

COURSE NAME : 19CST201-Agile Software Engineering

III YEAR/ V SEMESTER

Topic: Jenkin Tool

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JENKINS

Jenkins is a powerful application that allows continuous integration and continuous delivery of projects, regardless of the platform you are working on. It is a free source that can handle any kind of build or continuous integration. You can integrate Jenkins with a number of testing and deployment technologies.



Jenkins

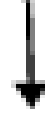


WHY JENKINS?

Jenkins is a software that allows **continuous integration**. Jenkins will be installed on a server where the central build will take place. The following flowchart demonstrates a very simple workflow of how Jenkins works.



Developers check their source code.



Jenkins will pick up the changed source code and trigger a build and run any tests if required.



The build output will be available in the Jenkins dashboards. Automatic notifications can also be sent back to the developer.



WHAT IS CONTINUOUS INTEGRATION?

Continuous Integration is a development practice that requires developers to integrate code into a shared repository at regular intervals. This concept was meant to remove the problem of finding later occurrence of issues in the build lifecycle. Continuous integration requires the developers to have frequent builds. The common practice is that whenever a code commit occurs, a build should be triggered.



SYSTEM REQUIREMENTS

JDK	JDK 1.5 or above
Memory	2 GB RAM (recommended)
Disk Space	No minimum requirement. Note that since all builds will be stored on the Jenkins machines, it has to be ensured that sufficient disk space is available for build storage.
Operating System Version	Jenkins can be installed on Windows, Ubuntu/Debian, Red Hat/Fedora/CentOS, Mac OS X, openSUSE, FReeBSD, OpenBSD, Gentoo.
Java Container	The WAR file can be run in any container that supports Servlet 2.4/JSP 2.0 or later.(An example is Tomcat 5).



ADVANTAGES OF JENKINS INCLUDE

- It is an open-source tool with great community support.
- It is easy to install.
- It has 1000+ plugins to ease your work. If a plugin does not exist, you can code it and share it with the community.
- It is free of cost.
- It is built with Java and hence, it is portable to all the major platforms



JENKIN FEATURES

- ❖ The following are some facts about Jenkins that makes it better than other Continuous Integration tools:
- ❖ Adoption: Jenkins is widespread, with more than 147,000 active installations and over 1 million users around the world.
- ❖ Plugins: Jenkins is interconnected with well over 1,000 plugins that allow it to integrate with most of the development, testing and deployment tools.



THANK YOU!!