

Topic 4: Jenkins Jobs

Jobs

Build jobs are the basic currency of a Continuous Integration server.

Jobs is a way to perform task in jenkins which includes :

Compiling

Testing

Packaging

Deploying etc.

Types of Jobs



Freestyle project

This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.



Pipeline

Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.



Multi-configuration project

Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.



Folder

Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.



GitHub Organization

Scans a GitHub organization (or user account) for all repositories matching some defined markers.



Multibranch Pipeline

Creates a set of Pipeline projects according to detected branches in one SCM repository.

General Options

The first section you see when you create a new freestyle job contains general information about the project, such as a unique name and description, and other information about how and where the buildjob should be executed

SCM Configuration

Continuous Integration server monitors your version control system, and checks out the latest changes as they occur.

The server then compiles and tests the most recent version of the code.

Build Triggers

Once you have configured your version control system, you need to tell Jenkins when to kick off a build.

You set this up in the Build Triggers section

Build Step

Jenkins should know where and how often to obtain the project source code. The next thing you need to explain to Jenkins is what to do with the source code. In a freestyle build, you do this by defining build steps.

Build steps are the basic building blocks for the Jenkins freestyle build process. They are what let you tell Jenkins exactly how you want your project built

Post-Build Step

Once the build is completed, there are still a few things you need to look after.

You might want to archive some of the generated artifacts, to report on test results, and to notify people about the results