Pages / Home / Jenkins - Installation

3 - Jenkins - Add a new project

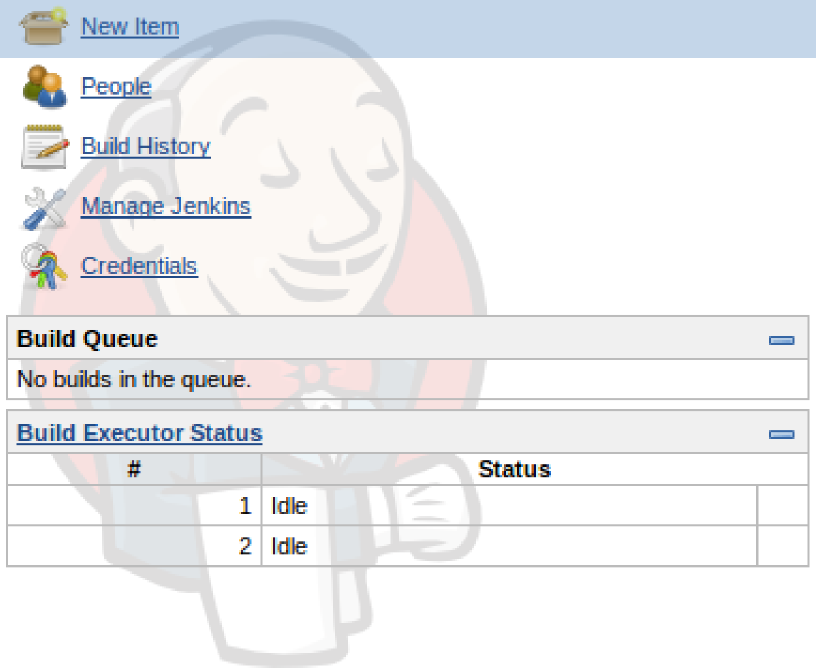
Created by Florian Dambrine, last modified on Mar 26, 2014

Table of contents

- Create a new Item
- Configure your project
  - Configure Git
  - Add Build Triggers
    - Create a new hook in BitBucket
    - Triggers configuration in your Jenkins project
  - Configure the Build Environment
    - Invoke Artifactory Manager
    - Inject GumGum's parameters
    - Invoke Gradle or Maven (depending on your project)
    - Email notification

Create a new Item

- Click on **New Item** from the Dashboard



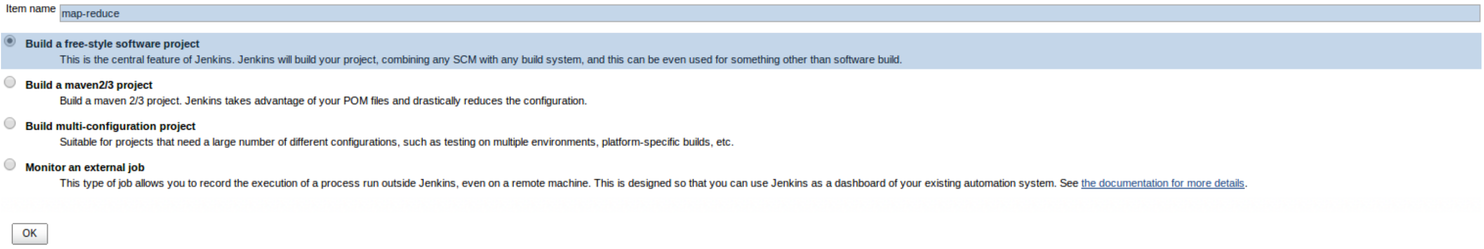
Build Queue

No builds in the queue.

Build Executor Status

#	Status
1	Idle
2	Idle

- Enter the name of your project and check the box **Build a free-style software project**



Item name map-reduce

● **Build a free-style software 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.

○ **Build a maven2/3 project**
Build a maven 2/3 project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

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

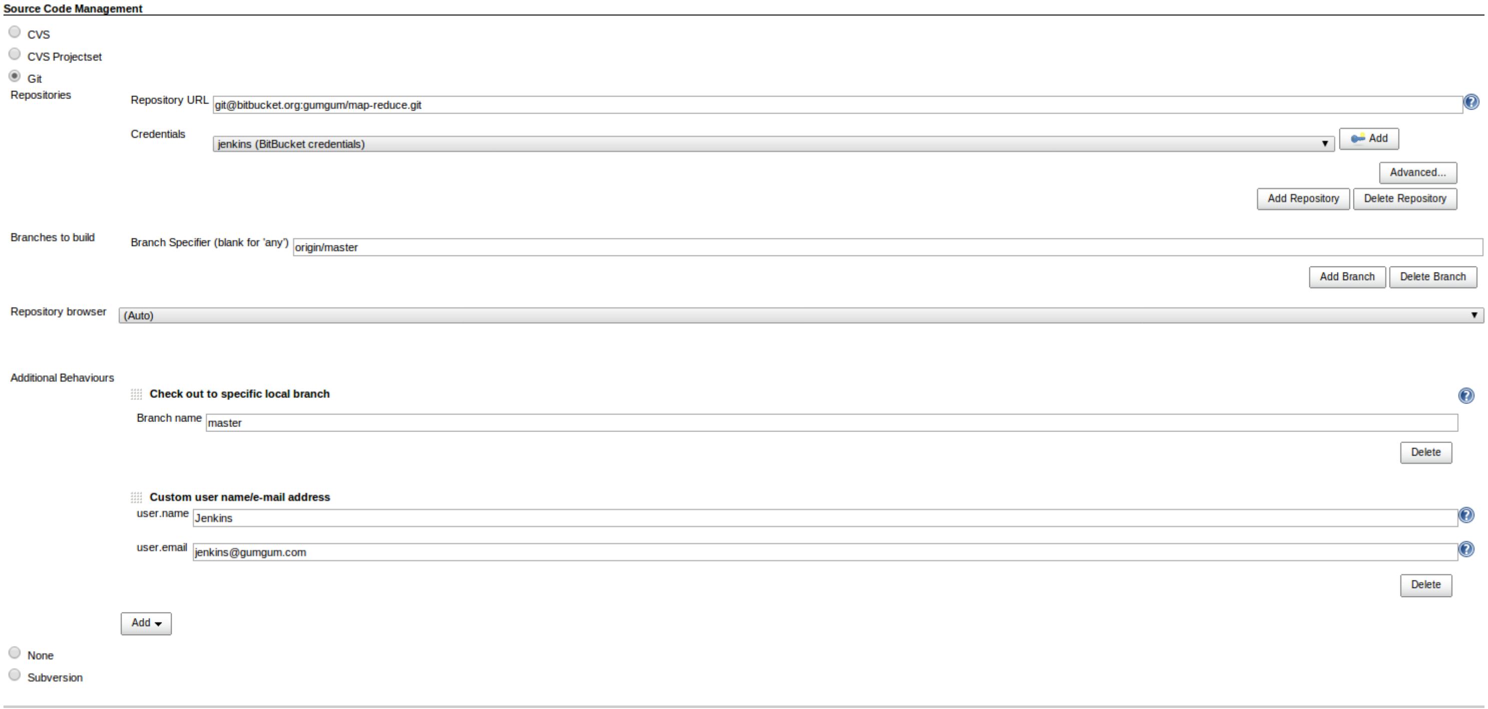
○ **Monitor an external job**
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system. See the documentation for more details.

Configure your project

Configure Git

- Here are the following settings that you have to configure to build tour project from BitBucket

Select the source code management tool	☑ Git
Repository URL	git@bitbucket.org:gumgum/*projectName*.git
Credentials	Select the credentials for BitBucket (References Add Credentials in Jenkins)
Branch to build	origin/master (most of the time)
Additional Behaviours - Check out to specific local branch	master
Additional Behaviours - Custom user name/e-mail address	**user.name** Jenkins **user.email** jenkins@gumgum.com



Source Code Management

○ CVS
○ CVS Projectset
● Git

Repositories
Repository URL: git@bitbucket.org:gumgum/map-reduce.git
Credentials: jenkins (BitBucket credentials)

Branches to build
Branch Specifier (blank for 'any'): origin/master

Repository browser: (Auto)

Additional Behaviours
Check out to specific local branch
Branch name: master

Custom user name/e-mail address
user.name: Jenkins
user.email: jenkins@gumgum.com

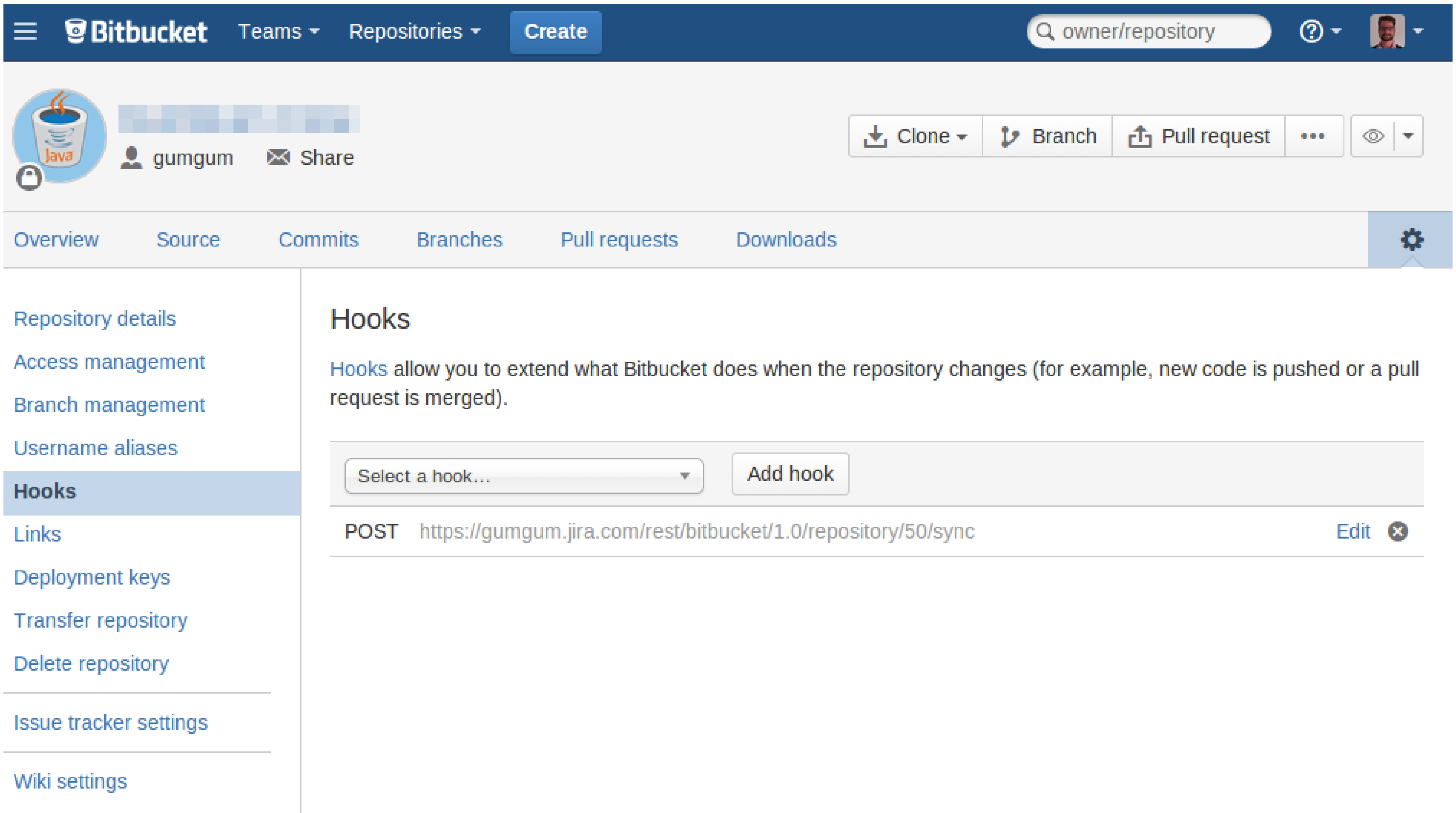
○ None
○ Subversion

Add Build Triggers

- Add two builds triggers, one from BitBucket, and the other one to pull periodically

Create a new hook in BitBucket

- *Reference link if needed: https://confluence.atlassian.com/display/BITBUCKET/Manage+Bitbucket+hooks*
- Go on BitBucket and click on the **gear icon** (You have to be admin)
- Click on **Hooks**
- **Add hook** after selecting **Jenkins** in the menu



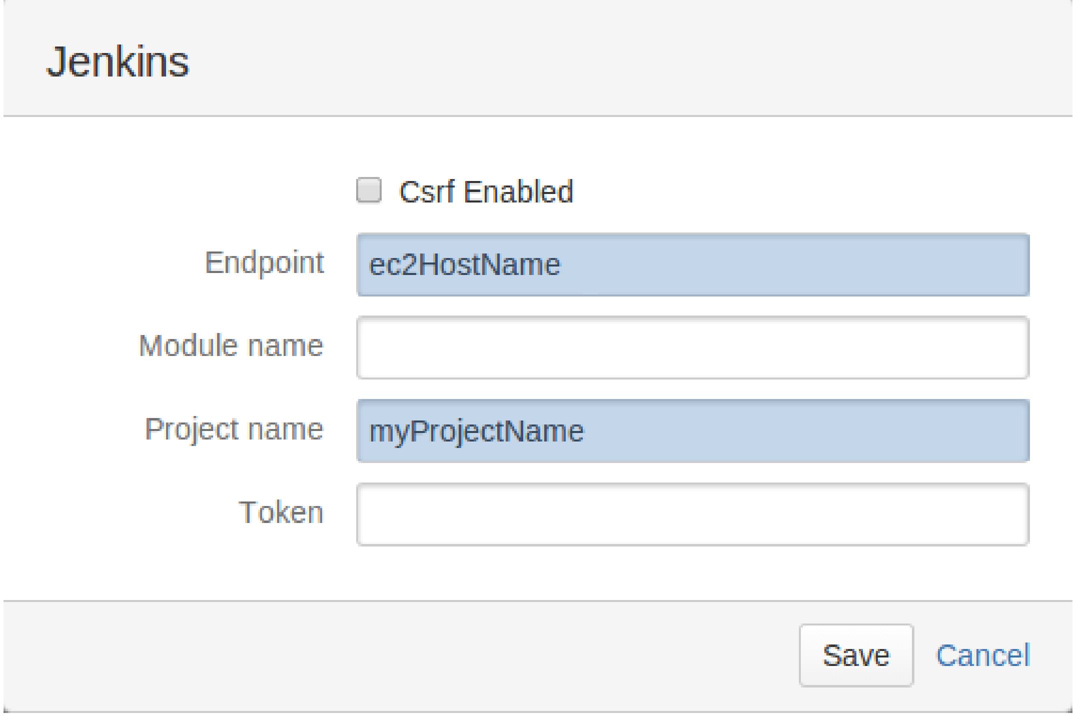
Hooks

Hooks allow you to extend what Bitbucket does when the repository changes (for example, new code is pushed or a pull request is merged).

POST https://gumgum.jira.com/rest/bitbucket/1.0/repository/50/sync

- Only set the following parameters:

Endpoint	DNS of your EC2 instance (http://jenkins.gumgum.com)
Project name	Name of your project in Jenkins



Jenkins

□ Csrf Enabled

Endpoint	ec2HostName
Module name	
Project name	myProjectName
Token	

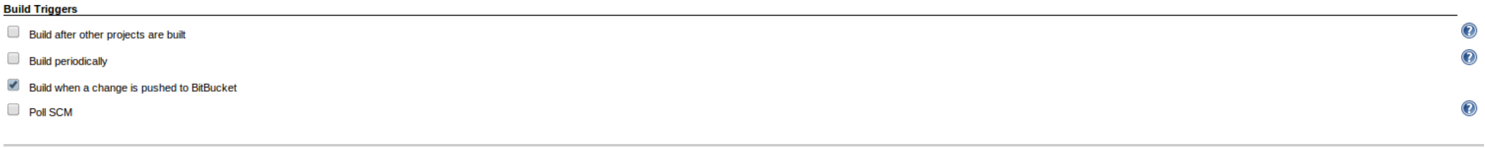
You have to allow BitBucket's IP addresses to trigger the hook on your server. In order to do that you have to allow the following ports: **80, 443** in your Security Groups.

Allow theses ports for the Ips given in the **Outbound** column in the following link https://confluence.atlassian.com/display/BITBUCKET/How+can+I+access+Bitbucket+from+behind+a+firewall

As written in the documentation those Ips may change, so in case of error with the hook trigger, check this documentation first!

Triggers configuration in your Jenkins project

- Thanks to theses triggers, you allow Jenkins to build your project **after each commit on the master** (thanks to the **Build when a change is pushed to BitBucket** checkbox)



Build Triggers

☐ Build after other projects are built

☐ Build periodically

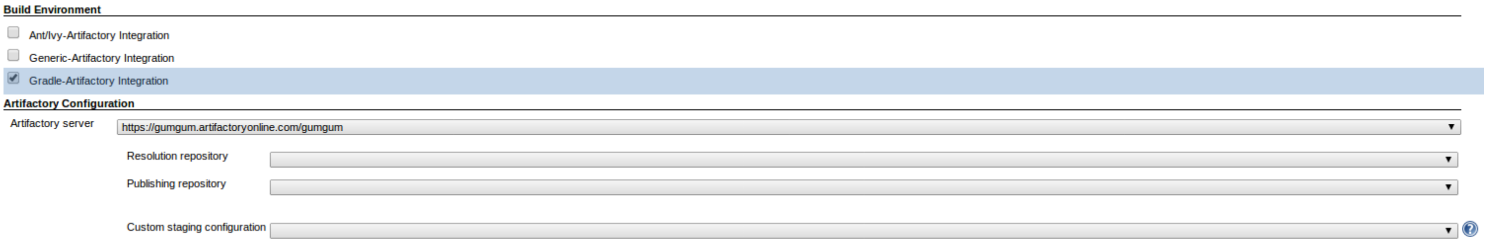
☑ Build when a change is pushed to BitBucket

☐ Poll SCM

Configure the Build Environment

Invoke Artifactory Manager

- In order to export to artifactory, you have to check the Gradle-Artifactory Integration checkbox



Build Environment

☐ Ant/Ivy-Artifactory Integration

☐ Generic-Artifactory Integration

☑ Gradle-Artifactory Integration

Artifactory Configuration

Artifactory server https://gumgum.artifactoryonline.com/gumgum

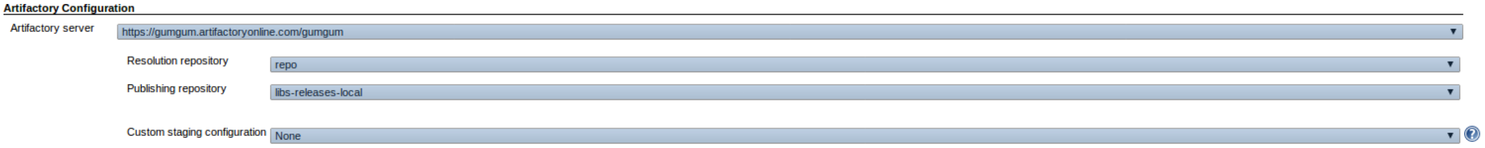
Resolution repository

Publishing repository

Custom staging configuration

- As you can see, there is an issue to refresh the selection lists
- To overcome this problem you can just hit **Apply** (Button at the bottom of the page) and **refresh** your browser (*F5*)
- Set up the following parameter:

Artifactory server	https://gumgum.artifactoryonline.com/gumgum (See section Artifactory Configuration)
Resolution repository	repo
Publishing repository	libs-releases-local
Custom staging configuration	None



Artifactory Configuration

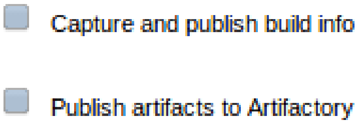
Artifactory server https://gumgum.artifactoryonline.com/gumgum

Resolution repository repo

Publishing repository libs-releases-local

Custom staging configuration None

- **Uncheck** the following two checkboxes avoiding releasing a SNAPSHOT to artifactory.

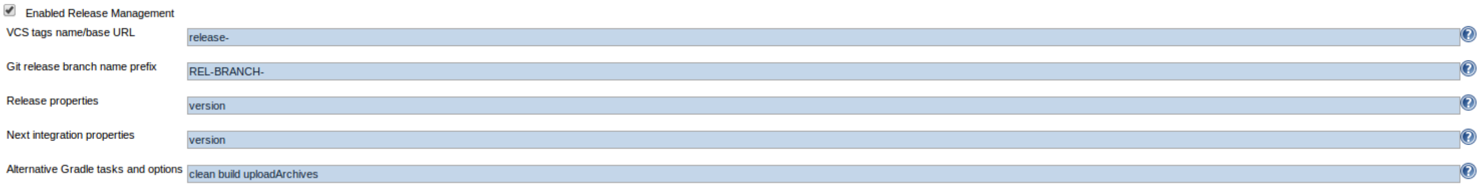


□ Capture and publish build info

□ Publish artifacts to Artifactory

- Enable the **Release Management**

VCS tags name/base URL	release-
Git release branch name prefix	REL-BRANCH-
Release properties	version
Next integration properties	version
Alternative Gradle tasks and options	All of the Gradle command that you want to invoke, usually: clean | assemble | build | uploadArchives | deploy



☑ Enabled Release Management

VCS tags name/base URL: release-

Git release branch name prefix: REL-BRANCH-

Release properties: version

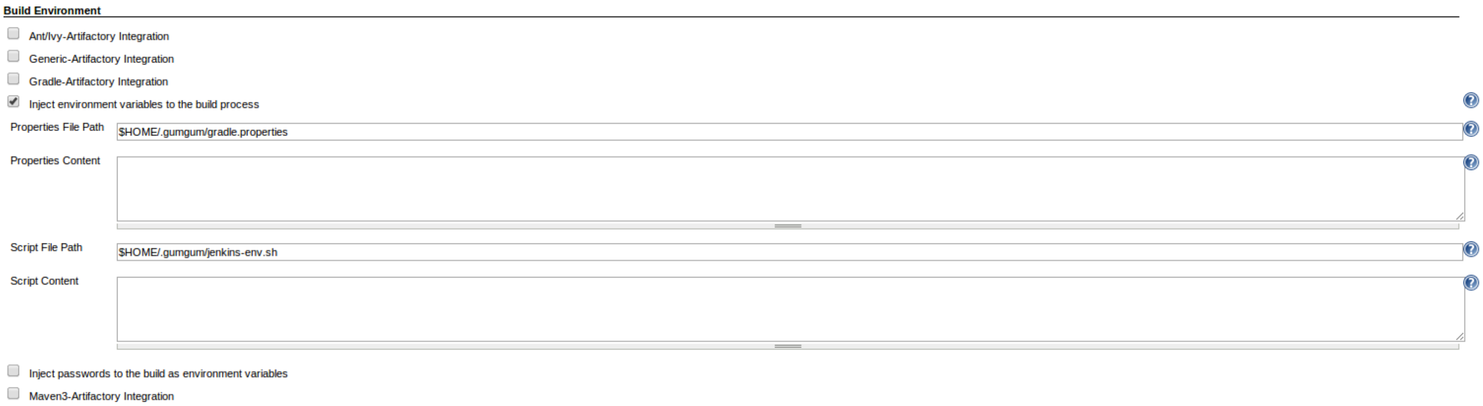
Next integration properties: version

Alternative Gradle tasks and options: clean build uploadArchives

Inject GumGum's parameters

- Configure the build environment in order to inject some parameters used by the Gradle script
- This section is using some files created in the following section: Import the GumGum configuration

Properties File Path	$HOME/.gumgum/gradle.properties
Script File Path	$HOME/.gumgum/jenkins-env.sh



Build Environment

□ Ant/Ivy-Artifactory Integration

□ Generic-Artifactory Integration

□ Gradle-Artifactory Integration

☑ Inject environment variables to the build process

Properties File Path: $HOME/.gumgum/gradle.properties

Properties Content:

Script File Path: $HOME/.gumgum/jenkins-env.sh

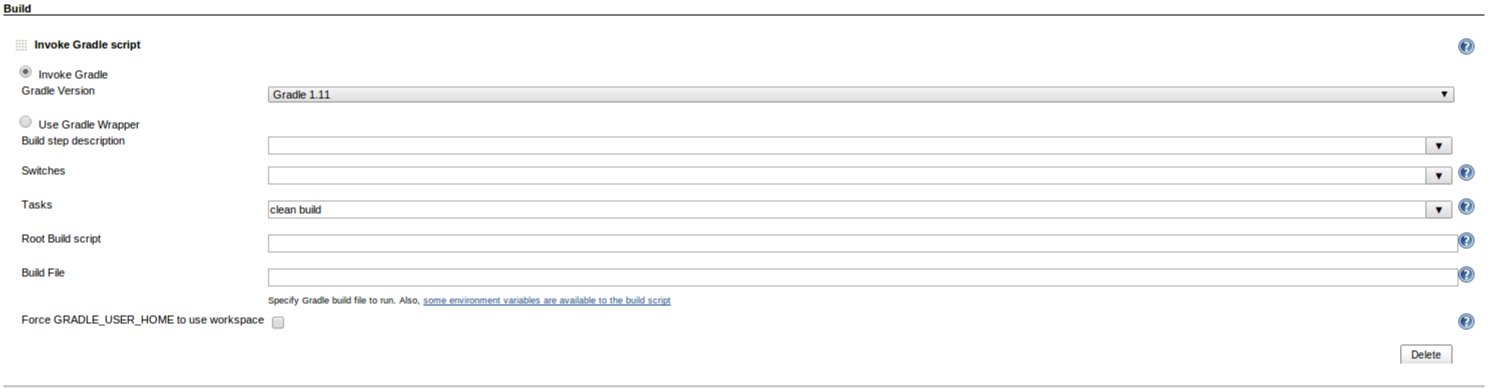
Script Content:

□ Inject passwords to the build as environment variables

□ Maven3-Artifactory Integration

Invoke Gradle or Maven (depending on your project)

- **Add a new build > Invoke Gradle script** OR **Add a new build > Invoke Maven 3**
- Select the version of Gradle/Maven (Items comes from the configuration of Jenkins -> Gradle Configuration / Maven Configuration)
- Set tasks to run by Gradle (Usually **clean build**) / Maven (Usually **clean deploy**)



Build

Invoke Gradle script

● Invoke Gradle

Gradle Version: Gradle 1.11

○ Use Gradle Wrapper

Build step description:

Switches:

Tasks: clean build

Root Build script:

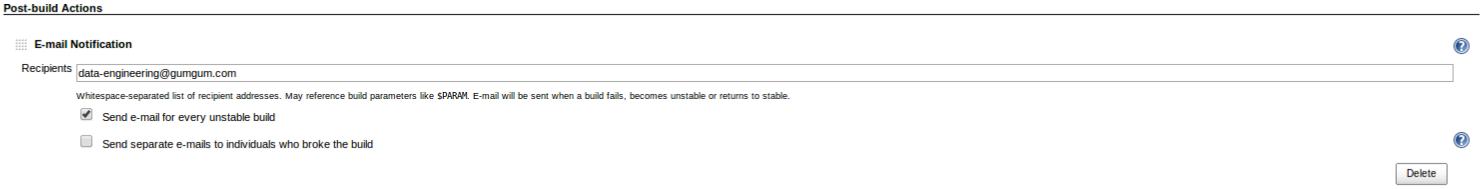
Build File:

Specify Gradle build file to run. Also, some environment variables are available to the build script

Force GRADLE_USER_HOME to use workspace □

Email notification

- **Add a new post-build action > Email notification**



Post-build Actions

E-mail Notification

Recipients: data-engineering@gumgum.com

Whitespace-separated list of recipient addresses. May reference build parameters like $PARAM. E-mail will be sent when a build fails, becomes unstable or returns to stable.

☑ Send e-mail for every unstable build

□ Send separate e-mails to individuals who broke the build

Like   Maxime Nay likes this

No labels