# Using Gradle to Manage Testing



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## Overview



Most (all?) projects will have tests

Setting up JUnit 4

**Setting up JUnit 5** 

Filtering tests



#### There Is a Test Source Set

By default looks for unit tests in src/test/java

Outputs to build/classes/test

Reports to build/reports/test



testImplementation("junit:junit:4.12")

# Dependencies

Use testImplementation to define test dependencies



```
test {
    testLogging {
        events TestLogEvent.FAILED,
               TestLogEvent.PASSED,
               TestLogEvent.SKIPPED
```

## Configuration

Use test block to configure testing



```
tasks {
  test {
      useJUnitPlatform()
      testLogging.events = setOf(TestLogEvent.FAILED, TestLogEvent.PASSED,
                                 TestLogEvent.SKIPPED)
```

# Configure jUnit5

Add use jUnitPlatform to configure jUnit5



```
testImplementation("org.junit.jupiter:junit-jupiter-api:$junit_version")
testRuntimeOnly("org.junit.jupiter:junit-jupiter-engine:$junit_version")
```

#### Dependencies for jUnit5

Use testImplementation to define test dependencies



#### Filtering

```
test {
  filter {
   includeTestsMatching "com.foo.shouldCreateASession"
   includeTestsMatching "*shouldCreateASession"
}
```



#### Filtering

```
tasks.register<Test>("singleTest") {
  group = "Verification"
  description = "Runs a single test"
  dependsOn("testClasses")
  filter {
     includeTestsMatching(
     "com.pluralsight.security.TestCreateStreams.testWhenInputFileDoesExist")
```



#### Filtering (JUnit 5)

```
tasks.register<Test>("singleTest") {
  group = "Verification"
  description = "Runs a single test"
  dependsOn("testClasses")
  useJUnitPlatform()
  filter {
     includeTestsMatching(
     "com.pluralsight.security.TestCreateStreams.testWhenInputFileDoesExist")
```



# Filtering

gradle test --tests \*shouldCreateASession



#### Review



Most (all?) projects will have tests

Setting up JUnit 4

Setting up JUnit 5

Filtering tests



What's Next?



