JUnit 5 Release Notes

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This document contains the *change log* for all JUnit 5 releases since 5.4 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.

5.5.0-RC1

Date of Release:

Scope:

For a complete list of all *closed* issues and pull requests for this release, consult the 5.5 RC1 milestone page in the JUnit repository on GitHub.

JUnit Platform

Bug Fixes

• A custom ClassLoader created for additional --class-path entries passed to the ConsoleLauncher

will now be closed after usage to gracefully free file handles.

Deprecations and Breaking Changes

• The internal PreconditionViolationException class in concealed package org.junit.platform.commons.util is now deprecated and has been replaced by an exception class with the same name in exported package org.junit.platform.commons.

New Features and Improvements

- AnnotationSupport.findRepeatableAnnotations() now finds repeatable annotations used as metaannotations on other repeatable annotations.
- New AnnotationSupport.findRepeatableAnnotations() variant that accepts a java.util.Optional<? extends AnnotatedElement> argument.
- Exceptions thrown by TestExecutionListeners no longer cause test execution to abort. Instead, they will be logged as warnings now.
- New MethodSource.from() variant that accepts String, String, Class<?>... as arguments.

JUnit Jupiter

Bug Fixes

• Execution of dynamic tests registered via a @TestFactory method no longer results in an OutOfMemoryError if the executables in the dynamic tests retain references to objects consuming large amounts of memory. Technically speaking, JUnit Jupiter no longer retains references to instances of DynamicTest after they have been executed.

Deprecations and Breaking Changes

• Script-based condition APIs and their supporting implementations are deprecated with the intent to remove them in JUnit Jupiter 5.6. Users should instead rely on a combination of other built-in conditions or create and use a custom implementation of ExecutionCondition to evaluate the same conditions.

New Features and Improvements

- Support for declarative timeouts using @Timeout or configuration parameters (see User Guide for details)
- New overloaded variants of Assertions.assertLinesMatch(···) that accept a String or a Supplier<String> for a custom failure message.
- Failure messages for Assertions.assertLinesMatch(…) now emit each expected and actual line in a dedicated line.
- New Kotlin friendly assertDoesNotThrow, assertTimeout, and assertTimeoutPreemptively assertions have been added as top-level functions in the org.junit.jupiter.api package.
- Display names for test methods generated by the ReplaceUnderscores DisplayNameGenerator no

longer include empty parentheses for test methods that do not declare any parameters.

- New junit.jupiter.displayname.generator.default configuration parameter to set the default DisplayNameGenerator that will be used unless @DisplayName or @DisplayNameGeneration is present.
- MethodOrderer.Random now generates a default random seed only once and prints it to the log in order to allow reproducible builds.
- The declared field type for an extension registered via <code>@RegisterExtension</code> is no longer required to implement an <code>Extension</code> API. It is now sufficient if the extension implementation can be assigned to the declared field type. This provides extension authors greater flexibility as well as the ability to hide implementation details of the user facing extension API.
- Methods ordered with MethodOrderer.Random now execute using the SAME_THREAD concurrency mode instead of the CONCURRENT mode when no custom seed is provided.
- New emptyValue attribute in @CsvFileSource and @CsvSource.
- All methods in the TestWatcher API are now interface default methods with empty implementations.
- New InvocationInterceptor extension API (see User Guide for details).
- Added support for method URIs, e.g. method:org.junit.Foo#bar(), to DynamicContainer and DynamicTest factory methods.

JUnit Vintage

New Features and Improvements

• junit:junit is now a compile-scoped dependency of junit-vintage-engine to allow for easier dependency management in Maven POMs.

5.5.0-M1

Date of Release: March 19, 2019

Scope: Configurable test discovery implementation

For a complete list of all *closed* issues and pull requests for this release, consult the 5.5 M1 milestone page in the JUnit repository on GitHub.

JUnit Platform

New Features and Improvements

- Configurable test discovery implementation that can be reused by different test engines (see Javadoc of the org.junit.platform.engine.support.discovery package).
- New isFinal() and isNotFinal() methods in ModifierSupport.

JUnit Jupiter

New Features and Improvements

- Expected and actual values are now supplied for failed boolean assertions for enhanced IDE and reporting support for example, when assertTrue() or assertFalse() fails.
- @ValueSource now additionally supports literal values of type boolean for parameterized tests.

JUnit Vintage

No changes.

5.4.2

Date of Release: April 7, 2019

Scope: Bug fixes since 5.4.1

For a complete list of all *closed* issues and pull requests for this release, consult the 5.4.2 milestone page in the JUnit repository on GitHub.

JUnit Platform

No changes.

JUnit Jupiter

Bug Fixes

• Parameterized tests no longer throw an ArrayStoreException when creating human-readable test names.

JUnit Vintage

Bug Fixes

• Safeguard against Runners that only report tests as failed but not as started or finished such as Spock in case of failures during data-provider preparation.

5.4.1

Date of Release: March 17, 2019

Scope: Bug fixes since 5.4.0

For a complete list of all *closed* issues and pull requests for this release, consult the 5.4.1 milestone page in the JUnit repository on GitHub.

Overall Improvements

• Fix Specification-Version entry in JAR manifests

JUnit Platform

Bug Fixes

• Restore compatibility with Android: Unsupported Pattern flags, like UNICODE_CHARACTER_CLASS, no longer cause class StringUtils to fail during initialization.

JUnit Jupiter

Bug Fixes

• Deletion of a temporary directory within a test no longer results in a test failure for a temporary directory supplied via @TempDir.

JUnit Vintage

Bug Fixes

• Fix reporting of finish events of intermediate containers with static and dynamic children, e.g. Spock test classes with regular and <code>QUnroll</code> feature methods in a test suite.

5.4.0

Date of Release: February 7, 2019

Scope:

- New junit-jupiter dependency-aggregating artifact for simplified dependency management in build tools
- XML report generating listener
- Test Kit for testing engines and extensions
- null and empty argument sources for @ParameterizedTest methods
- @TempDir support for temporary directories
- · Custom display name generator API
- Support for ordering test methods
- Support for ordering extensions registered via @RegisterExtension

- TestWatcher extension API
- API for accessing outer test instances in ExtensionContext
- JUnit 4 @Ignore migration support
- Improved diagnostics and error reporting
- Improved documentation and user experience in the User Guide
- Discontinuation of the junit-platform-surefire-provider
- Various minor improvements and bug fixes

For complete details consult the 5.4.0 Release Notes online.