

# Gradle Plugin

## Plugin Information

View Gradle [on the plugin site](#) for more information.

This plugin makes it possible to invoke a [Gradle](#) build script as the main build step. It also allows detecting [Build Scans](#) in arbitrary console logs, for Maven and Gradle builds and display them in the Jenkins UI.

## Description

This plugin adds [Gradle](#) Support to Jenkins. [Gradle](#) is managed as another tool inside Jenkins (the same way as Ant or Maven), including support for automatic installation and a new build step is provided to execute Gradle tasks.

It also allows detecting [Build Scans](#) in arbitrary console logs, for Maven and Gradle builds and display them in the Jenkins UI.

## Configuration

Gradle configuration is performed in the **Configure System** (before Jenkins 2.0) or **Global Tool Configuration** (starting in Jenkins 2.0). In both cases these options reside in the **Manage Jenkins** section.

In the **Gradle** section provided by this plugin, several installations can be configured:

The screenshot shows the Jenkins configuration page for Gradle. It features a table of Gradle installations with columns for name, automatic installation status, and version. The 'Default' installation is currently selected and has automatic installation enabled. Below the table, there are buttons to add new installers or gradle versions, and to delete existing ones. A link at the bottom provides access to a list of all installed Gradle versions on the system.

The system provides both automatic installation, which can be performed by directly downloading from [the Gradle web site](#), extracting a compressed final or executing some shell commands.

Besides, for nodes which already has Gradle installed, the tool can be manually configured, by unchecking the **Install automatically** checkbox and providing the base path (`GRADLE_HOME`) of the installation.

## Usage

The [Gradle](#) plugin provides an **Invoke Gradle script** build step.

### Build

?

**Invoke Gradle script**

Invoke Gradle

Gradle Version (Default) ▾

Use Gradle Wrapper

Build step description ▾

Switches ▾ ?

Tasks ▾ ?

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  ?

Delete

The first configuration option is whether to use one of the installation configured in Jenkins (see previous section) or use the [Gradle Wrapper](#) which is the Gradle-provided mechanism to "embed" the use of a specific Gradle version in a build, installing it if necessary.

Other configuration options include:

- A description to use for the build step.
- Switches (options) to provide to the Gradle execution.
- Tasks to execute (if blank the default tasks of the build will be invoked).
- Path to the build script if different from the root directory of the build.
- Name of the build script if different from `build.gradle`.

If a [Gradle Build Scan](#) is produced during a build, then a link to it is added to the build page.



## Build #9 (Mar 18, 2019 4:21:05 PM)



No changes.



Started by anonymous user



This run spent:

- 2 ms waiting;
- 7.3 sec build duration;
- 7.3 sec total from scheduled to completion.



**Revision:** 2182134756c793f8d4e54cc8356fdf6d5bf40d48

- refs/remotes/origin/master



### Build Scans

- <https://gradle.com/s/hbhe3qk7djfgu>

## Capturing build scans from console log

If you are not using the provided build scan, you can still configure to detect published (Maven or Gradle) [Build Scans](#) from the console log. For doing so, go to **Build Environment** and check **Inspect build log for published Gradle build scans**.

### Build Environment

- Use secret text(s) or file(s)
- Provide Configuration files
- Abort the build if it's stuck
- Assign unique TCP ports to avoid collisions
- Create Delivery Pipeline version
- Inspect build log for published Gradle build scans
- Generate Release Notes
- Inject environment variables to the build process
- Inject passwords to the build as environment variables
- Set Build Name
- With Ant
- Add timestamps to the Console Output

If build scans are detected in the console log of a build, a badge will be added to the build page. This works for [Build Scans](#) produced by Gradle and Maven builds.

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### Build Scans

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## Capturing build scans from Jenkins Pipeline

When using Jenkins pipeline, there is the command `findBuildScans` which can be used to find the build scans emitted by Gradle builds and show them on the build page.

### Pipeline

Definition

Pipeline script

Script

```
1 node {
2     sh 'gradle help --scan'
3 }
4 findBuildScans()
```

Use Groovy Sandbox

[Pipeline Syntax](#)

# Roadmap

- Using the Gradle API for accessing all the Gradle functionalities
- Providing a Maven-like or Ivy-like integration
  - Multi-project detection
  - Adding automatic tests result path detection
  - Listing executed tasks with time execution for each task
  - Providing a log for each module in a multi-project

## Changelog

### 1.33 (July 5th 2019)

- Remove support for dry-run plugin [#72](#)
- Support detecting build scans in pipeline jobs ([#71](#))
- Increase required core version to 2.60.3 [#73](#)
- Use consistent file formatting for sources [#74](#). Thanks @darxriggs.

### 1.32 (May 24th 2019)

- Expose build scan action via Jenkins API ([#70](#))

### 1.31 (Mar 16th 2019)

- Support detecting Build Scans for non-Gradle build steps ([PR #66](#))
- Support for detecting Maven Build Scans ([PR #68](#))

### 1.30 (Jan 11th 2019)

- Fix configuration as code compatibility ([JENKINS-53575](#))

### Release 1.29 (Jul 3rd 2018)

- Update licensing information in pom.xml.
- Support console annotations for Gradle 4.7 and later.

### Release 1.28 (Oct 2 2017)

- Empty job parameters are passed as empty ([JENKINS-45300](#))
- Console annotator endless loop in combination with using the Ant plugin fixed ([JENKINS-46051](#))

### Release 1.27 (Jun 23 2017)

- Increase required core version to 1.642.1
- Make finding wrapper location more robust on Windows
- Job parameters are now correctly quoted when passed as system properties ([JENKINS-42573](#) and [JENKINS-20505](#))
- Do not pass all job parameters as (system) properties to Gradle by default
- Include automated test for CLI command [JENKINS-42847](#)
- Ensure that Gradle's bin directory is on the path for Pipeline tool steps [JENKINS-42381](#)
- Add option to pass only selected system properties to Gradle
- Add option to pass only selected project properties to Gradle
- Progress status `FROM-CACHE` and `NO-SOURCE` are highlighted in the console, too.
- Support build scan plugin 1.8


### Release 1.26 (Feb 13 2017)


- Use `@DataBoundSetter` instead of a (too) large `@DataBoundConstructor`
- Add `@Symbol` annotations for step and tool ([JENKINS-37394](#))
- Make it possible to configure the wrapper location ([JENKINS-35029](#))
- Update icon for build scan integration
- Remove description from build step


### Release 1.25


- Update core dependency to 1.580.1 [JENKINS-34790](#)

- Fix for Gradle wrapper not working when Gradle version was previously selected ([JENKINS-24682](#))
- Long task names in console outline should not overlap console output ([JENKINS-26287](#))
- It is now possible to pass Gradle build parameters as project properties ([JENKINS-17523](#))
- If a [Gradle Build Scan](#) is produced during the build then a link is added to the build page.


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 **Build Scans**

- <https://gradle.com/s/hbhe3qk7djjgu>

## Release 1.24

- \* Fix [JENKINS-18629](#) - Jenkins fails to save configuration when using Invoke Gradle script in Conditional Step (single).

## Release 1.23

- \* Fix [issue #17386](#) - Gradle.properties ignored after 1.22 upgrade. GRADLE\_USER\_HOME is now no longer set to the workspace of the job by default. If you wish to have the workspace job as the GRADLE\_USER\_HOME, you will need to change the config to reflect this.

## Release 1.22

- \* Fix [JENKINS-17294](#) - mask sensitive variables (Password parameters)
- \* Fix [JENKINS-13412](#) - use hudson.util.ArgumentListBuilder#toWindowsCommand
- \* Set GRADLE\_USER\_HOME all the time

## Release 1.21

- \* Add the ability to allow gradlew to still be run from workspace top, but to also configure it so that gradlew is found in the root build script directory.
- \* Fix [JENKINS-12769](#) - Cannot specify location of gradle wrapper
- \* Fix [JENKINS-15406](#) - When using gradlew, root build script field is not used to locate gradlew

## Release 1.20

- \* Fix [JENKINS-15166](#) - Gradle plugin fails to save selected Gradle Version in Project configuration

## Release 1.19

- \* Fix broken file permission introduced by [JENKINS-14780](#)

## Release 1.18

- \* Fix [JENKINS-14780](#) - make gradlew script executable

## Release 1.17

- \* Merge pull request - Change Gradle Wrapper logic to use the launcher's OS type rather than master's OS type when determining Gradle Wrapper script name

## Release 1.16

\* Fix reopened [JENKINS-9538](#) - hudson.model.FreeStyleBuild & GradleInstallation not serializable => Gradle build not working anymore

## Release 1.15

\* Fix reopened [JENKINS-13412](#) - Gradle plugin fails to quote parameters without whitespace when containing input/output redirection symbols, e.g. in XML strings

## Release 1.14

\* Fix [JENKINS-13412](#) - Gradle plugin fails to quote parameters without whitespace when containing input/output redirection symbols, e.g. in XML strings

## Release 1.13

\* Fix [JENKINS-9538](#) - hudson.model.FreeStyleBuild & GradleInstallation not serializable => Gradle build not working anymore

## Release 1.12 (October 30, 2011)

\* Fix [JENKINS-9553](#) - Gradle wrapper command fails on Windows

## Release 1.11 (October 02, 2011)

- Coloring output log and Navigation executed tasks (from pull request of ikikko)

## Release 1.10 (September 07, 2011)

- Provide dry-run option for the [DryRun Plugin](#)

## Release 1.9 (June 24, 2011)

- Integrate pull request - Enable JAVA\_OPTS

## Release 1.8 (April 01, 2011)

- Add pull request 'Let users use the Gradle wrapper'

## Release 1.7.1 (March 24, 2011)

- Fix 1.7 to properly set required Jenkins version.

## Release 1.7 (March 23, 2011)

- Add automatic tool installer

## Release 1.6 (February 27, 2011)

- Fix 1.5 to properly set required Jenkins version.

## Release 1.5 (February 19, 2011)

- Update to Jenkins 1.397 API and metadata
- Change UI labels from Hudson to Jenkins

## Release 1.4 (June, 09, 2010)

- Fix help messages
- Add technical internal behavior for a suitable Artifactory/Gradle integration (with the buildinfo)

## Release 1.3 (February 23, 2010)

- Add a description message in the build step

- The plugin makes it possible to extract a Gradle distribution from a shared location or from a command line, and uses this distribution for running the build.

## Release 1.2 (February 07, 2009)

- Add a distinction between switches and tasks
- The plugin makes its possible to specify the location of the build script if the workspace has a top-level build.gradle in somewhere other than the module root directory
- Improve user help messages

## Release 1.1 (November 07, 2008)

- Add the support of Gradle 0.5  
Before the version 0.5, the gradle windows executable file was "gradle.exe" and you lost the ERRORLEVEL value.  
From Gradle 0.5, the window launcher is a .bat file that conserves the correct ERRORLEVEL value.

## Release 1.0 (October 04, 2008)

- Initial release