# Overview of Java Artifacts with Neo4j

#### References

- jqassistant
- py2neo

## **Artifacts**

Table 1 - Types per artifact

	artifactName	languageElement	numberOfTypes
0	axon-test-4.7.5	Interface	16
1	axon-test-4.7.5	Class	69
2	axon-disruptor-4.7.5	Class	22
3	axon-eventsourcing-4.7.5	Interface	31
4	axon-eventsourcing-4.7.5	Class	96
5	axon-eventsourcing-4.7.5	Enum	2
6	axon-eventsourcing-4.7.5	Annotation	1
7	axon-messaging-4.7.5	Class	541
8	axon-messaging-4.7.5	Interface	143
9	axon-messaging-4.7.5	Annotation	26
10	axon-messaging-4.7.5	Enum	19
11	axon-modelling-4.7.5	Interface	26
12	axon-modelling-4.7.5	Class	108
13	axon-modelling-4.7.5	Annotation	12
14	axon-modelling-4.7.5	Enum	3
15	axon-configuration-4.7.5	Class	22
16	axon-configuration-4.7.5	Interface	15
17	axon-configuration-4.7.5	Annotation	1
18	axon-configuration-4.7.5	Enum	1

Table 2 - Types per artifact (grouped)

languageElement	Class	Interface	Annotation	Enum
artifactName				
axon-messaging-4.7.5	541	143	26	19
axon-modelling-4.7.5	108	26	12	3
axon-eventsourcing-4.7.5	96	31	1	2
axon-test-4.7.5	69	16	0	0
axon-configuration-4.7.5	22	15	1	1
axon-disruptor-4.7.5	22	0	0	0

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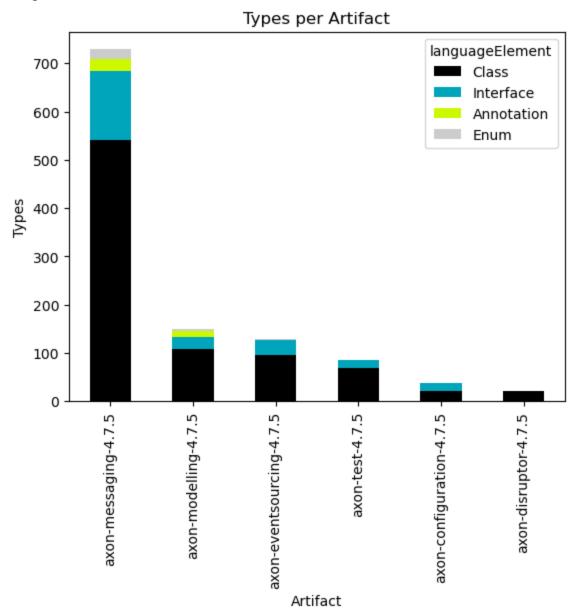


Table 3 - Types per artifact (grouped and normalized in %)

languageElement Cla		Interface	Annotation	Enum
artifactName				
axon-messaging-4.7.5	74.211248	19.615912	3.566529	2.606310
axon-modelling-4.7.5	72.483221	17.449664	8.053691	2.013423
axon-eventsourcing-4.7.5	73.846154	23.846154	0.769231	1.538462
axon-test-4.7.5	81.176471	18.823529	0.000000	0.000000
axon-configuration-4.7.5	56.410256	38.461538	2.564103	2.564103
axon-disruptor-4.7.5	100.000000	0.000000	0.000000	0.000000

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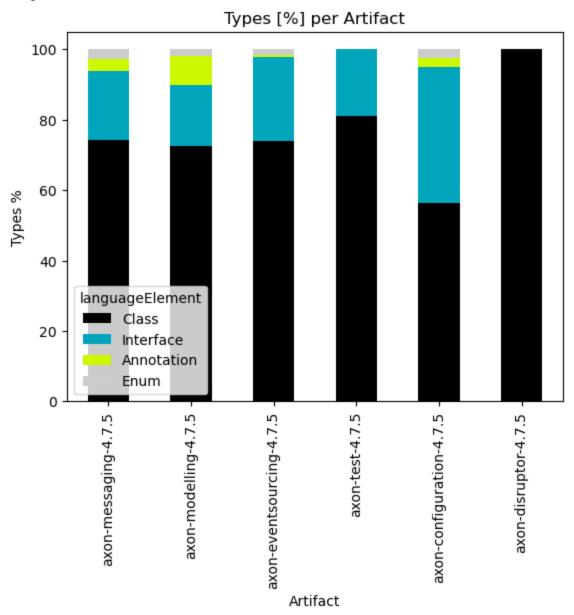
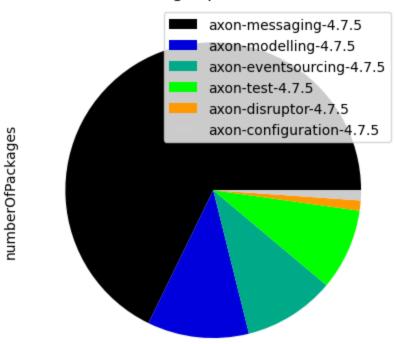


Table 4 - Number of packages per artifact

	numberOfPackages
artifactName	
axon-messaging-4.7.5	61
axon-modelling-4.7.5	10
axon-eventsourcing-4.7.5	9
axon-test-4.7.5	8
axon-disruptor-4.7.5	1
axon-configuration-4.7.5	1

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#### Packages per Artifact



## **Effective Method Line Count**

#### Table 5 - Effective method line count distribution

The table shown here only includes the first 10 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-configuration- 4.7.5.jar	axon-disruptor- 4.7.5.jar	axon-eventsourcing- 4.7.5.jar	axon-messaging- 4.7.5.jar	axon-modelling- 4.7.5.jar	axon-test- 4.7.5.jar
effectiveLineCount						
1	304	84	564	2486	473	261
2	135	31	196	720	137	147
3	33	30	123	557	127	61
4	33	8	64	245	55	48
5	14	5	38	199	46	23
6	16	6	33	133	38	17
7	2	2	31	91	23	18
8	9	0	11	73	11	10
9	8	4	17	65	8	10
10	4	3	8	37	7	5

## Table 6 - Effective method line count distribution (normalized)

The table shown here only includes the first 10 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-configuration- 4.7.5.jar	axon-disruptor- 4.7.5.jar	axon-eventsourcing- 4.7.5.jar	axon-messaging- 4.7.5.jar	axon-modelling- 4.7.5.jar	axon-test- 4.7.5.jar
effectiveLineCount						
1	52.961672	45.652174	50.492390	51.975747	49.015544	40.717629
2	23.519164	16.847826	17.547001	15.053314	14.196891	22.932917
3	5.749129	16.304348	11.011638	11.645411	13.160622	9.516381
4	5.749129	4.347826	5.729633	5.122308	5.699482	7.488300
5	2.439024	2.717391	3.401970	4.160569	4.766839	3.588144
6	2.787456	3.260870	2.954342	2.780682	3.937824	2.652106
7	0.348432	1.086957	2.775291	1.902572	2.383420	2.808112
8	1.567944	0.000000	0.984781	1.526239	1.139896	1.560062
9	1.393728	2.173913	1.521934	1.358980	0.829016	1.560062
10	0.696864	1.630435	0.716204	0.773573	0.725389	0.780031

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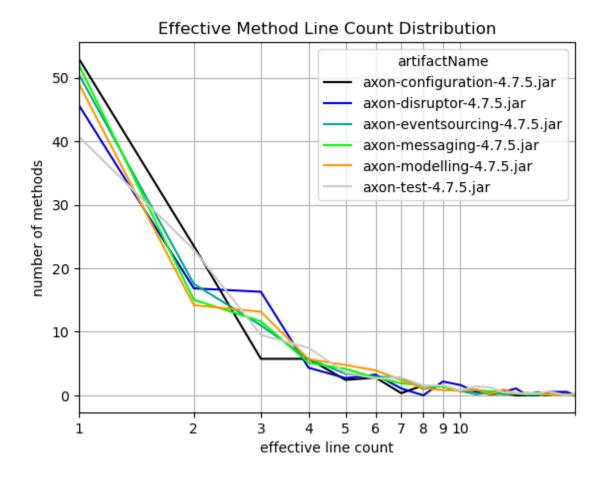


Table 7 - Cyclomatic method complexity distribution

The table shown here only includes the first 10 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-	configuration- 4.7.5.jar	axon-disruptor- 4.7.5.jar	axon-eventsourcing- 4.7.5.jar	axon-messaging- 4.7.5.jar	axon-modelling- 4.7.5.jar	axon-test- 4.7.5.jar
naticComplexity						
1	515	146	920	3817	794	474
2	37	20	92	408	70	58
3	13	5	54	263	35	55
4	3	4	24	129	27	21
5	3	3	9	65	22	12
6	1	2	3	43	11	8
7	2	2	7	19	2	4
8	0	2	7	10	1	3
9	0	0	0	7	2	1
10	0	0	0	4	0	1
4 5 6 7 8 9	3 3 1 2 0	4 3 2 2 2 2	24 9 3 7 7	129 65 43 19 10 7	27 22 11 2 1	

### Table 8 - Cyclomatic method complexity distribution (normalized)

The table shown here only includes the first 10 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-configuration- 4.7.5.jar	axon-disruptor- 4.7.5.jar	axon-eventsourcing- 4.7.5.jar	axon-messaging- 4.7.5.jar	axon-modelling- 4.7.5.jar	axon-test- 4.7.5.jar
cyclomaticComplexity						
1	89.721254	79.347826	82.363474	79.803471	82.279793	73.946958
2	6.445993	10.869565	8.236347	8.530211	7.253886	9.048362
3	2.264808	2.717391	4.834378	5.498641	3.626943	8.580343
4	0.522648	2.173913	2.148612	2.697052	2.797927	3.276131
5	0.522648	1.630435	0.805730	1.358980	2.279793	1.872075
6	0.174216	1.086957	0.268577	0.899017	1.139896	1.248050
7	0.348432	1.086957	0.626679	0.397240	0.207254	0.624025
8	0.000000	1.086957	0.626679	0.209074	0.103627	0.468019
9	0.000000	0.000000	0.000000	0.146352	0.207254	0.156006
10	0.000000	0.000000	0.000000	0.083630	0.000000	0.156006

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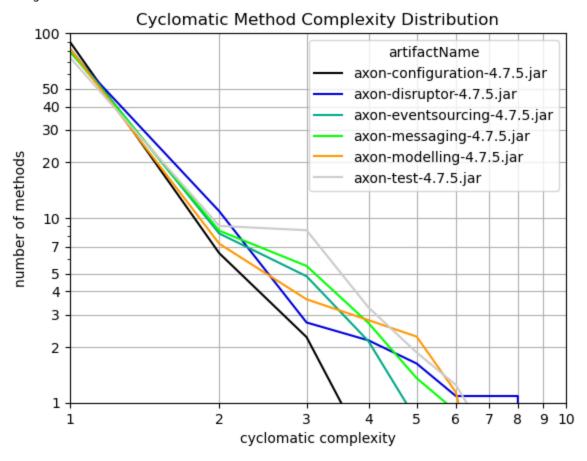


Table 9 - Top 10 packages with highest effective line counts

	artifactName	fullPackageName	linesInPackage	methodCount	maxLinesMethod	maxLinesMethodName
0	axon-messaging-4.7.5	org.axonframework.eventhandling	2213	793	64	processBatch
1	axon-configuration-4.7.5	org.axonframework.config	1474	574	42	<init></init>
2	axon-messaging-4.7.5	org. ax on framework. eventh and ling. pooled	939	308	70	run
3	axon-test-4.7.5	org.axonframework.test.aggregate	937	249	45	appendEventOverview
4	axon-modelling-4.7.5	org. ax on framework. model ling. command	784	315	17	${\tt lambda} initialize Handler {\tt 7}$
5	axon-messaging-4.7.5	org.axonframework.queryhandling	723	285	36	doQuery
6	axon-eventsourcing-4.7.5	org. ax on framework. events our cing. events tore	694	256	21	peekPrivateStream
7	axon-messaging-4.7.5	org.axonframework.messaging.annotation	673	239	23	<init></init>
8	axon-disruptor-4.7.5	org. ax on framework. disruptor. command handling	605	184	32	<init></init>
9	axon-eventsourcing-4.7.5	org.axonframework.eventsourcing	582	236	20	doScheduleSnapshot

## Table 10 - Top 10 methods with highest effective line counts

	artifactName	fullPackageName	maxLinesMethodType	${\it maxLinesMethodName}$	maxLinesMethod
0	axon-messaging-4.7.5	org.axonframework.eventhandling.pooled	Coordinator\$CoordinationTask	run	70
1	axon-messaging-4.7.5	org.axonframework.eventhandling	TrackingEventProcessor	processBatch	64
2	axon-messaging-4.7.5	org.axonframework.commandhandling.gateway	CommandGatewayFactory	createGateway	50
3	axon-test-4.7.5	org.axonframework.test.aggregate	Reporter	appendEventOverview	45
4	axon-configuration-4.7.5	org.axonframework.config	EventProcessingModule	<init></init>	42
5	axon-messaging-4.7.5	org.axonframework.deadline.quartz	DeadlineJob	execute	42
6	axon-modelling-4.7.5	org. axon framework. modelling. saga. repository. jdbc	JdbcSagaStore	updateSaga	38
7	axon-messaging-4.7.5	org.axonframework.queryhandling	SimpleQueryBus	doQuery	36
8	axon-messaging-4.7.5	org.axonframework.messaging.deadletter	In Memory Sequenced Dead Letter Queue	process	33
9	axon-disruptor-4.7.5	org. ax on framework. disruptor. command handling	DisruptorCommandBus	<init></init>	32

# Table 11 - Top 10 methods with highest cyclomatic complexity

	artifactName	fullPackageName	maxComplexityType	${\it maxComplexityMethod}$	maxComplexity
0	axon-messaging-4.7.5	org. ax on framework. eventhand ling. scheduling. job	JobRunrEventScheduler	deserialize Lamb da	40
1	axon-messaging-4.7.5	org.axonframework.eventhandling	TrackingEventProcessor	processBatch	21
2	axon-messaging-4.7.5	org. ax on framework. eventh and ling. pooled	Coordinator\$CoordinationTask	run	21
3	axon-modelling-4.7.5	org. axon framework. modelling. saga. repository	Association Value Map\$Association Value Comparator	compare	16
4	axon-messaging-4.7.5	org. ax on framework. eventhand ling. dead letter. jp a	DeadLetterEventEntry	equals	15
5	axon-messaging-4.7.5	org. ax on framework. messaging. annotation	Annotated Message Handling Member	handle	14
6	axon-messaging-4.7.5	org. ax on framework. command handling. distributed	CommandNameFilter	deserialize Lamb da	13
7	axon-messaging-4.7.5	org.axonframework.deadline.jobrunr	JobRunrDeadlineManager	deserialize Lamb da	13
8	axon-eventsourcing- 4.7.5	org.axonframework.eventsourcing.eventstore	ConcatenatingDomainEventStream	hasNext	13
9	axon-test-4.7.5	org.axonframework.test.aggregate	AggregateTestFixture	ensureValuesEqual	13