

# Method Metrics

## References

- [jqassistant](#)
- [Neo4j Python Driver](#)

## Effective Method Line Count

### Table 1a - Effective method line count distribution

This table shows the distribution of the effective method line count per artifact. For each artifact the number of methods with effective line count = 1,2,3,... is shown to get an overview of how line counts are distributed over methods.

Only the 15 artifacts with the highest method count and their effective method line count distribution (limited by 40) is shown here. The whole table can be found in the CSV report

`Effective_Method_Line_Count_Distribution`.

Have a look below to find out which packages and methods have the highest effective lines of code.

| artifactName       | axon-messaging-4.10.3.jar | axon-server-connector-4.10.3.jar | axon-event sourcing-4.10.3.jar | axon-modelling-4.10.3.jar | axon-test-4.10.3.jar | axon-configuration-4.10.3.jar | axon-spring-boot-autoconfigure-4.10.3.jar | axon-disruptor-4.10.3.jar | axon-tracing-opentelemetry-4.10.3.jar |
|--------------------|---------------------------|----------------------------------|--------------------------------|---------------------------|----------------------|-------------------------------|---|---------------------------|---------------------------------------|
| effectiveLineCount |                           |                                  |                                |                           |                      |                               |   |                           |                                       |
| 1                  | 2830                      | 552                              | 573                            | 535                       | 280                  | 310                           | 222                                       | 84                        | 16                                    |
| 2                  | 828                       | 198                              | 204                            | 160                       | 171                  | 146                           | 91  | 31                        | 4                                     |
| 3                  | 671                       | 138                              | 127                            | 140                       | 65                   | 34                            | 18  | 30                        | 10                                    |
| 4                  | 272                       | 68                               | 64                             | 58                        | 49                   | 42                            | 19  | 8                         | 7                                     |
| 5                  | 221                       | 44                               | 39                             | 46                        | 24                   | 16                            | 12  | 5                         | 2                                     |
| 6                  | 161                       | 25                               | 34                             | 44                        | 18                   | 17                            | 11  | 6                         | 3                                     |
| 7                  | 105                       | 19                               | 32                             | 25                        | 20                   | 3                             | 11  | 2                         | 2                                     |
| 8                  | 80                        | 21                               | 12                             | 10                        | 11                   | 7                             | 8   | 0                         | 0                                     |
| 9                  | 77                        | 12                               | 18                             | 17                        | 10                   | 8                             | 4   | 4                         | 1                                     |
| 10                 | 47                        | 15                               | 7                              | 8                         | 4                    | 6                             | 3   | 3                         | 0                                     |
| 11                 | 44                        | 11                               | 2                              | 7                         | 9                    | 5                             | 3   | 1                         | 0                                     |
| 12                 | 42                        | 9                                | 5                              | 2                         | 9                    | 1                             | 0   | 1                         | 1                                     |
| 13                 | 28                        | 6                                | 2                              | 9                         | 4                    | 2                             | 0   | 1                         | 0                                     |
| 14                 | 12                        | 1                                | 3                              | 4                         | 2                    | 1                             | 0   | 2                         | 0                                     |
| 15                 | 10                        | 5                                | 2                              | 5                         | 3                    | 0                             | 0   | 0                         | 0                                     |
| 16                 | 8                         | 3                                | 6                              | 2                         | 4                    | 0                             | 0   | 0                         | 0                                     |
| 17                 | 10                        | 6                                | 0                              | 1                         | 4                    | 1                             | 0   | 1                         | 0                                     |
| 18                 | 9                         | 0                                | 3                              | 0                         | 3                    | 1                             | 0   | 1                         | 0                                     |
| 19                 | 7                         | 4                                | 0                              | 2                         | 0                    | 1                             | 1   | 1                         | 0                                     |
| 20                 | 5                         | 2                                | 2                              | 2                         | 1                    | 0                             | 0   | 0                         | 0                                     |
| 21                 | 6                         | 2                                | 2                              | 1                         | 1                    | 1                             | 0   | 0                         | 0                                     |
| 22                 | 3                         | 0                                | 1                              | 2                         | 1                    | 0                             | 2   | 1                         | 0                                     |
| 23                 | 5                         | 0                                | 2                              | 0                         | 1                    | 1                             | 1   | 0                         | 0                                     |
| 24                 | 3                         | 3                                | 1                              | 1                         | 1                    | 0                             | 0   | 1                         | 0                                     |
| 25                 | 2                         | 0                                | 1                              | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 26                 | 2                         | 0                                | 0                              | 1                         | 1                    | 1                             | 0   | 0                         | 0                                     |
| 27                 | 0                         | 1                                | 0                              | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 28                 | 2                         | 1                                | 0                              | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 29                 | 0                         | 0                                | 0                              | 0                         | 1                    | 0                             | 0   | 0                         | 0                                     |
| 30                 | 1                         | 0                                | 0                              | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 31                 | 1                         | 0                                | 0                              | 0                         | 1                    | 0                             | 0   | 0                         | 0                                     |
| 32                 | 1                         | 0                                | 0                              | 0                         | 0                    | 0                             | 0   | 1                         | 0                                     |
| 33                 | 1                         | 0                                | 0                              | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 34                 | 1                         | 1                                | 0                              | 0                         | 0                    | 0                             | 1   | 0                         | 0                                     |
| 35                 | 0                         | 1                                | 0                              | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 36                 | 2                         | 0                                | 0                              | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 38                 | 0                         | 0                                | 0                              | 1                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 41                 | 0                         | 1                                | 0                              | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 43                 | 0                         | 0                                | 0                              | 0                         | 0                    | 1                             | 0   | 0                         | 0                                     |
| 44                 | 1                         | 0                                | 0                              | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |

Table 1b - Effective method line count distribution (normalized)

The table shown here only includes the first 40 rows which typically represents the most significant entries. Have a look below to find out which packages and methods have the highest effective lines of code.

| artifactName       | axon-messaging-4.10.3.jar | axon-server-connector-4.10.3.jar | axon-event sourcing-4.10.3.jar | axon-modelling-4.10.3.jar | axon-test-4.10.3.jar | axon-configuration-4.10.3.jar | axon-spring-boot-autoconfigure-4.10.3.jar | axon-disruptor-4.10.3.jar | axon-tracing-opentelemetry-4.10.3.jar |
|--------------------|---------------------------|----------------------------------|--------------------------------|---------------------------|----------------------|-------------------------------|---|---------------------------|---------------------------------------|
| effectiveLineCount |                           |                                  |                                |                           |                      |                               |   |                           |                                       |
| 1                  | 51.435842                 | 48.041775                        | 50.175131                      | 49.399815                 | 40.057225            | 51.155116                     | 54.545455                                 | 45.652174                 | 34.782609                             |
| 2                  | 15.049073                 | 17.232376                        | 17.863398                      | 14.773777                 | 24.463519            | 24.092409                     | 22.358722                                 | 16.847826                 | 8.695652                              |
| 3                  | 12.195565                 | 12.010444                        | 11.120841                      | 12.927054                 | 9.298999             | 5.610561                      | 4.422604                                  | 16.304348                 | 21.739130                             |
| 4                  | 4.943657                  | 5.918190                         | 5.604203                       | 5.355494                  | 7.010014             | 6.930693                      | 4.668305                                  | 4.347826                  | 15.217391                             |
| 5                  | 4.016721                  | 3.829417                         | 3.415061                       | 4.247461                  | 3.433476             | 2.640264                      | 2.948403                                  | 2.717391                  | 4.347826                              |
| 6                  | 2.926209                  | 2.175805                         | 2.977233                       | 4.062789                  | 2.575107             | 2.805281                      | 2.702703                                  | 3.260870                  | 6.521739                              |
| 7                  | 1.908397                  | 1.653612                         | 2.802102                       | 2.308403                  | 2.861230             | 0.495050                      | 2.702703                                  | 1.086957                  | 4.347826                              |
| 8                  | 1.454017                  | 1.827676                         | 1.050788                       | 0.923361                  | 1.573677             | 1.155116                      | 1.965602                                  | 0.000000                  | 0.000000                              |
| 9                  | 1.399491                  | 1.044386                         | 1.576182                       | 1.569714                  | 1.430615             | 1.320132                      | 0.982801                                  | 2.173913                  | 2.173913                              |
| 10                 | 0.854235                  | 1.305483                         | 0.612960                       | 0.738689                  | 0.572246             | 0.990099                      | 0.737101                                  | 1.630435                  | 0.000000                              |
| 11                 | 0.799709                  | 0.957354                         | 0.175131                       | 0.646353                  | 1.287554             | 0.825083                      | 0.737101                                  | 0.543478                  | 0.000000                              |
| 12                 | 0.763359                  | 0.783290                         | 0.437828                       | 0.184672                  | 1.287554             | 0.165017                      | 0.000000                                  | 0.543478                  | 2.173913                              |
| 13                 | 0.508906                  | 0.522193                         | 0.175131                       | 0.831025                  | 0.572246             | 0.330033                      | 0.000000                                  | 0.543478                  | 0.000000                              |
| 14                 | 0.218103                  | 0.087032                         | 0.262697                       | 0.369344                  | 0.286123             | 0.165017                      | 0.000000                                  | 1.086957                  | 0.000000                              |
| 15                 | 0.181752                  | 0.435161                         | 0.175131                       | 0.461681                  | 0.429185             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 16                 | 0.145402                  | 0.261097                         | 0.525394                       | 0.184672                  | 0.572246             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 17                 | 0.181752                  | 0.522193                         | 0.000000                       | 0.092336                  | 0.572246             | 0.165017                      | 0.000000                                  | 0.543478                  | 0.000000                              |
| 18                 | 0.163577                  | 0.000000                         | 0.262697                       | 0.000000                  | 0.429185             | 0.165017                      | 0.000000                                  | 0.543478                  | 0.000000                              |
| 19                 | 0.127226                  | 0.348129                         | 0.000000                       | 0.184672                  | 0.000000             | 0.165017                      | 0.245700                                  | 0.543478                  | 0.000000                              |
| 20                 | 0.090876                  | 0.174064                         | 0.175131                       | 0.184672                  | 0.143062             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 21                 | 0.109051                  | 0.174064                         | 0.175131                       | 0.092336                  | 0.143062             | 0.165017                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 22                 | 0.054526                  | 0.000000                         | 0.087566                       | 0.184672                  | 0.143062             | 0.000000                      | 0.491400                                  | 0.543478                  | 0.000000                              |
| 23                 | 0.090876                  | 0.000000                         | 0.175131                       | 0.000000                  | 0.143062             | 0.165017                      | 0.245700                                  | 0.000000                  | 0.000000                              |
| 24                 | 0.054526                  | 0.261097                         | 0.087566                       | 0.092336                  | 0.143062             | 0.000000                      | 0.000000                                  | 0.543478                  | 0.000000                              |
| 25                 | 0.036350                  | 0.000000                         | 0.087566                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 26                 | 0.036350                  | 0.000000                         | 0.000000                       | 0.092336                  | 0.143062             | 0.165017                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 27                 | 0.000000                  | 0.087032                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 28                 | 0.036350                  | 0.087032                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 29                 | 0.000000                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.143062             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 30                 | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 31                 | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.143062             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 32                 | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.543478                  | 0.000000                              |
| 33                 | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 34                 | 0.018175                  | 0.087032                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.245700                                  | 0.000000                  | 0.000000                              |
| 35                 | 0.000000                  | 0.087032                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 36                 | 0.036350                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 38                 | 0.000000                  | 0.000000                         | 0.000000                       | 0.092336                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 41                 | 0.000000                  | 0.087032                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 43                 | 0.000000                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.165017                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 44                 | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |

Table 1b Chart 1 - Effective method line count distribution (normalized)

<Figure size 640x480 with 0 Axes>



Table 1c - Top 30 packages with highest effective line counts

The following table shows the top 30 packages with the highest effective lines of code. The whole table can be found in the CSV report [Effective\\_lines\\_of\\_method\\_code\\_per\\_package](#).

|    | artifactName                          | fullPackageName                                   | linesInPackage | methodCount | maxLinesMethod | maxLinesMethodName                                |
|----|---------------------------------------|---|----------------|-------------|----------------|---|
| 0  | axon-messaging-4.10.3                 | org.axonframework.eventhandling                   | 2331           | 838         | 64             | processBatch                                      |
| 1  | axon-configuration-4.10.3             | org.axonframework.config                          | 1587           | 606         | 50             | <init>  |
| 2  | axon-messaging-4.10.3                 | org.axonframework.eventhandling.pooled            | 1041           | 341         | 77             | run   |
| 3  | axon-test-4.10.3                      | org.axonframework.test.aggregate                  | 956            | 251         | 45             | appendEventOverview                               |
| 4  | axon-messaging-4.10.3                 | org.axonframework.queryhandling                   | 953            | 388         | 36             | doQuery   |
| 5  | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector.event.axon | 872            | 279         | 35             | readMessages                                      |
| 6  | axon-messaging-4.10.3                 | org.axonframework.eventhandling.deadletter.jdbc   | 848            | 249         | 31             | convertToLetter                                   |
| 7  | axon-modelling-4.10.3                 | org.axonframework.modelling.command               | 843            | 335         | 19             | lambdainitializeHandler8                          |
| 8  | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector.query      | 739            | 216         | 27             | query   |
| 9  | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector            | 729            | 299         | 41             | build   |
| 10 | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing.eventstore        | 712            | 264         | 21             | peekPrivateStream                                 |
| 11 | axon-messaging-4.10.3                 | org.axonframework.messaging.annotation            | 670            | 239         | 23             | <init>  |
| 12 | axon-modelling-4.10.3                 | org.axonframework.modelling.command.inspection    | 637            | 218         | 26             | inspectFieldsAndMethods                           |
| 13 | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing                   | 622            | 251         | 20             | doScheduleSnapshot                                |
| 14 | axon-disruptor-4.10.3                 | org.axonframework.disruptor.commandhandling       | 605            | 184         | 32             | <init>  |
| 15 | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing.eventstore.leg... | 573            | 187         | 25             | fetchTrackedEvents                                |
| 16 | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing.eventstore.jdbc   | 568            | 236         | 24             | <init>  |
| 17 | axon-spring-boot-autoconfigure-4.10.3 | org.axonframework.springboot.autoconfig           | 567            | 192         | 34             | buildSerializer                                   |
| 18 | axon-messaging-4.10.3                 | org.axonframework.serialization                   | 537            | 181         | 22             | <init>  |
| 19 | axon-messaging-4.10.3                 | org.axonframework.eventhandling.deadletter.jpa    | 525            | 132         | 28             | equals  |
| 20 | axon-messaging-4.10.3                 | org.axonframework.common                          | 498            | 144         | 24             | getExactDirectSuperTypesOfParameterizedTypeOrC... |
| 21 | axon-test-4.10.3                      | org.axonframework.test.saga                       | 492            | 168         | 29             | <init>  |
| 22 | axon-modelling-4.10.3                 | org.axonframework.modelling.saga                  | 490            | 194         | 22             | handle  |
| 23 | axon-messaging-4.10.3                 | org.axonframework.commandhandling.gateway         | 488            | 174         | 50             | createGateway                                     |
| 24 | axon-messaging-4.10.3                 | org.axonframework.commandhandling.distributed     | 477            | 175         | 23             | dispatch  |
| 25 | axon-messaging-4.10.3                 | org.axonframework.eventhandling.tokenstore.jdbc   | 430            | 130         | 26             | updateToken                                       |

|    | artifactName          | fullPackageName                                   | linesInPackage | methodCount | maxLinesMethod | maxLinesMethodName |
|----|-----------------------|---|----------------|-------------|----------------|--------------------|
| 26 | axon-messaging-4.10.3 | org.axonframework.eventhandling.deadletter.leg... | 401            | 97          | 21             | convert            |
| 27 | axon-messaging-4.10.3 | org.axonframework.commandhandling                 | 377            | 169         | 13             | <init>             |
| 28 | axon-modelling-4.10.3 | org.axonframework.modelling.saga.repository.jdbc  | 374            | 84          | 38             | updateSaga         |
| 29 | axon-messaging-4.10.3 | org.axonframework.messaging.unitofwork            | 363            | 129         | 32             | executeWithResult  |

Table 1d - Top 30 methods with the highest effective line count

The following table shows the top 30 methods with the highest effective lines of code. The whole table can be found in the CSV report `Effective_lines_of_method_code_per_package` .

| index | artifactName | fullPackageName                       | maxLinesMethodType                                | maxLinesMet  |
|-------|--------------|---------------------------------------|---|--|
| 0     | 2            | axon-messaging-4.10.3                 | org.axonframework.eventhandling.pooled            | Coordinator\$CoordinationTask                      |
| 1     | 0            | axon-messaging-4.10.3                 | org.axonframework.eventhandling                   | TrackingEventProcessor                             |
| 2     | 23           | axon-messaging-4.10.3                 | org.axonframework.commandhandling.gateway         | CommandGatewayFactory                              |
| 3     | 1            | axon-configuration-4.10.3             | org.axonframework.config                          | DefaultConfigurer                                  |
| 4     | 3            | axon-test-4.10.3                      | org.axonframework.test.aggregate                  | Reporter   |
| 5     | 42           | axon-messaging-4.10.3                 | org.axonframework.deadline.quartz                 | DeadlineJob  |
| 6     | 9            | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector            | AxonServerConnectionManager\$Builder               |
| 7     | 28           | axon-modelling-4.10.3                 | org.axonframework.modelling.saga.repository.jdbc  | JdbcSagaStore                                      |
| 8     | 4            | axon-messaging-4.10.3                 | org.axonframework.queryhandling                   | SimpleQueryBus                                     |
| 9     | 5            | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector.event.axon | PersistentStreamConnectionSegmentConnectionP...    |
| 10    | 17           | axon-spring-boot-autoconfigure-4.10.3 | org.axonframework.springboot.autoconfig           | AxonAutoConfiguration                              |
| 11    | 34           | axon-messaging-4.10.3                 | org.axonframework.messaging.deadletter            | InMemorySequencedDeadLetterQueue                   |
| 12    | 14           | axon-disruptor-4.10.3                 | org.axonframework.disruptor.commandhandling       | DisruptorCommandBus                                |
| 13    | 29           | axon-messaging-4.10.3                 | org.axonframework.messaging.unitofwork            | BatchingUnitOfWork                                 |
| 14    | 6            | axon-messaging-4.10.3                 | org.axonframework.eventhandling.deadletter.jdbc   | DefaultDeadLetterJdbcConverter                     |
| 15    | 21           | axon-test-4.10.3                      | org.axonframework.test.saga                       | SagaTestFixture                                    |
| 16    | 19           | axon-messaging-4.10.3                 | org.axonframework.eventhandling.deadletter.jpa    | DeadLetterEventEntry                               |
| 17    | 8            | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector.query      | AxonServerQueryBus                                 |
| 18    | 12           | axon-modelling-4.10.3                 | org.axonframework.modelling.command.inspection    | AnnotatedAggregateMetaModelFactory\$AnnotatedAg... |
| 19    | 25           | axon-messaging-4.10.3                 | org.axonframework.eventhandling.tokenstore.jdbc   | JdbcTokenStore                                     |
| 20    | 15           | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing.eventstore.leg... | JpaEventStorageEngine                              |
| 21    | 41           | axon-messaging-4.10.3                 | org.axonframework.deadline                        | SimpleDeadlineManager\$DeadlineTask                |
| 22    | 16           | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing.eventstore.jdbc   | JdbcEventStorageEngine                             |
| 23    | 35           | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector.command    | AxonServerCommandBus                               |
| 24    | 65           | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector.event.util | EventCipher  |
| 25    | 20           | axon-messaging-4.10.3                 | org.axonframework.common                          | TypeReflectionUtils                                |

| index | artifactName | fullPackageName           | maxLinesMethodType                             | maxLinesMet                    |
|-------|--------------|---------------------------|--|--------------------------------|
| 26    | 11           | axon-messaging-4.10.3     | org.axonframework.messaging.annotation         | AnnotatedMessageHandlingMember |
| 27    | 56           | axon-messaging-4.10.3     | org.axonframework.deadline.jobrunr             | JobRunrDeadlineManager         |
| 28    | 33           | axon-eventsourcing-4.10.3 | org.axonframework.eventsourcing.eventstore.jpa | JpaEventStorageEngine          |
| 29    | 24           | axon-messaging-4.10.3     | org.axonframework.commandhandling.distributed  | DistributedCommandBus          |

## Cyclomatic Complexity

Table 2a - Cyclomatic method complexity distribution

This table shows the distribution of the cyclomatic complexity of methods per artifact. For each artifact the number of methods with the cyclomatic complexity = 1,2,3,... is shown to get an overview of how cyclomatic complexity is distributed over methods.

Only the 15 artifacts with the highest method count sum and their cyclomatic method complexity distribution (limited by 40) is shown here. The whole table can be found in the CSV report [Cyclomatic\\_Method\\_Complexity\\_Distribution](#).

Have a look below to find out which packages and methods have the highest effective lines of code.

| artifactName         | axon-messaging-4.10.3.jar | axon-server-connector-4.10.3.jar | axon-eventsourcing-4.10.3.jar | axon-modelling-4.10.3.jar | axon-test-4.10.3.jar | axon-configuration-4.10.3.jar | axon-spring-boot-autoconfigure-4.10.3.jar | axon-disruptor-4.10.3.jar | axon-tracing-opentelemetry-4.10.3.jar |
|----------------------|---------------------------|----------------------------------|-------------------------------|---------------------------|----------------------|-------------------------------|---|---------------------------|---------------------------------------|
| cyclomaticComplexity |                           |                                  |                               |                           |                      |                               |   |                           |                                       |
| 1                    | 4431                      | 967                              | 943                           | 899                       | 520                  | 542                           | 386                                       | 146                       | 35                                    |
| 2                    | 462                       | 87                               | 94                            | 75                        | 61                   | 37                            | 10  | 20                        | 8                                     |
| 3                    | 284                       | 42                               | 53                            | 40                        | 59                   | 17                            | 4   | 5                         | 2                                     |
| 4                    | 141                       | 24                               | 24                            | 29                        | 23                   | 5                             | 3   | 4                         | 1                                     |
| 5                    | 74                        | 7                                | 9                             | 24                        | 13                   | 3                             | 1   | 3                         | 0                                     |
| 6                    | 46                        | 3                                | 4                             | 10                        | 9                    | 0                             | 2   | 2                         | 0                                     |
| 7                    | 20                        | 6                                | 7                             | 2                         | 4                    | 2                             | 0   | 2                         | 0                                     |
| 8                    | 12                        | 6                                | 7                             | 1                         | 2                    | 0                             | 0   | 2                         | 0                                     |
| 9                    | 7                         | 3                                | 0                             | 2                         | 2                    | 0                             | 0   | 0                         | 0                                     |
| 10                   | 4                         | 2                                | 0                             | 0                         | 1                    | 0                             | 1   | 0                         | 0                                     |
| 11                   | 9                         | 0                                | 0                             | 0                         | 2                    | 0                             | 0   | 0                         | 0                                     |
| 12                   | 4                         | 1                                | 0                             | 0                         | 2                    | 0                             | 0   | 0                         | 0                                     |
| 13                   | 2                         | 0                                | 1                             | 0                         | 1                    | 0                             | 0   | 0                         | 0                                     |
| 14                   | 1                         | 0                                | 0                             | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 15                   | 1                         | 0                                | 0                             | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 16                   | 0                         | 1                                | 0                             | 1                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 17                   | 1                         | 0                                | 0                             | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 21                   | 1                         | 0                                | 0                             | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 23                   | 1                         | 0                                | 0                             | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |
| 40                   | 1                         | 0                                | 0                             | 0                         | 0                    | 0                             | 0   | 0                         | 0                                     |

Table 2b - Cyclomatic method complexity distribution (normalized)

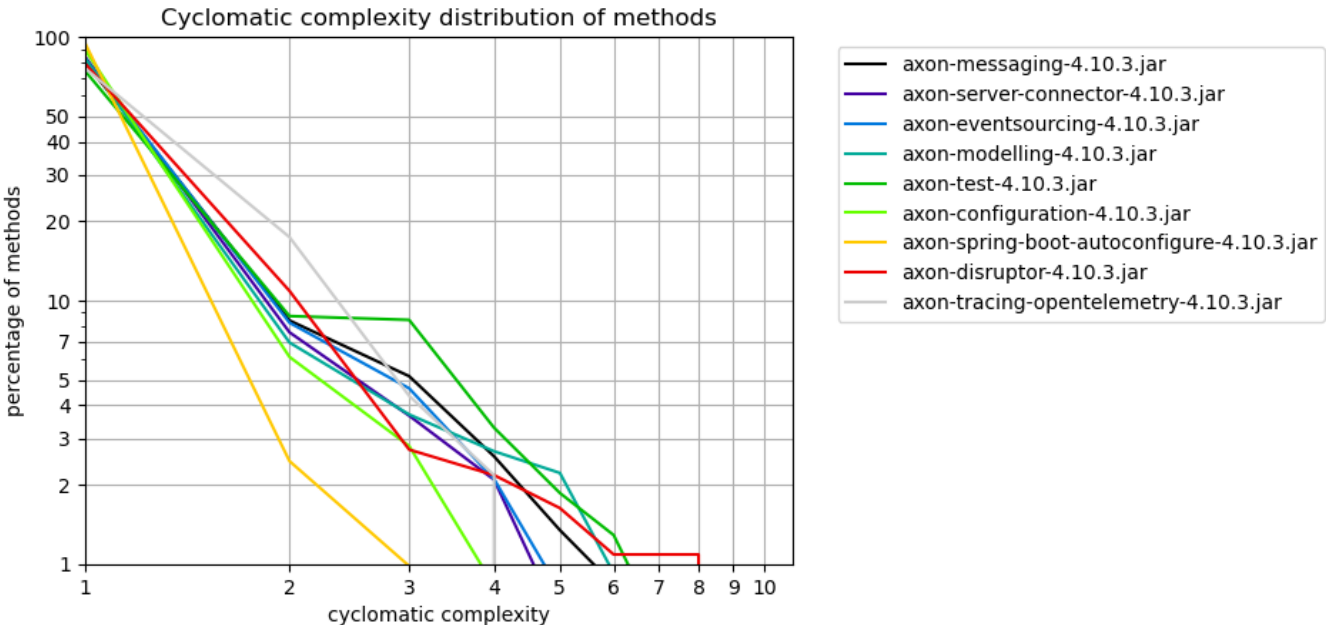


The table shown here only includes the first 40 rows which typically represents the most significant entries. Have a look below to find out which packages and methods have the highest effective lines of code.

| artifactName         | axon-messaging-4.10.3.jar | axon-server-connector-4.10.3.jar | axon-event sourcing-4.10.3.jar | axon-modelling-4.10.3.jar | axon-test-4.10.3.jar | axon-configuration-4.10.3.jar | axon-spring-boot-autoconfigure-4.10.3.jar | axon-disruptor-4.10.3.jar | axon-tracing-opentelemetry-4.10.3.jar |
|----------------------|---------------------------|----------------------------------|--------------------------------|---------------------------|----------------------|-------------------------------|---|---------------------------|---------------------------------------|
| cyclomaticComplexity |                           |                                  |                                |                           |                      |                               |   |                           |                                       |
| 1                    | 80.534351                 | 84.160139                        | 82.574431                      | 83.010157                 | 74.391989            | 89.438944                     | 94.840295                                 | 79.347826                 | 76.086957                             |
| 2                    | 8.396947                  | 7.571802                         | 8.231173                       | 6.925208                  | 8.726753             | 6.105611                      | 2.457002                                  | 10.869565                 | 17.391304                             |
| 3                    | 5.161759                  | 3.655352                         | 4.640981                       | 3.693444                  | 8.440629             | 2.805281                      | 0.982801                                  | 2.717391                  | 4.347826                              |
| 4                    | 2.562704                  | 2.088773                         | 2.101576                       | 2.677747                  | 3.290415             | 0.825083                      | 0.737101                                  | 2.173913                  | 2.173913                              |
| 5                    | 1.344965                  | 0.609225                         | 0.788091                       | 2.216066                  | 1.859800             | 0.495050                      | 0.245700                                  | 1.630435                  | 0.000000                              |
| 6                    | 0.836060                  | 0.261097                         | 0.350263                       | 0.923361                  | 1.287554             | 0.000000                      | 0.491400                                  | 1.086957                  | 0.000000                              |
| 7                    | 0.363504                  | 0.522193                         | 0.612960                       | 0.184672                  | 0.572246             | 0.330033                      | 0.000000                                  | 1.086957                  | 0.000000                              |
| 8                    | 0.218103                  | 0.522193                         | 0.612960                       | 0.092336                  | 0.286123             | 0.000000                      | 0.000000                                  | 1.086957                  | 0.000000                              |
| 9                    | 0.127226                  | 0.261097                         | 0.000000                       | 0.184672                  | 0.286123             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 10                   | 0.072701                  | 0.174064                         | 0.000000                       | 0.000000                  | 0.143062             | 0.000000                      | 0.245700                                  | 0.000000                  | 0.000000                              |
| 11                   | 0.163577                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.286123             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 12                   | 0.072701                  | 0.087032                         | 0.000000                       | 0.000000                  | 0.286123             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 13                   | 0.036350                  | 0.000000                         | 0.087566                       | 0.000000                  | 0.143062             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 14                   | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 15                   | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 16                   | 0.000000                  | 0.087032                         | 0.000000                       | 0.092336                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 17                   | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 21                   | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 23                   | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |
| 40                   | 0.018175                  | 0.000000                         | 0.000000                       | 0.000000                  | 0.000000             | 0.000000                      | 0.000000                                  | 0.000000                  | 0.000000                              |

Table 2b Chart 1 - Cyclomatic method complexity distribution (normalized)

<Figure size 640x480 with 0 Axes>



## Table 2c - Top 30 packages with highest cyclomatic complexity

The following table shows the top 30 packages with the highest cyclomatic complexity. The whole table can be found in the CSV report `Effective_lines_of_method_code_per_package`.

|    | artifactName                          | fullPackageName                                   | complexityInPackage | methodCount | maxComplexity | maxComplexityMe                              |
|----|---------------------------------------|---|---------------------|-------------|---------------|--|
| 0  | axon-messaging-4.10.3                 | org.axonframework.eventhandling                   | 1276                | 838         | 21            | processE                                     |
| 1  | axon-configuration-4.10.3             | org.axonframework.config                          | 716                 | 606         | 7             | invokeLifecycleHan                           |
| 4  | axon-messaging-4.10.3                 | org.axonframework.queryhandling                   | 484                 | 388         | 11            | doQ  |
| 2  | axon-messaging-4.10.3                 | org.axonframework.eventhandling.pooled            | 460                 | 341         | 23            |  |
| 7  | axon-modelling-4.10.3                 | org.axonframework.modelling.command               | 455                 | 335         | 9             | resolveTi                                    |
| 5  | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector.event.axon | 445                 | 279         | 16            | readMess                                     |
| 3  | axon-test-4.10.3                      | org.axonframework.test.aggregate                  | 438                 | 251         | 13            | ensureValuesE                                |
| 10 | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing.eventstore        | 397                 | 264         | 13            | has  |
| 11 | axon-messaging-4.10.3                 | org.axonframework.messaging.annotation            | 386                 | 239         | 14            | he   |
| 9  | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector            | 355                 | 299         | 12            |  |
| 12 | axon-modelling-4.10.3                 | org.axonframework.modelling.command.inspection    | 339                 | 218         | 9             | prepareHan                                   |
| 13 | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing                   | 325                 | 251         | 8             | doScheduleSnap                               |
| 6  | axon-messaging-4.10.3                 | org.axonframework.eventhandling.deadletter.jdbc   | 304                 | 249         | 12            | ec   |
| 20 | axon-messaging-4.10.3                 | org.axonframework.common                          | 301                 | 144         | 9             | getExactDirectSuperTypesOfParameterizedTypeC |
| 15 | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing.eventstore.leg... | 292                 | 187         | 8             | loadKeyViolationC                            |
| 8  | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector.query      | 292                 | 216         | 9             | sti  |
| 18 | axon-messaging-4.10.3                 | org.axonframework.serialization                   | 285                 | 181         | 7             | ec   |
| 22 | axon-modelling-4.10.3                 | org.axonframework.modelling.saga                  | 277                 | 194         | 6             | instantiateAssociationRes                    |
| 14 | axon-disruptor-4.10.3                 | org.axonframework.disruptor.commandhandling       | 274                 | 184         | 8             | onR  |
| 16 | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing.eventstore.jdbc   | 273                 | 236         | 7             | lambdafetchTrackedEven                       |
| 23 | axon-messaging-4.10.3                 | org.axonframework.commandhandling.gateway         | 249                 | 174         | 12            | createGate                                   |
| 24 | axon-messaging-4.10.3                 | org.axonframework.commandhandling.distributed     | 243                 | 175         | 12            | ec   |
| 21 | axon-test-4.10.3                      | org.axonframework.test.saga                       | 235                 | 168         | 9             | assertDispatchedEqu                          |
| 17 | axon-spring-boot-autoconfigure-4.10.3 | org.axonframework.springboot.autoconfig           | 224                 | 192         | 10            | buildSeriz                                   |
| 19 | axon-messaging-4.10.3                 | org.axonframework.eventhandling.deadletter.jp     | 212                 | 132         | 15            | ec   |
| 31 | axon-messaging-4.10.3                 | org.axonframework.messaging                       | 209                 | 156         | 4             | endS   |

|    | artifactName          | fullPackageName                        | complexityInPackage | methodCount | maxComplexity | maxComplexityMe |
|----|-----------------------|--|---------------------|-------------|---------------|-----------------|
| 29 | axon-messaging-4.10.3 | org.axonframework.messaging.unitofwork | 206                 | 129         | 11            | executeWithR    |
| 27 | axon-messaging-4.10.3 | org.axonframework.commandhandling      | 201                 | 169         | 10            | <               |
| 30 | axon-test-4.10.3      | org.axonframework.test.matchers        | 191                 | 108         | 8             | matche          |
| 38 | axon-messaging-4.10.3 | org.axonframework.common.caching       | 182                 | 110         | 8             | onE             |

## Table 2d - Top 30 methods with highest cyclomatic complexity

The following table shows the top 30 packages containing the methods with the highest cyclomatic complexity. The whole table can be found in the CSV report

`Effective_lines_of_method_code_per_package` .

|    | index | artifactName                          | fullPackageName                                   | maxComplexityType                                  | maxComplexity |
|----|-------|---------------------------------------|---|--|---------------|
| 0  | 61    | axon-messaging-4.10.3                 | org.axonframework.eventhandling.scheduling.job... | JobRunrEventScheduler                              | deseria       |
| 1  | 2     | axon-messaging-4.10.3                 | org.axonframework.eventhandling.pooled            | Coordinator\$CoordinationTask                      |               |
| 2  | 0     | axon-messaging-4.10.3                 | org.axonframework.eventhandling                   | TrackingEventProcessor                             | I             |
| 3  | 5     | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector.event.axon | PersistentStreamConnection.SegmentConnectionP...   | re            |
| 4  | 39    | axon-modelling-4.10.3                 | org.axonframework.modelling.saga.repository       | AssociationValueMap\$AssociationValueComparator    |               |
| 5  | 19    | axon-messaging-4.10.3                 | org.axonframework.eventhandling.deadletter.jpa    | DeadLetterEventEntry                               |               |
| 6  | 11    | axon-messaging-4.10.3                 | org.axonframework.messaging.annotation            | AnnotatedMessageHandlingMember                     |               |
| 7  | 62    | axon-messaging-4.10.3                 | org.axonframework.commandhandling.distributed.... | CommandNameFilter                                  | deseria       |
| 8  | 3     | axon-test-4.10.3                      | org.axonframework.test.aggregate                  | AggregateTestFixture                               | ensur         |
| 9  | 56    | axon-messaging-4.10.3                 | org.axonframework.deadline.jobrunr                | JobRunrDeadlineManager                             | deseria       |
| 10 | 10    | axon-eventsourcing-4.10.3             | org.axonframework.eventsourcing.eventstore        | ConcatenatingDomainEventStream                     |               |
| 11 | 6     | axon-messaging-4.10.3                 | org.axonframework.eventhandling.deadletter.jdbc   | JdbcDeadLetter                                     |               |
| 12 | 46    | axon-messaging-4.10.3                 | org.axonframework.common.jdbc                     | ConnectionWrapperFactory                           | le            |
| 13 | 9     | axon-server-connector-4.10.3          | org.axonframework.axonserver.connector            | AxonServerConnectionManager\$Builder               |               |
| 14 | 23    | axon-messaging-4.10.3                 | org.axonframework.commandhandling.gateway         | CommandGatewayFactory                              | cr            |
| 15 | 45    | axon-test-4.10.3                      | org.axonframework.test.server                     | AxonServerContainer                                |               |
| 16 | 24    | axon-messaging-4.10.3                 | org.axonframework.commandhandling.distributed     | ReplyMessage                                       |               |
| 17 | 42    | axon-messaging-4.10.3                 | org.axonframework.deadline.quartz                 | DeadlineJob  |               |
| 18 | 32    | axon-messaging-4.10.3                 | org.axonframework.deadline.dbscheduler            | DbSchedulerHumanReadableDeadlineDetails            |               |
| 19 | 29    | axon-messaging-4.10.3                 | org.axonframework.messaging.unitofwork            | BatchingUnitOfWork                                 | execu         |
| 20 | 26    | axon-messaging-4.10.3                 | org.axonframework.eventhandling.deadletter.leg... | JpaDeadLetter                                      |               |
| 21 | 4     | axon-messaging-4.10.3                 | org.axonframework.queryhandling                   | SimpleQueryBus                                     |               |
| 22 | 48    | axon-messaging-4.10.3                 | org.axonframework.messaging.responsetypes         | MultipleInstancesResponseType                      |               |
| 23 | 59    | axon-messaging-4.10.3                 | org.axonframework.common.lock                     | PessimisticLockFactory\$DisposableLock             |               |
| 24 | 17    | axon-spring-boot-autoconfigure-4.10.3 | org.axonframework.springboot.autoconfig           | AxonAutoConfiguration                              | t             |
| 25 | 27    | axon-messaging-4.10.3                 | org.axonframework.commandhandling                 | MethodCommandHandlerDefinition\$MethodCommandMe... |               |

| index | artifactName          | fullPackageName                                 | maxComplexityType   | maxCompl                              |
|-------|-----------------------|---|---------------------|---------------------------------------|
| 26    | axon-messaging-4.10.3 | org.axonframework.messaging.deadletter          | GenericDeadLetter   |                                       |
| 27    | axon-test-4.10.3      | org.axonframework.test.saga                     | CommandValidator    | assertDispat                          |
| 28    | axon-messaging-4.10.3 | org.axonframework.common                        | TypeReflectionUtils | getExactDirectSuperTypesOfParameteriz |
| 29    | axon-messaging-4.10.3 | org.axonframework.eventhandling.tokenstore.jdbc | JdbcTokenStore      |                                       |