## **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>

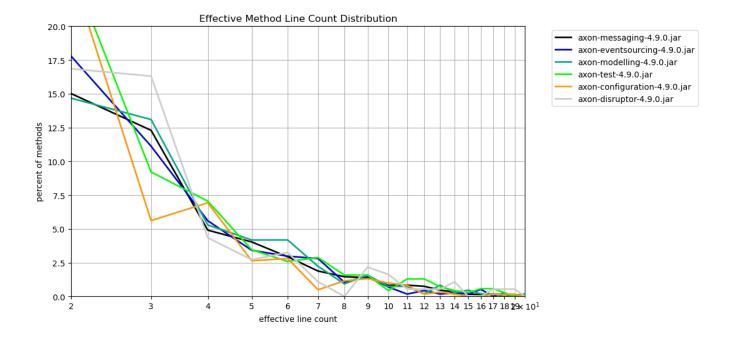


Table 1c - Top 30 packages with highest effective line counts

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. eventh and ling. dead letter. jdbc	849	249	31	convertToLetter
6	axon- modelling- 4.9.0	org.axonframework.modelling.command	824	329	17	${\tt lambda} in itialize Handler 7$
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. ax on framework. modelling. command. in spection	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. axon framework. events our cing. events to re. jdbc	569	236	24	<init></init>
14	axon- messaging- 4.9.0	org.axonframework.serialization	537	181	22	<init></init>
15	axon- messaging- 4.9.0	org. ax on framework. eventhand ling. dead letter. jp a	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.axonframework.commandhandling.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
Part	0	2	messaging-	org.axonframework.eventhandling.pooled	Coordinator\$CoordinationTask	
2	1	0	messaging-	org.axonframework.eventhandling	TrackingEventProcessor	proces
g 15	2	1	configuration-	org.axonframework.config	DefaultConfigurer	
1	3	18	messaging-	org.axonframework.commandhandling.gateway	CommandGatewayFactory	createG
5 86 messaging gravoriframework deading sagu repository jallac and a secondary of the sague of t	4	3		org.axonframework.test.aggregate	Reporter	appendEventO <sub>1</sub>
reference of the modelling of the modell	5	35	messaging-	org.axonframework.deadline.quartz	DeadlineJob	•
7	6	24	modelling-	org.axonframework.modelling.saga.repository.jdbc	JdbcSagaStore	upda
8 30 messaging- 9 25 massaging- 10 11 messaging- 11	7	4	messaging-	org.axonframework.queryhandling	SimpleQueryBus	d
9 25 messaging org.axonframework.messaging.unitohook BatchingUnitofWork executeWith 4.9.0 org.axonframework.disruptor.commandhandling DisruptorCommandBus  11 15 messaging org.axonframework.eventhandling.deadletter.jdbc DefaultDeadLetter.Jdbc/Convener Converti 4.9.0 org.axonframework.eventhandling.deadletter.jdbc DefaultDeadLetter.Jdbc/Convener Converti 4.9.0 org.axonframework.eventhandling.deadletter.jdbc DeadLetter.Jdbc/Convener Converti 4.9.0 org.axonframework.eventhandling.jdbenatore.jdbc Jdbc/TokenStore Updat 4.9.0 org.axonframework.modelling.command.inspection Annotated.AggregateMetaModelFactorysAnnotated.dg. inspectFieldsAndv 4.9.0 org.axonframework.modelling.command.inspection Annotated.AggregateMetaModelFactorysAnnotated.dg. inspectFieldsAndv 4.9.0 org.axonframework.eventsourcing.eventstore.jdbc SimpleDeadlineManagersDeadlineTask.  17 12 eventsourcing-org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine detchTracker.4.9.0 org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine detchTracker.4.9.0 org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine detchTracker.4.9.0 org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine org.axonframework.eventsourcing.eventstore.jdbc Jdbc/EventStorageEngine org.axonframework.eventsourcing.eventstore.jd	8	30	messaging-	org.axonframework.messaging.deadletter	InMemorySequencedDeadLetterQueue	t
11 b disruptor.4.9.0 org.aconframework.eventhandling.deadletter.jdbc DefaultDeadLetter.jdbc/Converter convert 4.9.0 org.aconframework.eventhandling.deadletter.jdbc DefaultDeadLetter.jdbc/Converter convert 4.9.0 org.aconframework.eventhandling.deadletter.jdbc DeadLetter.jdbc/Converter convert 4.9.0 org.aconframework.eventhandling.deadletter.jdbc DeadLetter.jdbc/Converter convert 4.9.0 org.aconframework.eventhandling.deadletter.jdbc DeadLetter.jdbc/Converter converter 4.9.0 org.aconframework.eventhandling.tolerstore.jdbc JdbcTokenStore updat 4.9.0 org.aconframework.modelling.command.inspection AnnotatedAggregateMetaModelFactory\$AnnotatedAg inspectFieldSAnt/b 4.9.0 org.aconframework.modelling.command.inspection AnnotatedAggregateMetaModelFactory\$AnnotatedAg inspectFieldSAnt/b 4.9.0 org.aconframework.eventsourcing.eventstore.jdbc SimpleDeadlineManager\$DeadlineTask org.aconframework.eventsourcing.eventstore.jdg JpaEventStorageEngine fetchTrackec 4.9.0 org.aconframework.eventsourcing.eventstore.jdbc JdbcEventStorageEngine fetchTrackec 4.	9	25	messaging-	org.axonframework.messaging.unitofwork	BatchingUnitOfWork	executeWitl
ressaging- nessaging-	10	11	axon- disruptor-4.9.0	org.axonframework.disruptor.commandhandling	DisruptorCommandBus	
12 15 messaging- 13 19 8XONT-rest. 14 21 messaging- 4.00 org.axonframework.eventhandling.tokenstore.jdbc  15 9 axon- 16 34 messaging- 4.00 org.axonframework.eventhandling.tokenstore.jdbc  17 12 eventsourcing- 4.00 org.axonframework.eventhandling.command.inspection  18 29 eventsourcing- 4.00 org.axonframework.eventhandling.command.inspection  19 13 eventsourcing- 4.00 org.axonframework.deadline  29 eventsourcing- 4.00 org.axonframework.eventsourcing.eventstore.jpa  20 pa.  2	11	5	messaging-	org. ax on framework. eventh and ling. dead letter. jdbc	DefaultDeadLetterJdbcConverter	convert1
14 21 messaging axon-messaging axon-framework.weventhandling.tokenstore.jdbc JdbcTokenStore updat 15 9 modelling axon-modelling command.inspection AnnotatedAggregateMetaModelFactory\$AnnotatedAg inspectFieldsAndM 16 34 messaging axon-sessaging axon-framework.deadline SimpleDeadlineManagersDeadlineTask 17 12 eventsourcing org.axonframework.deadline SimpleDeadlineManagersDeadlineTask 18 29 eventsourcing org.axonframework.eventsourcing.eventstore.jga JpaEventStorageEngine fetchTracket 18 29 eventsourcing org.axonframework.eventsourcing.eventstore.jga JpaEventStorageEngine fetchTracket 19 13 eventsourcing org.axonframework.eventsourcing.eventstore.jdbc JdbcEventStorageEngine 20 16 messaging axon-messaging org.axonframework.eventsourcing.eventstore.jdbc JdbcEventStorageEngine 21 8 messaging org.axonframework.messaging.annotation AnnotatedMessageHandlingMember 22 47 messaging axon-messaging org.axonframework.deadline.jobrunr JobRunrDeadlineManager 23 20 messaging 4.9.0 org.axonframework.commandhandling.distributed DistributedCommandBus day 25 14 messaging org.axonframework.commandhandling.distributed DistributedCommandBus 26 32 modelling org.axonframework.modelling.saga repository AssociationValueValpsAssociationValueComparator org.axonframevork.ondelling.saga repository 3 AssociationValueValpsAssociationValueComparator	12	15	messaging-	org. ax on framework. eventhand ling. dead letter. jp a	DeadLetterEventEntry	
14         21         messaging 4.9.0 as on modelling and such 4.9.0         org axonframework.eventhandling.tokenstore.jdbc         JdbcTokenStore         updat           15         9         ason-modelling org axonframework.modelling.command.inspection         AnnotatedAggregateMetaModelFactory\$AnnotatedAg         inspectFieldsAndW           16         34         messaging-such 4.9.0         org axonframework.deadline         SimpleDeadlineManager\$DeadlineTask           17         12         eventsourcing-such 4.9.0         org axonframework.eventsourcing.eventstore.jeg         JpaEventStorageEngine         fetchTracked           18         29         eventsourcing-such 4.9.0         org axonframework.eventsourcing.eventstore.jpa         JpaEventStorageEngine         fetchTracked           19         13         eventsourcing-such 4.9.0         org axonframework.eventsourcing.eventstore.jdbc         JdbcEventStorageEngine         fetchTracked           20         16         messaging-such 4.9.0         org axonframework.common         TypeReflectionUtils         getExactDirectSuperTypesOfParameterizedTyp           21         8         ason-such 4.9.0         org axonframework.messaging.annotation         AnnotatedMessageHandlingMember         org axonframework.gending.distributed           22         47         messaging-such 4.9.0         org axonframework.commandhandling.distributed         DistributedCom	13	19		org.axonframework.test.saga	SagaTestFixture	
15         9         modelling-4,9.0 /49.0 /49.0         org.axonframework.modelling.command.inspection         AnnotatedAggregateMetaModelFactorysAnnotatedAg         inspectFieldsAndWindspecifiedsAndwindspecifiedsAndwindspecifiedsAndwindspecifiedsAndwindspecifiedsAndwindspecifiedsAndwindspe	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 fetchTrackec 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 org.axonframework.modelling.saga.repository  29 AssociationValueMap\$AssociationValueComparator  20 org.axonframework.modelling.saga.repository  20 AssociationValueMap\$AssociationValueComparator	15	9	modelling-	org.axonframework.modelling.command.inspection	Annotated Aggregate Meta Model Factory \$ Annotated Ag	inspectFieldsAndN
17 12 eventsourcing-49.0 org.axonframework.eventsourcing.eventstore.leg JpaEventStorageEngine fetchTracket 49.0 axon- 49.0 org.axonframework.eventsourcing.eventstore.jpa JpaEventStorageEngine fetchTracket 49.0 axon- 49.0 org.axonframework.eventsourcing.eventstore.jdbc JdbcEventStorageEngine  18 eventsourcing-49.0 org.axonframework.eventsourcing.eventstore.jdbc JdbcEventStorageEngine  20 16 messaging-49.0 org.axonframework.common TypeReflectionUtils getExactDirectSuperTypesOfParameterizedTyp 49.0 org.axonframework.messaging.annotation AnnotatedMessageHandlingMember  21 8 messaging-49.0 org.axonframework.deadline.jobrunr JobRunrDeadlineManager exactor org.axonframework.deadline.jobrunr JobRunrDeadlineManager  22 4 17 messaging-49.0 org.axonframework.commandhandling.distributed DistributedCommandBus dd 49.0 axon-modelling-axon-org.axonframework.modelling.saga AbstractSagaManager  25 14 messaging-49.0 org.axonframework.serialization AbstractXStreamSerializer  26 32 modelling-org.axonframework.modelling.saga.repository AssociationValueComparator oc	16	34	messaging-	org.axonframework.deadline	SimpleDeadlineManager\$DeadlineTask	
18     29     eventsourcing-4.9.0     org.axonframework.eventsourcing.eventstore.jpa     JpaEventStorageEngine     fetchTracket       19     13     eventsourcing-4.9.0     org.axonframework.eventsourcing.eventstore.jdbc     JdbcEventStorageEngine       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-axonframework.modelling.saga     AbstractSagaManager       25     14     messaging-4.9.0     org.axonframework.serialization     AbstractXStreamSerializer       26     32     modelling-modelling-modelling-saga.repository     AssociationValueMap\$AssociationValueComparator     OciationValueComparator	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  16 messaging- 4.9.0 org.axonframework.common  21 8 messaging- 4.9.0 org.axonframework.messaging.annotation  22 47 messaging- 4.9.0 org.axonframework.deadline.jobrunr  23 20 messaging- 4.9.0 org.axonframework.deadline.jobrunr  24 17 modelling- 25 14 messaging- 4.9.0 org.axonframework.modelling.saga  26 axon-  27 messaging- 4.9.0 org.axonframework.modelling.saga  28 messaging- 4.9.0 org.axonframework.deadline.jobrunr  29 daxon-  20 messaging- 4.9.0 org.axonframework.deadline.jobrunr  20 messaging- 4.9.0 org.axonframework.commandhandling.distributed  20 messaging- 4.9.0 org.axonframework.modelling.saga  21 AbstractSagaManager  22 daxon-  23 messaging- 4.9.0 org.axonframework.modelling.saga  24 AbstractSagaManager  25 messaging- 4.9.0 org.axonframework.serialization  26 axon-  27 messaging- 4.9.0 org.axonframework.serialization  28 AbstractStreamSerializer  AbstractXStreamSerializer  AbstractXStreamSerializer  AssociationValueMap\$AssociationValueComparator	18	29	eventsourcing-	org.axonframework.eventsourcing.eventstore.jpa	JpaEventStorageEngine	fetchTrackec
20 16 messaging- 4.9.0 axon- 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  25 14 messaging- 4.9.0 org.axonframework.modelling.saga  AbstractSagaManager  26 32 modelling- 4.9.0 org.axonframework.modelling.saga.repository AssociationValueMap\$AssociationValueComparator	19	13	eventsourcing-	org. ax on framework. events our cing. events to re. jdbc	JdbcEventStorageEngine	
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.modelling.saga AbstractXStreamSerializer  26 32 modelling-  27 axon-  28 messaging- 4.9.0 org.axonframework.serialization AbstractXStreamSerializer	20	16	messaging-	org.axonframework.common	TypeReflectionUtils	getExactDirectSuperTypesOfParameterizedTyp
22 47 messaging- 4.9.0 org.axonframework.deadline.jobrunr 23 20 messaging- 4.9.0 org.axonframework.commandhandling.distributed 24 17 modelling- 4.9.0 org.axonframework.modelling.saga 25 14 messaging- 4.9.0 org.axonframework.modelling.saga 26 32 modelling- 32 modelling- 4.9.0 org.axonframework.modelling.saga.repository  AssociationValueMap\$AssociationValueComparator  Comparator  JobRunrDeadlineManager    d  AbstractSagaManager  AbstractXStreamSerializer	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	22	47	messaging-	org.axonframework.deadline.jobrunr	JobRunrDeadlineManager	6
24 17 modelling- org.axonframework.modelling.saga AbstractSagaManager  25 14 messaging- 4.9.0 org.axonframework.serialization AbstractXStreamSerializer  4.9.0 axon- axon- modelling- org.axonframework.modelling.saga.repository AssociationValueMap\$AssociationValueComparator comparator comparator comparator	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 co	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	Cı

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.

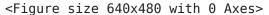
artifactName	axon-messaging- 4.9.0.jar	axon-eventsourcing- 4.9.0.jar	axon-modelling- 4.9.0.jar	axon-test- 4.9.0.jar	axon-configuration- 4.9.0.jar	axon-disruptor- 4.9.0.jar	
cyclomaticComplexity							
1	4413	943	895	518	542	146	
2	462	94	75	60	37	20	
3	284	53	38	60	17	5	
4	141	24	29	22	5	4	
5	74	9	24	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	axon-configuration- 4.9.0.jar	axon-disruptor- 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)



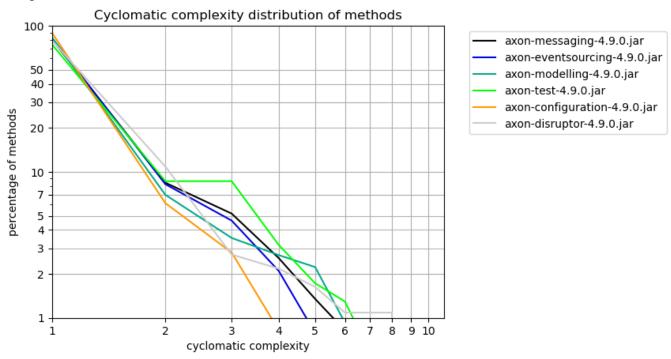


Table 2c - Top 30 packages with highest cyclomatic complexity

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	get Exact Direct Super Types Of Parameterized Type Or Community of the C
12	axon- eventsourcing- 4.9.0	org. axon framework. events our cing. events to re.leg	292	187	8	loadKeyViolationCod
14	axon- messaging- 4.9.0	org.axonframework.serialization	285	181	7	calculateRou
17	axon- modelling- 4.9.0	org.axonframework.modelling.saga	277	194	6	hand
11	axon- disruptor-4.9.0	org.axonframework.disruptor.commandhandling	274	184	8	onRes
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.axonframework.commandhandling.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	resolveDeta
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	matchingFiel
31	axon- messaging- 4.9.0	org.axonframework.common.caching	182	110	8	onEve
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	рі
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. eventh and ling. 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. axon framework. command hand ling. distributed	CommandNameFilter	deserial:
9	3	axon-test- 4.9.0	org.axonframework.test.aggregate	AggregateTestFixture	ensure'
10	5	axon- messaging- 4.9.0	org. ax on framework. even than dling. 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. ax on framework. even than dling. dead letter. 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	DbSchedulerBinaryDeadlineDetails	
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	$\label{lem:MethodCommandHandlerDefinition} \textbf{MethodCommandMe}$	
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	Annotation Command Target Resolver	re
26	19	axon-test- 4.9.0	org.axonframework.test.saga	CommandValidator	assertDispatc

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