# Overview of Java Artifacts with Neo4j

#### References

- jqassistant
- py2neo

# **Artifacts**

Table 1 - Types per artifact

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

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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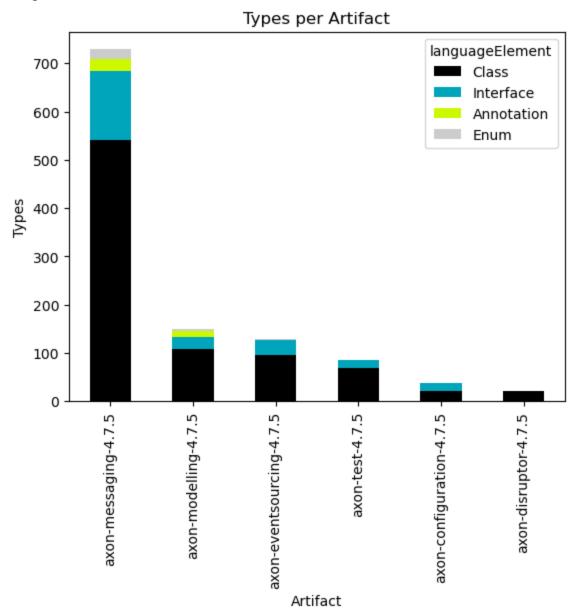


Table 3 - Types per artifact (grouped and normalized in %)

languageElement	Class	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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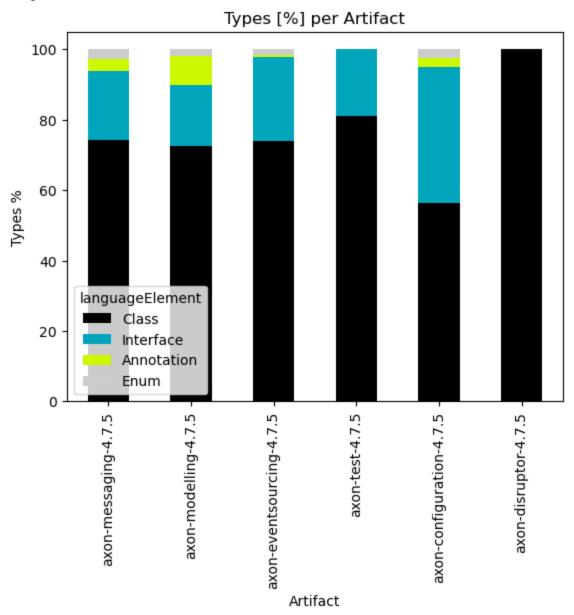
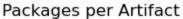
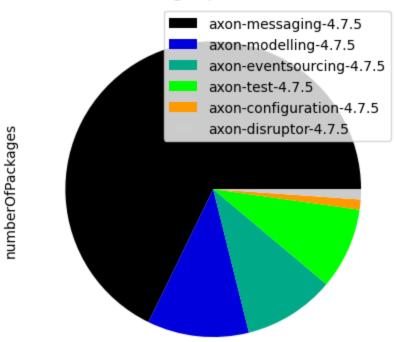


Table 4 - Number of packages per artifact

	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-configuration-4.7.5	1
axon-disruptor-4.7.5	1

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# **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	567	2517	509	267
2	135	31	197	726	141	159
3	33	30	123	559	134	62
4	33	8	64	248	56	48
5	14	5	40	201	48	23
6	16	6	33	133	38	17
7	2	2	31	93	24	19
8	9	0	11	74	11	10
9	8	4	17	65	8	10
10	4	3	8	38	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	50.489760	52.079454	50.098425	40.393343
2	23.519164	16.847826	17.542297	15.021726	13.877953	24.054463
3	5.749129	16.304348	10.952805	11.566315	13.188976	9.379728
4	5.749129	4.347826	5.699020	5.131388	5.511811	7.261725
5	2.439024	2.717391	3.561888	4.158908	4.724409	3.479576
6	2.787456	3.260870	2.938557	2.751914	3.740157	2.571861
7	0.348432	1.086957	2.760463	1.924271	2.362205	2.874433
8	1.567944	0.000000	0.979519	1.531140	1.082677	1.512859
9	1.393728	2.173913	1.513802	1.344920	0.787402	1.512859
10	0.696864	1.630435	0.712378	0.786261	0.688976	0.756430

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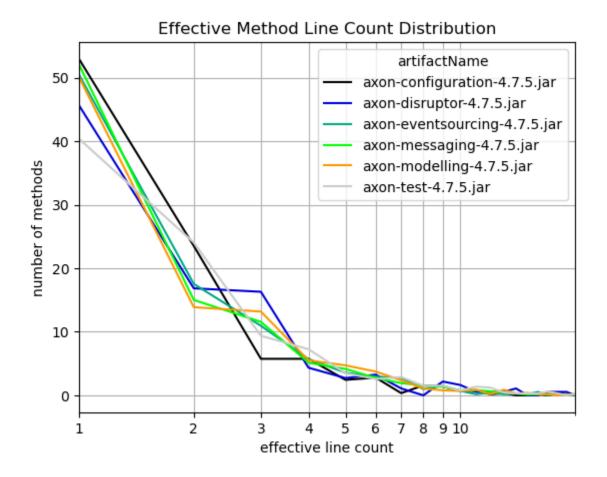


Table 7 - Cyclomatic method complexity distribution

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
cyclomaticComplexity						
1	515	146	926	3858	837	492
2	37	20	92	413	75	60
3	13	5	54	266	37	55
4	3	4	24	130	28	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

### 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	82.457703	79.826195	82.381890	74.432678
2	6.445993	10.869565	8.192342	8.545417	7.381890	9.077156
3	2.264808	2.717391	4.808549	5.503828	3.641732	8.320726
4	0.522648	2.173913	2.137133	2.689841	2.755906	3.177005
5	0.522648	1.630435	0.801425	1.344920	2.165354	1.815431
6	0.174216	1.086957	0.267142	0.889717	1.082677	1.210287
7	0.348432	1.086957	0.623330	0.393131	0.196850	0.605144
8	0.000000	1.086957	0.623330	0.206911	0.098425	0.453858
9	0.000000	0.000000	0.000000	0.144838	0.196850	0.151286
10	0.000000	0.000000	0.000000	0.082764	0.000000	0.151286

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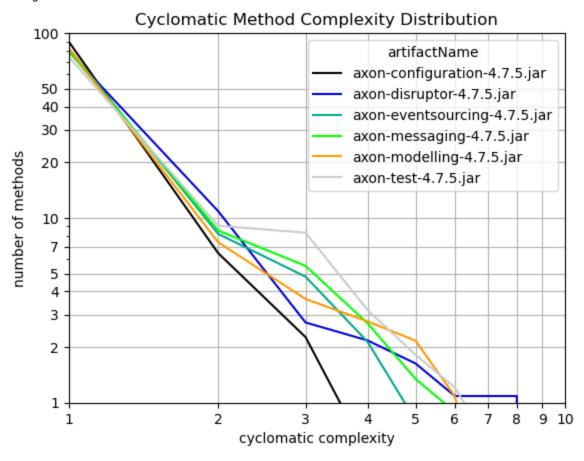


Table 9 - Top 10 packages with highest effective line counts

	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. eventhand ling. pooled	939	308	70	run
3	axon-test-4.7.5	org.axonframework.test.aggregate	937	249	45	appendEventOverview
4	axon-messaging-4.7.5	org.axonframework.queryhandling	832	333	36	doQuery
5	axon-modelling-4.7.5	org. ax on framework. modelling. command	784	315	17	${\tt lambda} initialize Handler 7$
6	axon-eventsourcing-4.7.5	org. ax on framework. events our cing. events tore	709	262	21	peekPrivateStream
7	axon-messaging-4.7.5	org.axonframework.messaging.annotation	673	239	23	<init></init>
8	axon-modelling-4.7.5	org. ax on framework. modelling. command. in spection	637	218	26	inspectFieldsAndMethods
9	axon-disruptor-4.7.5	org. ax on framework. disruptor. command handling	605	184	32	<init></init>

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

	artifactName	fullPackageName	maxLinesMethodType	maxLines Method Name	${\it maxLinesMethod}$
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. ax on 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. ax on framework. messaging. dead letter	In Memory Sequenced Dead Letter Queue	process	33
9	axon-disruptor-4.7.5	org.axonframework.disruptor.commandhandling	DisruptorCommandBus	<init></init>	32

# Table 11 - Top 10 methods with highest cyclomatic complexity

	artifactName	fullPackageName	maxComplexityType	maxComplexityMethod	maxComplexity
0	axon-messaging-4.7.5	org.axonframework.eventhandling.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. even than dling. pooled	Coordinator\$CoordinationTask	run	21
3	axon-modelling-4.7.5	org.axonframework.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