Jenkins Directory strucute: /var/lib/Jenkins

drwxr-xr-x 3 jenkins jenkins 16 May 10 22:44 ./fingerprints/

drwxr-xr-x 4 jenkins jenkins 39 May 5 11:38 ./jobs/

drwxr-xr-x 4 jenkins jenkins 33 Apr 26 04:46 ./logs/

drwxr-xr-x 3 jenkins jenkins 15 Apr 26 05:55 ./nodes/

drwxr-xr-x 90 jenkins jenkins 8192 Apr 26 05:06 ./plugins/

drwx------ 4 jenkins jenkins 4096 Apr 25 14:03 ./secrets/

drwxr-xr-x 2 jenkins jenkins 182 May 17 10:21 ./updates/

drwxr-xr-x 2 jenkins jenkins 24 Apr 24 14:10 ./userContent/

drwxr-xr-x 4 jenkins jenkins 91 May 17 10:27 ./users/

drwxr-xr-x 2 jenkins jenkins 6 Apr 24 14:18 ./workflow-libs/

drwxr-xr-x 3 jenkins jenkins 20 Apr 25 14:03 ./workspace/

To get the initial password: /var/lib/jenkins/secrets/initialAdminPassword

to find the version: /var/lib/Jenkins/config.xml

Jenkins configuration details can be found under: etc/sysconfig/Jenkins or /etc/default/Jenkins

JENKINS\_HOME="/var/lib/jenkins"

We can change Jenkins home directory and port number in the Jenkins file (/etc/sysconfig/Jenkins or /etc/default/jenkins)

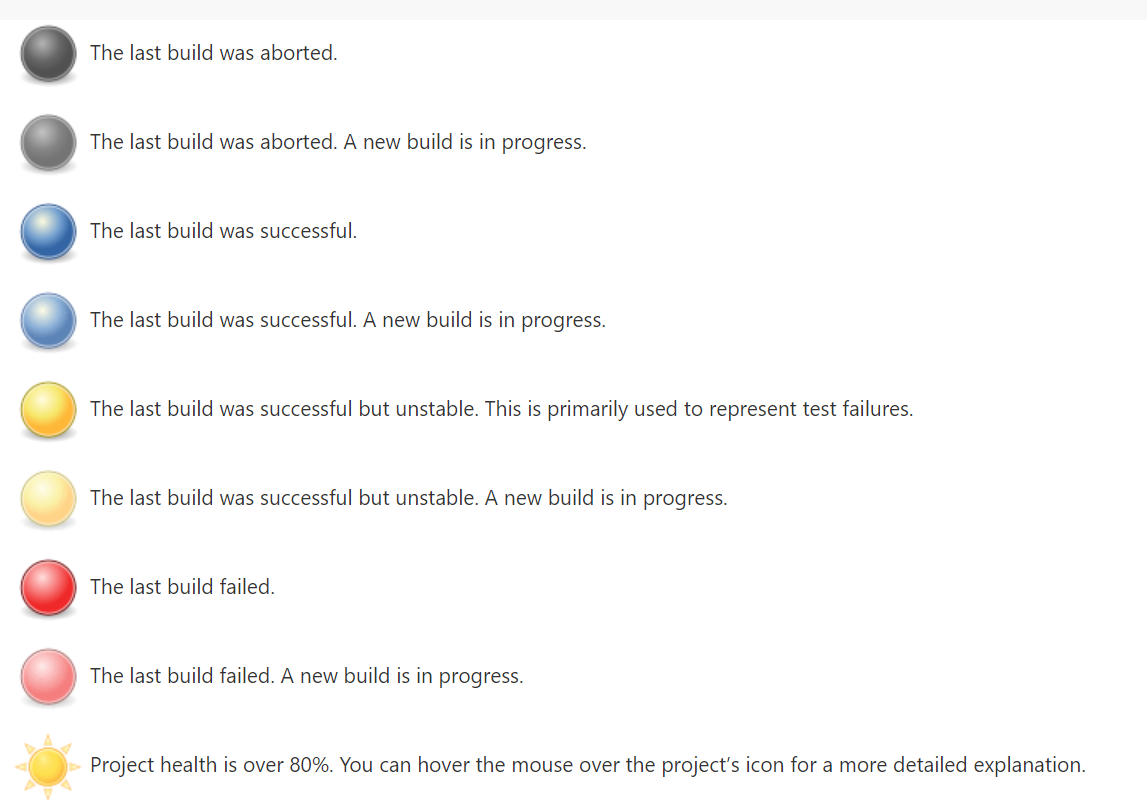
Log: /var/log/Jenkins/Jenkins.log

Manager Jenkins:

1. System configuration
   1. **Configure System** (Home directory, No.of executors, labels, usage, Fingerprints, SMTP, Email Configuration, Git plugin)
   2. **Global Tool Configuration:** It is about configuring tools paths such as maven, docker, git etc.
   3. Manage Plugins: It is all about Plugins (Updates, Available, Installed, Advanced tabs)
   4. Manage Nodes and Clouds (New nodes, configure cloud, Node Monitoring)
2. Security:
   1. **Configure Global Security** (Matrix based, Project Matrix based)
   2. **Manage Credentials** (It is about credentials, like username and password, pem files we store for accessing specific items)
   3. **Configure Credential Providers**
   4. **Manage Users (**Managing users such as delete**)**
3. Status Information
4. Troubleshooting
5. Tools and Actions
6. Uncategorized

Different stages of Builds

1. Unstable
2. Failure
3. Successful



Different Style of projects:

1. Free style project
2. Pipeline
3. External Job
4. Multi-Configuration Project
5. Folder
6. GitHub Organization Project
7. Multibranch Pipeline

**Quite period**: When this option is non-zero, newly triggered builds of this project will be added to the queue, but Jenkins will wait for the specified period of time (in seconds) before actually starting the build.

Build after other projects are built

Build periodically

GitHub hook trigger for GITScm polling

Poll SCM

I have created a jenkinsfile in which I need to go into an already created directory. We can go to the directory by the name of the directory can be variable, eg: dir ('RELEASE/abc/${abc-version}”)

def dirpath = "RELEASE/abc/${abc-version}"

dir(dirpath){

//logic

}

1. Build when a change is pushed to BitBucket
2. GitHub hook trigger for GitScm polling
3. Poll SCM

Node launch methods:

1. Launch agent by connecting it to the master
2. Launch agent via execution of command on controller
3. Launch agent via SSH
4. Let Jenkins control windows agent as windows service

 Fingerprinting help Jenkins in keeping track of **which version of a file is used by which version of a dependency**.

Jenkins shared library is the concept of having common pipeline code in the version control system that can be used by any no.of pipelines just referencing it . Multiple teams can also use the same pipeline in their jobs.

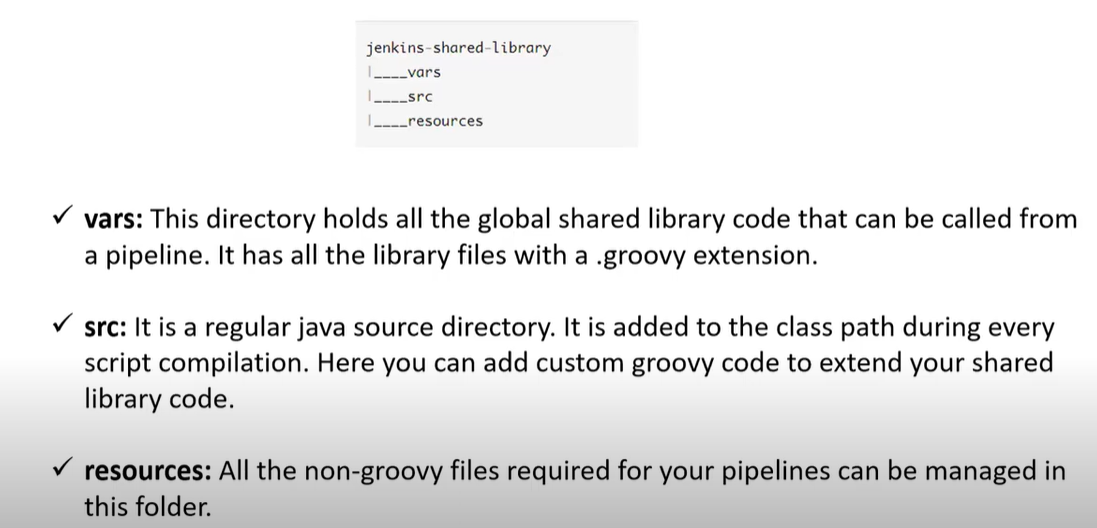
It is kind of reusable of common code.

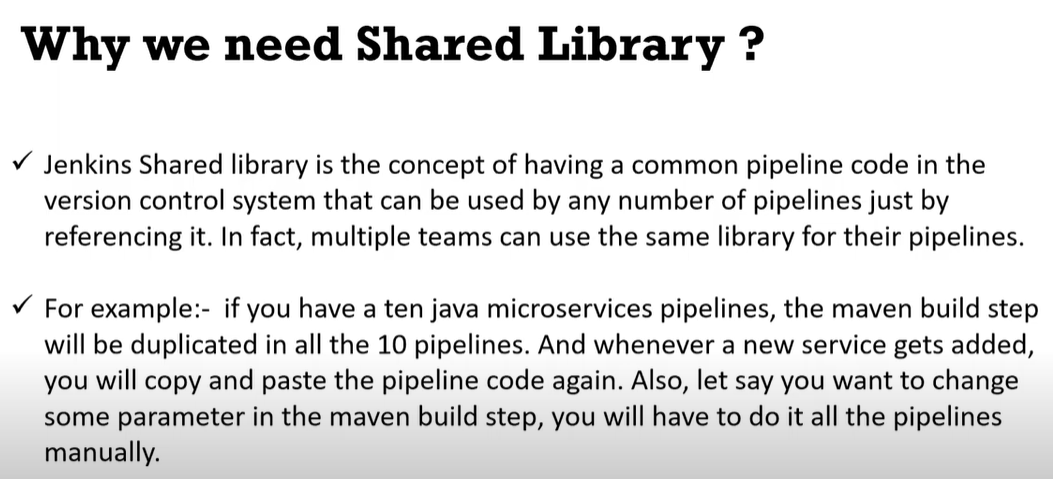
Jenkins shared library

---vars

---src

---resources





Installation on ubunut:

sudo apt install openjdk-8-jdk openjdk-8-jre

wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add -

sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ > \

/etc/apt/sources.list.d/jenkins.list'

sudo apt-get update

sudo apt-get install jenkins

link: <https://www.jenkins.io/doc/book/installing/linux/#debianubuntu>