## **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- 4.9.0.jar	axon-eventsourcing- 4.9.0.jar	axon-modelling- 4.9.0.jar	axon-test- 4.9.0.jar	axon-configuration- 4.9.0.jar	axon-disruptor- 4.9.0.jar
effectiveLineCount						
1	2819	574	532	279	310	84
2	823	203	158	169	146	31
3	674	127	141	64	34	30
4	269	64	57	49	42	8
5	221	39	45	24	16	5
6	161	34	45	18	17	6
7	103	32	24	20	3	2
8	80	12	10	11	7	0
9	76	17	17	11	8	4
10	45	8	8	3	6	3
11	46	2	8	9	5	1
12	41	5	2	9	1	1
13	26	2	9	5	2	1
14	17	3	3	3	1	2
15	9	2	5	2	0	0
16	8	6	2	4	0	0
17	10	0	2	4	1	1
18	9	3	0	2	1	1
19	6	0	1	0	1	1
20	5	2	2	1	0	0
21	7	2	1	1	1	0
22	2	0	2	1	0	1
23	5	1	0	1	1	0
24	3	2	1	1	0	1
25	2	2	0	0	0	0
26	2	0	1	1	1	0
28	2	0	0	1	0	0
30	1	0	0	0	0	0
31	1	0	0	1	0	0
32	1	0	0	0	0	1
33	1	0	0	0	0	0
34	1	0	0	0	0	0
36	2	0	0	0	0	0
38	0	0	1	0	0	0
43	0	0	0	0	1	0
44	1	0	0	0	0	0
45	0	0	0	1	0	0
50	1	0	0	0	1	0
63	1	0	0	0	0	0
64	1	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- 4.9.0.jar	axon-eventsourcing- 4.9.0.jar	axon-modelling- 4.9.0.jar	axon-test- 4.9.0.jar	axon-configuration- 4.9.0.jar	axon-disruptor- 4.9.0.jar
effectiveLineCount						
1	51.413460	50.262697	49.396472	40.143885	51.155116	45.652174
2	15.010031	17.775832	14.670381	24.316547	24.092409	16.847826
3	12.292541	11.120841	13.091922	9.208633	5.610561	16.304348
4	4.906073	5.604203	5.292479	7.050360	6.930693	4.347826
5	4.030640	3.415061	4.178273	3.453237	2.640264	2.717391
6	2.936349	2.977233	4.178273	2.589928	2.805281	3.260870
7	1.878534	2.802102	2.228412	2.877698	0.495050	1.086957
8	1.459055	1.050788	0.928505	1.582734	1.155116	0.000000
9	1.386102	1.488616	1.578459	1.582734	1.320132	2.173913
10	0.820719	0.700525	0.742804	0.431655	0.990099	1.630435
11	0.838957	0.175131	0.742804	1.294964	0.825083	0.543478
12	0.747766	0.437828	0.185701	1.294964	0.165017	0.543478
13	0.474193	0.175131	0.835655	0.719424	0.330033	0.543478
14	0.310049	0.262697	0.278552	0.431655	0.165017	1.086957
15	0.164144	0.175131	0.464253	0.287770	0.000000	0.000000
16	0.145906	0.525394	0.185701	0.575540	0.000000	0.000000
17	0.182382	0.000000	0.185701	0.575540	0.165017	0.543478
18	0.164144	0.262697	0.000000	0.287770	0.165017	0.543478
19	0.109429	0.000000	0.092851	0.000000	0.165017	0.543478
20	0.091191	0.175131	0.185701	0.143885	0.000000	0.000000
21	0.127667	0.175131	0.092851	0.143885	0.165017	0.000000
22	0.036476	0.000000	0.185701	0.143885	0.000000	0.543478
23	0.091191	0.087566	0.000000	0.143885	0.165017	0.000000
24	0.054715	0.175131	0.092851	0.143885	0.000000	0.543478
25	0.036476	0.175131	0.000000	0.000000	0.000000	0.000000
26	0.036476	0.000000	0.092851	0.143885	0.165017	0.000000
28	0.036476	0.000000	0.000000	0.143885	0.000000	0.000000
30	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
31	0.018238	0.000000	0.000000	0.143885	0.000000	0.000000
32	0.018238	0.000000	0.000000	0.000000	0.000000	0.543478
33	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
34	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
36	0.036476	0.000000	0.000000	0.000000	0.000000	0.000000
38	0.000000	0.000000	0.092851	0.000000	0.000000	0.000000
43	0.000000	0.000000	0.000000	0.000000	0.165017	0.000000
44	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
45	0.000000	0.000000	0.000000	0.143885	0.000000	0.000000
50	0.018238	0.000000	0.000000	0.000000	0.165017	0.000000
63	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
64	0.018238	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>

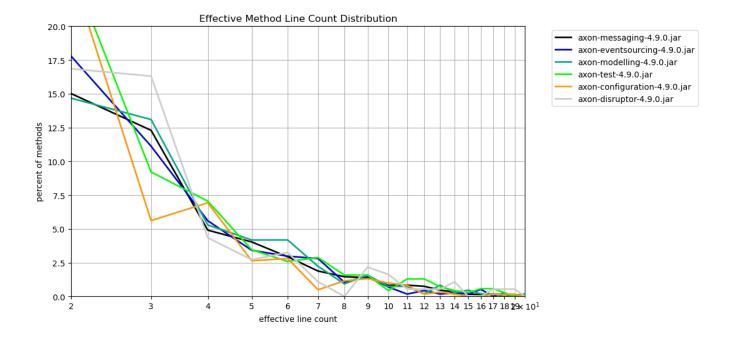


Table 1c - Top 30 packages with highest effective line counts

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- 4.9.0	org.axonframework.eventhandling	2338	838	64	processBatch
1	axon- configuration- 4.9.0	org.axonframework.config	1587	606	50	<init></init>
2	axon- messaging- 4.9.0	org.axonframework.eventhandling.pooled	1021	333	78	run
3	axon-test- 4.9.0	org.axonframework.test.aggregate	951	249	45	appendEventOverview
4	axon- messaging- 4.9.0	org.axonframework.queryhandling	927	381	36	doQuery
5	axon- messaging- 4.9.0	org. ax on framework. even than dling. dead letter. jdbc	849	249	31	convertToLetter
6	axon- modelling- 4.9.0	org.axonframework.modelling.command	824	329	17	lambda $initialize Handler 7$
7	axon- eventsourcing- 4.9.0	org.axonframework.eventsourcing.eventstore	712	264	21	peekPrivateStream
8	axon- messaging- 4.9.0	org.axonframework.messaging.annotation	673	239	23	<init></init>
9	axon- modelling- 4.9.0	org.axonframework.modelling.command.inspection	637	218	26	inspectFieldsAndMethods
10	axon- eventsourcing- 4.9.0	org.axonframework.eventsourcing	623	251	20	doScheduleSnapshot
11	axon- disruptor-4.9.0	org.axonframework.disruptor.commandhandling	605	184	32	<init></init>
12	axon- eventsourcing- 4.9.0	org. axon framework. events our cing. events to re.leg	573	187	25	fetchTrackedEvents
13	axon- eventsourcing- 4.9.0	org.axonframework.eventsourcing.eventstore.jdbc	569	236	24	getTrackedEventData
14	axon- messaging- 4.9.0	org.axonframework.serialization	537	181	22	<init></init>
15	axon- messaging- 4.9.0	org.axonframework.eventhandling.deadletter.jpa	522	132	28	equals
16	axon- messaging- 4.9.0	org.axonframework.common	501	144	24	get Exact Direct Super Types Of Parameterized Type Or C
17	axon- modelling- 4.9.0	org.axonframework.modelling.saga	490	194	22	handle
18	axon- messaging- 4.9.0	org.axonframework.commandhandling.gateway	488	174	50	createGateway
19	axon-test- 4.9.0	org.axonframework.test.saga	487	167	28	<init></init>
20	axon- messaging- 4.9.0	org. ax on framework. command handling. distributed	477	175	23	dispatch
21	axon- messaging- 4.9.0	org.axonframework.eventhandling.tokenstore.jdbc	430	130	26	updateToken
22	axon- messaging- 4.9.0	org. ax on framework. eventh and ling. dead letter. leg	401	97	21	convert
23	axon- messaging- 4.9.0	org.axonframework.commandhandling	377	169	13	<init></init>
24	axon- modelling- 4.9.0	org.axonframework.modelling.saga.repository.jdbc	374	84	38	updateSaga
25	axon- messaging- 4.9.0	org.axonframework.messaging.unitofwork	363	129	32	executeWithResult
26	axon-test- 4.9.0	org.axonframework.test.matchers	351	108	21	matchingFields

maxLinesMethodName	maxLinesMethod	methodCount	linesInPackage	fullPackageName	artifactName	
describeTo	13	156	348	org.axonframework.messaging	axon- messaging- 4.9.0	27
execute	18	103	321	org.axonframework.deadline.dbscheduler	axon- messaging- 4.9.0	28
fetchTrackedEvents	25	101	320	org.axonframework.eventsourcing.eventstore.jpa	axon- eventsourcing- 4.9.0	29

## 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.

Part		index	artifactName	fullPackageName	maxLinesMethodType	maxLinesMetho
1	0	2	messaging-	org.axonframework.eventhandling.pooled	Coordinator\$CoordinationTask	
2	1	0	messaging-	org.axonframework.eventhandling	TrackingEventProcessor	proces
3   12   messageing   magnetimental contracted languagements   magnetimental contracted languagements   magnetimental contracted   magnetimental contracte	2	1	configuration-	org.axonframework.config	DefaultConfigurer	
1	3	18	messaging-	org.axonframework.commandhandling.gateway	CommandGatewayFactory	createG
5         86         messaging and some season of accompany of accompany and some season of accompany of a some season	4	3		org.axonframework.test.aggregate	Reporter	appendEventO <sup>1</sup>
Part	5	35	messaging-	org.axonframework.deadline.quartz	DeadlineJob	e
1	6	24	modelling-	org.axonframework.modelling.saga.repository.jdbc	JdbcSagaStore	upda
8	7	4	messaging-	org.axonframework.queryhandling	SimpleQueryBus	d
9 25 messaging description or a sconfiamework messaging uninotwork is a description of the second will be a sconfiamework disruptor commandanding in Disruptor CommandBus in a sconfiamework eventhandling deadletter. Job in a sconfiamework eventhandling ev	8	30	messaging-	org.axonframework.messaging.deadletter	InMemorySequencedDeadLetterQueue	r
to disruption-4.9 of gazontramework eventhandling deadletter jabe DefaultDeadLetter.JdbcConverter convert 4.9 org. axonframework eventhandling deadletter.jdbc DefaultDeadLetter.JdbcConverter convert 4.9 org. axonframework eventhandling deadletter.jdbc DeadLetterEventEntry  13 19 axonframework eventhandling deadletter.jdbc DeadLetterEventEntry  14 21 maxon org. axonframework eventhandling deadletter.jdbc JdbcTokenStore org. axonframework.eventhandling.command.inspection JdbcTokenStore org. axonframework.eventhandling.command.inspection AnnotatedAggregateMetaModelFactory\$AnnotatedAg inspectFieldsAndv. 4.90 org. axonframework.modelling.command.inspection AnnotatedAggregateMetaModelFactory\$AnnotatedAg inspectFieldsAndv. 4.90 org. axonframework.eventsourcing.eventstore.jdbc JgbcTokenStore org. axonframework.eventsourcing.eventstore.jdbc JgbcTokenStorageEngine fetchTracket 4.90 org. axonframework.eventsourcing.eventstore.jdbc JdbcTokenStorageEngine org. axonframework.eventsourcing.eventstore.jdbc JdbcTokenStorageEngine org. axonframework.eventsourcing.eventstore.jdbc JdbcEventStorageEngine org	9	25	messaging-	org.axonframework.messaging.unitofwork	BatchingUnitOfWork	executeWitl
resistanting of axonframework eventhandling deadletter jac DefaultDeadLetter Jabc Corverter Convert 4.9.0  12 15 messaging 4.9.0 org.axonframework eventhandling deadletter jac DeadLetter EventEntry  13 19 axonframework a.9.0 org.axonframework eventhandling tokenstore jdbc Jdbc TokenStore updat 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc TokenStore updat 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc EventStorage Engine fetch Tracket 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc EventStorage Engine get Tracked Event 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc EventStorage Engine get Exact Direct SuperTypes Of Parameterized Type 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc EventStorage Engine get Exact Direct SuperTypes Of Parameterized Type 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc Event Storage Engine get Exact Direct SuperTypes Of Parameterized Type 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc Event Storage Engine get Exact Direct SuperTypes Of Parameterized Type 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc Event Storage Engine get Exact Direct SuperTypes Of Parameterized Type 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc Event Storage Engine get Exact Direct SuperTypes Of Parameterized Type 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc Event Storage Engine get Exact Direct SuperTypes Of Parameterized Type 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc Event Storage Engine get Exact Direct SuperTypes Of Parameterized Type 4.9.0 org.axonframework eventsourcing eventstore jdbc Jdbc Event Storage Engine get Exact Direct SuperTypes Of Parameterized Type 4.9.0 org.axo	10	11	axon- disruptor-4.9.0	org.axonframework.disruptor.commandhandling	DisruptorCommandBus	
12 15 messaging 49.0 org.axonframework.eventhandling.tokenstore.jdb: org.axonframework.est.saga SagaTestFixture  14 21 messaging 49.0 org.axonframework.est.saga SagaTestFixture  15 9 axon- 16 34 axon- 17 12 eventsourcing 49.0 org.axonframework.eventhandling.tokenstore.jdb: SimpleDeadlineManager\$DeadlineTask  18 29 eventsourcing 49.0 org.axonframework.eventsourcing.eventstore.jdb: JapaEventStorageEngine fetchTracket 49.0 org.axonframework.eventsourcing.eventstore.jdb: JapaEventStorageEngine fetchTracket 49.0 org.axonframework.eventsourcing.eventstore.jdb: JapaEventStorageEngine getExactDirectSuperTypesOfParameterizedTyp  18 axon- 19 13 eventsourcing 49.0 org.axonframework.eventsourcing.eventstore.jdb: JapaEventStorageEngine getExactDirectSuperTypesOfParameterizedTyp  19 axon- 20 16 messaging 49.0 org.axonframework.eventsourcing.eventstore.jdb: JapaEventStorageEngine getExactDirectSuperTypesOfParameterizedTyp  21 axon- 22 47 axon- 23 20 messaging org.axonframework.eventsourcing.eventstore.jdb: JapaEventStorageEngine getExactDirectSuperTypesOfParameterizedTyp  24 axon- 25 14 axon- 26 32 maxon- 27 axon- 28 axon- 29 axon- 29 axon- 29 axon- 20 axon- 20 axon- 20 axon- 20 axon- 20 axon- 20 axon- 21 axon- 22 axon- 23 axon- 24 axon- 25 14 axon- 25 axon- 26 axon- 27 axon- 28 axon- 29 axon- 29 axon- 29 axon- 20 axon- 20 axon- 20 axon- 20 axon- 21 axon- 22 axon- 23 axon- 24 axon- 25 14 axon- 25 axon- 25 axon- 26 axon- 27 axon- 28 axon- 28 axon- 29 axon- 29 axon- 29 axon- 20 ax	11	5	messaging-	org. ax on framework. eventh and ling. dead letter. jdbc	DefaultDeadLetterJdbcConverter	convert1
14 21 messaging- 3 xon- 15 9 modelling- 4.9.0 org.axonframework.eventhandling.tokenstore.jdbc  16 34 messaging- 4.9.0 org.axonframework.deadline 5 impleDeadlineManagersDeadlineTask  17 12 eventsourcing- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  18 29 eventsourcing- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  18 29 eventsourcing- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  19 13 eventsourcing- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  19 13 eventsourcing- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  20 16 messaging- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  21 8 messaging- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  22 47 messaging- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  23 20 messaging- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  24 17 messaging- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  25 14 messaging- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  26 32 modelling- 3 org.axonframework.eventsourcing.eventstore.jdbc  3 org.axonframework.eventsourcing.eventstore.jdbc  4 org.axonframework.eventsourcing.eventstore.jdbc  3 org.axonframework.eventsourcing.eventstore.jdbc  4 org.axonframework.eventsourcing.eventstore.jdbc  4 org.axonframework.eventsourcing.eventstore.jdbc  4 org.axonframework.eventsourcing.eventstore.jdbc  4 org.axonframework.eventsourcing.eventstore.jdbc  5 org.axonframework.eventsourcing.eventstore.jdbc  4 org.axonframework.eventsourcing.eventstore.jdbc  5 org.axonframework.eventsourcing.eventstore.jdbc  5 org.axonframework.eventsourcing.eventstore.jdbc  6 org.axonframework.eventsourcing.eventstore.jdbc  7 org.axonframework.eventsourcing.eventstore.jdbc  9 org.axonframework.eventsourcing.eventstore.jdbc  9 org.axonframework.eventsourcing.eventstore.jdbc  9 org.axonframework.eventsourcing.eventstore.jdbc  1 org.axonframework.eventsourcing.eventstore.jdbc  1 org.axonframework.eventsourcing.eventstore.jdbc  1 org.axonframework.eventsourcing.eventstore.jdbc  1 org.axonframew	12	15	messaging-	org. ax on framework. eventhand ling. dead letter. jp a	DeadLetterEventEntry	
14         21         messaging 4.9.0 as on delling and 4.9.0         org axonframework.eventhandling tokenstore jdbc         JdbcTokenStore         updat           15         9         axon-modelling org axonframework.modelling.command.inspection         AnnotatedAggregateMetaModelFactory\$AnnotatedAg         inspectFieldsAndW           16         34         messaging-ason-modelling.org.         org.axonframework.deadline         SimpleDeadlineManager\$DeadlineTask           17         12         eventsourcing-ason-modelling.org.         org.axonframework.eventsourcing.eventstore.leg         JpaEventStorageEngine         fetchTracked           19         13         eventsourcing-ason-modelling.org.         org.axonframework.eventsourcing.eventstore.jpa         JpaEventStorageEngine         getTrackedEventStorageEngine           19         13         eventsourcing-ason-modelling.org.         org.axonframework.eventsourcing.eventstore.jdbc         JdbcEventStorageEngine         getTrackedEventStorageEngine           20         16         messaging-ason-messaging-ason-messaging.org.         org.axonframework.eventsourcing.eventstore.jdbc         AnnotatedMessageHandlingMember         etc.           21         24         messaging-ason-messaging.annotation         AnnotatedMessageHandlingMember         etc.           22         47         messaging-ason-messaging.annotation.ason-ason-ason-ason-ason-ason-ason-ason-	13	19		org.axonframework.test.saga	SagaTestFixture	
15         9         modelling-4,9.0 /4,9.0 /4,9.0         org.axonframework.modelling.command.inspection         AnnotatedAggregateMetaModelFactory\$AnnotatedAg         inspectFieldSAndW           16         34         messaging-4,9.0 /4.9.0         org.axonframework.eventsourcing.eventstore.leg         SimpleDeadlineManager\$DeadlineTask           17         12         eventsourcing-4,9.0 /4.9.0         org.axonframework.eventsourcing.eventstore.jeg         JpaEventStorageEngine         fetchTrackec           18         29         eventsourcing-4,9.0 org.axonframework.eventsourcing.eventstore.jba         JpaEventStorageEngine         getTrackedEventStorageEngine           19         13         eventsourcing-4,9.0 org.axonframework.eventsourcing.eventstore.jba         JdbcEventStorageEngine         getTrackedEventStorageEngine           20         16         messaging-4,9.0 org.axonframework.eventsourcing.eventstore.jba         AnnotatedMessageHandlingMember         getExactDirectSuperTypesOfParameterizedTyp           21         18         messaging-4,9.0 org.axonframework.messaging.annotation         AnnotatedMessageHandlingMember         e           22         47         messaging-4,9.0 org.axonframework.deadline.jobrunr         JobRunrDeadlineManager         e           23         20         messaging-4,9.0 org.axonframework.modelling.saga         DistributedCommandBus         d           24         17 </td <td>14</td> <td>21</td> <td>messaging-</td> <td>org. axon framework. eventh and ling. to ken store. jdbc</td> <td>JdbcTokenStore</td> <td>updat</td>	14	21	messaging-	org. axon framework. eventh and ling. to ken store. jdbc	JdbcTokenStore	updat
16 34 messaging- 4.9.0 org.axonframework.deadline SimpleDeadlineManager\$DeadlineTask  17 12 eventsourcing- 4.9.0 org.axonframework.eventsourcing.eventstore.leg JpaEventStorageEngine fetchTracket 4.9.0 org.axonframework.eventsourcing.eventstore.jpa  18 29 eventsourcing- 4.9.0 org.axonframework.eventsourcing.eventstore.jpa  19 13 eventsourcing- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  20 16 messaging- 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc  21 8 messaging- 4.9.0 org.axonframework.common  22 47 messaging- 4.9.0 org.axonframework.deadline.jobrunr  23 20 messaging- 4.9.0 org.axonframework.deadline.jobrunr  24 17 messaging- 4.9.0 org.axonframework.commandhandling.distributed  25 14 messaging- 4.9.0 org.axonframework.modelling.saga  26 azon- modelling- 4.9.0 org.axonframework.modelling.saga. AbstractSagaManager  27 AssociationValueMap\$AssociationValueComparator  28 axon- messaging- 4.9.0 org.axonframework.modelling.saga.repository  29 AssociationValueMap\$AssociationValueComparator  20 axon- modelling- 4.9.0 org.axonframework.modelling.saga.repository  20 AssociationValueMap\$AssociationValueComparator	15	9	modelling-	org. axon framework. modelling. command. in spection	Annotated Aggregate Meta Model Factory \$ Annotated Ag	inspectFieldsAndN
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18     29     eventsourcing-4.9.0     org.axonframework.eventsourcing.eventstore.jpa     JpaEventStorageEngine     fetchTrackee       19     13     eventsourcing-4.9.0     org.axonframework.eventsourcing.eventstore.jdbc     JdbcEventStorageEngine     getTrackedEventstorageEngine       20     16     messaging-4.9.0     org.axonframework.common     TypeReflectionUtils     getExactDirectSuperTypesOfParameterizedTyp       21     8     messaging-4.9.0     org.axonframework.messaging.annotation     AnnotatedMessageHandlingMember       22     47     messaging-4.9.0     org.axonframework.deadline.jobrunr     JobRunrDeadlineManager     €       23     20     messaging-4.9.0     org.axonframework.commandhandling.distributed     DistributedCommandBus     d       24     17     modelling-modelling-messaging-4.9.0     org.axonframework.modelling.saga     AbstractSagaManager       25     14     messaging-4.9.0     org.axonframework.serialization     AbstractXStreamSerializer       26     32     modelling-modelling-modelling-modelling-saga.repository     AssociationValueMap\$AssociationValueComparator     O	17	12	eventsourcing-	org. axon framework. events our cing. events to re.leg	JpaEventStorageEngine	fetchTrackec
19     13     eventsourcing-4.9.0     org.axonframework.eventsourcing.eventstore.jdbc     JdbcEventStorageEngine     getTrackedEventstorageEngine       20     16     messaging-4.9.0     org.axonframework.common     TypeReflectionUtils     getExactDirectSuperTypesOfParameterizedTyp       21     8     messaging-4.9.0     org.axonframework.messaging.annotation     AnnotatedMessageHandlingMember       22     47     messaging-4.9.0     org.axonframework.deadline.jobrunr     JobRunrDeadlineManager     €       23     20     messaging-4.9.0     org.axonframework.commandhandling.distributed     DistributedCommandBus     d       24     17     modelling-4.9.0     org.axonframework.modelling.saga     AbstractSagaManager       25     14     messaging-4.9.0     org.axonframework.serialization     AbstractXStreamSerializer       26     32     modelling-org.axonframework.modelling.saga.repository     AssociationValueMap\$AssociationValueComparator     co	18	29	eventsourcing-	org.axonframework.eventsourcing.eventstore.jpa	JpaEventStorageEngine	fetchTrackec
20 16 messaging- 4.9.0 org.axonframework.common TypeReflectionUtils getExactDirectSuperTypesOfParameterizedTyp  21 8 messaging- 4.9.0 org.axonframework.messaging.annotation AnnotatedMessageHandlingMember  22 47 messaging- 4.9.0 org.axonframework.deadline.jobrunr 4.9.0 org.axonframework.commandhandling.distributed DistributedCommandBus d  23 20 messaging- 4.9.0 org.axonframework.commandhandling.distributed DistributedCommandBus d  24 17 modelling- 4.9.0 org.axonframework.modelling.saga AbstractSagaManager  25 14 messaging- 4.9.0 org.axonframework.serialization AbstractXStreamSerializer  26 32 modelling- 4.9.0 org.axonframework.modelling.saga.repository AssociationValueMap\$AssociationValueComparator cci	19	13	eventsourcing-	org. ax on framework. events our cing. events to re. jdbc	JdbcEventStorageEngine	getTrackedEve
21 8 messaging- 4.9.0 org.axonframework.messaging.annotation AnnotatedMessageHandlingMember  22 47 messaging- 4.9.0 org.axonframework.deadline.jobrunr  23 20 messaging- 4.9.0 org.axonframework.commandhandling.distributed DistributedCommandBus d  24 17 modelling- 4.9.0 org.axonframework.modelling.saga AbstractSagaManager  25 14 messaging- 4.9.0 org.axonframework.serialization AbstractXStreamSerializer  26 32 modelling-  27 axon-  28 modelling-  29 org.axonframework.modelling.saga.repository AssociationValueMap\$AssociationValueComparator	20	16	messaging-	org.axonframework.common	TypeReflectionUtils	getExactDirectSuperTypesOfParameterizedTyp
22       47       messaging- 4.9.0       org.axonframework.deadline.jobrunr JobRunrDeadlineManager       6         23       20       axon- messaging- 4.9.0       org.axonframework.commandhandling.distributed       DistributedCommandBus       d         24       17       axon- modelling- 4.9.0       org.axonframework.modelling.saga       AbstractSagaManager         25       14       axon- messaging- 4.9.0       org.axonframework.serialization       AbstractXStreamSerializer         26       32       modelling- modelling- mog.axonframework.modelling.saga.repository       AssociationValueMap\$AssociationValueComparator       comparator	21	8	messaging-	org.axonframework.messaging.annotation	AnnotatedMessageHandlingMember	
23 20 messaging- 4.9.0 org.axonframework.commandhandling.distributed DistributedCommandBus d  24 17 modelling- 4.9.0 org.axonframework.modelling.saga AbstractSagaManager  25 14 messaging- 4.9.0 org.axonframework.serialization AbstractXStreamSerializer  26 32 modelling-  27 modelling-  28 org.axonframework.modelling.saga.repository AssociationValueMap\$AssociationValueComparator comparator	22	47	messaging-	org.axonframework.deadline.jobrunr	JobRunrDeadlineManager	E
24 17 modelling- 4.9.0 org.axonframework.modelling.saga AbstractSagaManager  25 14 messaging- 4.9.0 org.axonframework.serialization AbstractXStreamSerializer  26 32 modelling-  org.axonframework.modelling.saga.repository AssociationValueMap\$AssociationValueComparator calculated associationValueComparator calculated associationValueCom	23	20	messaging-	org.axonframework.commandhandling.distributed	DistributedCommandBus	d
25 14 messaging-4.9.0 org.axonframework.serialization AbstractXStreamSerializer  axon- 26 32 modelling- org.axonframework.modelling.saga.repository AssociationValueMap\$AssociationValueComparator ca	24	17	modelling-	org.axonframework.modelling.saga	AbstractSagaManager	
26 32 modelling- org.axonframework.modelling.saga.repository AssociationValueMap\$AssociationValueComparator ci	25	14	messaging-	org.axonframework.serialization	AbstractXStreamSerializer	
	26	32	modelling-	org.axonframework.modelling.saga.repository	AssociationValueMap\$AssociationValueComparator	CI

maxLinesMetho	maxLinesMethodType	fullPackageName	artifactName	index	
peekPrivate	EmbeddedEventStore\$EventConsumer	org.axonframework.eventsourcing.eventstore	axon- eventsourcing- 4.9.0	7	27
matchin	DeepEqualsMatcher	org.axonframework.test.matchers	axon-test- 4.9.0	26	28
	InitialEventRepresentation	org.axonframework.serialization.upcasting.event	axon- messaging- 4.9.0	54	29

# 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.

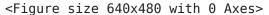
artifactName	axon-messaging- 4.9.0.jar	axon-eventsourcing- 4.9.0.jar	axon-modelling- 4.9.0.jar	axon-test- 4.9.0.jar	axon-configuration- 4.9.0.jar	axon-disruptor- 4.9.0.jar	
cyclomaticComplexity							
1	4413	943	895	518	542	146	
2	462	94	75	60	37	20	
3	284	53	38	60	17	5	
4	141	24	29	22	5	4	
5	74	9	24	12	3	3	
6	45	4	10	9	0	2	
7	20	7	2	4	2	2	
8	12	7	1	3	0	2	
9	7	0	2	1	0	0	
10	4	0	0	1	0	0	
11	9	0	0	2	0	0	
12	4	0	0	2	0	0	
13	2	1	0	1	0	0	
14	1	0	0	0	0	0	
15	1	0	0	0	0	0	
16	0	0	1	0	0	0	
17	1	0	0	0	0	0	
21	1	0	0	0	0	0	
22	1	0	0	0	0	0	
40	1	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

artifactName	axon-messaging- 4.9.0.jar	axon-eventsourcing- 4.9.0.jar	axon-modelling- 4.9.0.jar	axon-test- 4.9.0.jar		
cyclomaticComplexity						
1	80.485136	82.574431	83.101207	74.532374	89.438944	79.347826
2	8.426044	8.231173	6.963788	8.633094	6.105611	10.869565
3	5.179646	4.640981	3.528319	8.633094	2.805281	2.717391
4	2.571585	2.101576	2.692665	3.165468	0.825083	2.173913
5	1.349626	0.788091	2.228412	1.726619	0.495050	1.630435
6	0.820719	0.350263	0.928505	1.294964	0.000000	1.086957
7	0.364764	0.612960	0.185701	0.575540	0.330033	1.086957
8	0.218858	0.612960	0.092851	0.431655	0.000000	1.086957
9	0.127667	0.000000	0.185701	0.143885	0.000000	0.000000
10	0.072953	0.000000	0.000000	0.143885	0.000000	0.000000
11	0.164144	0.000000	0.000000	0.287770	0.000000	0.000000
12	0.072953	0.000000	0.000000	0.287770	0.000000	0.000000
13	0.036476	0.087566	0.000000	0.143885	0.000000	0.000000
14	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
15	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
16	0.000000	0.000000	0.092851	0.000000	0.000000	0.000000
17	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
21	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
22	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000
40	0.018238	0.000000	0.000000	0.000000	0.000000	0.000000

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



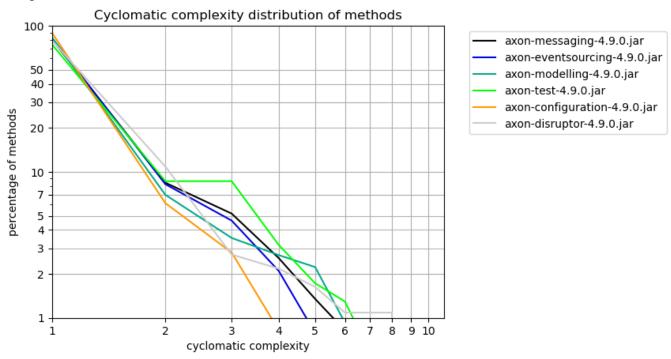


Table 2c - Top 30 packages with highest cyclomatic complexity

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	maxComplexityMeth
0	axon- messaging- 4.9.0	org.axonframework.eventhandling	1277	838	21	processBat
1	axon- configuration- 4.9.0	org.axonframework.config	716	606	7	invokeLifecycleHandle
4	axon- messaging- 4.9.0	org.axonframework.queryhandling	477	381	11	doQue
2	axon- messaging- 4.9.0	org.axonframework.eventhandling.pooled	448	333	22	,
6	axon- modelling- 4.9.0	org.axonframework.modelling.command	445	329	9	resolveTarç
3	axon-test- 4.9.0	org.axonframework.test.aggregate	434	249	13	ensureValuesEqu
7	axon- eventsourcing- 4.9.0	org.axonframework.eventsourcing.eventstore	397	264	13	hasNe
8	axon- messaging- 4.9.0	org.axonframework.messaging.annotation	386	239	14	hanc
9	axon- modelling- 4.9.0	org.axonframework.modelling.command.inspection	339	218	9	prepareHandle
10	axon- eventsourcing- 4.9.0	org.axonframework.eventsourcing	325	251	8	doScheduleSnapst
5	axon- messaging- 4.9.0	org. ax on framework. eventh and ling. dead letter. jdbc	304	249	12	equa
16	axon- messaging- 4.9.0	org.axonframework.common	301	144	9	getExactDirectSuperTypesOfParameterizedTypeOrC
12	axon- eventsourcing- 4.9.0	org. ax on framework. events our cing. events to re.leg	292	187	8	fetchTrackedEver
14	axon- messaging- 4.9.0	org.axonframework.serialization	285	181	7	equi
17	axon- modelling- 4.9.0	org.axonframework.modelling.saga	277	194	6	instantiateAssociationResol\
11	axon- disruptor-4.9.0	org.axonframework.disruptor.commandhandling	274	184	8	doDispat
13	axon- eventsourcing- 4.9.0	org.axonframework.eventsourcing.eventstore.jdbc	273	236	7	${\tt lambda} fetch Tracked Events$
18	axon- messaging- 4.9.0	org.axonframework.commandhandling.gateway	249	174	12	createGatew
20	axon- messaging- 4.9.0	org. ax on framework. command handling. distributed	243	175	12	equa
19	axon-test- 4.9.0	org.axonframework.test.saga	234	167	9	assertDispatchedEqual
15	axon- messaging- 4.9.0	org. ax on framework. eventhand ling. dead letter. jp a	212	132	15	equa
27	axon- messaging- 4.9.0	org.axonframework.messaging	209	156	4	frc
25	axon- messaging- 4.9.0	org.axonframework.messaging.unitofwork	206	129	11	executeWithRes
23	axon- messaging- 4.9.0	org.axonframework.commandhandling	201	169	10	<in< td=""></in<>
26	axon-test- 4.9.0	org.axonframework.test.matchers	191	108	8	matchesL
31	axon- messaging- 4.9.0	org.axonframework.common.caching	182	110	8	onEv∈
21	axon- messaging- 4.9.0	org.axonframework.eventhandling.tokenstore.jdbc	173	130	9	updateTok

on	xComp	mplex	cityM	eth	Meth
			6	equa	equa
ine	ermineM	neMes	sage	:Nar	jeNar
(e)	adKeyV	eyViol	ation(	Cod	nCod

## 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	maxComple
0	51	axon- messaging- 4.9.0	org. ax on framework. eventhand ling. scheduling. job	JobRunrEventScheduler	deserial
1	2	axon- messaging- 4.9.0	org.axonframework.eventhandling.pooled	Coordinator\$CoordinationTask	
2	0	axon- messaging- 4.9.0	org.axonframework.eventhandling	TrackingEventProcessor	pı
3	32	axon- modelling- 4.9.0	org.axonframework.modelling.saga.repository	AssociationValueMap\$AssociationValueComparator	
4	15	axon- messaging- 4.9.0	org. ax on framework. even than dling. dead letter. jp a	DeadLetterEventEntry	
5	8	axon- messaging- 4.9.0	org.axonframework.messaging.annotation	AnnotatedMessageHandlingMember	
6	47	axon- messaging- 4.9.0	org.axonframework.deadline.jobrunr	JobRunrDeadlineManager	deserial
7	7	axon- eventsourcing- 4.9.0	org.axonframework.eventsourcing.eventstore	ConcatenatingDomainEventStream	
8	52	axon- messaging- 4.9.0	org. ax on framework. command handling. distributed	CommandNameFilter	deserial
9	3	axon-test- 4.9.0	org.axonframework.test.aggregate	AggregateTestFixture	ensure <sup>1</sup>
10	5	axon- messaging- 4.9.0	org. ax on framework. eventh and ling. dead letter. jdbc	JdbcDeadLetter	
11	37	axon- messaging- 4.9.0	org.axonframework.common.jdbc	ConnectionWrapperFactory	lar
12	39	axon-test- 4.9.0	org.axonframework.test.server	AxonServerContainer	
13	20	axon- messaging- 4.9.0	org.axonframework.commandhandling.distributed	ReplyMessage	
14	18	axon- messaging- 4.9.0	org.axonframework.commandhandling.gateway	CommandGatewayFactory	cre
15	22	axon- messaging- 4.9.0	org.axonframework.eventhandling.deadletter.leg	JpaDeadLetter	
16	4	axon- messaging- 4.9.0	org.axonframework.queryhandling	SimpleQueryBus	
17	25	axon- messaging- 4.9.0	org.axonframework.messaging.unitofwork	BatchingUnitOfWork	execut
18	28	axon- messaging- 4.9.0	org.axonframework.deadline.dbscheduler	DbSchedulerHumanReadableDeadlineDetails	
19	35	axon- messaging- 4.9.0	org.axonframework.deadline.quartz	DeadlineJob	
20	49	axon- messaging- 4.9.0	org.axonframework.common.lock	PessimisticLockFactory\$DisposableLock	
21	40	axon- messaging- 4.9.0	org.axonframework.messaging.responsetypes	MultipleInstancesResponseType	
22	23	axon- messaging- 4.9.0	org.axonframework.commandhandling	$\label{lem:MethodCommandHandlerDefinition\$MethodCommandMe} MethodCommandHandlerDefinition\$MethodCommandMe$	
23	30	axon- messaging- 4.9.0	org.axonframework.messaging.deadletter	GenericDeadLetter	
24	16	axon- messaging- 4.9.0	org.axonframework.common	TypeReflectionUtils	getExactDirectSuperTypesOfParameterize
25	6	axon- modelling- 4.9.0	org.axonframework.modelling.command	AnnotationCommandTargetResolver	re
26	19	axon-test- 4.9.0	org.axonframework.test.saga	CommandValidator	assertDispato

maxComple	maxComplexityType	fullPackageName	artifactName	index	
	JacksonSerializer	org.axonframework.serialization.json	axon- messaging- 4.9.0	50	27
ι	JdbcTokenStore	org. ax on framework. eventh and ling. to ken store. jdbc	axon- messaging- 4.9.0	21	28
prep	AnnotatedAggregateMetaModelFactory\$AnnotatedAg	org.axonframework.modelling.command.inspection	axon- modelling- 4.9.0	9	29