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 effectiveLineCount	axon-messaging-4.8.2.jar	axon-eventsourcing-4.8.2.jar	axon-modelling-4.8.2.jar	axon-test-4.8.2.jar	axon-configuration-4.8.2.jar	axon-disruptor-4.8.2.jar
1	2743	567	523	279	308	84
2	790	197	147	169	135	31
3	642	123	135	64	35	30
4	270	64	57	49	32	8
5	217	40	44	24	16	5
6	150	33	44	18	16	6
7	100	31	23	20	2	2
8	79	11	10	11	7	0
9	73	17	17	11	8	4
10	46	8	8	3	6	3
11	47	2	8	9	5	1
12	39	5	2	9	1	1
13	25	2	9	5	2	1
14	15	3	3	3	1	2
15	8	2	5	2	0	0
16	8	6	2	4	0	0
17	9	0	2	4	1	1
18	8	3	0	2	1	1
19	7	0	1	0	1	1
20	4	2	2	1	0	0
21	7	2	1	1	1	0
22	5	0	1	1	0	1
23	3	1	1	1	1	0
24	6	2	1	1	0	1
25	0	2	0	0	0	0
26	2	0	1	1	1	0
28	2	0	0	1	0	0
29	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
40	0	0	0	0	1	0
42	1	0	0	0	0	0
43	0	0	0	0	1	0
45	0	0	0	1	0	0
50	1	0	0	0	0	0
57	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 effectiveLineCount	axon-messaging-4.8.2.jar	axon-eventsourcing-4.8.2.jar	axon-modelling-4.8.2.jar	axon-test-4.8.2.jar	axon-configuration-4.8.2.jar	axon-disruptor-4.8.2.jar
1	51.589242	50.489760	49.904580	40.143885	52.920962	45.652174
2	14.858003	17.542297	14.026718	24.316547	23.195876	16.847826
3	12.074478	10.952805	12.881679	9.208633	6.013746	16.304348
4	5.078052	5.699020	5.438931	7.050360	5.498282	4.347826
5	4.081249	3.561888	4.198473	3.453237	2.749141	2.717391
6	2.821140	2.938557	4.198473	2.589928	2.749141	3.260870
7	1.880760	2.760463	2.194656	2.877698	0.343643	1.086957
8	1.485800	0.979519	0.954198	1.582734	1.202749	0.000000
9	1.372955	1.513802	1.622137	1.582734	1.374570	2.173913
10	0.865150	0.712378	0.763359	0.431655	1.030928	1.630435
11	0.883957	0.178094	0.763359	1.294964	0.859107	0.543478
12	0.733496	0.445236	0.190840	1.294964	0.171821	0.543478
13	0.470190	0.178094	0.858779	0.719424	0.343643	0.543478
14	0.282114	0.267142	0.286260	0.431655	0.171821	1.086957
15	0.150461	0.178094	0.477099	0.287770	0.000000	0.000000
16	0.150461	0.534283	0.190840	0.575540	0.000000	0.000000
17	0.169268	0.000000	0.190840	0.575540	0.171821	0.543478
18	0.150461	0.267142	0.000000	0.287770	0.171821	0.543478
19	0.131653	0.000000	0.095420	0.000000	0.171821	0.543478
20	0.075230	0.178094	0.190840	0.143885	0.000000	0.000000
21	0.131653	0.178094	0.095420	0.143885	0.171821	0.000000
22	0.094038	0.000000	0.095420	0.143885	0.000000	0.543478
23	0.056423	0.089047	0.095420	0.143885	0.171821	0.000000
24	0.112846	0.178094	0.095420	0.143885	0.000000	0.543478
25	0.000000	0.178094	0.000000	0.000000	0.000000	0.000000
26	0.037615	0.000000	0.095420	0.143885	0.171821	0.000000
28	0.037615	0.000000	0.000000	0.143885	0.000000	0.000000
29	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000
31	0.018808	0.000000	0.000000	0.143885	0.000000	0.000000
32	0.018808	0.000000	0.000000	0.000000	0.000000	0.543478
33	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000
34	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000
36	0.037615	0.000000	0.000000	0.000000	0.000000	0.000000
38	0.000000	0.000000	0.095420	0.000000	0.000000	0.000000
40	0.000000	0.000000	0.000000	0.000000	0.171821	0.000000
42	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000
43	0.000000	0.000000	0.000000	0.000000	0.171821	0.000000
45	0.000000	0.000000	0.000000	0.143885	0.000000	0.000000
50	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000
57	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000

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

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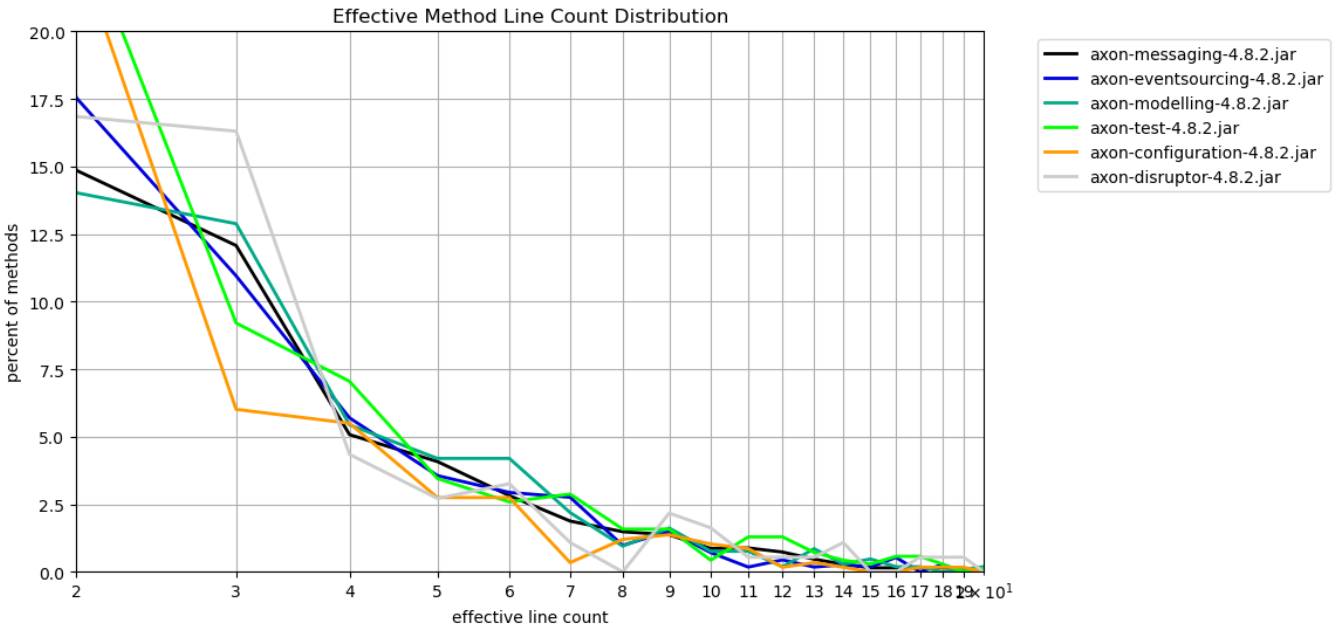

Table 1c - Top 30 packages with highest effective line counts

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-4.8.2	org.axonframework.eventhandling	2213	793	64	processBatch
1	axon-configuration-4.8.2	org.axonframework.config	1503	582	43	<init>
2	axon-messaging-4.8.2	org.axonframework.eventhandling.pooled	971	318	77	run
3	axon-test-4.8.2	org.axonframework.test.aggregate	951	249	45	appendEventOverview
4	axon-messaging-4.8.2	org.axonframework.queryhandling	855	342	36	doQuery
5	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.jdbc	849	249	31	convertToLetter
6	axon-modelling-4.8.2	org.axonframework.modelling.command	792	315	17	lambda$initializeHandler$7
7	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore	709	262	21	peekPrivateStream
8	axon-messaging-4.8.2	org.axonframework.messaging.annotation	673	239	23	<init>
9	axon-modelling-4.8.2	org.axonframework.modelling.command.inspection	637	218	26	inspectFieldsAndMethods
10	axon-disruptor-4.8.2	org.axonframework.disruptor.commandhandling	605	184	32	<init>
11	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing	582	236	20	doScheduleSnapshot
12	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore.leg...	570	185	25	fetchTrackedEvents
13	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore.jdbc	569	236	24	getTrackedEventData
14	axon-messaging-4.8.2	org.axonframework.serialization	537	181	22	<init>
15	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.jpa	522	132	28	equals
16	axon-messaging-4.8.2	org.axonframework.common	501	144	24	getExactDirectSuperTypesOfParameterizedTypeOrC...
17	axon-messaging-4.8.2	org.axonframework.commandhandling.gateway	488	174	50	createGateway
18	axon-test-4.8.2	org.axonframework.test.saga	487	167	28	<init>
19	axon-messaging-4.8.2	org.axonframework.commandhandling.distributed	474	175	23	dispatch
20	axon-modelling-4.8.2	org.axonframework.modelling.saga	459	181	23	handle
21	axon-messaging-4.8.2	org.axonframework.eventhandling.tokenstore.jdbc	430	130	26	updateToken
22	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.leg...	401	97	21	convert
23	axon-modelling-4.8.2	org.axonframework.modelling.saga.repository.jdbc	374	84	38	updateSaga
24	axon-messaging-4.8.2	org.axonframework.messaging.unitofwork	363	129	32	executeWithResult
25	axon-test-4.8.2	org.axonframework.test.matchers	351	108	21	matchingFields
26	axon-messaging-4.8.2	org.axonframework.messaging	348	156	13	defaultHeaders

	artifactName	fullPackageName	linesInPackage	methodCount	maxLinesMethod	maxLinesMethodName
27	axon-messaging-4.8.2	org.axonframework.commandhandling	340	151	13	<init>
28	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore.jpa	320	101	25	fetchTrackedEvents
29	axon-messaging-4.8.2	org.axonframework.deadline.dbscheduler	310	101	17	execute

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	maxLinesMetho
0	2	axon-messaging-4.8.2	org.axonframework.eventhandling.pooled	Coordinator$CoordinationTask	
1	0	axon-messaging-4.8.2	org.axonframework.eventhandling	TrackingEventProcessor	proces
2	17	axon-messaging-4.8.2	org.axonframework.commandhandling.gateway	CommandGatewayFactory	createG
3	3	axon-test-4.8.2	org.axonframework.test.aggregate	Reporter	appendEventO
4	1	axon-configuration-4.8.2	org.axonframework.config	EventProcessingModule	
5	34	axon-messaging-4.8.2	org.axonframework.deadline.quartz	DeadlineJob	e
6	23	axon-modelling-4.8.2	org.axonframework.modelling.saga.repository.jdbc	JdbcSagaStore	upda
7	4	axon-messaging-4.8.2	org.axonframework.queryhandling	SimpleQueryBus	d
8	30	axon-messaging-4.8.2	org.axonframework.messaging.deadletter	InMemorySequencedDeadLetterQueue	p
9	24	axon-messaging-4.8.2	org.axonframework.messaging.unitofwork	BatchingUnitOfWork	executeWit
10	10	axon-disruptor-4.8.2	org.axonframework.disruptor.commandhandling	DisruptorCommandBus	
11	5	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.jdbc	DefaultDeadLetterJdbcConverter	convertT
12	18	axon-test-4.8.2	org.axonframework.test.saga	SagaTestFixture	
13	15	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.jpa	DeadLetterEventEntry	
14	9	axon-modelling-4.8.2	org.axonframework.modelling.command.inspection	AnnotatedAggregateMetaModelFactory$AnnotatedAg...	inspectFieldsAndM
15	21	axon-messaging-4.8.2	org.axonframework.eventhandling.tokenstore.jdbc	JdbcTokenStore	updat
16	12	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore.leg...	JpaEventStorageEngine	fetchTracked
17	28	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore.jpa	JpaEventStorageEngine	fetchTracked
18	13	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore.jdbc	JdbcEventStorageEngine	getTrackedEve
19	16	axon-messaging-4.8.2	org.axonframework.common	TypeReflectionUtils	getExactDirectSuperTypesOfParameterizedTyp
20	37	axon-messaging-4.8.2	org.axonframework.deadline	SimpleDeadlineManager$DeadlineTask	
21	19	axon-messaging-4.8.2	org.axonframework.commandhandling.distributed	DistributedCommandBus	d
22	20	axon-modelling-4.8.2	org.axonframework.modelling.saga	AbstractSagaManager	
23	8	axon-messaging-4.8.2	org.axonframework.messaging.annotation	AnnotatedMessageHandlingMember	
24	32	axon-modelling-4.8.2	org.axonframework.modelling.saga.repository	AssociationValueMap$AssociationValueComparator	c
25	52	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter	DeadLetteringEventHandlerInvoker	
26	46	axon-messaging-4.8.2	org.axonframework.deadline.jobrunr	JobRunrDeadlineManager	e

	index	artifactName	fullPackageName	maxLinesMethodType	maxLinesMetho
27	14	axon-messaging-4.8.2	org.axonframework.serialization	AbstractXStreamSerializer	
28	54	axon-messaging-4.8.2	org.axonframework.serialization.upcasting.event	InitialEventRepresentation	
29	25	axon-test-4.8.2	org.axonframework.test.matchers	DeepEqualsMatcher	matchin

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-4.8.2.jar	axon-eventsourcing-4.8.2.jar	axon-modelling-4.8.2.jar	axon-test-4.8.2.jar	axon-configuration-4.8.2.jar	axon-disruptor-4.8.2.jar
cyclomaticComplexity						
1	4276	926	866	518	521	146
2	445	92	75	60	35	20
3	280	54	38	60	16	5
4	138	24	29	22	5	4
5	68	9	24	12	3	3
6	45	3	10	9	0	2
7	20	7	2	4	2	2
8	13	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	1	0	1	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 code.

artifactName cyclomaticComplexity	axon-messaging-4.8.2.jar	axon-eventsourcing-4.8.2.jar	axon-modelling-4.8.2.jar	axon-test-4.8.2.jar	axon-configuration-4.8.2.jar	axon-disruptor-4.8.2.jar
1	80.421290	82.457703	82.633588	74.532374	89.518900	79.347826
2	8.369381	8.192342	7.156489	8.633094	6.013746	10.869565
3	5.266128	4.808549	3.625954	8.633094	2.749141	2.717391
4	2.595449	2.137133	2.767176	3.165468	0.859107	2.173913
5	1.278917	0.801425	2.290076	1.726619	0.515464	1.630435
6	0.846342	0.267142	0.954198	1.294964	0.000000	1.086957
7	0.376152	0.623330	0.190840	0.575540	0.343643	1.086957
8	0.244499	0.623330	0.095420	0.431655	0.000000	1.086957
9	0.131653	0.000000	0.190840	0.143885	0.000000	0.000000
10	0.075230	0.000000	0.000000	0.143885	0.000000	0.000000
11	0.169268	0.000000	0.000000	0.287770	0.000000	0.000000
12	0.075230	0.000000	0.000000	0.287770	0.000000	0.000000
13	0.037615	0.089047	0.000000	0.143885	0.000000	0.000000
14	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000
15	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000
16	0.018808	0.000000	0.095420	0.000000	0.000000	0.000000
21	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000
22	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000
40	0.018808	0.000000	0.000000	0.000000	0.000000	0.000000

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

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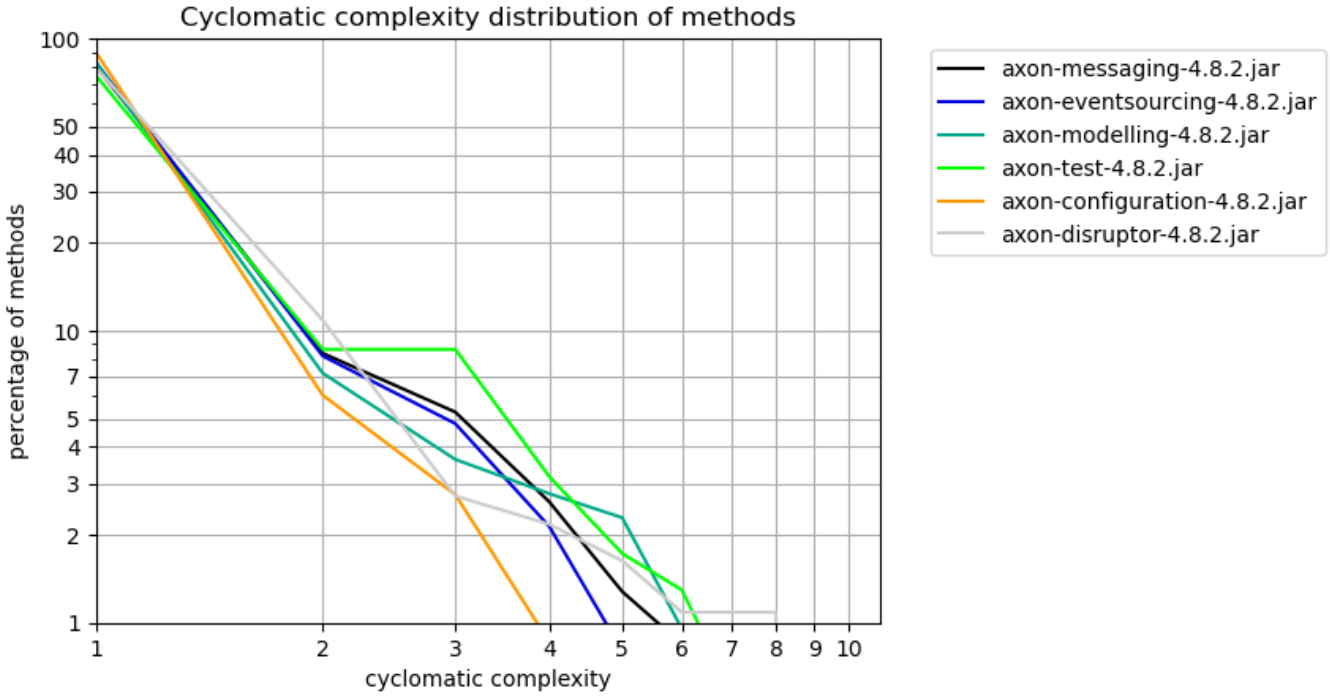

Table 2c - Top 30 packages with highest cyclomatic complexity

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-4.8.2	org.axonframework.eventhandling	1214	793	21	processBat
1	axon-configuration-4.8.2	org.axonframework.config	688	582	7	getFactoryForTy
3	axon-test-4.8.2	org.axonframework.test.aggregate	434	249	13	ensureValuesEqu
4	axon-messaging-4.8.2	org.axonframework.queryhandling	433	342	11	doQue
6	axon-modelling-4.8.2	org.axonframework.modelling.command	431	315	9	resolveTarg
2	axon-messaging-4.8.2	org.axonframework.eventhandling.pooled	429	318	22	r
7	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore	395	262	13	hasNe
8	axon-messaging-4.8.2	org.axonframework.messaging.annotation	386	239	14	hand
9	axon-modelling-4.8.2	org.axonframework.modelling.command.inspection	339	218	9	prepareHandle
11	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing	305	236	8	doScheduleSnapsh
5	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.jdbc	304	249	12	equa
16	axon-messaging-4.8.2	org.axonframework.common	301	144	9	getExactDirectSuperTypesOfParameterizedTypeOrC
12	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore.leg...	290	185	8	loadKeyViolationCod
14	axon-messaging-4.8.2	org.axonframework.serialization	285	181	7	calculateRou
10	axon-disruptor-4.8.2	org.axonframework.disruptor.commandhandling	274	184	8	onRes
13	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore.jdbc	273	236	7	lambda$cleanGaps$
20	axon-modelling-4.8.2	org.axonframework.modelling.saga	264	181	6	equa
17	axon-messaging-4.8.2	org.axonframework.commandhandling.gateway	249	174	12	createGatew
19	axon-messaging-4.8.2	org.axonframework.commandhandling.distributed	243	175	12	equa
18	axon-test-4.8.2	org.axonframework.test.saga	234	167	9	assertDispatchedEqual
15	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.jpa	212	132	15	equa
26	axon-messaging-4.8.2	org.axonframework.messaging	209	156	4	endSco
24	axon-messaging-4.8.2	org.axonframework.messaging.unitofwork	206	129	11	executeWithRes
25	axon-test-4.8.2	org.axonframework.test.matchers	191	108	8	matchesL
31	axon-messaging-4.8.2	org.axonframework.common.caching	182	110	8	onEve
27	axon-messaging-4.8.2	org.axonframework.commandhandling	180	151	10	<in
21	axon-messaging-4.8.2	org.axonframework.eventhandling.tokenstore.jdbc	173	130	9	updateTok

	artifactName	fullPackageName	complexityInPackage	methodCount	maxComplexity	maxComplexityMeth
30	axon-messaging-4.8.2	org.axonframework.messaging.deadletter	169	112	10	equa
28	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore.jpa	155	101	8	loadKeyViolationCod
33	axon-messaging-4.8.2	org.axonframework.tracing	150	120	7	determineMessageNar

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	50	axon-messaging-4.8.2	org.axonframework.eventhandling.scheduling.job...	JobRunrEventScheduler	$deserial$
1	2	axon-messaging-4.8.2	org.axonframework.eventhandling.pooled	Coordinator$CoordinationTask	
2	0	axon-messaging-4.8.2	org.axonframework.eventhandling	TrackingEventProcessor	p
3	32	axon-modelling-4.8.2	org.axonframework.modelling.saga.repository	AssociationValueMap$AssociationValueComparator	
4	15	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.jpa	DeadLetterEventEntry	
5	8	axon-messaging-4.8.2	org.axonframework.messaging.annotation	AnnotatedMessageHandlingMember	
6	51	axon-messaging-4.8.2	org.axonframework.commandhandling.distributed....	CommandNameFilter	$deserial$
7	46	axon-messaging-4.8.2	org.axonframework.deadline.jobrunr	JobRunrDeadlineManager	$deserial$
8	7	axon-eventsourcing-4.8.2	org.axonframework.eventsourcing.eventstore	ConcatenatingDomainEventStream	
9	3	axon-test-4.8.2	org.axonframework.test.aggregate	AggregateTestFixture	ensure
10	19	axon-messaging-4.8.2	org.axonframework.commandhandling.distributed	ReplyMessage	
11	39	axon-test-4.8.2	org.axonframework.test.server	AxonServerContainer	
12	36	axon-messaging-4.8.2	org.axonframework.common.jdbc	ConnectionWrapperFactory	lar
13	5	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.jdbc	JdbcDeadLetter	
14	17	axon-messaging-4.8.2	org.axonframework.commandhandling.gateway	CommandGatewayFactory	cre
15	34	axon-messaging-4.8.2	org.axonframework.deadline.quartz	DeadlineJob	
16	29	axon-messaging-4.8.2	org.axonframework.deadline.dbscheduler	DbSchedulerBinaryDeadlineDetails	
17	24	axon-messaging-4.8.2	org.axonframework.messaging.unitofwork	BatchingUnitOfWork	execut
18	22	axon-messaging-4.8.2	org.axonframework.eventhandling.deadletter.leg...	JpaDeadLetter	
19	4	axon-messaging-4.8.2	org.axonframework.queryhandling	SimpleQueryBus	
20	30	axon-messaging-4.8.2	org.axonframework.messaging.deadletter	GenericDeadLetter	
21	27	axon-messaging-4.8.2	org.axonframework.commandhandling	MethodCommandHandlerDefinition$MethodCommandMe...	
22	48	axon-messaging-4.8.2	org.axonframework.common.lock	PessimisticLockFactory$DisposableLock	
23	40	axon-messaging-4.8.2	org.axonframework.messaging.responsetypes	MultipleInstancesResponseType	
24	16	axon-messaging-4.8.2	org.axonframework.common	TypeReflectionUtils	getExactDirectSuperTypesOfParameterize
25	6	axon-modelling-4.8.2	org.axonframework.modelling.command	AnnotationCommandTargetResolver	re
26	21	axon-messaging-4.8.2	org.axonframework.eventhandling.tokenstore.jdbc	JdbcTokenStore	u

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27	18	axon-test-4.8.2	org.axonframework.test.saga	CommandValidator	assertDispatc
28	9	axon-modelling-4.8.2	org.axonframework.modelling.command.inspection	AnnotatedAggregateMetaModelFactory$AnnotatedAg...	prep
29	49	axon-messaging-4.8.2	org.axonframework.serialization.json	JacksonSerializer	