

LAB 03 Jenkins

1) What are the different methods to trigger pipeline in Jenkins?

- Trigger builds remotely
- Build after other projects are built
- Build periodically
- GitHub hook trigger
- Poll SCM

2) What is the benefit of using master-slave architecture rather than building on master only?

- 1- Produce backups
- 2- Distribute nodes across slave nodes and help to scale up and down easily

3) What is different between authorization and authentication?

Authentication verifies the identity of a user or service, and authorization determines their access rights

4) What is the benefit of making organization job in Jenkins?

enable Jenkins to monitor an entire GitHub Organization

5) Make Jenkins-shared-library and make your Jenkins file which you used in lab2 to point to this library

```
<  >  ↺  localhost:8080/job/lib/19/consoleText
> git config remote.origin.url https://github.com/naghamahmed/jenkins.git # timeout=10
Fetching upstream changes from https://github.com/naghamahmed/jenkins.git
> git --version # timeout=10
> git --version # 'git version 2.30.2'
using GIT_ASKPASS to set credentials github-token
> git fetch --tags --force --progress -- https://github.com/naghamahmed/jenkins.git +refs/heads/*:refs/rem
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision 82093b78099463026841c01479266b46317329cb (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 82093b78099463026841c01479266b46317329cb # timeout=10
Commit message: "Update deployment.groovy"
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (check)
[Pipeline] echo
checking your code
[Pipeline] echo
dev
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (test)
[Pipeline] echo
testing your app
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (deployment)
[Pipeline] echo
your code is deployed right now
[Pipeline] echo
this build number 19
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

Sharable libraries available to any Pipeline jobs running on this system. These libraries will be trusted, meaning they run without "sandbox" restrictions and may use @Grab.

Library

Name ?

Jenkins-library

Default version ?

main

Currently maps to revision: 82093b78099463026841c01479266b46317329cb

☐ Load implicitly ?

☒ Allow default version to be overridden ?

☒ Include @Library changes in job recent changes ?

☐ Cache fetched versions on controller for quick retrieval ?

Retrieval method

Modern SCM

Loads a library from an SCM plugin using newer interfaces optimized for this purpose. The recommended option when available.

Source Code Management

Git

Project Repository ?

https://github.com/naghamahmed/jenkins.git

Credentials ?

Save

Apply