

Overview in General

This file contains a general overview of the data in the graph including node labels and relationships types.

References

- [jqassistant](#)
- [Neo4j Python Driver](#)

Node Labels

Table 1a - Highest node count by label combination

Lists the 30 label combinations with the highest number of nodes. The labels with the lowest node count are listed in table 1b. The total list would sum up to the total number of labels (100%).

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

	nodeLabels	nodesWithThatLabels	nodesWithThatLabelsPercent
0	[Json, Key]	668	18.859401
1	[Json, Value, Scalar]	603	17.024280
2	[NPM, Dependency]	338	9.542631
3	[Type, TS, Primitive]	291	8.215697
4	[Type, TS, Declared]	276	7.792208
5	[TS, ExternalDeclaration]	212	5.985319
6	[Type, TS, Literal]	136	3.839639
7	[Json, Value, Object]	133	3.754941
8	[Type, TS, Union]	119	3.359684
9	[Type, TS, ObjectMember]	101	2.851496
10	[NPM, Script]	91	2.569170
11	[TS, Property]	65	1.835121
12	[TS, Function]	47	1.326934
13	[Type, TS, FunctionParameter]	40	1.129305
14	[Type, Object, TS]	39	1.101073
15	[Type, TS, Function]	34	0.959910
16	[File, Directory]	33	0.931677
17	[TS, Parameter]	33	0.931677
18	[Package, File, Json, NPM]	29	0.818746
19	[TS, Variable]	24	0.677583
20	[Value, TS, Literal]	20	0.564653
21	[JQAssistant, Rule, Concept]	19	0.536420
22	[File, Directory, Local]	17	0.479955
23	[Type, TS, Intersection]	17	0.479955
24	[TS, Interface]	17	0.479955
25	[TS, TypeAlias]	16	0.451722
26	[Value, TS, Declared]	13	0.367024
27	[Json, Value, Array]	12	0.338792
28	[TS, ExternalModule]	11	0.310559
29	[Type, TS, NotIdentified]	11	0.310559

Chart 1a - Highest node count by label combination

Values under 0.5% will be grouped into "others" to get a cleaner plot. The group "others" is then broken down in Chart 1b.

<Figure size 640x480 with 0 Axes>

Nodes per label combination (more than 0.5% overall)

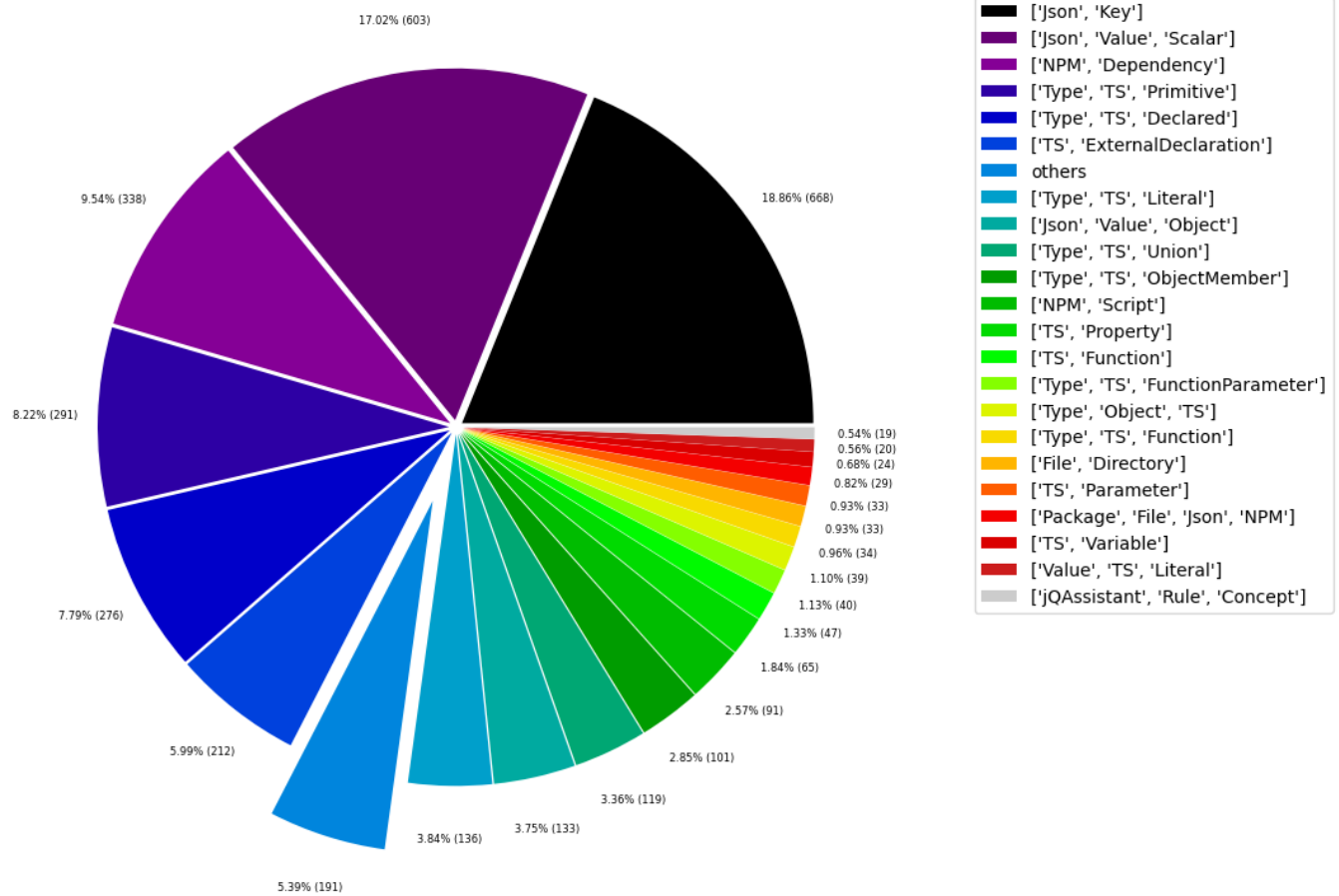


Table 1b - Lowest node count by label combination

Lists the 30 label combinations with the lowest number of nodes until they reach 0.5% of the total node count, which are shown above.

	nodeLabels	nodesWithThatLabels	nodesWithThatLabelsPercent
0	[Analyze, Task, JQAssistant]	1	0.028233
1	[File, TS, Scan]	1	0.028233
2	[TS, Method]	1	0.028233
3	[Value, TS, ObjectMember]	1	0.028233
4	[TS, Constructor]	1	0.028233
5	[TS, Class]	1	0.028233
6	[TS, Enum]	2	0.056465
7	[Value, Object, TS]	3	0.084698
8	[Type, TS, Tuple]	3	0.084698
9	[Value, TS, Function]	4	0.112931
10	[TS, TypeParameter]	4	0.112931
11	[Value, TS, Complex]	5	0.141163
12	[NPM, Engine]	6	0.169396
13	[Project, TS]	6	0.169396
14	[File, Local]	6	0.169396
15	[File, TS, Local, Module]	6	0.169396
16	[Value, TS, Member]	6	0.169396
17	[Type, TS, TypeParameterReference]	6	0.169396
18	[Value, TS, Call]	6	0.169396
19	[TS, EnumMember]	8	0.225861
20	[Type, TS, NotIdentified]	11	0.310559
21	[TS, ExternalModule]	11	0.310559
22	[Json, Value, Array]	12	0.338792
23	[Value, TS, Declared]	13	0.367024
24	[TS, TypeAlias]	16	0.451722
25	[TS, Interface]	17	0.479955
26	[File, Directory, Local]	17	0.479955
27	[Type, TS, Intersection]	17	0.479955

Chart 1b - Lowest node count by label combination

Shows the lowest (less than 0.5% overall) node count label combinations. Therefore, this plot breaks down the "others" slice of the pie chart above. Values under 0.01% will be grouped into "others" to get a cleaner plot.

<Figure size 640x480 with 0 Axes>

Nodes per label combination (less than 0.5% overall)

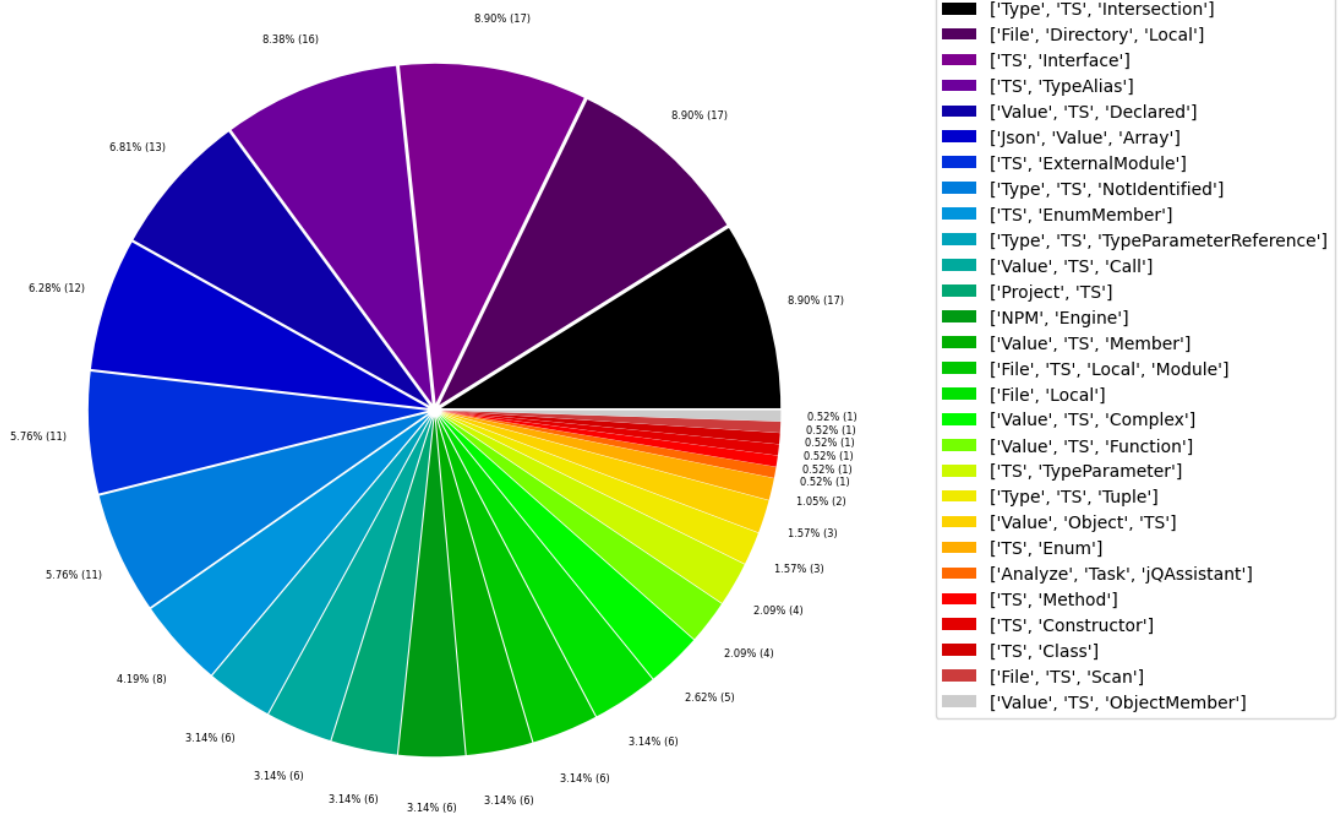


Table 1c - Highest node count by single label

Lists the 40 labels with the highest number of nodes. Doesn't sum up to the total number of nodes or 100% because one node can have multiple labels. Helps to identify commonly used labels.

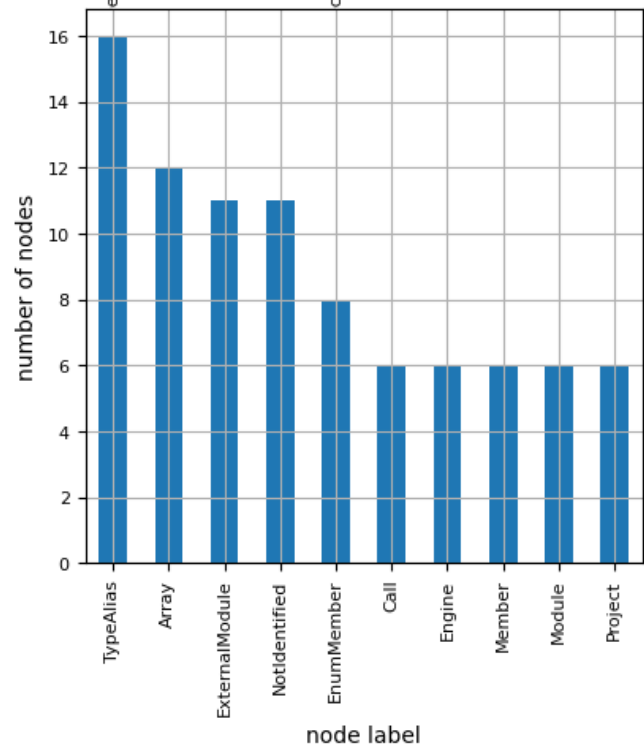
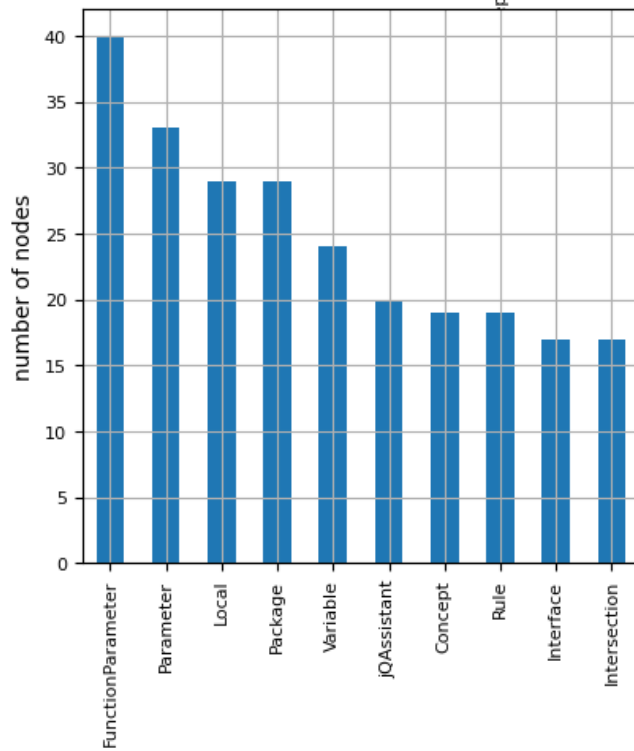
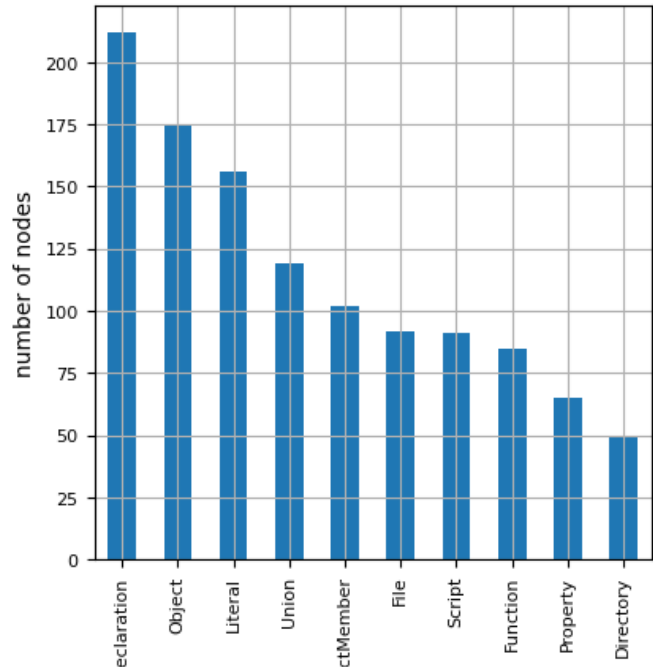
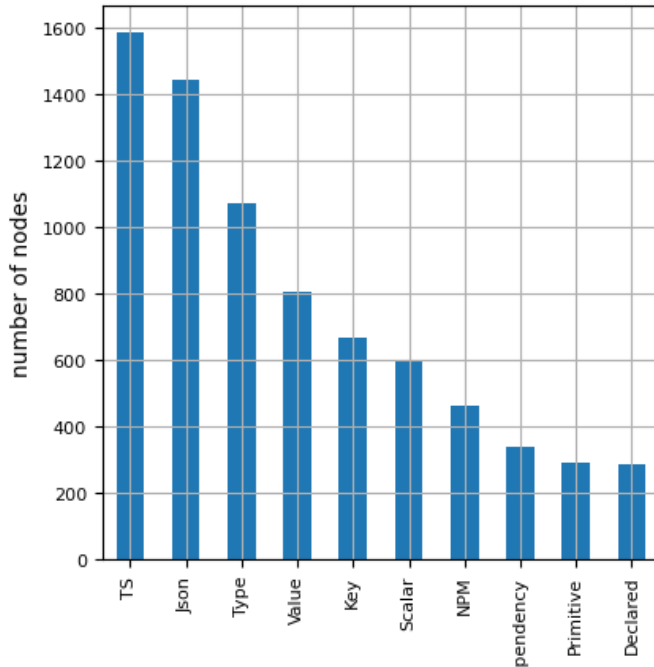
	nodeLabel	nodesWithThatLabel	nodesWithThatLabelPercent
0	TS	1586	44.776962
1	Json	1445	40.796160
2	Type	1073	30.293619
3	Value	806	22.755505
4	Key	668	18.859401
5	Scalar	603	17.024280
6	NPM	464	13.099944
7	Dependency	338	9.542631
8	Primitive	291	8.215697
9	Declared	289	8.159232
10	ExternalDeclaration	212	5.985319
11	Object	175	4.940711
12	Literal	156	4.404291
13	Union	119	3.359684
14	ObjectMember	102	2.879729
15	File	92	2.597403
16	Script	91	2.569170
17	Function	85	2.399774
18	Property	65	1.835121
19	Directory	50	1.411632
20	FunctionParameter	40	1.129305
21	Parameter	33	0.931677
22	Local	29	0.818746
23	Package	29	0.818746
24	Variable	24	0.677583
25	jqAssistant	20	0.564653
26	Concept	19	0.536420
27	Rule	19	0.536420
28	Interface	17	0.479955
29	Intersection	17	0.479955
30	TypeAlias	16	0.451722
31	Array	12	0.338792
32	ExternalModule	11	0.310559
33	NotIdentified	11	0.310559
34	EnumMember	8	0.225861
35	Call	6	0.169396
36	Engine	6	0.169396
37	Member	6	0.169396
38	Module	6	0.169396
39	Project	6	0.169396

Chart 1c - Highest node count by label

Shows the 40 labels with the highest number of nodes.

<Figure size 640x480 with 0 Axes>

Node count by label



node label

node label

Relationship Types

Table 2a - Highest relationship count by type

Lists the 30 relationship types with the highest number of occurrences. The whole table can be found in the CSV report `Relationship_type_count`.

Total number of relationships: 4854

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	DEPENDS_ON	876	18.046972
1	HAS_KEY	668	13.761846
2	HAS_VALUE	668	13.761846
3	CONTAINS	594	12.237330
4	OF_TYPE	337	6.942728
5	EXPORTS	305	6.283478
6	REFERENCES	197	4.058508
7	DECLARES	186	3.831891
8	DECLARES_DEV_DEPENDENCY	169	3.481665
9	DECLARES_DEPENDENCY	161	3.316852
10	HAS_MEMBER	102	2.101360
11	HAS_TYPE_ARGUMENT	94	1.936547
12	DECLARES_SCRIPT	91	1.874742
13	RETURNS	82	1.689328
14	HAS_PARAMETER	73	1.503914
15	CONTAINS_VALUE	51	1.050680
16	IS_DESCRIBED_IN_NPM_PACKAGE	33	0.679852
17	INITIALIZED_WITH	32	0.659250
18	REQUIRES_CONCEPT	28	0.576844
19	INCLUDES_CONCEPT	19	0.391430
20	USES	11	0.226617
21	DECLARES_PEER_DEPENDENCY	8	0.164813
22	CALLS	6	0.123609
23	CONTAINS_PROJECT	6	0.123609
24	DECLARES_ENGINE	6	0.123609
25	EXTENDS	6	0.123609
26	HAS_ARGUMENT	6	0.123609
27	HAS_CONFIG	6	0.123609
28	HAS_NPM_PACKAGE	6	0.123609
29	HAS_ROOT	6	0.123609

Chart 2a - Highest relationship count by type

Values under 0.5% will be grouped into "others" to get a cleaner plot. The group "others" is then broken down in the second chart.

<Figure size 640x480 with 0 Axes>

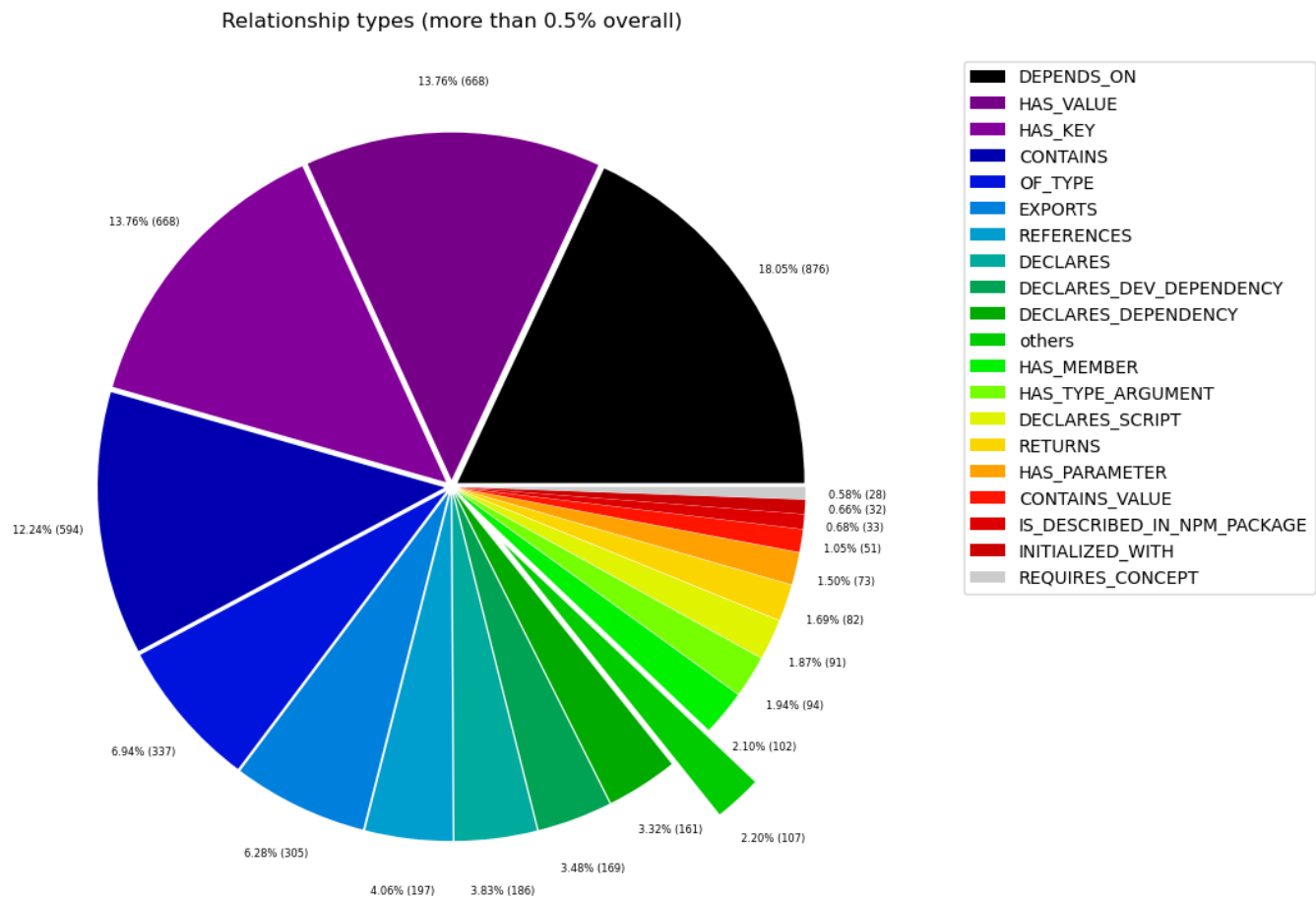


Table 2b - Lowest relationship count by type

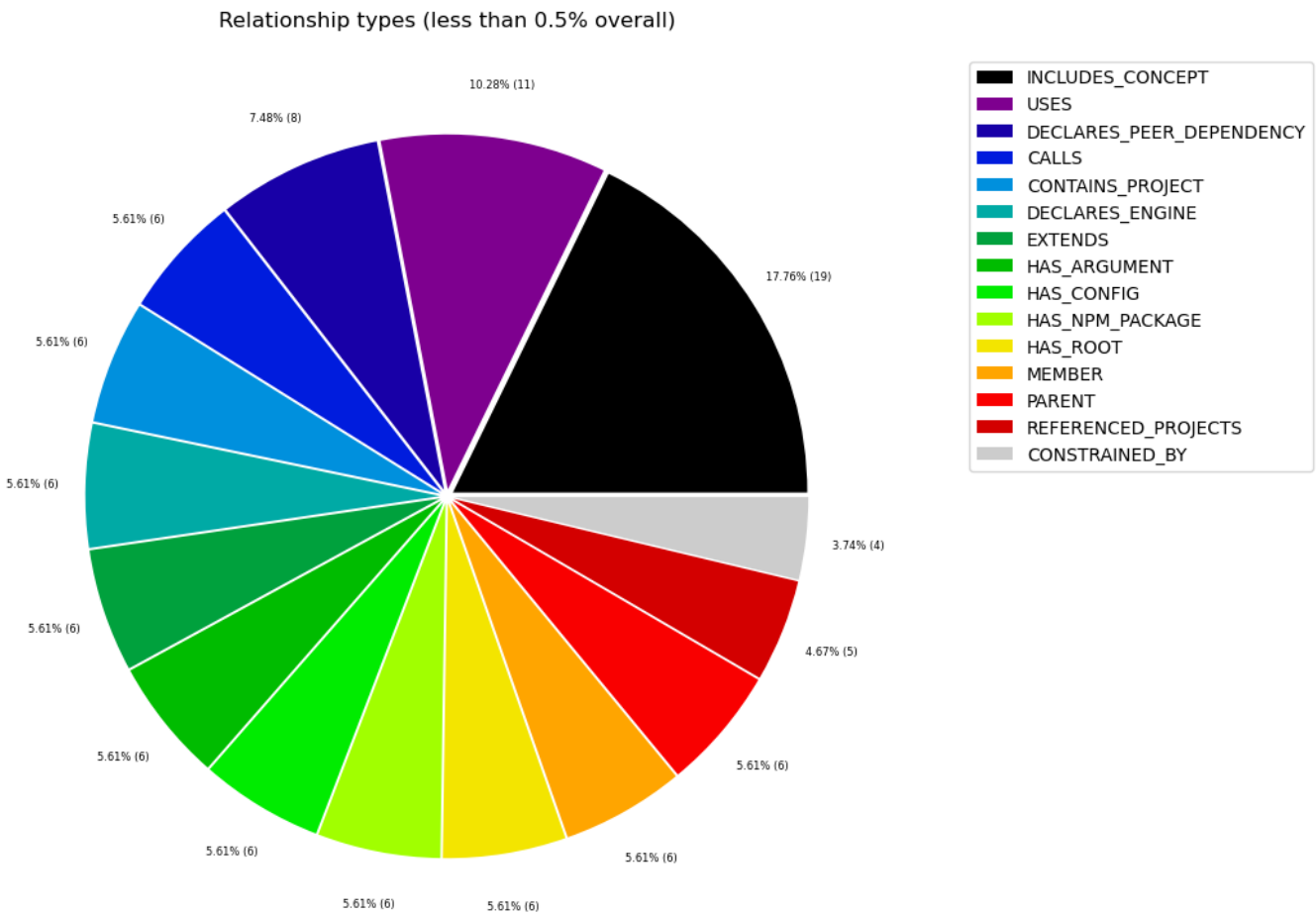
Lists the 30 relationships type with the lowest number of occurrences up to 0.5% of the total node count. This is essentially breaking down the "others" slice from the chart above.

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONSTRAINED_BY	4	0.082406
1	REFERENCED_PROJECTS	5	0.103008
2	MEMBER	6	0.123609
3	HAS_ROOT	6	0.123609
4	HAS_NPM_PACKAGE	6	0.123609
5	HAS_CONFIG	6	0.123609
6	HAS_ARGUMENT	6	0.123609
7	EXTENDS	6	0.123609
8	CONTAINS_PROJECT	6	0.123609
9	CALLS	6	0.123609
10	PARENT	6	0.123609
11	DECLARES_ENGINE	6	0.123609
12	DECLARES_PEER_DEPENDENCY	8	0.164813
13	USES	11	0.226617
14	INCLUDES_CONCEPT	19	0.391430

Chart 2b - Lowest relationship count by type

Shows the lowest (less than 0.5% overall) relationship types. This plot breaks down the "others" slice of the pie chart above. Values under 0.01% will be grouped into "others" to get a cleaner plot.

<Figure size 640x480 with 0 Axes>



Node labels with their relationships

Table 3a - Highest relationship count by node labels and relationship type

Lists the 30 node labels and their relationship types with the highest number of occurrences.

	sourceLabels	relationType	targetLabels	numberOfRelationships	numberOfNodesWithSameLabelsAsSource	numberOfNodesWithSameLabelsAsTarget
0	[Json, Value, Object]	HAS_KEY	[Json, Key]	668	133	
1	[Json, Key]	HAS_VALUE	[Json, Value, Scalar]	552	668	
2	[TS, Function]	DEPENDS_ON	[TS, ExternalDeclaration]	289	47	
3	[File, TS, Local, Module]	DEPENDS_ON	[TS, ExternalDeclaration]	233	6	
4	[TS, ExternalModule]	EXPORTS	[TS, ExternalDeclaration]	212	11	
5	[Package, File, Json, NPM]	DECLARES_DEV_DEPENDENCY	[NPM, Dependency]	169	29	
6	[Package, File, Json, NPM]	DECLARES_DEPENDENCY	[NPM, Dependency]	161	29	
7	[Type, TS, Union]	CONTAINS	[Type, TS, Primitive]	147	119	
8	[Type, TS, Declared]	REFERENCES	[TS, ExternalDeclaration]	143	276	
9	[Type, TS, Union]	CONTAINS	[Type, TS, Literal]	119	119	
10	[Json, Key]	HAS_VALUE	[Json, Value, Object]	104	668	
11	[Type, Object, TS]	HAS_MEMBER	[Type, TS, ObjectMember]	101	39	
12	[Package, File, Json, NPM]	DECLARES_SCRIPT	[NPM, Script]	91	29	
13	[TS, Function]	DEPENDS_ON	[TS, ExternalModule]	76	47	
14	[Type, TS, Union]	CONTAINS	[Type, TS, Declared]	70	119	
15	[File, Directory]	CONTAINS	[File, Directory]	63	33	
16	[TS, Interface]	DECLARES	[TS, Property]	61	17	
17	[File, Directory]	CONTAINS	[Package, File, Json, NPM]	58	33	
18	[Json, Value, Array]	CONTAINS_VALUE	[Json, Value, Scalar]	51	12	
19	[File, TS, Local, Module]	DECLARES	[TS, Function]	47	6	
20	[TS, Property]	OF_TYPE	[Type, TS, Union]	46	65	
21	[TS, Variable]	DEPENDS_ON	[TS, ExternalDeclaration]	44	24	
22	[Type, TS, Declared]	HAS_TYPE_ARGUMENT	[Type, TS, Declared]	41	276	
23	[Type, TS, Function]	HAS_PARAMETER	[Type, TS, FunctionParameter]	40	34	
24	[Type, TS, ObjectMember]	OF_TYPE	[Type, TS, Union]	35	101	
25	[NPM, Dependency]	IS_DESCRIBED_IN_NPM_PACKAGE	[Package, File, Json, NPM]	33	338	
26	[TS, Function]	HAS_PARAMETER	[TS, Parameter]	33	47	
27	[Type, TS, ObjectMember]	OF_TYPE	[Type, TS, Primitive]	32	101	
28	[File, TS, Local, Module]	EXPORTS	[TS, ExternalDeclaration]	32	6	
29	[File, TS, Local, Module]	EXPORTS	[TS, Function]	31	6	

Graph Density

total_number_of_nodes (vertices): 3542

total_number_of_relationships (edges): 4854

-> total directed graph density: 0.00038701276376705817

-> total directed graph density in percent: 0.03870127637670582