

01 - Creación de un Pipeline Declarativo básico de CI

a. Codificación del pipeline:

```
pipeline {
  agent any
  environment {
    PASS_QUALITY_GATE = 'False'
  }
  stages {
    stage('Checkout') {
      steps {
        cleanWs()
        echo 'Checking out'
        git credentialsId: 'e9b5c362-f040-4029-b41f-7e0b64015e87',
url: 'git@localhost:threepoints/docker-vulnerable-dvwa.git'
      }
    }
    stage('Pruebas de SAST'){
      steps {
        script {
          if (PASS_QUALITY_GATE == 'True') {
            echo 'Pasa las pruebas de SonarQube'
          } else {
            echo 'No pasa las pruebas de SonarQube'
            sh 'make fail'
          }
        }
      }
    }
    stage('Build'){
      steps{
        sh 'docker build -t dvwa .'
      }
    }
  }
}
```

b. Capturas OceanBlue

→ ↻ ⓘ localhost:38082/blue/organizations/jenkins/practica_2... Guest

✓ practica 2 2022 Leonardo Marques
< 2 >

Pipeline

Changes

Tests

Branch: — 4s No changes

Commit: — 15 minutes ago Started by user Threepoints



En failure del las pruebas de SAST he añadido un comando sh para que interrumpa la ejecución

→ ↻ ⓘ localhost:38082/blue/organizations/jenkins/practica_2... Guest

✗ practica 2 2022 Leonardo Marques
1 >

Pipeline

Changes

Tests

Branch: — 4s No changes

Commit: — 18 minutes ago Started by user Threepoints



Pruebas de SAST - <1s



[Restart Pruebas de SAST](#)



✓	> No passa las pruebas de SonarQube — Print Message	<1s
✗	> make fail — Shell Script	<1s

c. Capturas SonarQube “Mocked”

<pre>[Pipeline] stage [Pipeline] { (Pruebas de SAST) [Pipeline] script [Pipeline] { [Pipeline] echo Passa las pruebas de SonarQube [Pipeline] } [Pipeline] // script [Pipeline] } [Pipeline] // stage</pre>	<pre>[Pipeline] stage [Pipeline] { (Pruebas de SAST) [Pipeline] script [Pipeline] { [Pipeline] echo No passa las pruebas de SonarQube [Pipeline] sh + make fail /var/lib/jenkins/workspace/practica_2_2 [Pipeline] } [Pipeline] // script</pre>
---	---

02. Ejecutar dos steps de manera paralela.

a. Codificación del pipeline

```
stage('Pruebas SAST Paralles') {
    parallel {
        stage('Test One') {
            steps {
                script {
                    if (PASS_QUALITY_GATE == 'True') {
                        echo 'Pasa las pruebas de SonarQube'
                    } else {
                        echo 'No pasa las pruebas de SonarQube'
                        //sh 'make fail'
                        currentBuild.result = 'FAILURE'
                    }
                }
            }
        }
        stage('Test Two') {
            steps {
                echo "${WORKSPACE}"
            }
        }
    }
}
```

b. Capturas OceanBlue.

→ ↻ ⓘ localhost:38082/blue/organizations/jenkins/practica_2_20... ☐ 👤 Gue

✓ **practica 2 2022 Leonardo Marques** Pipeline Changes Tests
< 4

Branch: — 2s No changes
Commit: — 3 minutes ago Started by user Threepoints

```

graph LR
    Start((Start)) --> Checkout((Checkout))
    Checkout --> PruebasSAST[Pruebas SAST Paralles]
    PruebasSAST --> TestOne((Test One))
    PruebasSAST --> TestTwo((Test Two))
    TestOne --> Build((Build))
    TestTwo --> Build
    Build --> End((End))
  
```

Pruebas SAST Paralles / Test One - <1s

✓ ▾ Passa las pruebas de SonarQube — Print Message

1 Passa las pruebas de SonarQube

Pruebas SAST Paralles / Test Two - <1s

✓ ▾ /var/lib/jenkins/workspace/practica_2_2022_Leonardo_Marques — Print Message

1 /var/lib/jenkins/workspace/practica_2_2022_Leonardo_Marques

c. Capturas de la consola.

```

[Pipeline] stage
[Pipeline] { (Pruebas SAST Paralles)
[Pipeline] parallel
[Pipeline] { (Branch: Test One)
[Pipeline] { (Branch: Test Two)
[Pipeline] stage
[Pipeline] { (Test One)
[Pipeline] stage
[Pipeline] { (Test Two)
[Pipeline] script
[Pipeline] {
[Pipeline] echo
[Test Two] /var/lib/jenkins/workspace/practica_2_2022_Leonardo_Marques
[Pipeline] }
[Pipeline] echo
[Test One] Passa las pruebas de SonarQube
[Pipeline] }
[Pipeline] // stage

```

03. Usar credenciales en un pipeline declarativo.

a. Codificación del pipeline:

En el ejercicio creo que no es lo esperado, he tenido errores con la escrita en el fichero y los datos sensibles como la clave.

```
stage('Configurar archivo'){
    steps{
        withCredentials([usernamePassword(credentialsId:
'Credentials_Threepoints',
                                passwordVariable: 'password',
                                usernameVariable: 'user')]) {
            writeFile file: 'credentials.ini',
            text: """
[credentials]
user=${user}
password=${password}
            """
            sh('cat credentials.ini')
        }
    }
}
```

Credentials_Threepoints

admin/*****

b. Capturas OceanBlue:

localhost:38082/blue/organizations/jenkins/practica_2_2... Gues

practica 2 2022 Leonardo Marques Pipeline Changes Tests

< 6

branch: — 3s No changes

commit: — a few seconds ago Started by user Threepoints

```
graph LR
    Start((Start)) --> Checkout((Checkout))
    Checkout --> Paralles((Paralles))
    Checkout --> TestOne((Test One))
    Checkout --> TestTwo((Test Two))
    Paralles --> Configurar[Configurar archivo]
    TestOne --> Configurar
    TestTwo --> Configurar
    Configurar --> Build((Build))
    Build --> End((End))
```

✓ credentials.ini — Write file to workspace <1s

```
1 Warning: A secret was passed to "writeFile" using Groovy String
2 interpolation, which is insecure.
3 Affected argument(s) used the following
4 variable(s): [****]
5 See https://jenkins.io/redirect/groovy-string-
6 interpolation for details.
```

✓ cat credentials.ini — Shell Script <1s

```
1 + cat credentials.ini
2
3 [credentials]
4 user=admin
5 ****=****
```

c. Capturas de la consola:

```
[Pipeline] stage
[Pipeline] { (Configurar archivo)
[Pipeline] withCredentials
Masking supported pattern matches of $password
[Pipeline] {
[Pipeline] writeFile
Warning: A secret was passed to "writeFile" using Groovy String interpolation, which is insecure.
        Affected argument(s) used the following variable(s): [****]
        See https://jenkins.io/redirect/groovy-string-interpolation for details.
[Pipeline] sh
+ cat credentials.ini

[credentials]
user=admin
****=****

[Pipeline] }
[Pipeline] // withCredentials
[Pipeline] }
[Pipeline] // stage
```