Docs

[User Manual](http://docs.google.com/userguide/userguide.html)

[Guides and Tutorials](https://guides.gradle.org)

[DSL Reference](http://docs.google.com/dsl/)

[Javadoc](http://docs.google.com/javadoc/)

[Release Notes](http://docs.google.com/release-notes.html)

[Forums](https://discuss.gradle.org/)

[Training](https://gradle.org/training/)

[Try Gradle Enterprise](https://gradle.com/enterprise)

[PDF](http://docs.google.com/userguide/userguide.pdf)

* [User Manual Home](http://docs.google.com/userguide/userguide.html)
* [Release Notes](http://docs.google.com/release-notes.html)
* [Installing Gradle](http://docs.google.com/userguide/installation.html)
* [Tutorials](https://guides.gradle.org/)

### Reference

* [Groovy DSL Reference](http://docs.google.com/dsl/)
* [Gradle API Javadoc](http://docs.google.com/javadoc/)
* [Core Plugins](http://docs.google.com/userguide/plugin_reference.html)
* [Gradle & Third-party Tools](http://docs.google.com/userguide/third_party_integration.html)

### Getting Started

* [Creating New Gradle Builds](https://guides.gradle.org/creating-new-gradle-builds/)
* [Creating Build Scans](https://guides.gradle.org/creating-build-scans/)
* [Migrating From Maven](https://guides.gradle.org/migrating-from-maven/)

### Running Gradle Builds

* [Command-Line Interface](http://docs.google.com/userguide/command_line_interface.html)
* [Customizing Execution](#gjdgxs)
  + [Configuring the Build Environment](http://docs.google.com/userguide/build_environment.html)
  + [Configuring the Gradle Daemon](http://docs.google.com/userguide/gradle_daemon.html)
  + [Initialization Scripts](http://docs.google.com/userguide/init_scripts.html)
* [Directory Layout](http://docs.google.com/userguide/directory_layout.html)
* [Executing Multi-Project Builds](http://docs.google.com/userguide/intro_multi_project_builds.html)
* [Gradle Wrapper](http://docs.google.com/userguide/gradle_wrapper.html)
* [Troubleshooting](http://docs.google.com/userguide/troubleshooting.html)
* [Using Build Scans](https://docs.gradle.com/build-scan-plugin)
* [Enabling and Configuring the Build Cache](http://docs.google.com/userguide/build_cache.html)
* [Integrating Separate Gradle Builds (Composite Builds)](http://docs.google.com/userguide/composite_builds.html)

### Authoring Gradle Builds

* [Fundamentals](#30j0zll)
  + [Introducing the Basics of Build Scripts](http://docs.google.com/userguide/tutorial_using_tasks.html)
  + [Working with Tasks](http://docs.google.com/userguide/more_about_tasks.html)
  + [Learning More About Build Scripts](http://docs.google.com/userguide/writing_build_scripts.html)
  + [Working with Files](http://docs.google.com/userguide/working_with_files.html)
  + [Creating Custom Task Types](http://docs.google.com/userguide/custom_tasks.html)
  + [Using Gradle Plugins](http://docs.google.com/userguide/plugins.html)
  + [The Standard Gradle Plugins](http://docs.google.com/userguide/standard_plugins.html)
  + [Understanding the Build Lifecycle](http://docs.google.com/userguide/build_lifecycle.html)
  + [Working with Logging](http://docs.google.com/userguide/logging.html)
  + [Configuring Multi-Project Builds](http://docs.google.com/userguide/multi_project_builds.html)
* [Best Practices](#1fob9te)
  + [Authoring Maintainable Build Scripts](http://docs.google.com/userguide/authoring_maintainable_build_scripts.html)
  + [Organizing Gradle Projects](http://docs.google.com/userguide/organizing_gradle_projects.html)
  + [Optimizing Build Performance](https://guides.gradle.org/performance/)
  + [Using the Build Cache](https://guides.gradle.org/using-build-cache/)
* [Dependency Management](#3znysh7)
  + [Introduction to Dependency Management](http://docs.google.com/userguide/introduction_dependency_management.html)
  + [Dependency Management Terminology](http://docs.google.com/userguide/dependency_management_terminology.html)
  + [Dependency Types](http://docs.google.com/userguide/dependency_types.html)
  + [Repository Types](http://docs.google.com/userguide/repository_types.html)
  + [Declaring Dependencies](http://docs.google.com/userguide/declaring_dependencies.html)
  + [Declaring Repositories](http://docs.google.com/userguide/declaring_repositories.html)
  + [Inspecting Dependencies](http://docs.google.com/userguide/inspecting_dependencies.html)
  + [Managing Dependency Configurations](http://docs.google.com/userguide/managing_dependency_configurations.html)
  + [Managing Transitive Dependencies](http://docs.google.com/userguide/managing_transitive_dependencies.html)
  + [Dependency Locking](http://docs.google.com/userguide/dependency_locking.html)
  + [Troubleshooting Dependency Resolution](http://docs.google.com/userguide/troubleshooting_dependency_resolution.html)
  + [Customizing Dependency Resolution Behavior](http://docs.google.com/userguide/customizing_dependency_resolution_behavior.html)
  + [Dependency Cache Internals](http://docs.google.com/userguide/dependency_cache.html)
  + [Working with Dependencies](http://docs.google.com/userguide/working_with_dependencies.html)
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  + [Software Model Concepts](http://docs.google.com/userguide/software_model_concepts.html)
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  + [Implementing Model Rules in a Plugin](http://docs.google.com/userguide/rule_source.html)
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  + [Configuring Tasks Lazily](http://docs.google.com/userguide/lazy_configuration.html)
  + [Developing Parallel Tasks](https://guides.gradle.org/using-the-worker-api/)
  + [Testing Your Build with TestKit](http://docs.google.com/userguide/test_kit.html)
  + [Using Ant from Gradle](http://docs.google.com/userguide/ant.html)
* [Sample Gradle builds](#1t3h5sf)
  + [Groovy DSL Samples](https://github.com/gradle/gradle/tree/master/subprojects/docs/src/samples)
  + [Kotlin DSL Samples](https://github.com/gradle/kotlin-dsl/tree/master/samples)

### Extending Gradle

* [Writing Custom Plugins](http://docs.google.com/userguide/custom_plugins.html)
* [Plugin Development Guides](https://gradle.org/guides/?q=Plugin+Development)

[Edit this page](https://github.com/gradle/gradle/edit/master/subprojects/docs/src/docs/userguide/)

# Installing Gradle

You can install the Gradle build tool on Linux, macOS, or Windows. This document covers installing using a package manager like SDKMAN!, Homebrew, or Scoop, as well as manual installation.

Use of the [Gradle Wrapper](http://docs.google.com/gradle_wrapper.html#sec:upgrading_wrapper) is the recommended way to upgrade Gradle.

You can find all releases and their checksums on the [releases page](https://gradle.org/releases).

[Prerequisites](#4d34og8)

Gradle runs on all major operating systems and requires only a [Java JDK](http://www.oracle.com/technetwork/java/javase/downloads/index.html) version 7 or higher to run. To check, run java -version. You should see something like this:

❯ java -version  
java version "1.8.0\_151"  
Java(TM) SE Runtime Environment (build 1.8.0\_151-b12)  
Java HotSpot(TM) 64-Bit Server VM (build 25.151-b12, mixed mode)

Gradle ships with its own Groovy library, therefore Groovy does not need to be installed. Any existing Groovy installation is ignored by Gradle.

Gradle uses whatever JDK it finds in your path. Alternatively, you can set the JAVA\_HOME environment variable to point to the installation directory of the desired JDK.

[Installing with a package manager](#2s8eyo1)

[SDKMAN!](http://sdkman.io) is a tool for managing parallel versions of multiple Software Development Kits on most Unix-based systems.

❯ sdk install gradle

[Homebrew](http://brew.sh) is "the missing package manager for macOS".

❯ brew install gradle

[Scoop](http://scoop.sh) is a command-line installer for Windows inspired by Homebrew.

❯ scoop install gradle

[Chocolatey](https://chocolatey.org) is "the package manager for Windows".

❯ choco install gradle

[MacPorts](https://www.macports.org) is a system for managing tools on macOS:

❯ sudo port install gradle

[↓ Proceed to next steps](#17dp8vu)

[Installing manually](#3rdcrjn)

[Step 1.](#26in1rg) [Download](https://gradle.org/releases) the latest Gradle distribution

The distribution ZIP file comes in two flavors:

* Binary-only (bin)
* Complete (all) with docs and sources

Need to work with an older version? See the [releases page](https://gradle.org/releases).

[Step 2. Unpack the distribution](#lnxbz9)

[Linux & MacOS users](#35nkun2)

Unzip the distribution zip file in the directory of your choosing, e.g.:

❯ mkdir /opt/gradle  
❯ unzip -d /opt/gradle gradle-4.10.1-bin.zip  
❯ ls /opt/gradle/gradle-4.10.1  
LICENSE NOTICE bin getting-started.html init.d lib media

[Microsoft Windows users](#1ksv4uv)

Create a new directory C:\Gradle with File Explorer.

Open a second File Explorer window and go to the directory where the Gradle distribution was downloaded. Double-click the ZIP archive to expose the content. Drag the content folder gradle-4.10.1 to your newly created C:\Gradle folder.

Alternatively you can unpack the Gradle distribution ZIP into C:\Gradle using an archiver tool of your choice.

[Step 3. Configure your system environment](#44sinio)

For running Gradle, firstly add the environment variable GRADLE\_HOME. This should point to the unpacked files from the Gradle website. Next add *GRADLE\_HOME*/bin to your PATH environment variable. Usually, this is sufficient to run Gradle.

[Linux & MacOS users](#2jxsxqh)

Configure your PATH environment variable to include the bin directory of the unzipped distribution, e.g.:

❯ export PATH=$PATH:/opt/gradle/gradle-4.10.1/bin

[Microsoft Windows users](#z337ya)

In File Explorer right-click on the This PC (or Computer) icon, then click Properties → Advanced System Settings → Environmental Variables.

Under System Variables select Path, then click Edit. Add an entry for C:\Gradle\gradle-4.10.1\bin. Click OK to save.

[↓ Proceed to next steps](#17dp8vu)

[Verifying installation](#3j2qqm3)

Open a console (or a Windows command prompt) and run gradle -v to run gradle and display the version, e.g.:

❯ gradle -v  
  
------------------------------------------------------------  
Gradle 4.10.1  
------------------------------------------------------------  
  
Build time: 2018-02-21 15:28:42 UTC  
Revision: 819e0059da49f469d3e9b2896dc4e72537c4847d  
  
Groovy: 2.4.15  
Ant: Apache Ant(TM) version 1.9.9 compiled on February 2 2017  
JVM: 1.8.0\_151 (Oracle Corporation 25.151-b12)  
OS: Mac OS X 10.13.3 x86\_64

If you run into any trouble, see the [section on troubleshooting installation](http://docs.google.com/troubleshooting.html#sec:troubleshooting_installation).

You can verify the integrity of the Gradle distribution by downloading the SHA-256 file (available from the [releases page](https://gradle.org/releases)) and following these [verification instructions](http://docs.google.com/gradle_wrapper.html#sec:verification).

[Next steps](#17dp8vu)

Now that you have Gradle installed, use these resources for getting started:

* Create your first Gradle project by following the [Creating New Gradle Builds](https://guides.gradle.org/creating-new-gradle-builds/) tutorial.
* Sign up for a [live introductory Gradle training](https://gradle.org/training/intro-to-gradle/) with a core engineer.
* Learn how to achieve common tasks through the [command-line interface](http://docs.google.com/command_line_interface.html#command_line_interface).
* [Configure Gradle execution](http://docs.google.com/build_environment.html#build_environment), such as use of an HTTP proxy for downloading dependencies.
* Subscribe to the [Gradle Newsletter](https://newsletter.gradle.com/) for monthly release and community updates.

[Getting help](#1y810tw)

You might check the user guide at *GRADLE\_HOME*/docs/userguide/userguide.html. It is also available on the [Gradle web site](https://gradle.org/documentation.html). Typing gradle help prints the command line help. Typing gradle tasks shows all the tasks of a Gradle build.

Docs

* [User Manual](http://docs.google.com/userguide/userguide.html)
* [DSL Reference](http://docs.google.com/dsl/)
* [Release Notes](http://docs.google.com/release-notes.html)
* [Javadoc](http://docs.google.com/javadoc/)

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