Jenkins

Build Jobs in Jenkins

Lesson Objectives

- In this lesson, you will learn about:
 - Introduction to Jenkins Build Job
 - Configuring Source Code Management
 - Create and run New Build Job



Introduction to Jenkins Build Job

- A Build Job is a way of compiling, testing, packaging and deploying project to an application server.
- During creation of build job, project configuration should be done.
- Execution of build job can be done either automatically (Scheduled) or manually.
- Create build Job by following the below steps:
 - Select "New Job" from menu item which avails in Jenkins Dashboard.
 - Select an appropriate type of Build Jobs from the list offered by Jenkins.



Introduction to Jenkins Build Job

Different type of Build Jobs

Freestyle software project

 Freestyle build jobs are general-purpose build jobs, which provides a maximum of flexibility.

➤ Maven project

- The "maven2/3 project" is a build job specially adapted to Maven projects.
- Jenkins understands Maven pom files and project structures, and can use the information gleaned from the pom file to reduce the work related to the set up of project.

Monitor an external job

The "Monitor an external job" build job lets you keep an eye on noninteractive processes, such as cron jobs.

➤ Multiconfiguration job

The "multiconfiguration project" (also referred to as a "matrix project") run the same build job in many different configurations.



Configuring Source Code Management

- ➤ Jenkins tight integration with Version Control System is essential.
- ➤ Jenkins supports CVS and SVN (Version Control System). Also it is easy to integrate with all other version control system via plug-in.
- ➤ To configure Version Control System, SCM configuration options are offered in all Jenkins Build Jobs.
- ➤ By default, Jenkins will check out the repository contents into a subdirectory of current Jenkins workspace.



Create and run New Build Job

- Create build Job by following the below steps:
- Select "New Job" from menu item which avails in Jenkins Dashboard.
- Type a new project name.
- Select "Build a Free-style software project" from the list offered by Jenkins.
- Select "SubVersion" in SCM
 - Type SVN Repository URL.
 - Type "." in Local module directory field to avoid creation of new directory for source in Local workspace.
- Choose an appropriate "Check out strategy".
- Select poll SCM option in Build Trigger.
- In Build option, select "Invoke Ant"
 - Select Ant Version which is available in your machine.
 - Specify the target which you want to run from your build file available.
- Click on Save.



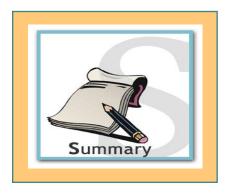
Demo

Create and run Build Job



Summary

- In this lesson, you have learnt about:
 - Introduction to Jenkins Build Job
 - Configuring Source Code Management
 - Create and run New Build Job



Review Question

- Question 1: In Jenkins, SVN Repository URL is validated immediately.
 - True/False
- ➤ Question 2: Which type of build job is used to run the same build job in many different configurations?
 - Freestyle software project
 - Maven project
 - Monitor an external job
 - Multiconfiguration job

