

# JUnit 5 Release Notes

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Version 5.3.0-SNAPSHOT

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This document contains the *change log* for all JUnit 5 releases since 5.1 GA.

Please refer to the [User Guide](#) for comprehensive reference documentation for programmers writing tests, extension authors, and engine authors as well as build tool and IDE vendors.

## 5.3.0-M1

**Date of Release:**

**Scope:**

For a complete list of all *closed* issues and pull requests for this release, consult the [5.3 M1](#) milestone page in the JUnit repository on GitHub.

## JUnit Platform

### Bug Fixes

- Full stacktrace is printed to the console, when running the `ConsoleLauncher` in `--details verbose` mode.

### Deprecations and Breaking Changes

- The `junit-platform-gradle-plugin` has been discontinued and is no longer released as part of JUnit 5. Please use [Gradle's native support](#) for running tests on the JUnit Platform (requires Gradle 4.6 or higher) instead.

### New Features and Improvements

- New overloaded variant of `isAnnotated()` in `AnnotationSupport` that accepts `Optional<? extends AnnotatedElement>` instead of `AnnotatedElement`.

## JUnit Jupiter

### Bug Fixes

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### Deprecations and Breaking Changes

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### New Features and Improvements

- New support for the IBM AIX operating system in `@EnabledOnOs` and `@DisabledOnOs`.
- New `assertThrows` methods in `Assertions` provide a more specific failure message if the supplied lambda expression or method reference returns a result instead of throwing an exception.

- New `arguments()` static factory method in the `Arguments` interface that serves as an *alias* for `Arguments.of()`. `arguments()` is intended to be used via `import static`.
- New `get<Class>(index)` Kotlin extension method to make `ArgumentsAccessor` friendlier to use from Kotlin.

## JUnit Vintage

### Bug Fixes

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### Deprecations and Breaking Changes

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### New Features and Improvements

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## 5.2.0

**Date of Release:** April 29, 2018

**Scope:** JUnit BOM, support for Maven Surefire 2.21.0 allowing builds with Java 9 and Java 10, *argument aggregation* and *widening primitive conversion* for arguments in parameterized tests, external factory methods for `@MethodSource`, as well as various minor improvements and bug fixes.

For a complete list of all *closed* issues and pull requests for this release, consult the [5.2 M1](#), [5.2 RC1](#), and [5.2 GA](#) milestone pages in the JUnit repository on GitHub.

## Overall Improvements

- JUnit BOM: To ease dependency management using [Maven](#) or [Gradle](#), a *Bill of Materials* POM is now provided under the `org.junit:junit-bom:5.2.0` Maven coordinates.

## JUnit Platform

### Bug Fixes

- Tag expressions containing spaces are now supported in the JUnit Platform Maven Surefire provider.
- Duplicate `--config` keys supplied to the `ConsoleLauncher` are now reported properly.
- Exceptions thrown in `Node.after()` (in the `HierarchicalTestEngine` infrastructure) no longer mask earlier exceptions.

## New Features and Improvements

- The JUnit Platform Surefire Provider (`junit-platform-surefire-provider`) now works with and requires Surefire `2.21.0` which allows it to be used with Java 9 and Java 10.
- The default *include pattern* for filtering class names now matches test classes whose names either start with `Test` or end with `Test` or `Tests`.
  - This pattern is used by the `ConsoleLauncher`, the JUnit Platform Gradle Plugin, and the `JUnitPlatform` runner.

## JUnit Jupiter

### Bug Fixes

- Exceptions thrown by an `AfterAllCallback` no longer mask exceptions thrown at the class level when using the `@TestInstance(PER_CLASS)` lifecycle mode.

## New Features and Improvements

- New `assertDoesNotThrow()` methods in `Assertions` which assert that the execution of a given code block does *not* throw any kind of exception.
- New `fail()` method in `Assertions` makes it possible to fail a test without an explicit failure message.
- Implicit support for *widening primitive conversion* for an argument supplied to a `@ParameterizedTest`.
  - For example, a parameterized test annotated with `@ValueSource(ints = { 1, 2, 3 })` can be declared to accept an argument of type `int`, `long`, `float`, or `double`.
- `@MethodSource` now supports `static` factory methods declared in external classes referenced by *fully qualified method name*.
- Support for aggregation of multiple `@ParameterizedTest` arguments into a single object.
  - For details, see [Argument Aggregation](#).

## JUnit Vintage

No changes.

## 5.1.1

**Date of Release:** April 8, 2018

**Scope:** Bug fixes and minor improvements since the 5.1.0 release

For a complete list of all *closed* issues and pull requests for this release, consult the [5.1.1](#) milestone page in the JUnit repository on GitHub.

# JUnit Platform

## New Features and Improvements

- New `findAllClassesInModule()` method in `ReflectionSupport` which enables third-party `TestEngine` implementations to scan for classes in modules—for example, when processing a `ModuleSelector` during the discovery phase.

# JUnit Jupiter

## New Features and Improvements

- The `ParameterContext` API used in `ParameterResolver` implementations now includes the following convenience methods for looking up annotations on parameters. Extension authors are strongly encouraged to use these methods instead of those provided in the core `java.lang.reflect.Parameter` API due to a bug in `javac` on JDK versions prior to JDK 9 which causes lookups for annotations on parameters in inner class constructors to fail consistently—for example, when resolving a parameter for a `@Nested` test class constructor.
  - `boolean isAnnotated(Class<? extends Annotation> annotationType)`
  - `Optional<A> findAnnotation(Class<A> annotationType)`
  - `List<A> findRepeatableAnnotations(Class<A> annotationType)`

# JUnit Vintage

No changes.

## 5.1.0

**Date of Release:** February 18, 2018

### Scope:

- Discovering tests in Java 9 modules
- Improved Kotlin support
- [Programmatic extension registration](#) via `@RegisterExtension`
- [Tag expression language](#) for filtering tests to be executed
- Annotation-based [conditional test execution](#) with support for environment variables, system properties, operating systems, JRE versions, and dynamic scripts
- Various improvements for writing [parameterized tests](#)
- Refinements to the `ExtensionContext` API
- Support for re-running individual dynamic tests, parameterized tests, and test template invocations within an IDE

For complete details consult the [5.1.0 Release Notes](#) online.