# Jenkins

- Jenkins
- Hudson
- Bamboo

#### Installation

- Download jenkins package from <a href="https://jenkins.io/index.html">https://jenkins.io/index.html</a>
- Double click pkg
- Follow the wizard
- Browse jenkins UI @ <a href="http://localhost:8080/">http://localhost:8080/</a>
- Retrieve password from logs @ /var/log/jenkins/jenkins.log "look for Please use the following password to proceed to installation:"
- Enter password in UI
- Instructions for other OS <a href="https://wiki.jenkins-ci.org/display/JENKINS/Installing+Jenkins">https://wiki.jenkins-ci.org/display/JENKINS/Installing+Jenkins</a>

## Set Up

- Browse jenkins UI
- Proceed to install suggested plugin
- Create first user: provide
  - Username
  - Password
  - Full name
  - Email address
- Jenkins is ready for use

#### Features

- Plugins: Over 800 open source plugins available
- Integrations: Can be integrated with
  - Scm git, svn, cvs
  - Build tools maven, ant and more
  - Shell scripts
  - Emails
- REST Api

### Components

- Jobs: create jobs by selecting "new Item" from left menu.
  - Pre Build
  - Build -> tasks
  - Prost build -> tasks
    - Emails
    - Trigger other jobs
- Admin: manage plugin and more via "manage jenkins" from left menu
  - Configure system
    - scm integration
    - Sonar integration
    - Custom plugins
  - Manage node
    - Add slave using manage nodes
    - Create a vm -> install slave.jar -> attach to master via manage nodes
  - Manage plugin
    - Install plugins
    - Upgrade plugins
  - Safe restart
  - Manage User
    - Add users
    - LDAP integrations

### Demo

- Jenkins UI
- Create jobs
- Plugins

#### Exercises

- Install jenkins master
- Install string parameter plugin
- Install build pipeline plugin
- Create a job with shell scripts
  - Echo env variable -> \$WORKSPACE, \$JOB\_NAME and more
- Bonus
  - Create a vm
  - Install slave.jar
  - Configure slave from manage nodes
- References:
  - PDF in gitlab: jenkins-the-definitive-guide.pdf
  - https://jenkins.io/doc/