructions. Using APIs enables the automation of manual tasks.

# Application Programming Interfaces (APIs)



# Types of APIs







RPC

**REST** 

GraphQL

# **API Interaction**



Direct access



**Graphical Interface** 



Precompiled tools



Software development kits



# Software Development Kits

#### **Use Common Tools**

Leverage all the common programming tools like testing, linting, and scanning.

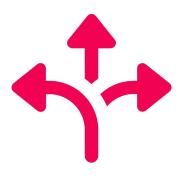
#### **General Purpose Language**

SDKs provide libraries for general purpose programming languages to use.

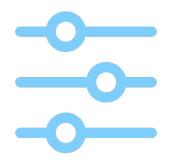
#### Multiple APIs

A single SDK can stitch together multiple APIs into a unified library.

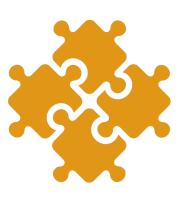
# API Driven Workflow Benefits







Customization



Integration





HashiCorp Terraform

### APIs in Terraform

**Terraform Providers** 

**Terraform Cloud** 

Written in Go

Target SDK or API

Public API

Provider in Terraform

Web Interface

Integrations

### Terraform Cloud Workflows



Command line interface



Version control system



Application programming interface

# API Workflow



Most complicated and flexible

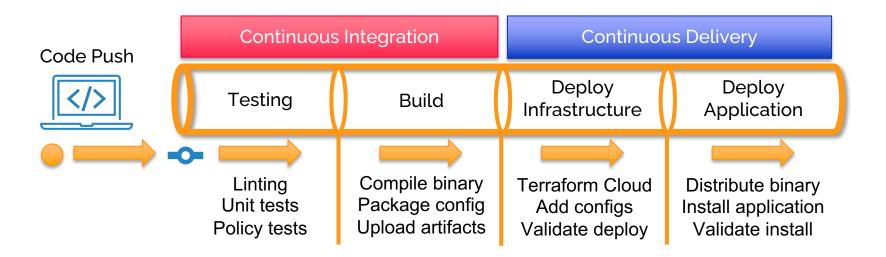


Bundle configurations in tarball



Relies on external orchestration

## API Workflow



# Summary

- Application programming interfaces are a contract between the client and the app
- APIs can be used in an automation workflow to interact with other services and applications
- Terraform Cloud and Enterprise have APIs that can integrate with your existing workflow



#### Diagrams and infographics

