

Compatibility Matrix

The sections below describe Gradle’s compatibility with several integrations. Versions not listed here may or may not work.

Contents

- Java Runtime
- Kotlin
- Groovy
- Android

Java Runtime

Gradle runs on the Java Virtual Machine (JVM), which is often provided by either a JDK or JRE. A JVM version between 8 and 23 is required to execute Gradle. JVM 24 and later versions are not yet supported.

Executing the Gradle daemon with JVM 16 or earlier has been deprecated and will become an error in Gradle 9.0. The Gradle wrapper, Gradle client, Tooling API client, and TestKit client will remain compatible with JVM 8.

JDK 6 and 7 can be used for [compilation](#). Testing with JVM 6 and 7 is deprecated and will not be supported in Gradle 9.0.

Any fully supported version of Java can be used for compilation or testing. However, the latest Java version may only be supported for compilation or testing, not for running Gradle. Support is achieved using [toolchains](#) and applies to all tasks supporting toolchains.

See the table below for the Java version supported by a specific Gradle release:

Table 1. Java Compatibility

Java version	Support for toolchains	Support for running Gradle
8	N/A	2.0
9	N/A	4.3
10	N/A	4.7
11	N/A	5.0
12	N/A	5.4
13	N/A	6.0
14	N/A	6.3
15	6.7	6.7
16	7.0	7.0
17	7.3	7.3
18	7.5	7.5

Java version	Support for toolchains	Support for running Gradle	<div>Contents</div> <div> Java Runtime </div> <div> Kotlin </div> <div> Groovy </div> <div> Android </div>
19	7.6	7.6	
20	8.1	8.3	
21	8.4	8.5	
22	8.7	8.8	
23	8.10	8.10	
24	N/A	N/A	

Kotlin

Gradle is tested with Kotlin 1.6.10 through 2.0.20-Beta2. Beta and RC versions may or may not work.

Table 2. Embedded Kotlin version

Embedded Kotlin version	Minimum Gradle version	Kotlin Language version
1.3.10	5.0	1.3
1.3.11	5.1	1.3
1.3.20	5.2	1.3
1.3.21	5.3	1.3
1.3.31	5.5	1.3
1.3.41	5.6	1.3
1.3.50	6.0	1.3
1.3.61	6.1	1.3
1.3.70	6.3	1.3
1.3.71	6.4	1.3
1.3.72	6.5	1.3
1.4.20	6.8	1.3
1.4.31	7.0	1.4
1.5.21	7.2	1.4
1.5.31	7.3	1.4
1.6.21	7.5	1.4

Embedded Kotlin version	Minimum Gradle version	Kotlin Language version
1.7.10	7.6	1.4
1.8.10	8.0	1.8
1.8.20	8.2	1.8
1.9.0	8.3	1.8
1.9.10	8.4	1.8
1.9.20	8.5	1.8
1.9.22	8.7	1.8
1.9.23	8.9	1.8
1.9.24	8.10	1.8

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Groovy

Gradle is tested with Groovy 1.5.8 through 4.0.0.

Gradle plugins written in Groovy must use Groovy 3.x for compatibility with Gradle and Groovy DSL build scripts.

Android

Gradle is tested with Android Gradle Plugin 7.3 through 8.4. Alpha and beta versions may or may not work.