

# 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 non-interactive 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

