#### **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- 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
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 26	2	0	0	0	0	0	0	0	0
27	0	1	0	0	1	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
	_	-		· ·		0	· ·		U

# 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.

2 15.049073 17.232376 17.863398 14.773777 24.463519 24.092409 22.358722 16.847826 8.69565   3 12.195565 12.010444 11.120841 12.927054 9.298999 5.610561 4.422604 16.304348 21.73913   4 4.943657 5.918190 5.604203 5.355494 7.010014 6.930693 4.668305 4.347826 15.21739   5 4.016721 3.829417 3.415061 4.247461 3.433476 2.640264 2.948403 2.717391 4.34782   6 2.926209 2.175805 2.977233 4.062789 2.575107 2.805281 2.702703 3.260870 6.52173   7 1.908397 1.653612 2.802102 2.308403 2.861230 0.495050 2.702703 1.086957 4.34782			4.10.3.jar	eventsourcing- 4.10.3.jar	modelling- 4.10.3.jar	test- 4.10.3.jar	configuration- 4.10.3.jar	autoconfigure- 4.10.3.jar	disruptor- 4.10.3.jar	opentelemetry- 4.10.3.jar
2 15.049073 17.232376 17.863398 14.773777 24.463519 24.092409 22.358722 16.847826 8.69565   3 12.195565 12.010444 11.120841 12.927054 9.298999 5.610561 4.422604 16.304348 21.73913   4 4.943657 5.918190 5.604203 5.355494 7.010014 6.930693 4.668305 4.347826 15.21739   5 4.016721 3.829417 3.415061 4.247461 3.433476 2.640264 2.948403 2.717391 4.34782   6 2.926209 2.175805 2.977233 4.062789 2.575107 2.805281 2.702703 3.260870 6.52173   7 1.908397 1.653612 2.802102 2.308403 2.861230 0.495050 2.702703 1.086957 4.34782	effectiveLineCount									
3 12.195565 12.010444 11.120841 12.927054 9.298999 5.610561 4.422604 16.304348 21.73913   4 4.943657 5.918190 5.604203 5.355494 7.010014 6.930693 4.668305 4.347826 15.21739   5 4.016721 3.829417 3.415061 4.247461 3.433476 2.640264 2.948403 2.717391 4.34782   6 2.926209 2.175805 2.977233 4.062789 2.575107 2.805281 2.702703 3.260870 6.52173   7 1.908397 1.653612 2.802102 2.308403 2.861230 0.495050 2.702703 1.086957 4.34782	1	51.435842	48.041775	50.175131	49.399815	40.057225	51.155116	54.545455	45.652174	34.782609
4 4.943657 5.918190 5.604203 5.355494 7.010014 6.930693 4.668305 4.347826 15.21739   5 4.016721 3.829417 3.415061 4.247461 3.433476 2.640264 2.948403 2.717391 4.34782   6 2.926209 2.175805 2.977233 4.062789 2.575107 2.805281 2.702703 3.260870 6.52173   7 1.908397 1.653612 2.802102 2.308403 2.861230 0.495050 2.702703 1.086957 4.34782	2	15.049073	17.232376	17.863398	14.773777	24.463519	24.092409	22.358722	16.847826	8.695652
5 4.016721 3.829417 3.415061 4.247461 3.433476 2.640264 2.948403 2.717391 4.34782   6 2.926209 2.175805 2.977233 4.062789 2.575107 2.805281 2.702703 3.260870 6.52173   7 1.908397 1.653612 2.802102 2.308403 2.861230 0.495050 2.702703 1.086957 4.34782	3	12.195565	12.010444	11.120841	12.927054	9.298999	5.610561	4.422604	16.304348	21.739130
6 2.926209 2.175805 2.977233 4.062789 2.575107 2.805281 2.702703 3.260870 6.52173   7 1.908397 1.653612 2.802102 2.308403 2.861230 0.495050 2.702703 1.086957 4.34782	4	4.943657	5.918190	5.604203	5.355494	7.010014	6.930693	4.668305	4.347826	15.217391
<b>7</b> 1.908397 1.653612 2.802102 2.308403 2.861230 0.495050 2.702703 1.086957 4.34782	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
<b>8</b> 1.454017 1.827676 1.050788 0.923361 1.573677 1.155116 1.965602 0.000000 0.00000	8	1.454017	1.827676	1.050788	0.923361	1.573677	1.155116	1.965602	0.000000	0.000000
<b>9</b> 1.399491 1.044386 1.576182 1.569714 1.430615 1.320132 0.982801 2.173913 2.17391	9	1.399491	1.044386	1.576182	1.569714	1.430615	1.320132	0.982801	2.173913	2.173913
<b>10</b> 0.854235 1.305483 0.612960 0.738689 0.572246 0.990099 0.737101 1.630435 0.00000	10	0.854235	1.305483	0.612960	0.738689	0.572246	0.990099	0.737101	1.630435	0.000000
<b>11</b> 0.799709 0.957354 0.175131 0.646353 1.287554 0.825083 0.737101 0.543478 0.00000	11	0.799709	0.957354	0.175131	0.646353	1.287554	0.825083	0.737101	0.543478	0.000000
<b>12</b> 0.763359 0.783290 0.437828 0.184672 1.287554 0.165017 0.000000 0.543478 2.17391	12	0.763359	0.783290	0.437828	0.184672	1.287554	0.165017	0.000000	0.543478	2.173913
<b>13</b> 0.508906 0.522193 0.175131 0.831025 0.572246 0.330033 0.000000 0.543478 0.00000	13	0.508906	0.522193	0.175131	0.831025	0.572246	0.330033	0.000000	0.543478	0.000000
<b>14</b> 0.218103 0.087032 0.262697 0.369344 0.286123 0.165017 0.000000 1.086957 0.00000	14	0.218103	0.087032	0.262697	0.369344	0.286123	0.165017	0.000000	1.086957	0.000000
<b>15</b> 0.181752 0.435161 0.175131 0.461681 0.429185 0.000000 0.000000 0.000000 0.000000	15	0.181752	0.435161	0.175131	0.461681	0.429185	0.000000	0.000000	0.000000	0.000000
<b>16</b> 0.145402 0.261097 0.525394 0.184672 0.572246 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
<b>17</b> 0.181752 0.522193 0.000000 0.092336 0.572246 0.165017 0.000000 0.543478 0.00000	17	0.181752	0.522193	0.000000	0.092336	0.572246	0.165017	0.000000	0.543478	0.000000
<b>18</b> 0.163577 0.000000 0.262697 0.000000 0.429185 0.165017 0.000000 0.543478 0.00000	18	0.163577	0.000000	0.262697	0.000000	0.429185	0.165017	0.000000	0.543478	0.000000
<b>19</b> 0.127226 0.348129 0.000000 0.184672 0.000000 0.165017 0.245700 0.543478 0.00000	19	0.127226	0.348129	0.000000	0.184672	0.000000	0.165017	0.245700	0.543478	0.000000
<b>20</b> 0.090876 0.174064 0.175131 0.184672 0.143062 0.000000 0.000000 0.000000 0.000000	20	0.090876	0.174064	0.175131	0.184672	0.143062	0.000000	0.000000	0.000000	0.000000
<b>21</b> 0.109051 0.174064 0.175131 0.092336 0.143062 0.165017 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
<b>22</b> 0.054526 0.00000 0.087566 0.184672 0.143062 0.00000 0.491400 0.543478 0.00000	22	0.054526	0.000000	0.087566	0.184672	0.143062	0.000000	0.491400	0.543478	0.000000
<b>23</b> 0.090876 0.000000 0.175131 0.000000 0.143062 0.165017 0.245700 0.000000 0.000000	23	0.090876	0.000000	0.175131	0.000000	0.143062	0.165017	0.245700	0.000000	0.000000
<b>24</b> 0.054526 0.261097 0.087566 0.092336 0.143062 0.000000 0.000000 0.543478 0.00000	24	0.054526	0.261097	0.087566	0.092336	0.143062	0.000000	0.000000	0.543478	0.000000
<b>25</b> 0.036350 0.000000 0.087566 0.000000 0.000000 0.000000 0.000000 0.000000	25	0.036350	0.000000	0.087566	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
<b>26</b> 0.036350 0.000000 0.000000 0.092336 0.143062 0.165017 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
<b>27</b> 0.000000 0.087032 0.000000 0.000000 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
<b>28</b> 0.036350 0.087032 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
<b>29</b> 0.000000 0.000000 0.000000 0.143062 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
<b>30</b> 0.018175 0.000000 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
<b>31</b> 0.018175 0.000000 0.000000 0.143062 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
<b>32</b> 0.018175 0.000000 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
<b>33</b> 0.018175 0.000000 0.000000 0.000000 0.000000 0.000000	33	0.018175	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
<b>34</b> 0.018175 0.087032 0.000000 0.000000 0.000000 0.000000 0.245700 0.000000 0.000000	34	0.018175	0.087032	0.000000	0.000000	0.000000	0.000000	0.245700	0.000000	0.000000
<b>35</b> 0.000000 0.087032 0.000000 0.000000 0.000000 0.000000 0.000000	35	0.000000	0.087032	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
<b>36</b> 0.036350 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
<b>38</b> 0.000000 0.000000 0.000000 0.092336 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
<b>41</b> 0.000000 0.087032 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
<b>43</b> 0.000000 0.000000 0.000000 0.000000 0.165017 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
<b>44</b> 0.018175 0.000000 0.000000 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>

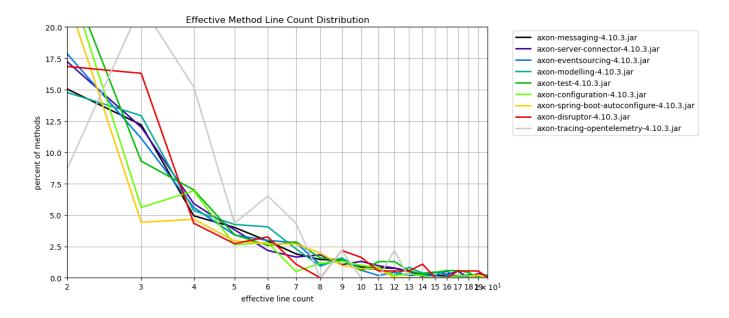


Table 1c - Top 30 packages with highest effective line counts

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></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. ax on framework. eventh and ling. dead letter. jdbc	848	249	31	convertToLetter
7	axon- modelling- 4.10.3	org.axonframework.modelling.command	843	335	19	lambda $initializeHandler$ 8
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></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. ax on framework. disruptor. command handling	605	184	32	<init></init>
15	axon- eventsourcing- 4.10.3	org. ax on framework. events our cing. events to re.leg	573	187	25	fetchTrackedEvents
16	axon- eventsourcing- 4.10.3	org.axonframework.eventsourcing.eventstore.jdbc	568	236	24	<init></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></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	get Exact Direct Super Types Of Parameterized Type Or C
21	axon-test- 4.10.3	org.axonframework.test.saga	492	168	29	<init></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. ax on framework. command handling. 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. ax on framework. eventh and ling. dead letter. leg	401	97	21	convert
27	axon- messaging- 4.10.3	org.axonframework.commandhandling	377	169	13	<init></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.

maxLinesMeth	maxLinesMethodType	fullPackageName	artifactName	index	
	Coordinator\$CoordinationTask	org.axonframework.eventhandling.pooled	axon- messaging- 4.10.3	2	0
proc	TrackingEventProcessor	org.axonframework.eventhandling	axon- messaging- 4.10.3	0	1
create	CommandGatewayFactory	org.axonframework.commandhandling.gateway	axon- messaging- 4.10.3	23	2
	DefaultConfigurer	org.axonframework.config	axon- configuration- 4.10.3	1	3
appendEvent	Reporter	org.axonframework.test.aggregate	axon-test- 4.10.3	3	4
	DeadlineJob	org.axonframework.deadline.quartz	axon- messaging- 4.10.3	42	5
	AxonServerConnectionManager\$Builder	org.axonframework.axonserver.connector	axon-server- connector- 4.10.3	9	6
ир	JdbcSagaStore	org.axonframework.modelling.saga.repository.jdbc	axon- modelling- 4.10.3	28	7
	SimpleQueryBus	org.axonframework.queryhandling	axon- messaging- 4.10.3	4	8
reaur	$\label{eq:persistentStreamConnection} Persistent Stream Connection \\ Segment Connection \\ P$	org.axonframework.axonserver.connector.event.axon	axon-server- connector- 4.10.3	5	9
build	AxonAutoConfiguration	org.axonframework.springboot.autoconfig	axon-spring- boot- autoconfigure- 4.10.3	17	10
	InMemorySequencedDeadLetterQueue	org.axonframework.messaging.deadletter	axon- messaging- 4.10.3	34	11
	DisruptorCommandBus	org.axonframework.disruptor.commandhandling	axon- disruptor- 4.10.3	14	12
executeV	BatchingUnitOfWork	org.axonframework.messaging.unitofwork	axon- messaging- 4.10.3	29	13
conve	DefaultDeadLetterJdbcConverter	org.axonframework.eventhandling.deadletter.jdbc	axon- messaging- 4.10.3	6	14
	SagaTestFixture	org.axonframework.test.saga	axon-test- 4.10.3	21	15
	DeadLetterEventEntry	org.axonframework.eventhandling.deadletter.jpa	axon- messaging- 4.10.3	19	16
	AxonServerQueryBus	org.axonframework.axonserver.connector.query	axon-server- connector- 4.10.3	8	17
inspectFieldsAnı	Annotated Aggregate Meta Model Factory \$ Annotated Ag	org.axonframework.modelling.command.inspection	axon- modelling- 4.10.3	12	18
upc	JdbcTokenStore	org. ax on framework. eventh and ling. to ken store. jdbc	axon- messaging- 4.10.3	25	19
fetchTrack	JpaEventStorageEngine	org.axonframework.eventsourcing.eventstore.leg	axon- eventsourcing- 4.10.3	15	20
	SimpleDeadlineManager\$DeadlineTask	org.axonframework.deadline	axon- messaging- 4.10.3	41	21
	JdbcEventStorageEngine	org.axonframework.eventsourcing.eventstore.jdbc	axon- eventsourcing- 4.10.3	16	22
do	AxonServerCommandBus	org.axonframework.axonserver.connector.command	axon-server- connector- 4.10.3	35	23
	EventCipher	org.axonframework.axonserver.connector.event.util	axon-server- connector- 4.10.3	65	24
getExactDirectSuperTypesOfParameterizedT	TypeReflectionUtils	org.axonframework.common	axon- messaging- 4.10.3	20	25

	index	artifactName	fullPackageName	maxLinesMethodType	maxLinesMeth
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	fetchTrack
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 16	1	0	0	0	0	0	0	0	0
16	0	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
40	1	0	0	0	U	U	U	0	U

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- 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	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	doÇ
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	ha
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	doScheduleSnar
6	axon- messaging- 4.10.3	org. ax on framework. eventh and ling. dead letter. jdbc	304	249	12	ec
20	axon- messaging- 4.10.3	org.axonframework.common	301	144	9	get Exact Direct Super Types Of Parameterized Type C
15	axon- eventsourcing- 4.10.3	org. ax on framework. events our cing. events to re.leg	292	187	8	loadKeyViolationC
8	axon-server- connector- 4.10.3	org.axonframework.axonserver.connector.query	292	216	9	stı
18	axon- messaging- 4.10.3	org.axonframework.serialization	285	181	7	calculateR
22	axon- modelling- 4.10.3	org.axonframework.modelling.saga	277	194	6	ha
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	lambda $cleanGa_{i}$
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	buildSeria
19	axon- messaging- 4.10.3	org.axonframework.eventhandling.deadletter.jpa	212	132	15	et
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 .

i	ndex	artifactName	fullPackageName	maxComplexityType	maxCompl
0	61	axon- messaging- 4.10.3	org. ax on framework. even than dling. 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	1
3	5	axon-server- connector- 4.10.3	org.axonframework.axonserver.connector.event.axon	${\sf PersistentStreamConnection} \\ Segment \\ Connection \\ {\sf P}$	re
4	39	axon- modelling- 4.10.3	org. axon framework. 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	ensure
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	la
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	DbSchedulerBinaryDeadlineDetails	
19	29	axon- messaging- 4.10.3	org.axonframework.messaging.unitofwork	BatchingUnitOfWork	execu
20	26	axon- messaging- 4.10.3	org. ax on framework. eventh and ling. dead letter. 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	b
25	27	axon- messaging- 4.10.3	org.axonframework.commandhandling	$\label{lem:MethodCommandHandlerDefinition} \textbf{MethodCommandMe}$	

	index	artifactName	fullPackageName	maxComplexityType	maxCompl
26	34	axon- messaging- 4.10.3	org.axonframework.messaging.deadletter	GenericDeadLetter	
27	21	axon-test- 4.10.3	org.axonframework.test.saga	CommandValidator	assertDispat
28	20	axon- messaging- 4.10.3	org.axonframework.common	TypeReflectionUtils	getExactDirectSuperTypesOfParameteriz
29	25	axon- messaging- 4.10.3	org.axonframework.eventhandling.tokenstore.jdbc	JdbcTokenStore	