

Setting Up Maven Jobs in Jenkins

Jenkins – Maven Set-Up

- Best approach is to set MAVEN_HOME and M2_HOME environment variables to Local Maven Directory
- Other approach is to set it in 'Global Tools Configuration'

Maven

Maven installations

Add Maven

Maven

Name

mvn353

MAVEN_HOME

C:\apache-maven-3.5.3\

☐ Install automatically

Delete Maven

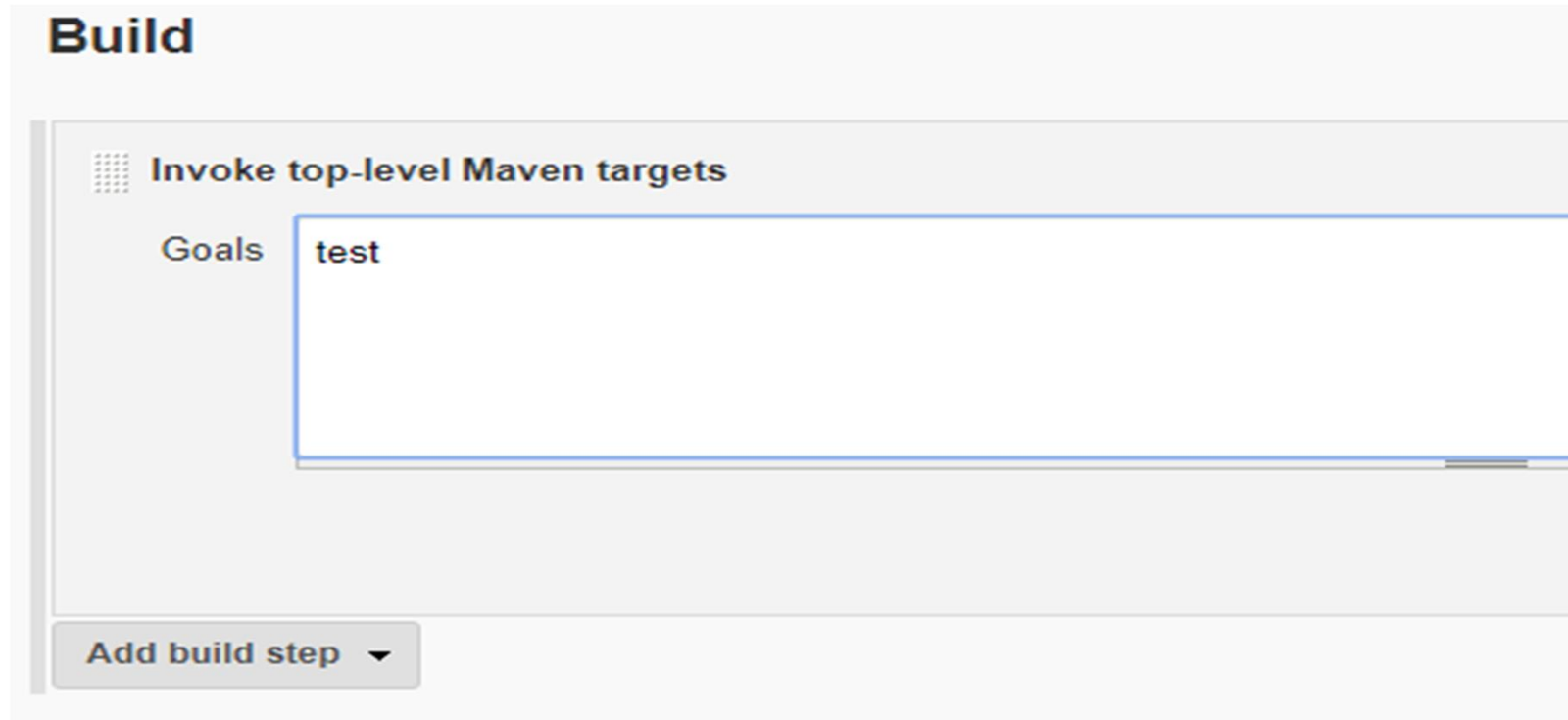
Add Maven

Jenkins – Maven Job

- Put up a Free Style Job to pull this GitHub Repository
<https://github.com/rchidana/mvndemo.git>
- In the build Step, execute top level Maven Goal 'test'

Jenkins – Maven Job

- In the build Step, execute top level Maven Goal 'test'



The screenshot shows the 'Build' step configuration in Jenkins. The step is titled 'Invoke top-level Maven targets'. Below the title, there is a 'Goals' field with the value 'test' entered. At the bottom of the configuration area, there is a button labeled 'Add build step' with a downward arrow.

Build

Invoke top-level Maven targets

Goals test

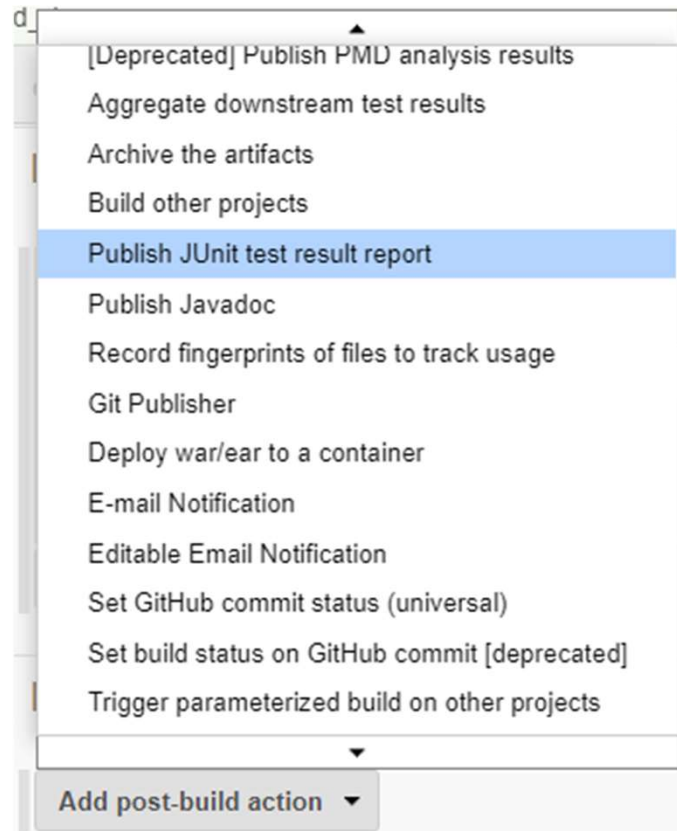
Add build step ▼

Jenkins – Publish JUnit Results

- Run the Job once to check if everything is well
- Sure-Fire is the JUnit plugin which produces all test XML reports which are found in 'target/surefire-reports/'
- Please publish test results by specifying the folder of the Reports file

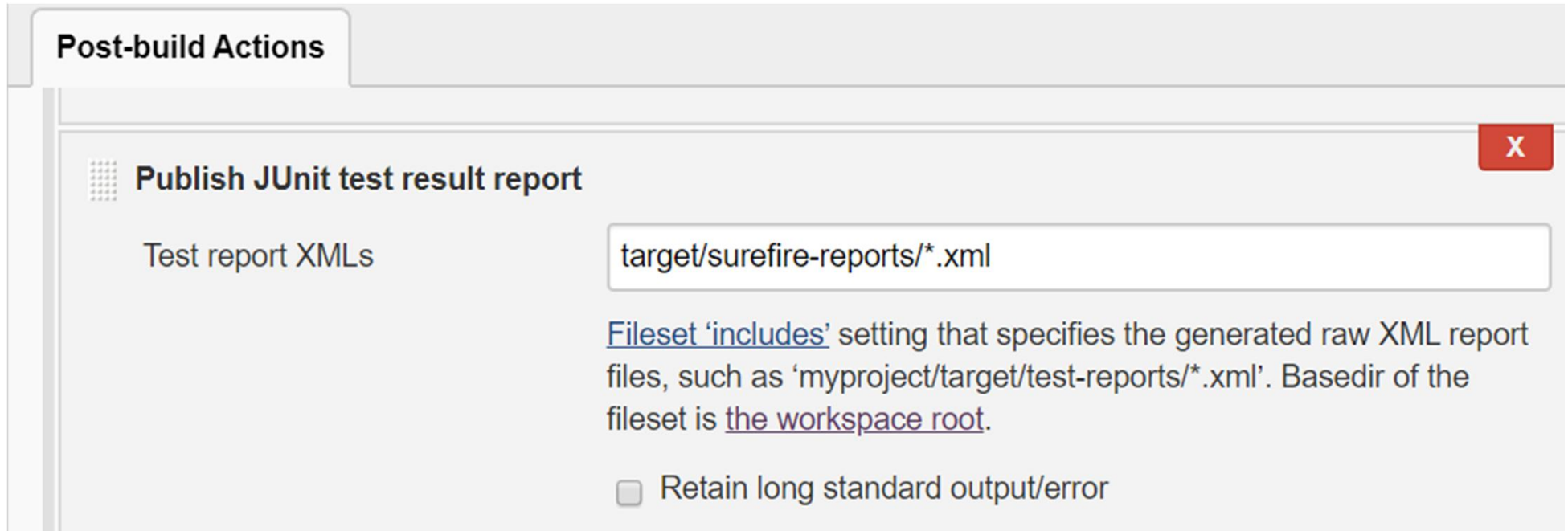
Jenkins – Publish JUnit Results

- Post Build Action -> Publish JUnit Results



Jenkins – Publish JUnit Results

- Post Build Action -> Publish JUnit Results



The screenshot shows the Jenkins configuration interface for the 'Post-build Actions' section. A tab labeled 'Post-build Actions' is selected. Below it, the 'Publish JUnit test result report' action is configured. The 'Test report XMLs' field contains the path 'target/surefire-reports/*.xml'. A descriptive text explains that the 'includes' setting specifies the generated raw XML report files, such as 'myproject/target/test-reports/*.xml', and that the base directory is the workspace root. There is an unchecked checkbox for 'Retain long standard output/error'.

Post-build Actions

Publish JUnit test result report

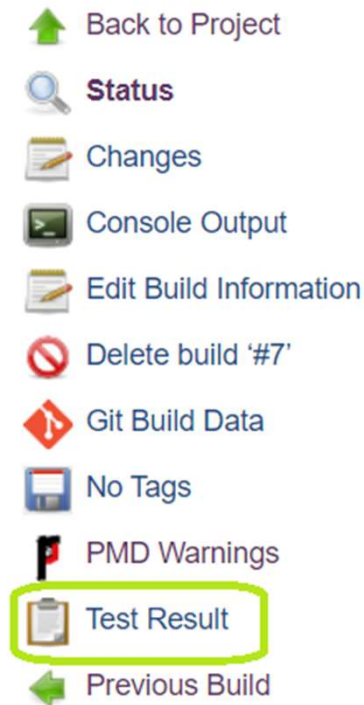
Test report XMLs:

[Fileset 'includes'](#) setting that specifies the generated raw XML report files, such as 'myproject/target/test-reports/*.xml'. Basedir of the fileset is [the workspace root](#).

☐ Retain long standard output/error

Jenkins – View JUnit Results

- On the recent Build, check ‘Test Result’



PMD – Code Analyzer

- Free Static Code Analyzer



PMD

An extensible cross-language static code analyzer.

PMD – Code Analyzer

- PMD analysis can be invoked with the Maven target `pmd:pmd`
- Jenkins Needs PMD Plugin in order to run PMD analysis on any project

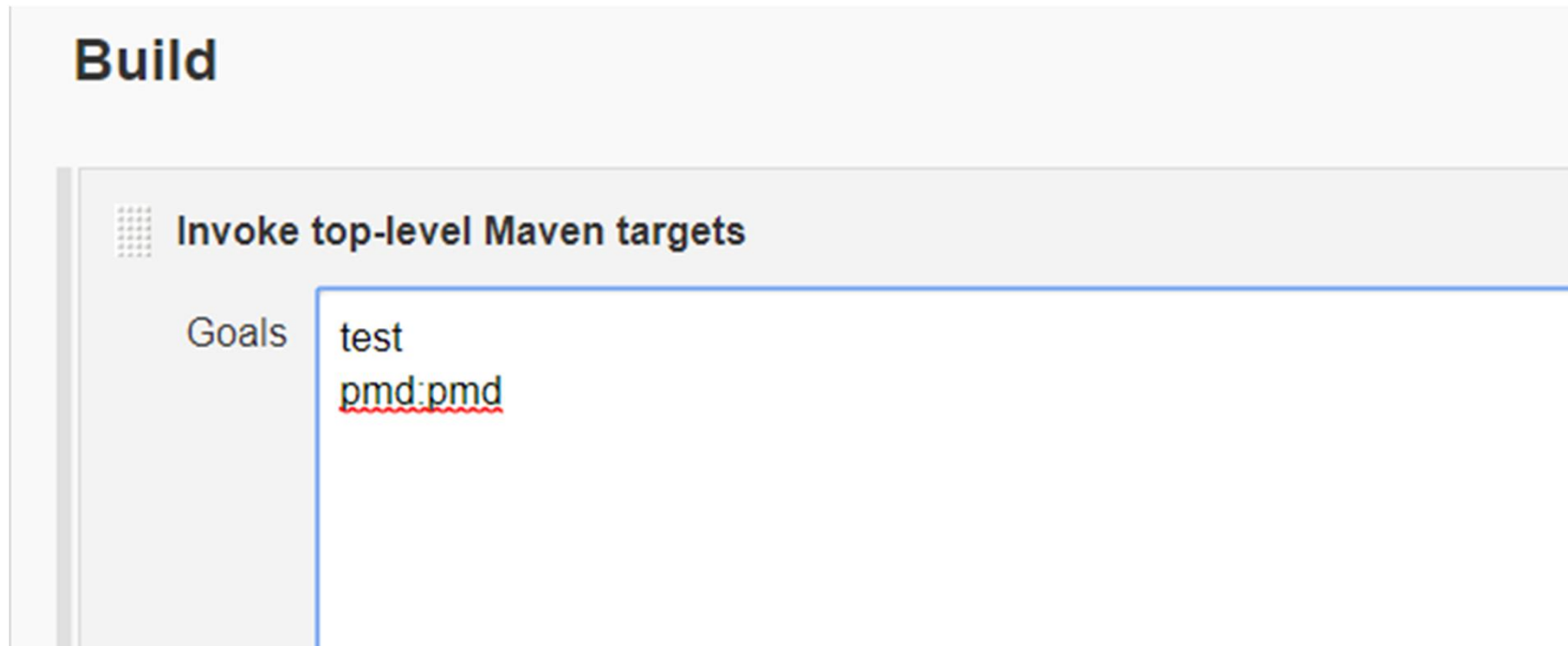
Install Jenkins PMD Plugin

- Manage Plugins > Available : Search for PMD

	Oracle Java SE Development Kit Installer Plugin	1.3
	Allows the Oracle Java SE Development Kit (JDK) to be installed via download from Oracle's website.	
	PMD Plug-in	4.0.0
	The PMD plug-in reached end-of-life. All functionality has been integrated into the Warnings Next Generation Plugin .	
	Static Analysis Utilities	1.06

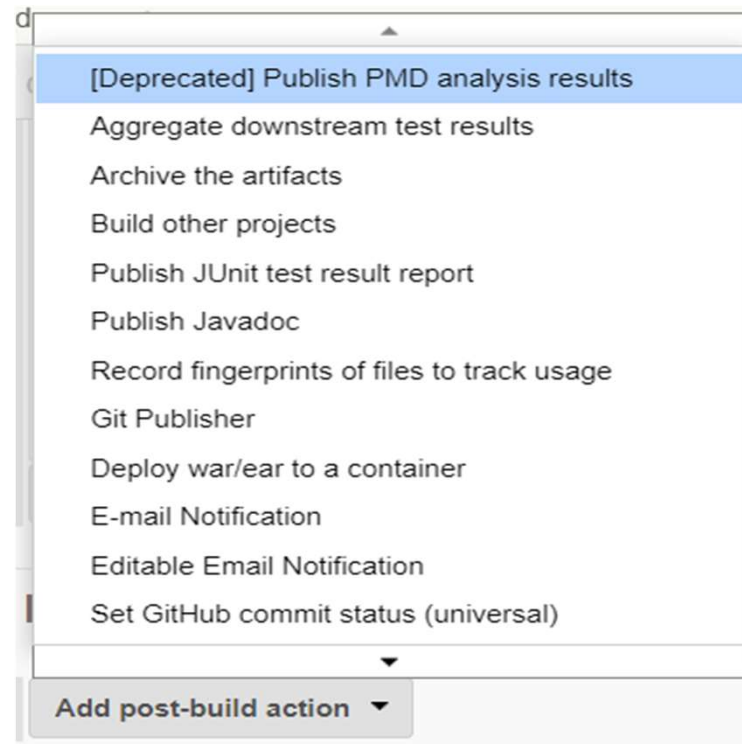
Invoke Maven pmd analysis

- Build Step > Invoke Maven Goal > pmd:pmd



Publish PMD Reports

- Post Build Step > Publish PMD reports



View PMD Reports

- Run the Analysis Once and then click on PMD Warnings

