Practice for Lesson 5: Understanding of Parallel Jenkins Jobs and Jenkins Slave on AWS

Practices for Lesson 5

Overview

In these practices, you will learn how to Build and Deploy an Application to Webserver using Jenkins Pipeline. Further create a parallel Agent Pipeline Job on Jenkins.

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Practice 5-2: Create a Parallel Agent Pipeline Job on Jenkins

Overview

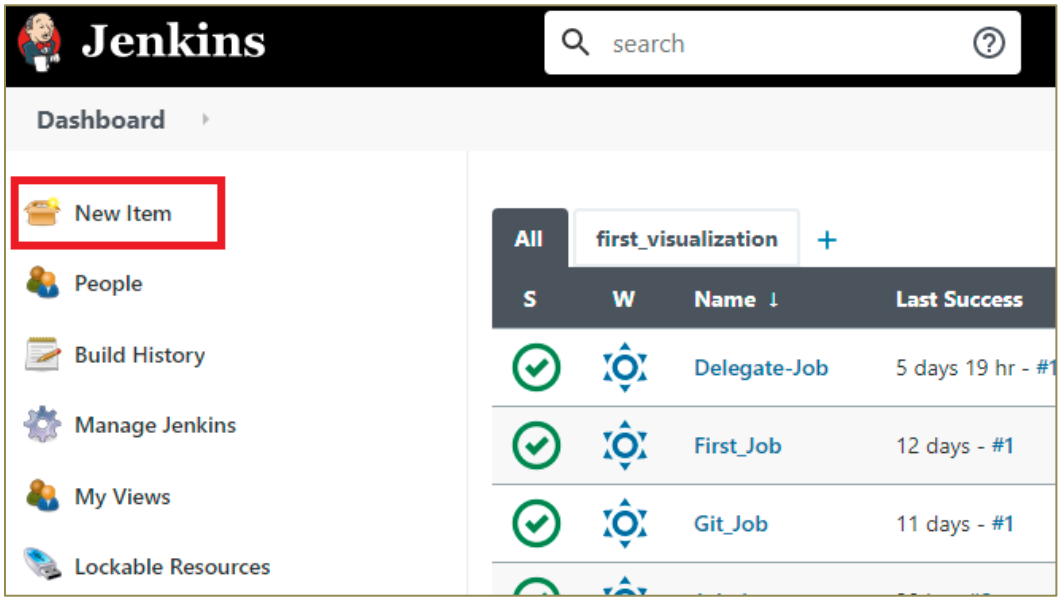
In this practice, you will learn how to create the Parallel Agent Pipeline Job on Jenkins instance using as sample example.

Assumptions

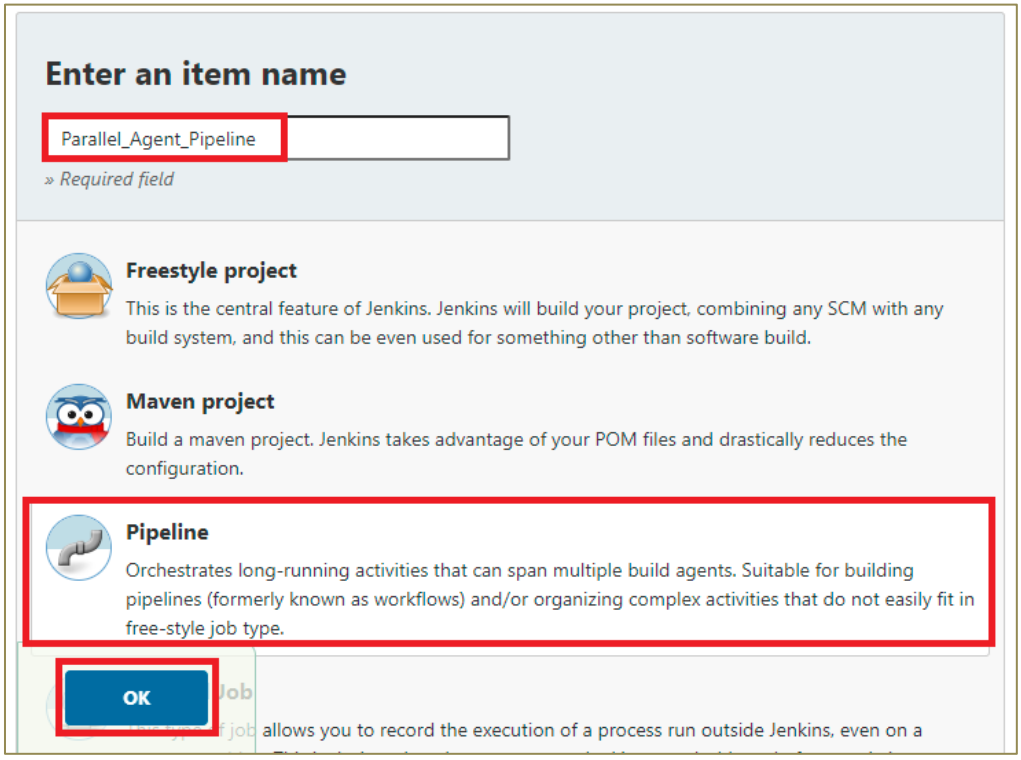
You should have completed the Practice of Lesson 5-1.

Tasks

1. Create a Parallel Agent Pipeline Job on Jenkins instance.
   a. In the Jenkins Dashboard, navigate to main menu and select **New Item** to create a Parallel Agent Pipeline as shown below.



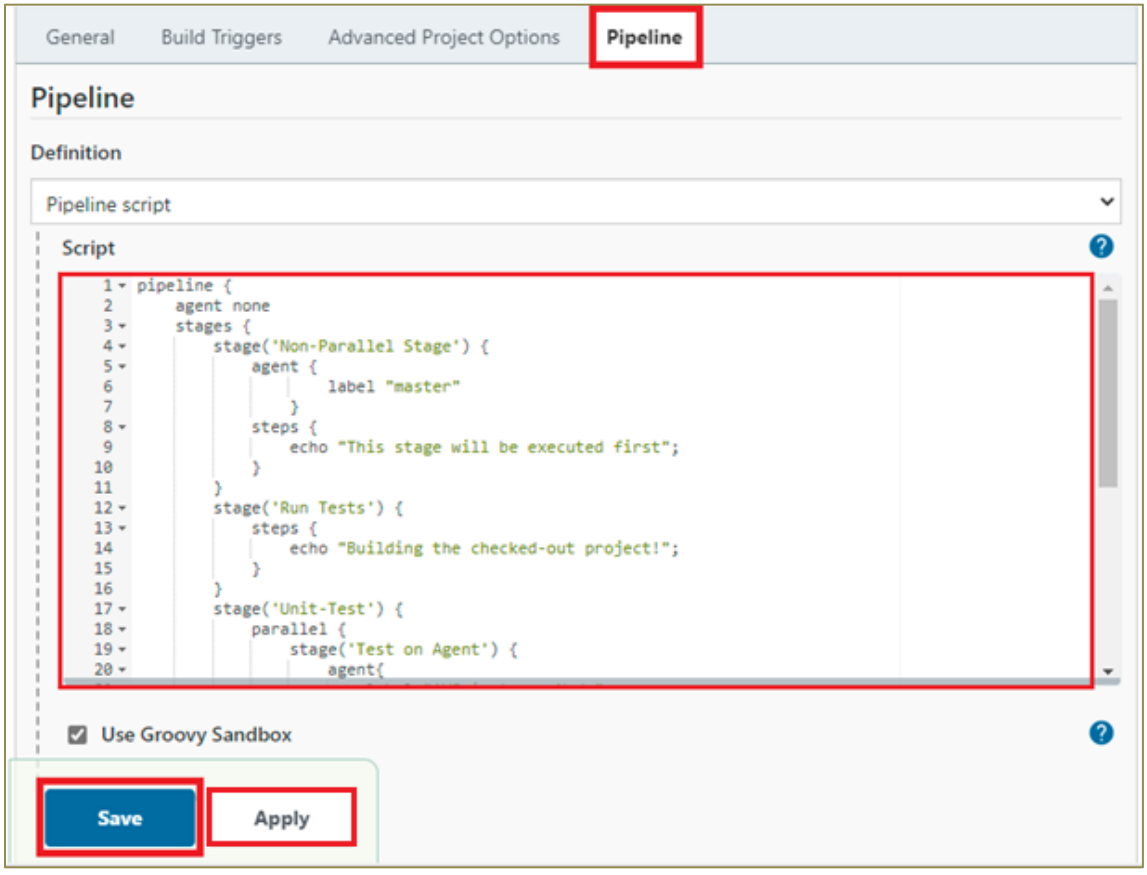
   b. Provide the **name** for the Pipeline, further select **Pipeline** and click **OK** as shown below.



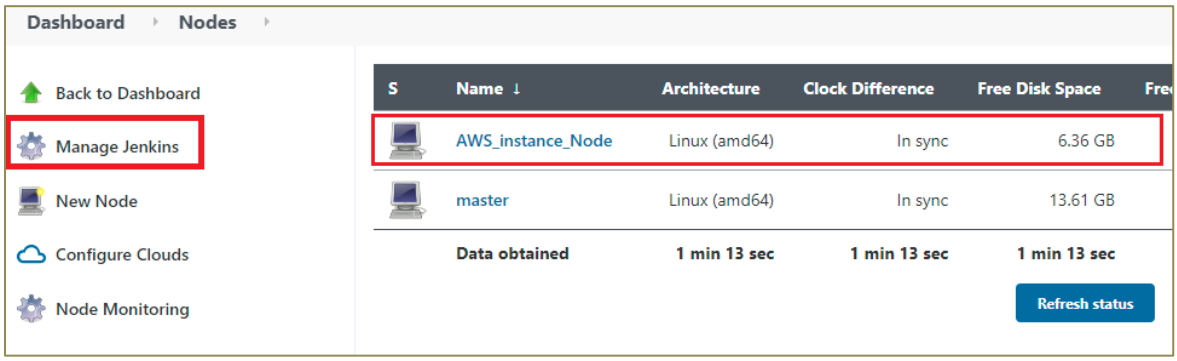
c. Navigate to **Pipeline**, select **Pipeline script** under **Definition** as shown below. Copy the Groovy script provided below and paste it in the **Script** block as shown below. Select the checkbox of **Use Groovy Sandbox** and click **Save**.

```
pipeline {
    agent none
    stages {
        stage('Non-Parallel Stage') {
            agent {
                label "master"
            }
            steps {
                echo "This stage will be executed first";
            }
        }
        stage('Run Tests') {
            steps {
                echo "Building the checked-out project!";
            }
        }
        stage('Unit-Test') {
            parallel {
                stage('Test on Agent') {
```

```
                        agent{
                              label "AWS_instance_Node"
                        }
                        steps {
                              echo "Task1 on Agent";
                        }
                  }
                  stage('Test On master') {
                        agent {
                              label "master"
                        }
                        steps {
                              echo "Task1 on Master";
                        }
                  }
            }
      }
}
```

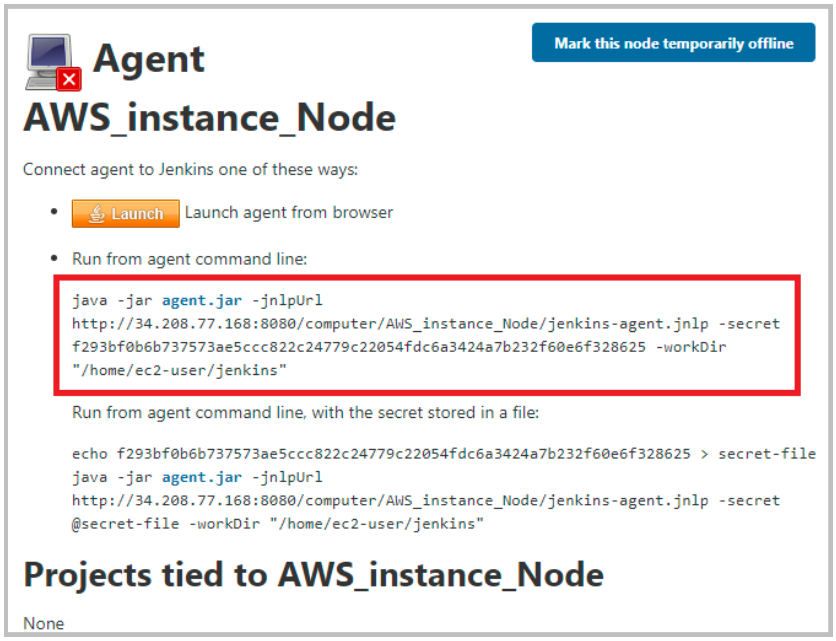


d. Verify that the Agent node is active in the Jenkins as shown below.

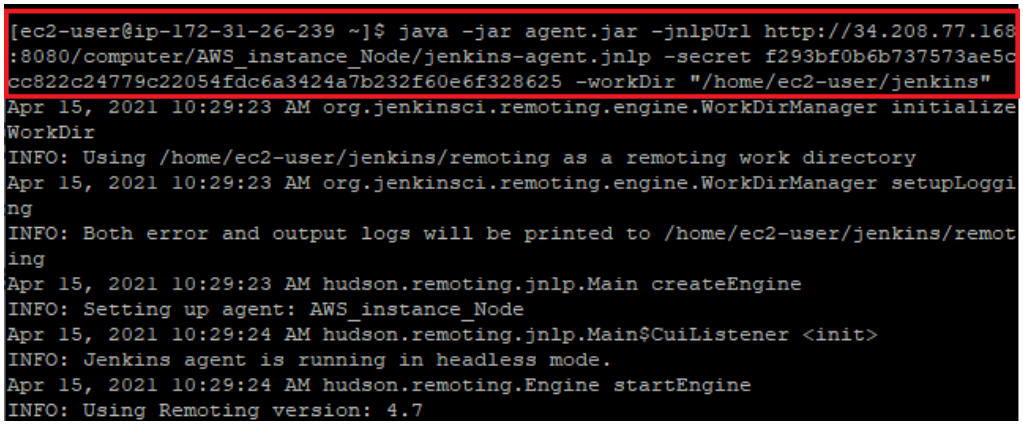


Note: If the connection is Disconnected follow the steps as mentioned in Practice 3-2.

i. In Jenkins, click on the agent node and copy the code as shown below.

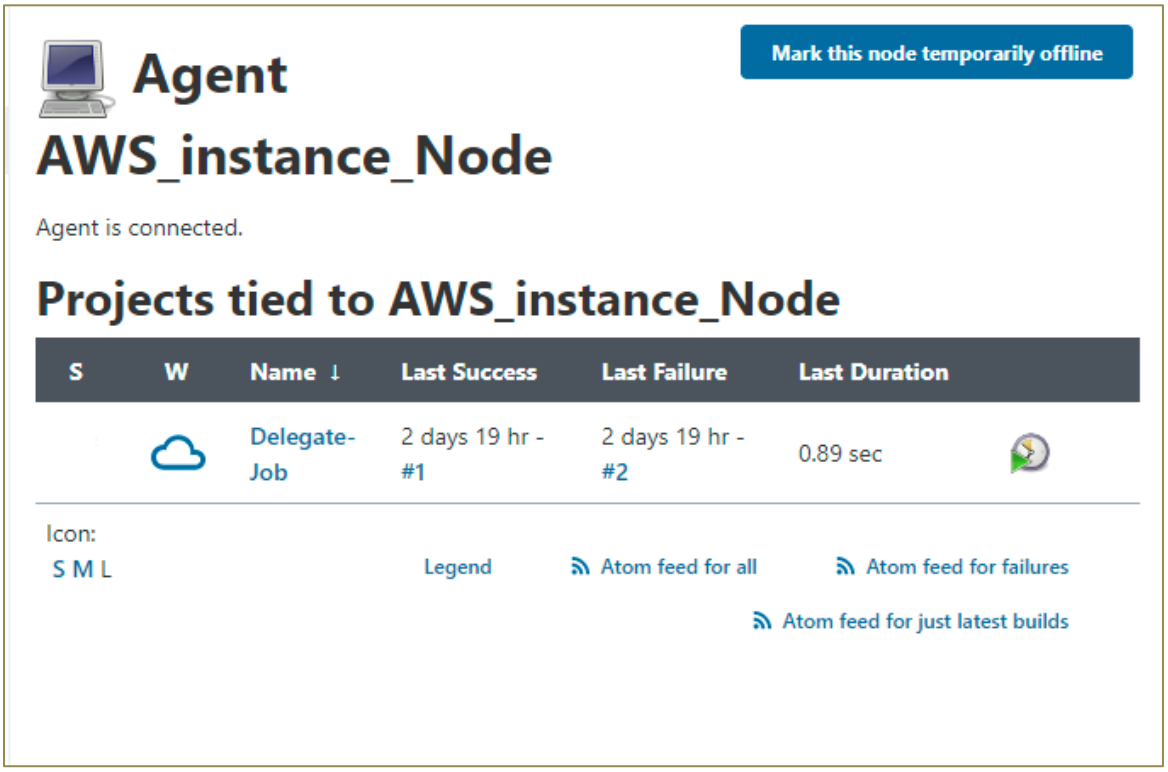


ii. Open Putty terminal connected to the **agent-node** and paste the command to execute as shown below.

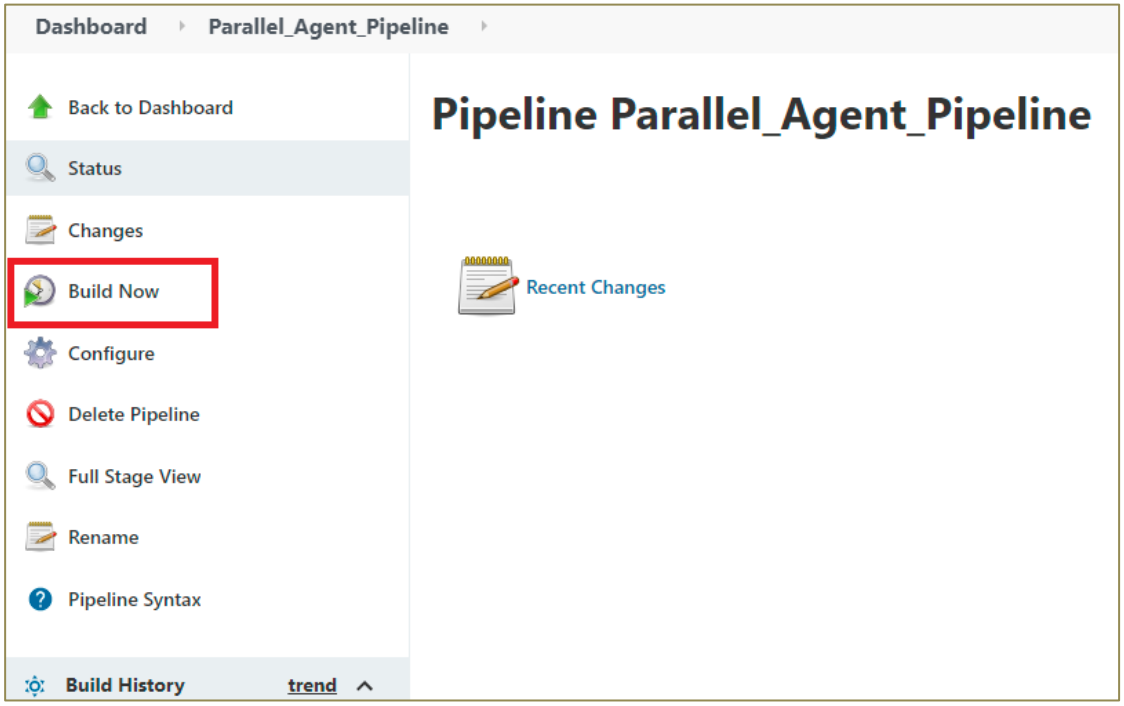


```
Apr 15, 2021 10:29:24 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Handshaking
Apr 15, 2021 10:29:24 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connecting to 34.208.77.168:46111
Apr 15, 2021 10:29:24 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Trying protocol: JNLP4-connect
Apr 15, 2021 10:29:24 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Remote identity confirmed: 22:59:fd:4e:67:d9:7d:87:06:49:16:00:6c:13:c8:2d
Apr 15, 2021 10:29:25 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connected
```

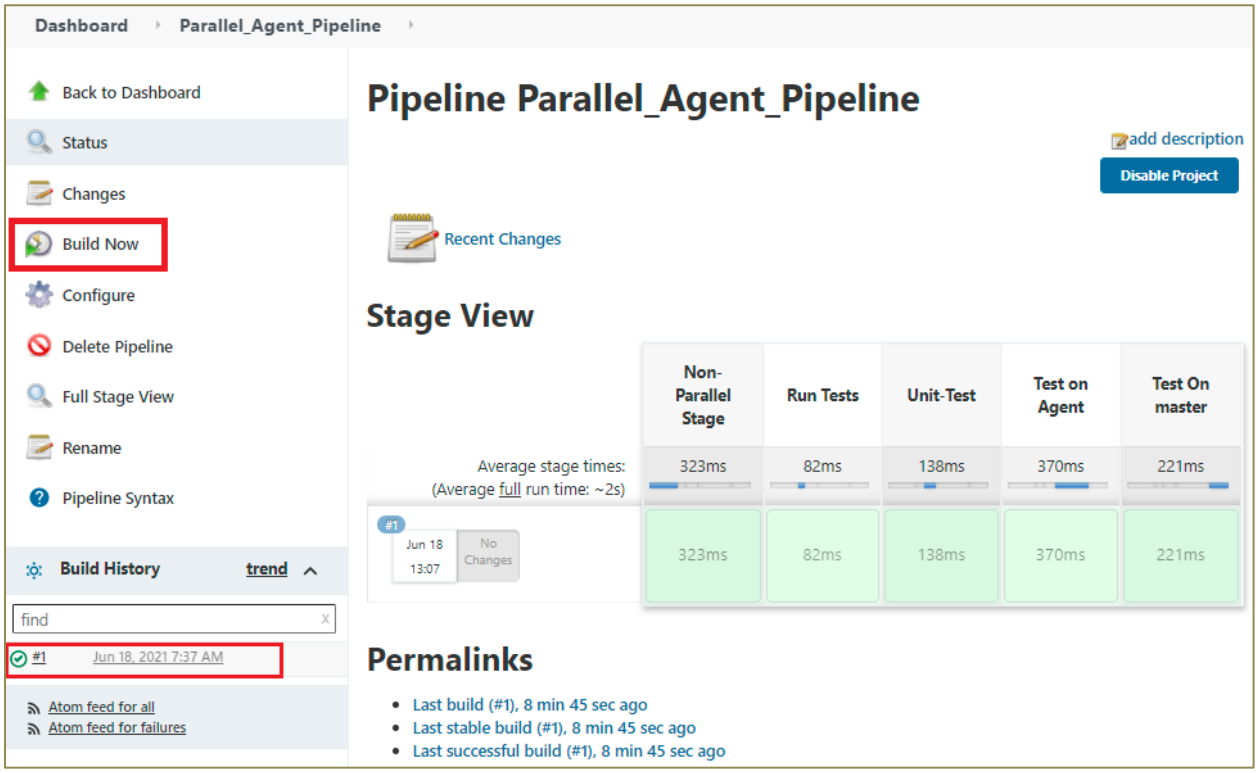
iii. Open Jenkins dashboard and **refresh** the agent node page to verify the connection as shown below.



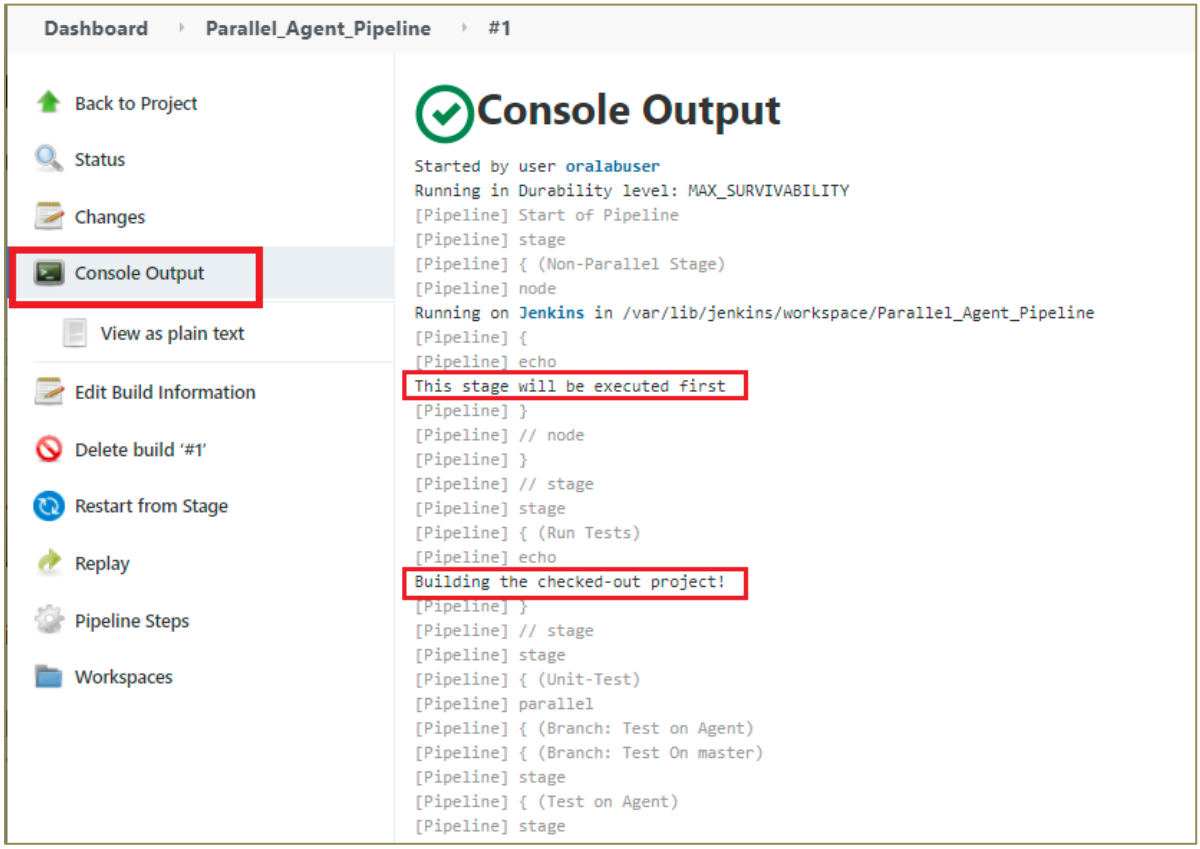
e. **Parallel** Scripted pipeline is created successfully, click **Build Now** to execute the Parallel pipeline script as shown below.



f. As shown below, **view** the **stages** of **pipeline** getting executed and click on the link under **Build History**.



g. Navigate to **Console Output** to view the execution output of the Parallel scripted pipeline.



2. Keep the Jenkins Dashboard, terminal and the AWS Management Console open for the next practice.