| JUnit 5 Release Notes  |
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| Stefan Bechtold, Sam Brannen, Johannes Link, Matthias Merdes, Marc Philipp,<br>Christian Stein |
| Version 5.3.0-SNAPSHOT   |
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This document contains the *change log* for all JUnit 5 releases since 5.2 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-RC1

#### Date of Release:

#### Scope:

For a complete list of all *closed* issues and pull requests for this release, consult the 5.3 RC1 milestone page in the JUnit repository on GitHub.

### **JUnit Platform**

#### **Bug Fixes**

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

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

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### **JUnit Jupiter**

### **Bug Fixes**

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### **Deprecations and Breaking Changes**

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

- New TestInstanceFactory extension API that enables custom creation of test class instances.
  - See Test Instance Factories in the User Guide for details.
- ArgumentConverters and ArgumentsAggregators registered using @ConvertWith and @AggregateWith, respectively, are now only instantiated once per @ParameterizedTest instead of once for each invocation.

# **JUnit Vintage**

#### **Bug Fixes**

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

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

• The VintageTestEngine now uses the *simple name* of a test class as the display name instead of the *fully qualified class name*. This aligns with the behavior of the JupiterTestEngine.

### 5.3.0-M1

Date of Release: June 24, 2018

**Scope:** Parallel test execution, output capturing, test sources for dynamic tests 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 5.3 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.
- The findAnnotation() methods in AnnotationSupport and AnnotationUtils no longer cache annotation lookups. Note, however, that the algorithm remains otherwise unmodified and is therefore semantically identical to the previous behavior.

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

- Experimental support for capturing output printed to System.out and System.err during test execution. This feature is disabled by default and can be enabled using a configuration parameter (cf. User Guide).
- Reusable support for parallel test execution for test engines that extend HierarchicalTestEngine.
  - HierarchicalTestEngine implementations may now specify
    HierarchicalTestExecutorService
  - By default, a SameThreadHierarchicalTestExecutorService is used.
  - Test engines may use ForkJoinPoolHierarchicalTestExecutorService to support parallel test execution based on the Fork/Join Framework.
  - Node implementations may provide a set of ExclusiveResources and an ExecutionMode to be used by ForkJoinPoolHierarchicalTestExecutorService.
- 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**

- When using @TestInstance(Lifecycle.PER\_CLASS) semantics, registered AfterAllCallback extensions are no longer invoked if an exception is thrown by the test class constructor. Consequently, AfterAllCallback extensions are now only invoked if BeforeAllCallback extensions were invoked.
- 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.

### **New Features and Improvements**

- Experimental support for parallel test execution. By default, tests are still executed sequentially; parallelism can be enabled using a configuration parameter (please refer to the User Guide for examples and configuration options).
- 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.
- New support for supplying a custom test source URI when creating a dynamic container or test. See factory methods dynamicContainer(String, URI, ...) in DynamicContainer and dynamicTest(String, URI, Executable) in DynamicTest for details.

### **JUnit Vintage**

No changes.

### 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 <code>@MethodSource</code>, as well as various minor improvements and bug fixes.

For complete details consult the 5.2.0 Release Notes online.