WF-02: Setup - CI/CD Harness & Terraform Scripting

Updates

	Last Update	Jira Ticket	Author	Details
1	02 Jan 2024	EUAP-8087	Shah, Sanjay	
2				

Overview

This page is to describe the pipeline in Harness CI/CD https://www.harness.io/ to deploy the Enterprise API Gateway infrastructure on the Experian AWS account.
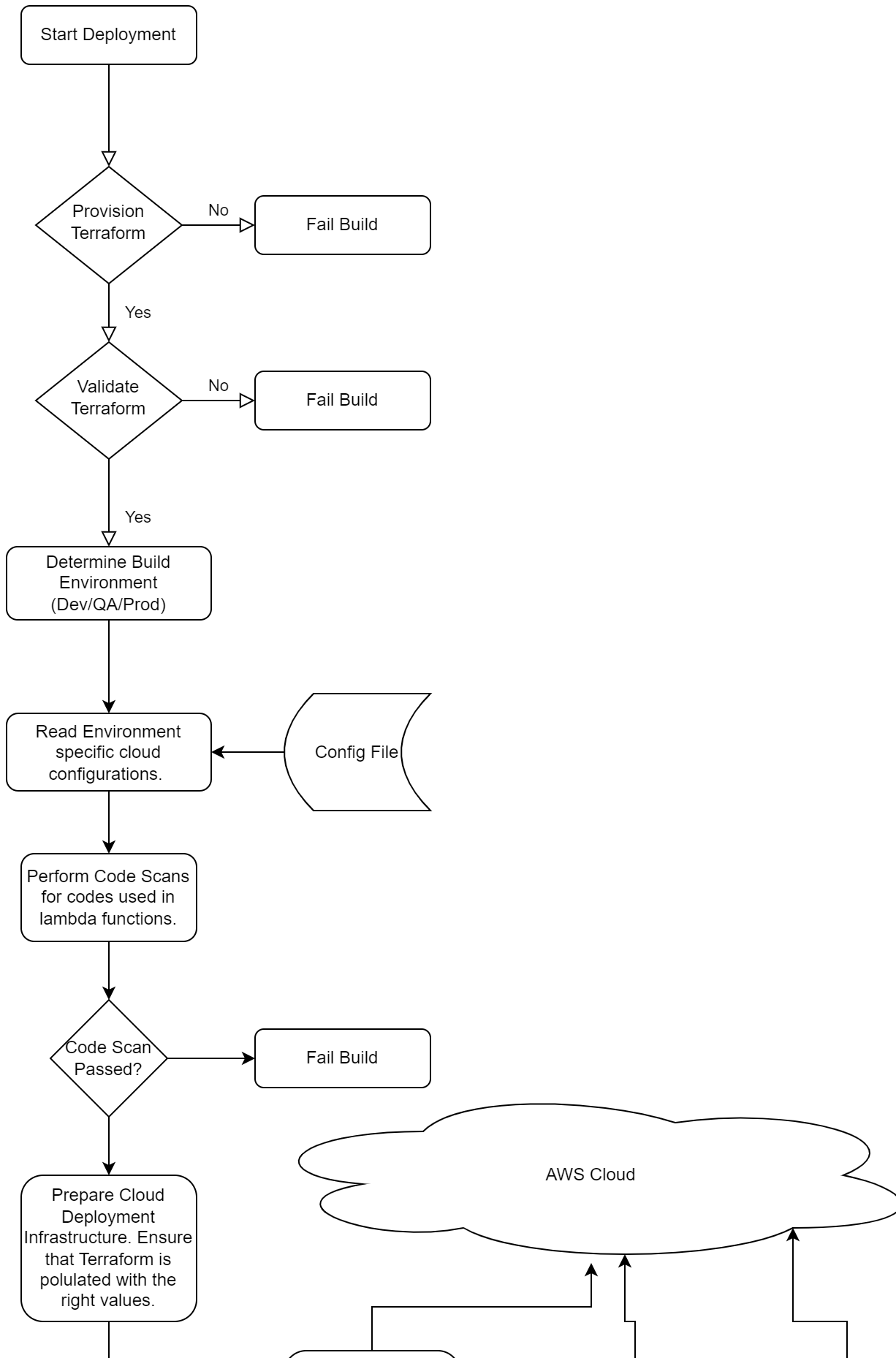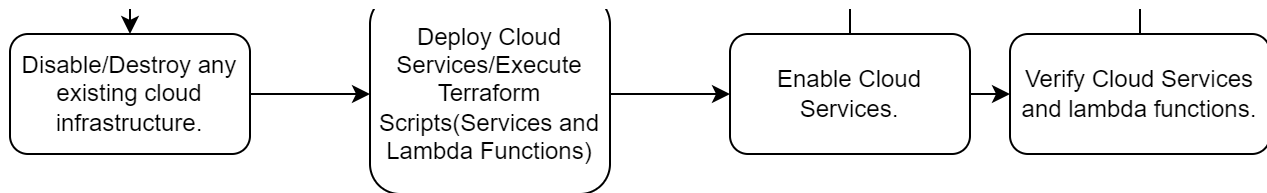
Sequence Diagram
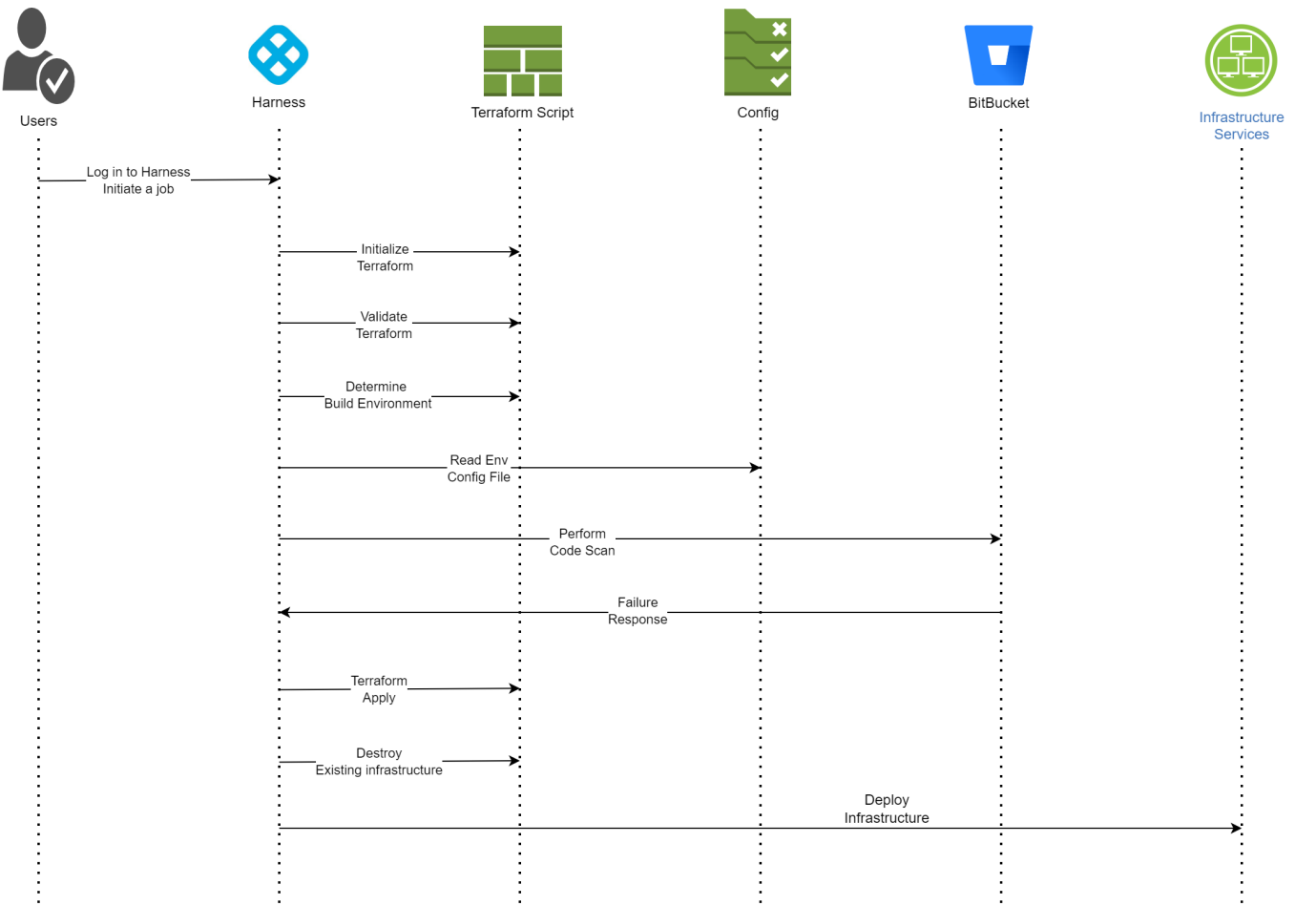
Sequence Details

1. Users
    a. Log in to Harness to initiate a job:

2. Harness
   a. Initialize Terraform
   b. Validate Terraform
   c. ...
3. ...

Flow Diagram

```
┌──────────────────┐
│ Start Deployment │
└──────────────────┘
         │
         ▼
      ◇ Provision
        Terraform ◇ ──── No ───▶ ┌────────────┐
                                 │ Fail Build │
                                 └────────────┘
         │
        Yes
         │
         ▼
      ◇ Validate
        Terraform ◇ ──── No ───▶ ┌────────────┐
                                 │ Fail Build │
                                 └────────────┘
         │
        Yes
         │
         ▼
┌──────────────────┐
│ Determine Build  │
│ Environment      │
│ (Dev/QA/Prod)    │
└──────────────────┘
         │
         ▼
┌──────────────────┐        ┌──────────────┐
│ Read Environment │◀───────│ Config File  │
│ specific cloud   │        └──────────────┘
│ configurations.  │
└──────────────────┘
         │
         ▼
┌──────────────────┐
│ Perform Code Scans│
│ for codes used in │
│ lambda functions. │
└──────────────────┘
         │
         ▼
      ◇ Code Scan
        Passed? ◇ ──────────▶ ┌────────────┐
                              │ Fail Build │
                              └────────────┘
         │
         ▼
┌──────────────────┐
│ Prepare Cloud    │
│ Deployment       │
│ Infrastructure. Ensure│
│ that Terraform is│
│ polulated with the│
│ right values.    │
└──────────────────┘
```

AWS Cloud

```
┌──────────────────┐      ┌──────────────────┐      ┌──────────────────┐      ┌──────────────────┐
│ Disable/Destroy  │      │  Deploy Cloud    │      │                  │      │ Verify Cloud     │
│ any existing     │─────▶│  Services/Execute│─────▶│ Enable Cloud     │────▶│ Services         │
│ cloud            │      │  Terraform       │      │ Services.        │      │ and lambda       │
│ infrastructure.  │      │  Scripts(Services│      │                  │      │ functions.       │
│                  │      │  and Lambda      │      │                  │      │                  │
│                  │      │  Functions)      │      │                  │      │                  │
└──────────────────┘      └──────────────────┘      └──────────────────┘      └──────────────────┘
```

Flow Diagram Details

1. Start Deployment:
2. Provision Terraform:
3. ...