# Overview for Java

## References

- jqassistant
- Neo4j Python Driver

# Overview

## Table 1 - Size

```
Received notification from DBMS server: {severity: WARNING} {code: Neo.ClientNotifica
tion.Statement.AggregationSkippedNull} {category: UNRECOGNIZED} {title: The query con
tains an aggregation function that skips null values.} {description: null value elimi
nated in set function.} {position: None} for query: '// Overview size\n \n  MATCH (n)
\n   WITH COUNT(n) AS nodeCount\n  MATCH ()-[]->()\n   WITH nodeCount\n      ,count
(*) AS relationshipCount\n  MATCH (a:Artifact:Archive)\n   WITH nodeCount\n      ,re
lationshipCount\n       ,count(DISTINCT a.fileName) AS artifactCount\n  MATCH (p:Pack
age)\n   WITH nodeCount\n       ,relationshipCount\n        ,artifactCount\n      ,co
unt(DISTINCT p.fqn) AS packageCount\n  MATCH (t:Type)\n   WITH nodeCount\n       ,rel
ationshipCount\n        ,artifactCount\n        ,packageCount\n      ,count(DISTINCT
t.fqn) AS typeCount\n  MATCH (m:Method)\n   WITH nodeCount\n       ,relationshipCount
\n        ,artifactCount\n        ,packageCount\n       ,typeCount\n        ,count(DISTI
NCT m.signature) AS methodCount\n  MATCH (member:Member)\n   WITH nodeCount\n      ,
relationshipCount\n        ,artifactCount\n        ,packageCount\n        ,typeCount\n
,methodCount\n        ,count(DISTINCT member.signature) AS memberCount\n RETURN nodeCo
unt\n        ,relationshipCount\n        ,artifactCount\n        ,packageCount\n        ,
typeCount\n        ,methodCount\n        ,memberCount'
```

| | nodeCount | relationshipCount | artifactCount | packageCount | typeCount | methodCount | memberCount |
|---|---|---|---|---|---|---|---|
| 0 | 353311 | 1096433 | 9 | 124 | 2173 | 8690 | 10636 |

# Artifacts

## Table 2a - Largest 30 types per artifact

This table shows the largest (number of types) artifacts and their kind of types (Class, Interface, Enum, Annotation). The whole table can be found in the CSV report

`Number_of_types_per_artifact` .

| | artifactName | numberOfArtifactTypes | languageElement | numberOfTypes |
|---|---|---|---|---|
| 0 | axon-messaging-4.11.0 | 809 | Class | 606 |
| 1 | axon-messaging-4.11.0 | 809 | Interface | 157 |
| 2 | axon-messaging-4.11.0 | 809 | Annotation | 27 |
| 3 | axon-messaging-4.11.0 | 809 | Enum | 19 |
| 4 | axon-modelling-4.11.0 | 158 | Class | 115 |
| 5 | axon-modelling-4.11.0 | 158 | Interface | 28 |
| 6 | axon-modelling-4.11.0 | 158 | Enum | 3 |
| 7 | axon-modelling-4.11.0 | 158 | Annotation | 12 |
| 8 | axon-server-connector-4.11.0 | 142 | Class | 116 |
| 9 | axon-server-connector-4.11.0 | 142 | Interface | 25 |
| 10 | axon-server-connector-4.11.0 | 142 | Enum | 1 |
| 11 | axon-eventsourcing-4.11.0 | 133 | Class | 98 |
| 12 | axon-eventsourcing-4.11.0 | 133 | Interface | 32 |
| 13 | axon-eventsourcing-4.11.0 | 133 | Enum | 2 |
| 14 | axon-eventsourcing-4.11.0 | 133 | Annotation | 1 |
| 15 | axon-spring-boot-autoconfigure-4.11.0 | 88 | Class | 82 |
| 16 | axon-spring-boot-autoconfigure-4.11.0 | 88 | Interface | 1 |
| 17 | axon-spring-boot-autoconfigure-4.11.0 | 88 | Annotation | 3 |
| 18 | axon-spring-boot-autoconfigure-4.11.0 | 88 | Enum | 2 |
| 19 | axon-test-4.11.0 | 87 | Class | 71 |
| 20 | axon-test-4.11.0 | 87 | Interface | 16 |
| 21 | axon-configuration-4.11.0 | 41 | Class | 23 |
| 22 | axon-configuration-4.11.0 | 41 | Interface | 16 |
| 23 | axon-configuration-4.11.0 | 41 | Annotation | 1 |
| 24 | axon-configuration-4.11.0 | 41 | Enum | 1 |
| 25 | axon-disruptor-4.11.0 | 22 | Class | 22 |
| 26 | axon-tracing-opentelemetry-4.11.0 | 5 | Class | 5 |

## Table 2b - Largest 30 types per artifact grouped

This table shows the largest (number of types) artifacts each in one row, their kind of types in columns and the count of them as values.

The source data for this aggregated table can be found in the CSV report `Number_of_types_per_artifact` .

| languageElement<br>artifactName | Class | Interface | Annotation | Enum |
|---|---|---|---|---|
| axon-messaging-4.11.0 | 606 | 157 | 27 | 19 |
| axon-modelling-4.11.0 | 115 | 28 | 12 | 3 |
| axon-server-connector-4.11.0 | 116 | 25 | 0 | 1 |
| axon-eventsourcing-4.11.0 | 98 | 32 | 1 | 2 |
| axon-spring-boot-autoconfigure-4.11.0 | 82 | 1 | 3 | 2 |
| axon-test-4.11.0 | 71 | 16 | 0 | 0 |
| axon-configuration-4.11.0 | 23 | 16 | 1 | 1 |
| axon-disruptor-4.11.0 | 22 | 0 | 0 | 0 |
| axon-tracing-opentelemetry-4.11.0 | 5 | 0 | 0 | 0 |

# Table 2b Chart 1 - 30 largest artifacts and their types stacked

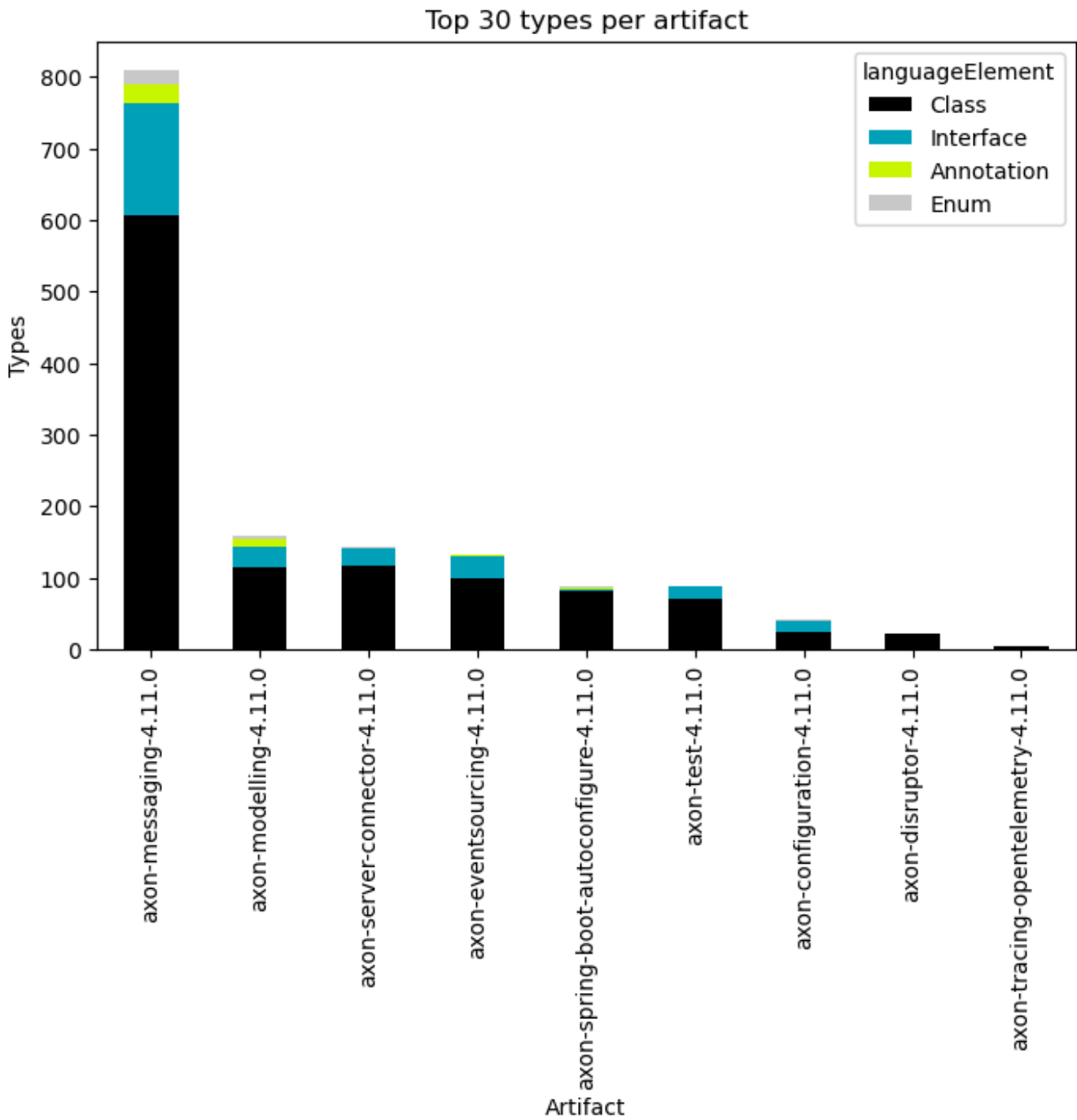&lt;Figure size 640x480 with 0 Axes&gt;



Top 30 types per artifact

# Table 2c - Largest 30 types per artifact (grouped and normalized in %)

| languageElement<br>artifactName | Class | Interface | Annotation | Enum |
|---|---|---|---|---|
| axon-messaging-4.11.0 | 74.907293 | 19.406675 | 3.337454 | 2.348578 |
| axon-modelling-4.11.0 | 72.784810 | 17.721519 | 7.594937 | 1.898734 |
| axon-server-connector-4.11.0 | 81.690141 | 17.605634 | 0.000000 | 0.704225 |
| axon-eventsourcing-4.11.0 | 73.684211 | 24.060150 | 0.751880 | 1.503759 |
| axon-spring-boot-autoconfigure-4.11.0 | 93.181818 | 1.136364 | 3.409091 | 2.272727 |
| axon-test-4.11.0 | 81.609195 | 18.390805 | 0.000000 | 0.000000 |
| axon-configuration-4.11.0 | 56.097561 | 39.024390 | 2.439024 | 2.439024 |
| axon-disruptor-4.11.0 | 100.000000 | 0.000000 | 0.000000 | 0.000000 |
| axon-tracing-opentelemetry-4.11.0 | 100.000000 | 0.000000 | 0.000000 | 0.000000 |

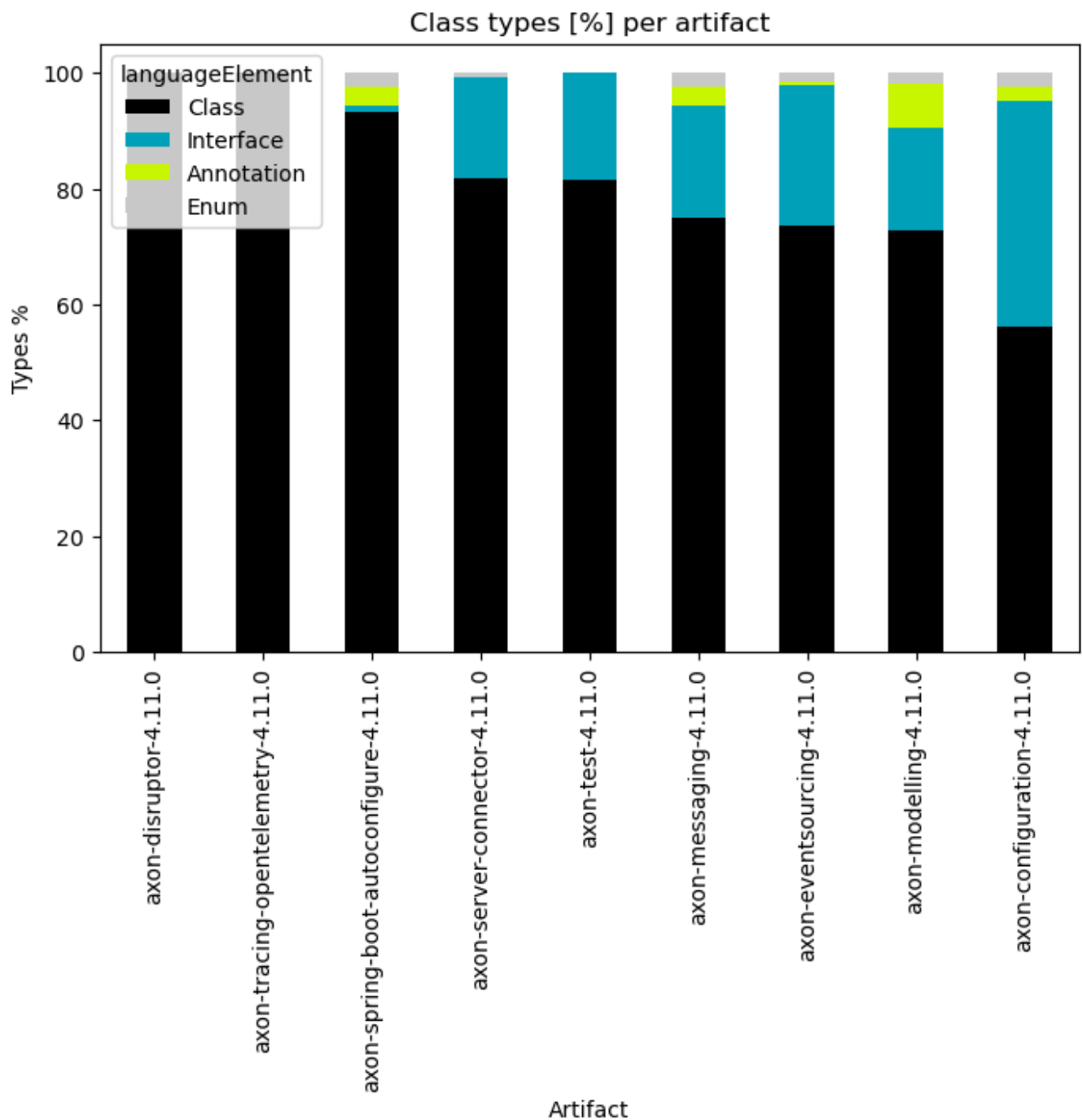## Table 2c Chart 1 - Top 30 artifacts with the highest relative amount of classes in %

<Figure size 640x480 with 0 Axes>

Class types [%] per artifact

Table 2c Chart 2 - Top 30 artifacts with the highest relative amount of interfaces in %
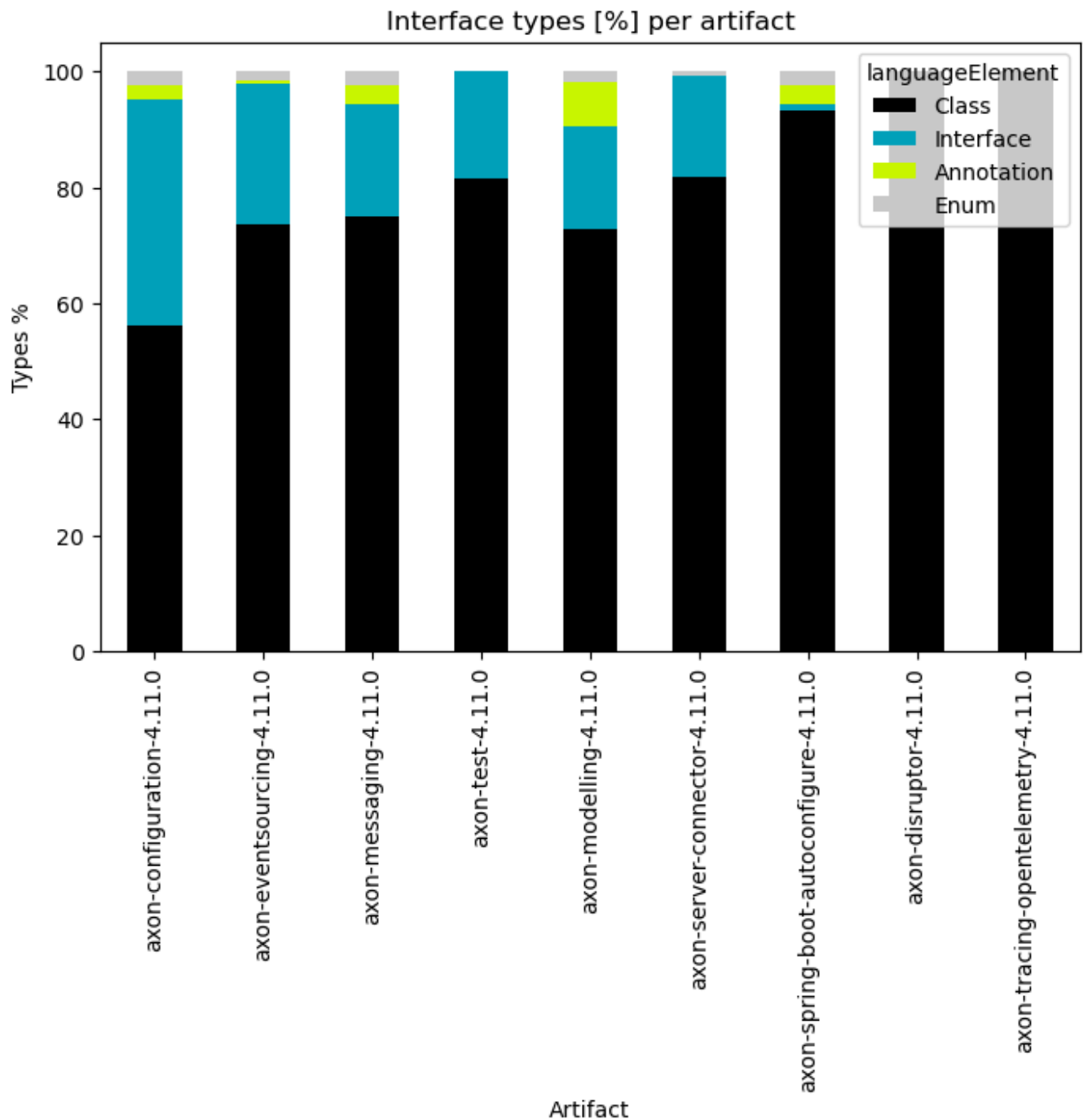
<Figure size 640x480 with 0 Axes>

## Interface types [%] per artifact

Table 2c Chart 3 - Top 30 artifacts with the highest relative amount of enums in %

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# Enum types [%] per artifact
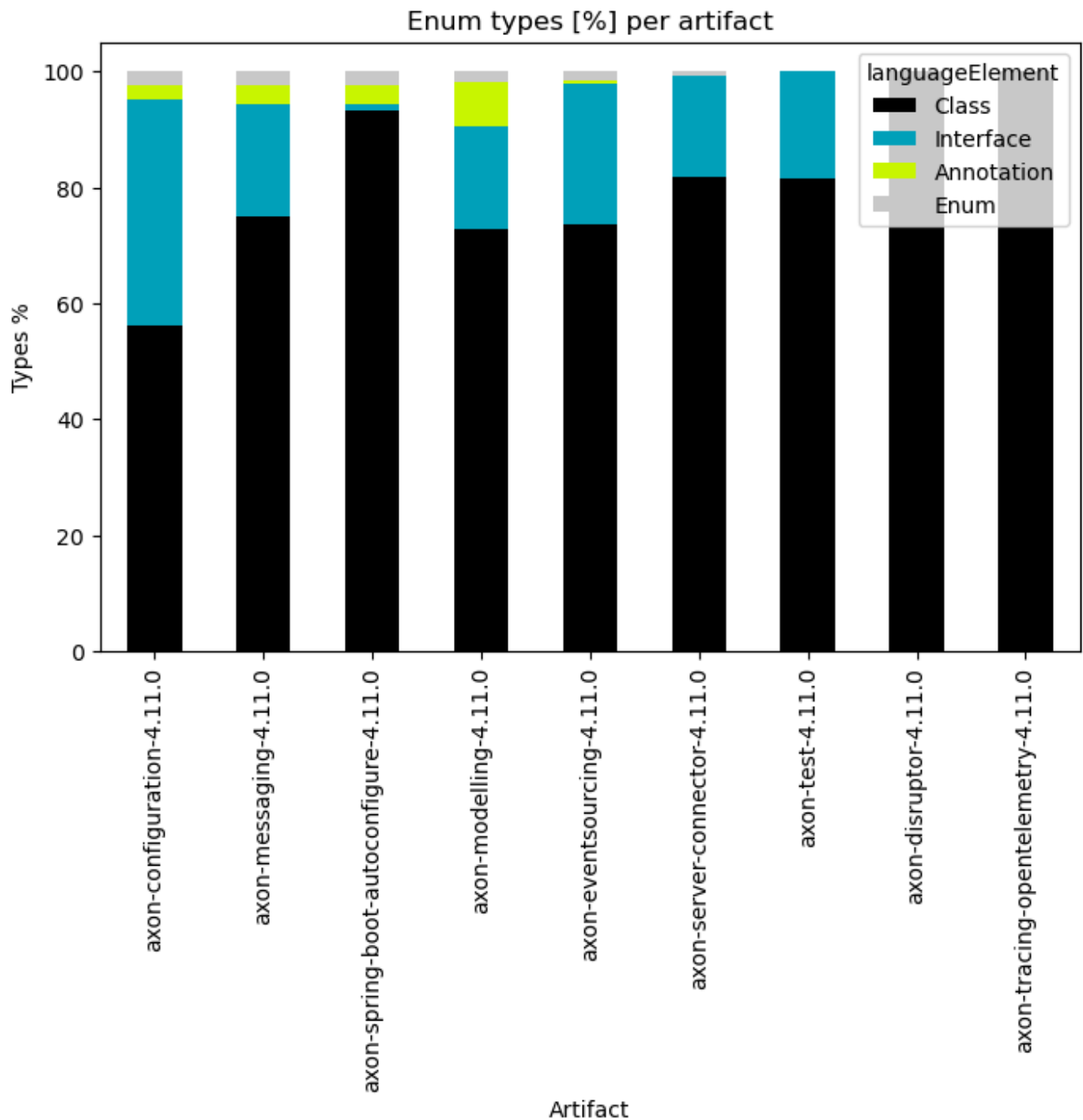


Table 2c Chart 4 - Top 30 artifacts with the highest relative amount of annotations in %

```
<Figure size 640x480 with 0 Axes>
```

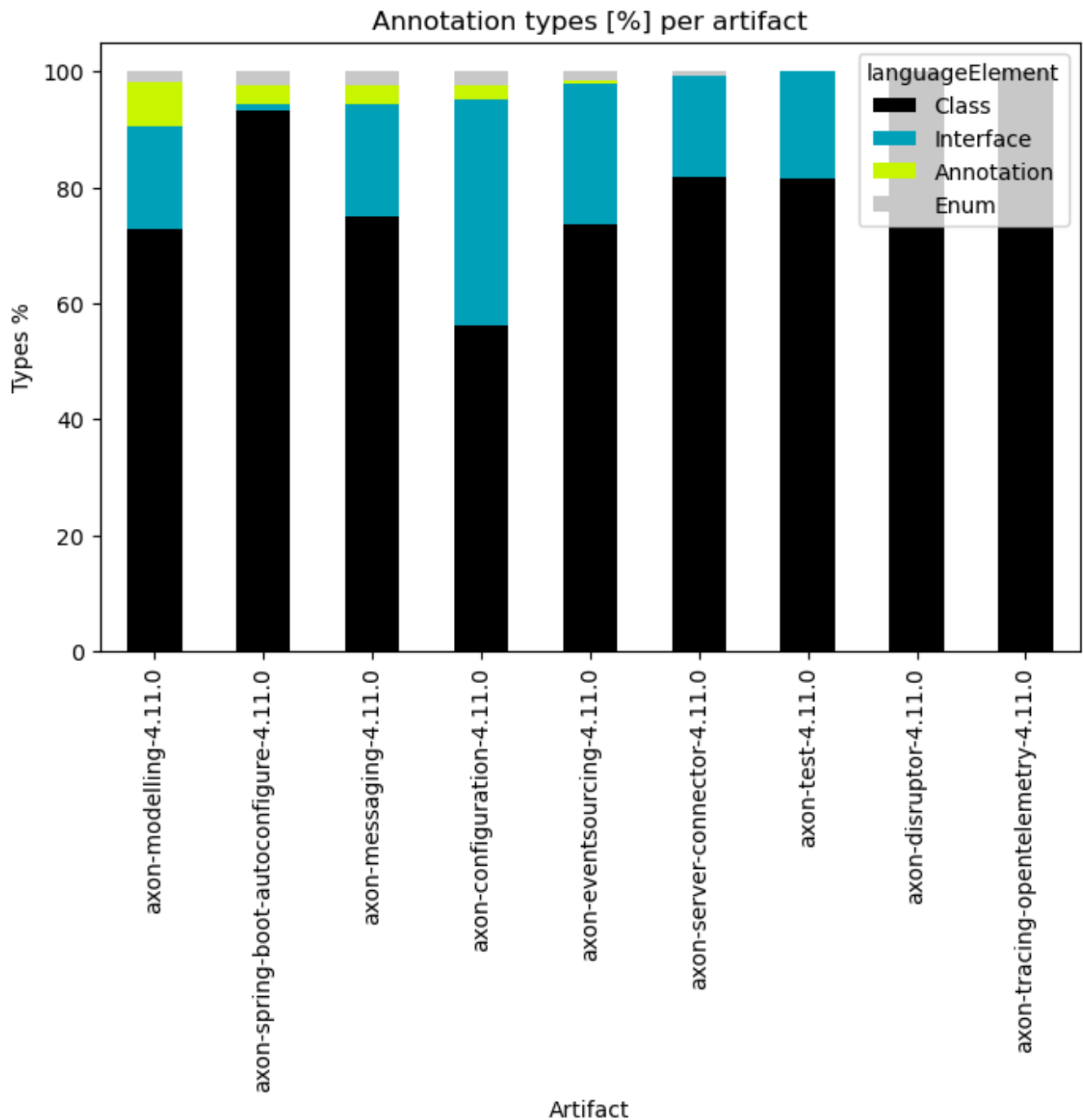Annotation types [%] per artifact

## Table 3 - Top 30 artifacts with the highest package count

The whole table can be found in the CSV report `Number_of_packages_per_artifact`.

|   | artifactName | numberOfPackages |
|---|---|---|
| **0** | axon-messaging-4.11.0 | 66 |
| **1** | axon-server-connector-4.11.0 | 11 |
| **2** | axon-modelling-4.11.0 | 10 |
| **3** | axon-eventsourcing-4.11.0 | 9 |
| **4** | axon-spring-boot-autoconfigure-4.11.0 | 9 |
| **5** | axon-test-4.11.0 | 8 |
| **6** | axon-disruptor-4.11.0 | 1 |
| **7** | axon-tracing-opentelemetry-4.11.0 | 1 |
| **8** | axon-configuration-4.11.0 | 1 |

## Table 3 Chart 1 - Number of packages per artifact

The following chat shows artifacts with the largest package count in percentage. Artifacts with less than 0.7% package count are grouped into "others" to focus on the most significant artifacts regarding their package count.

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Number of packages per artifact