67.07Jul. Insurance Project

Friday, July 7, 2023 7:15 PM

Open Source DevOps

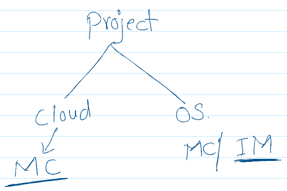
↓

InsureMe

- Java 11 (JDK+JRE)
- Maven (Install, Configure with Jenkins, Report Surefire)
- Git (Github) = Repo

SpringBoot
- Project
- Jenkins file = Pipeline.
- Ansible- Playbook.yml
- Docker file
- Selenium.jar

DB
- In-Memory (H2 Database)

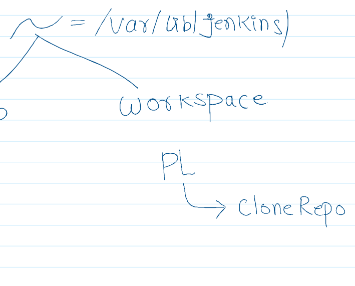


I] CI Server (Jenkins)

- Suggested Plugin's
- Before
  - Java
  - Maven
  - Docker
  - Ansible

Jenkins User.

-



1. Create Jenkins Pipeline with this: PL-InsureMe

```
node{
   def mavenHome
   def mavenCMD
   def tagName
   stage('Test'){
      echo "Welcome"
   }
 }
```

2. Generate PAT in GitHub

3. Add GitHub Credentials in Jenkins

4. Configure External Tools:
    a. Manage Jenkins --> Tools --> Maven --> Name, Home Path

```
node{
    def mavenHome
    def mavenCMD
    def tagName
    stage('Start'){
        echo "Welcome to InsureMe Project"
    }
    stage('Prepare Enviroment'){
        echo 'initialize all the variables'
        mavenHome = tool name: 'maven' , type: 'maven'
        mavenCMD = "${mavenHome}/bin/mvn"
        tagName="3.0"
    }
    stage('Project Cloning'){
        try{
            echo 'checkout the code from git repository'
            git credentialsId: 'jenkins-github', url: 'https://github.com/NubeEra-MCO/InsureMe.git'
        }
        catch(Exception e){
            echo 'Exception occured in Git Code Checkout Stage'
            currentBuild.result = "FAILURE"
            emailext body: '''Dear All,
            The Jenkins job ${JOB_NAME} has been failed. Request you to please have a look at it immediately by clicking on the below link.
            ${BUILD_URL}''', subject: 'Job ${JOB_NAME} ${BUILD_NUMBER} is failed', to: 'mujahed.trainer@gmail.com'
        }
    }
    stage('End'){
        echo "Bye bye"
    }
}
```

5. Install Plugin "HTML Publisher plugin"

6. Add Reporting Stage:

```
stage('publish test reports'){
    echo "Reporting"
    publishHTML([allowMissing: false, alwaysLinkToLastBuild: false, keepAll: false, reportDir: '/var/lib/jenkins/workspace/PL-InsureMe/target/surefire-reports', reportFiles: 'index.html', reportName: 'HTML Report', reportTitles: '', useWrapperFileDirectly: true])
  }
```

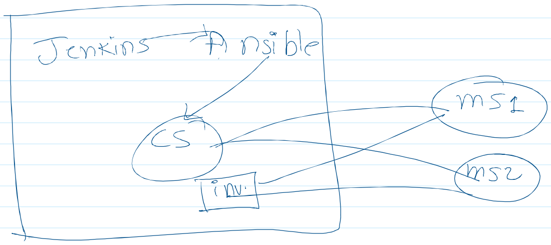
7. Install Docker Plugins
    a. Docker
    b. Docker Pipeline

8. Execute Pipeline:

```
node{
    def mavenHome
    def mavenCMD
    def tagName
    stage('Start'){
        echo "Welcome to InsureMe Project"
    }
    stage('Prepare Enviroment'){
        echo 'initialize all the variables'
        mavenHome = tool name: 'maven' , type: 'maven'
        mavenCMD = "${mavenHome}/bin/mvn"
        tagName="3.0"
    }
    stage('Project Cloning'){
        try{
            echo 'checkout the code from git repository'
            //git credentialsId: 'jenkins-github', url: 'https://github.com/NubeEra-MCO/InsureMe.git'
        }
        catch(Exception e){
            echo 'Exception occured in Git Code Checkout Stage'
            currentBuild.result = "FAILURE"
            emailext body: '''Dear All,
            The Jenkins job ${JOB_NAME} has been failed. Request you to please have a look at it immediately by clicking on the below link.
            ${BUILD_URL}''', subject: 'Job ${JOB_NAME} ${BUILD_NUMBER} is failed', to: 'mujahed.trainer@gmail.com'
        }
    }
    stage('Build the Application'){
        echo "Cleaning... Compiling...Testing... Packaging..."
        //sh "${mavenCMD} clean package"
    }
    stage('publish test reports'){
        echo "Reporting"
        //publishHTML([allowMissing: false, alwaysLinkToLastBuild: false, keepAll: false, reportDir: '/var/lib/jenkins/workspace/PL-InsureMe/target/surefire-reports', reportFiles: 'index.html', reportName: 'HTML Report', reportTitles: '', useWrapperFileDirectly: true])
    }

    stage('Containerize the application'){
        echo 'Creating Docker image'
        sh "docker build -t mujahed/insure-me:${tagName} ."
    }

    stage('End'){
        echo "Bye bye"
    }
}
```


Jenkins
Ansible
CS
inv.
ms1
ms2