Jenkins assignment 9

create three Git repositories named `master`, `dev`, and `qa`, each with an `index.html` file containing a unique script message, set up an Amazon Linux 2 EC2 instance with Jenkins and Apache HTTPD, configure three Jenkins jobs to monitor changes in each repository, and ensure that changes to `index.html` in the `master`, `dev`, or `qa` repositories trigger their respective jobs to deploy the updated `index.html` to the Apache web root, replacing the previous `index.html` file, while verifying the deployment and securing the setup?

Create job in declarative pipeline

Status
</> Changes
▷ Build Now
⚙ Configure
🗑 Delete Pipeline
☰ Stages
✎ Rename
⑦ Pipeline Syntax

✓ **jenkins-assignment-9**

Permalinks

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Builds   ∘∘∘ ⌐⌐

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May 11, 2025

✓ #33 6:40 PM   ⌄

✓ #32 6:35 PM   ⌄

Configure

⚙ General

⏱ Triggers

⇄ Pipeline

⚙ Advanced

Pipeline

Define your Pipeline using Groovy directly or pull it from source control.

Definition

Pipeline script   ⌄

Script ?

```
1  pipeline {
2      agent { label 'built-in' }
3
4      stages {
5          stage('Checkout Repositories') {
6              steps {
7                  dir('master') {
8                      git url: 'https://github.com/Poojak134/master.git', branch: 'main'
9                  }
10                 dir('dev') {
11                     git url: 'https://github.com/Poojak134/dev.git', branch: 'main'
12                 }
13                 dir('QA') {
14                     git url: 'https://github.com/Poojak134/QA.git', branch: 'main'
15                 }
```

☑ Use Groovy Sandbox ?

#33 (May 11, 2025, 6:40:16 PM)

Started by GitHub push by Poojak134

This run spent:

- 7.9 sec waiting;
- 8.5 sec build duration;
- 16 sec total from scheduled to completion.

Revision: 2cb6678b9ac181150f6803069ff4ba727314b34e
Repository: https://github.com/Poojak134/master.git

- refs/remotes/origin/main

Revision: 6e6bb1f2cca2c3ab84e02255b529a73aba6853bb
Repository: https://github.com/Poojak134/dev.git

- refs/remotes/origin/main

Revision: 21abaa49af873bf34d37dfc5d8238d51c6326e35
Repository: https://github.com/Poojak134/QA.git
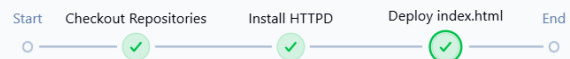
- refs/remotes/origin/main

No changes.

```
[Pipeline] stage
[Pipeline] { (Deploy index.html)
[Pipeline] script
[Pipeline] {
[Pipeline] fileExists
[Pipeline] sh
+ sudo cp master/index.html /var/www/html/index.html
[Pipeline] fileExists
[Pipeline] sh
+ sudo cp dev/index.html /var/www/html/index.html
[Pipeline] fileExists
[Pipeline] sh
+ sudo cp QA/index.html /var/www/html/index.html
[Pipeline] sh
+ sudo chmod 644 /var/www/html/index.html
+ sudo systemctl restart httpd
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

✓ ‹ **#33**

⏱ Started 4 days 15 hr ago   ⧖ Queued 7.8 sec   ⏱ Took 8.5 sec

Graph

```
                    Start   Checkout Repositories   Install HTTPD   Deploy index.html   End
                     ○─────────────✓────────────────────✓──────────────✓────────────○
```

🔍 Search   ✓ Deploy index.html   ⏱

✓ Checkout Repositories 2.6 sec   ✓ Verify if file exists in workspace master/index.html ›

✓ Install HTTPD 1.6 sec   ✓ sudo cp master/index.html /var/www/html/index.html ›

✓ Deploy index.html 2.9 sec   ✓ Verify if file exists in workspace dev/index.html ›

                                        ✓ sudo cp dev/index.html /var/www/html/index.html ›

```
pipeline {

    agent { label 'built-in' }


    stages {

        stage('Checkout Repositories') {

            steps {

                dir('master') {

                    git url: 'https://github.com/Poojak134/master.git', branch: 'main'

                }

                dir('dev') {

                    git url: 'https://github.com/Poojak134/dev.git', branch: 'main'

                }

                dir('QA') {

                    git url: 'https://github.com/Poojak134/QA.git', branch: 'main'
```

```groovy
        }

      }

    }


    stage('Install HTTPD') {

      steps {

        sh '''

          sudo yum install -y httpd

          sudo systemctl start httpd

          sudo systemctl enable httpd

        '''

      }

    }


    stage('Deploy index.html') {

      steps {

        script {

          // Define the target directory for the index.html file

          def targetDir = '/var/www/html/index.html'


          // Copy the index.html from each repository if it exists

          if (fileExists('master/index.html')) {

            sh "sudo cp master/index.html ${targetDir}"

          }

          if (fileExists('dev/index.html')) {

            sh "sudo cp dev/index.html ${targetDir}"

          }

          if (fileExists('QA/index.html')) {
```

```
                sh "sudo cp QA/index.html ${targetDir}"

            }


            // Set the appropriate permissions and restart Apache
            sh '''
                sudo chmod 644 /var/www/html/index.html

                sudo systemctl restart httpd
            '''
        }
      }
    }
   }
  }
```