JUnit 5 Release Notes
Stefan Bechtold, Sam Brannen, Johannes Link, Matthias Merdes, Marc Philipp, Christian Stein
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.
- ReflectionUtils.findNestedClasses() and ReflectionSupport.findNestedClasses() no longer allow a NoClassDefFoundError to propagate if a nested class or nested interface has an invalid class file. Instead, the error will now be swallowed and logged at WARNING level.

#### **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.
- New --fail-if-no-tests command-line option for the ConsoleLauncher.
  - When this option is enabled and no tests are discovered, the launcher will fail and exit with a status code of 2.

## **JUnit Jupiter**

#### **Bug Fixes**

- Test discovery no longer halts prematurely if a nested class or nested interface in a test class has an invalid class file.
- Certain categories of errors encountered during the test discovery phase no longer cause JUnit

Jupiter to prematurely abort the entire discovery process.

• Such errors are now logged, thereby enabling JUnit Jupiter to discover and execute as many tests as possible while still informing the user of containers and tests that could not be properly discovered.

#### **Deprecations and Breaking Changes**

#### **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**

### **Deprecations and Breaking Changes**

#### **New Features and Improvements**

### 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 JUnitPlatformrunner.

### **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.