

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	18.816901
1	[Json, Value, Scalar]	603	16.985915
2	[NPM, Dependency]	338	9.521127
3	[Type, TS, Primitive]	291	8.197183
4	[Type, TS, Declared]	276	7.774648
5	[TS, ExternalDeclaration]	212	5.971831
6	[Type, TS, Literal]	136	3.830986
7	[Json, Value, Object]	133	3.746479
8	[Type, TS, Union]	119	3.352113
9	[Type, TS, ObjectMember]	101	2.845070
10	[NPM, Script]	91	2.563380
11	[TS, Property]	65	1.830986
12	[TS, Function]	47	1.323944
13	[Type, TS, FunctionParameter]	40	1.126761
14	[Type, Object, TS]	39	1.098592
15	[File, Directory]	34	0.957746
16	[Type, TS, Function]	34	0.957746
17	[TS, Parameter]	33	0.929577
18	[Package, File, Json, NPM]	29	0.816901
19	[TS, Variable]	24	0.676056
20	[Value, TS, Literal]	20	0.563380
21	[JQAssistant, Rule, Concept]	19	0.535211
22	[Type, TS, Intersection]	17	0.478873
23	[TS, Interface]	17	0.478873
24	[File, Directory, Local]	16	0.450704
25	[TS, TypeAlias]	16	0.450704
26	[Value, TS, Declared]	13	0.366197
27	[Json, Value, Array]	12	0.338028
28	[TS, ExternalModule]	11	0.309859
29	[Type, TS, NotIdentified]	11	0.309859

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.

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Nodes per label combination (more than 0.5% overall)

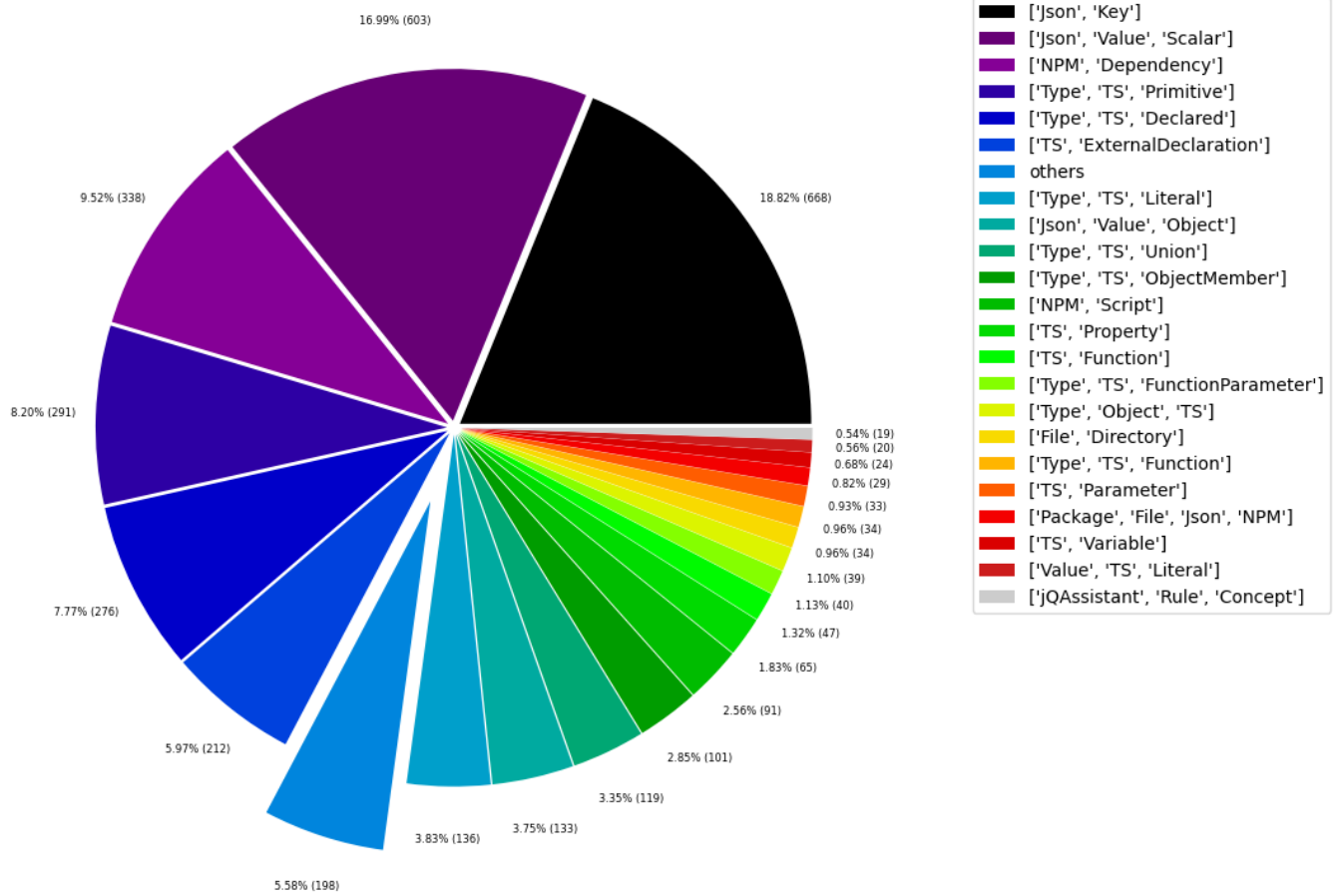


Table 1b - Lowest node count by label combination

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	0.028169
1	[File, TS, Scan]	1	0.028169
2	[TS, Method]	1	0.028169
3	[TS, Class]	1	0.028169
4	[TS, Constructor]	1	0.028169
5	[Git, Branch]	1	0.028169
6	[Repository, File, Git]	1	0.028169
7	[Author, Git, Person]	1	0.028169
8	[Committer, Git, Person]	1	0.028169
9	[Value, TS, ObjectMember]	1	0.028169
10	[Git, Tag]	2	0.056338
11	[Git, Commit]	2	0.056338
12	[TS, Enum]	2	0.056338
13	[Type, TS, Tuple]	3	0.084507
14	[Value, Object, TS]	3	0.084507
15	[Value, TS, Function]	4	0.112676
16	[TS, TypeParameter]	4	0.112676
17	[Value, TS, Complex]	5	0.140845
18	[Value, TS, Member]	6	0.169014
19	[Value, TS, Call]	6	0.169014
20	[Type, TS, TypeParameterReference]	6	0.169014
21	[File, TS, Local, Module]	6	0.169014
22	[File, Local]	6	0.169014
23	[Project, TS]	6	0.169014
24	[NPM, Engine]	6	0.169014
25	[TS, EnumMember]	8	0.225352
26	[Type, TS, NotIdentified]	11	0.309859
27	[TS, ExternalModule]	11	0.309859
28	[Json, Value, Array]	12	0.338028
29	[Value, TS, Declared]	13	0.366197

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.

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Nodes per label combination (less than 0.5% overall)

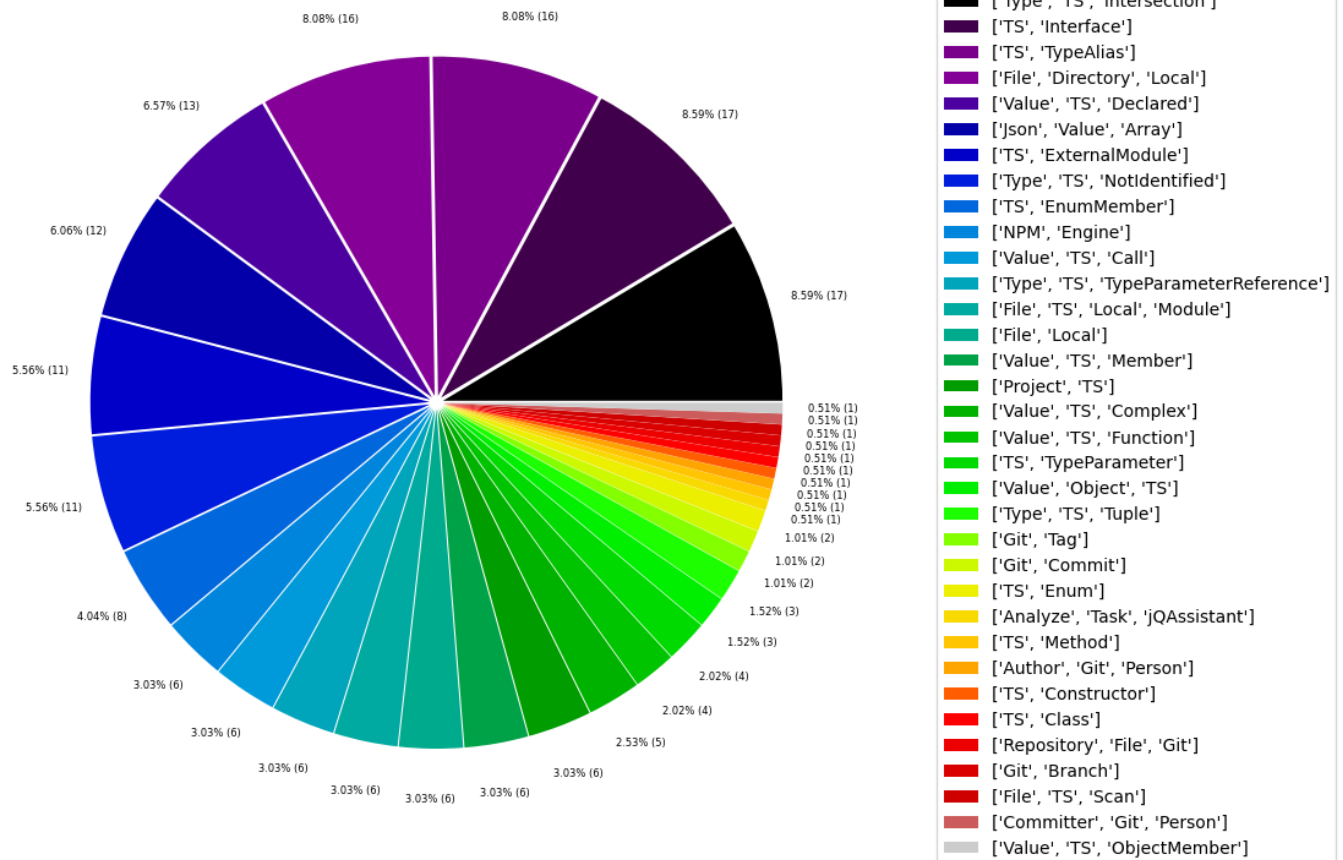


Table 1c - Highest node count by single label

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.

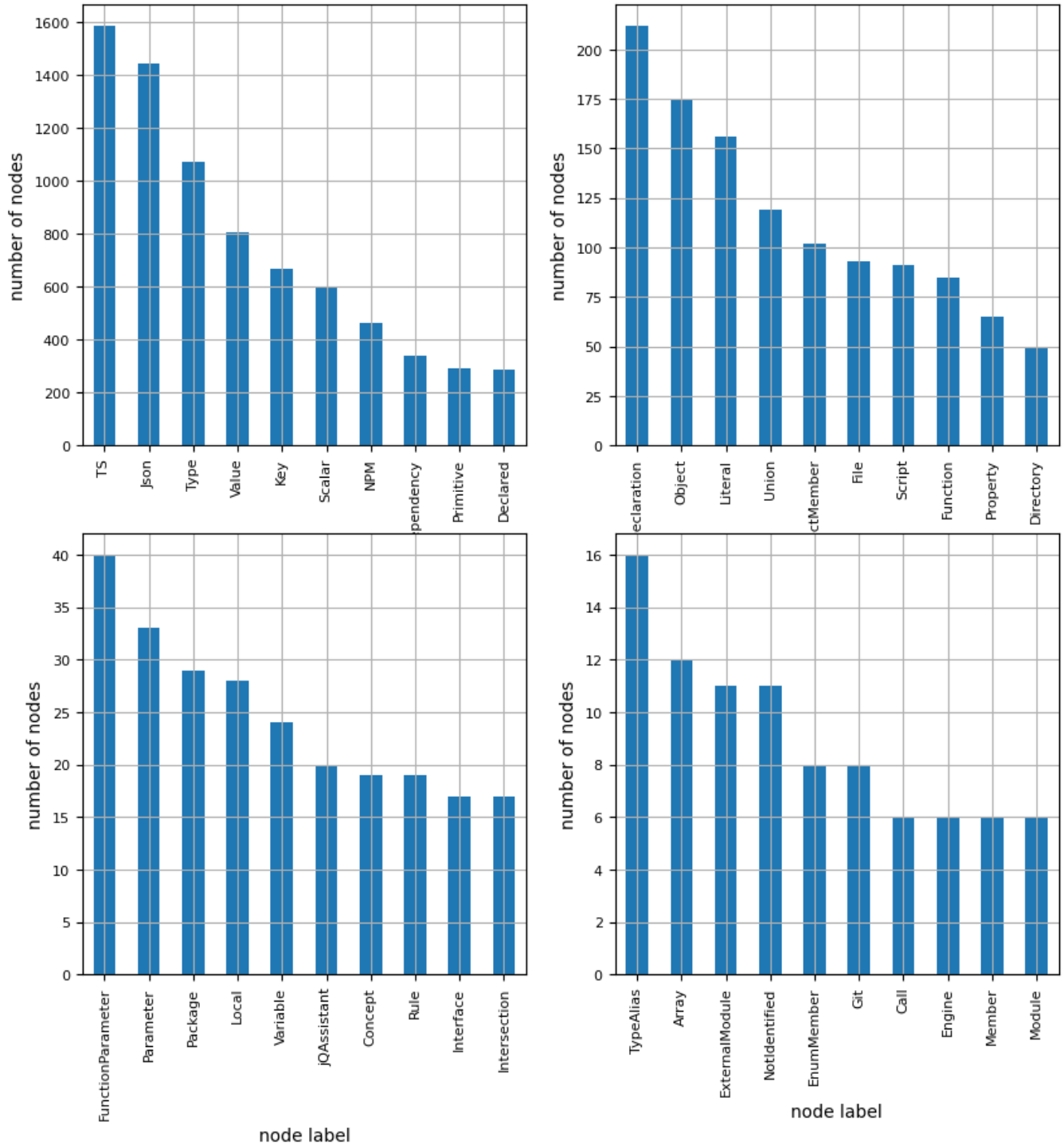
	nodeLabel	nodesWithThatLabel	nodesWithThatLabelPercent
0	TS	1586	44.676056
1	Json	1445	40.704225
2	Type	1073	30.225352
3	Value	806	22.704225
4	Key	668	18.816901
5	Scalar	603	16.985915
6	NPM	464	13.070423
7	Dependency	338	9.521127
8	Primitive	291	8.197183
9	Declared	289	8.140845
10	ExternalDeclaration	212	5.971831
11	Object	175	4.929577
12	Literal	156	4.394366
13	Union	119	3.352113
14	ObjectMember	102	2.873239
15	File	93	2.619718
16	Script	91	2.563380
17	Function	85	2.394366
18	Property	65	1.830986
19	Directory	50	1.408451
20	FunctionParameter	40	1.126761
21	Parameter	33	0.929577
22	Package	29	0.816901
23	Local	28	0.788732
24	Variable	24	0.676056
25	jQAssistant	20	0.563380
26	Concept	19	0.535211
27	Rule	19	0.535211
28	Interface	17	0.478873
29	Intersection	17	0.478873
30	TypeAlias	16	0.450704
31	Array	12	0.338028
32	ExternalModule	11	0.309859
33	NotIdentified	11	0.309859
34	EnumMember	8	0.225352
35	Git	8	0.225352
36	Call	6	0.169014
37	Engine	6	0.169014
38	Member	6	0.169014
39	Module	6	0.169014

Chart 1c - Highest node count by label

Shows the 40 labels with the highest number of nodes.

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Node count by 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: 4869

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	DEPENDS_ON	876	17.991374
1	HAS_KEY	668	13.719450
2	HAS_VALUE	668	13.719450
3	CONTAINS	594	12.199630
4	OF_TYPE	337	6.921339
5	EXPORTS	305	6.264120
6	REFERENCES	197	4.046005
7	DECLARES	186	3.820086
8	DECLARES_DEV_DEPENDENCY	169	3.470939
9	DECLARES_DEPENDENCY	161	3.306634
10	HAS_MEMBER	102	2.094886
11	HAS_TYPE_ARGUMENT	94	1.930581
12	DECLARES_SCRIPT	91	1.868967
13	RETURNS	82	1.684124
14	HAS_PARAMETER	73	1.499281
15	CONTAINS_VALUE	51	1.047443
16	IS_DESCRIBED_IN_NPM_PACKAGE	33	0.677757
17	INITIALIZED_WITH	32	0.657219
18	REQUIRES_CONCEPT	28	0.575067
19	INCLUDES_CONCEPT	19	0.390224
20	USES	11	0.225919
21	DECLARES_PEER_DEPENDENCY	8	0.164305
22	CALLS	6	0.123229
23	CONTAINS_PROJECT	6	0.123229
24	DECLARES_ENGINE	6	0.123229
25	EXTENDS	6	0.123229
26	HAS_ARGUMENT	6	0.123229
27	HAS_CONFIG	6	0.123229
28	HAS_NPM_PACKAGE	6	0.123229
29	HAS_ROOT	6	0.123229

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.

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Relationship types (more than 0.5% overall)

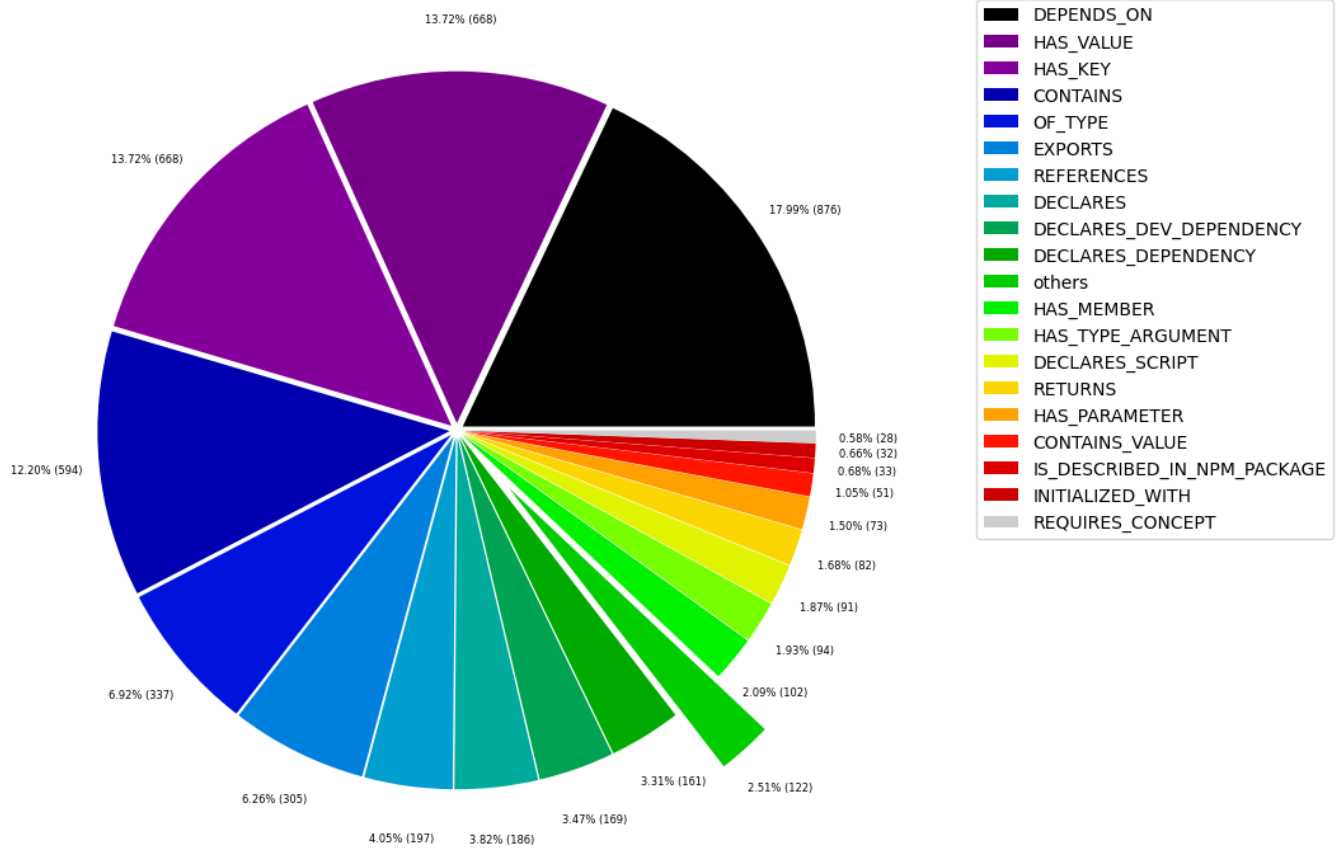


Table 2b - Lowest relationship count by type

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.

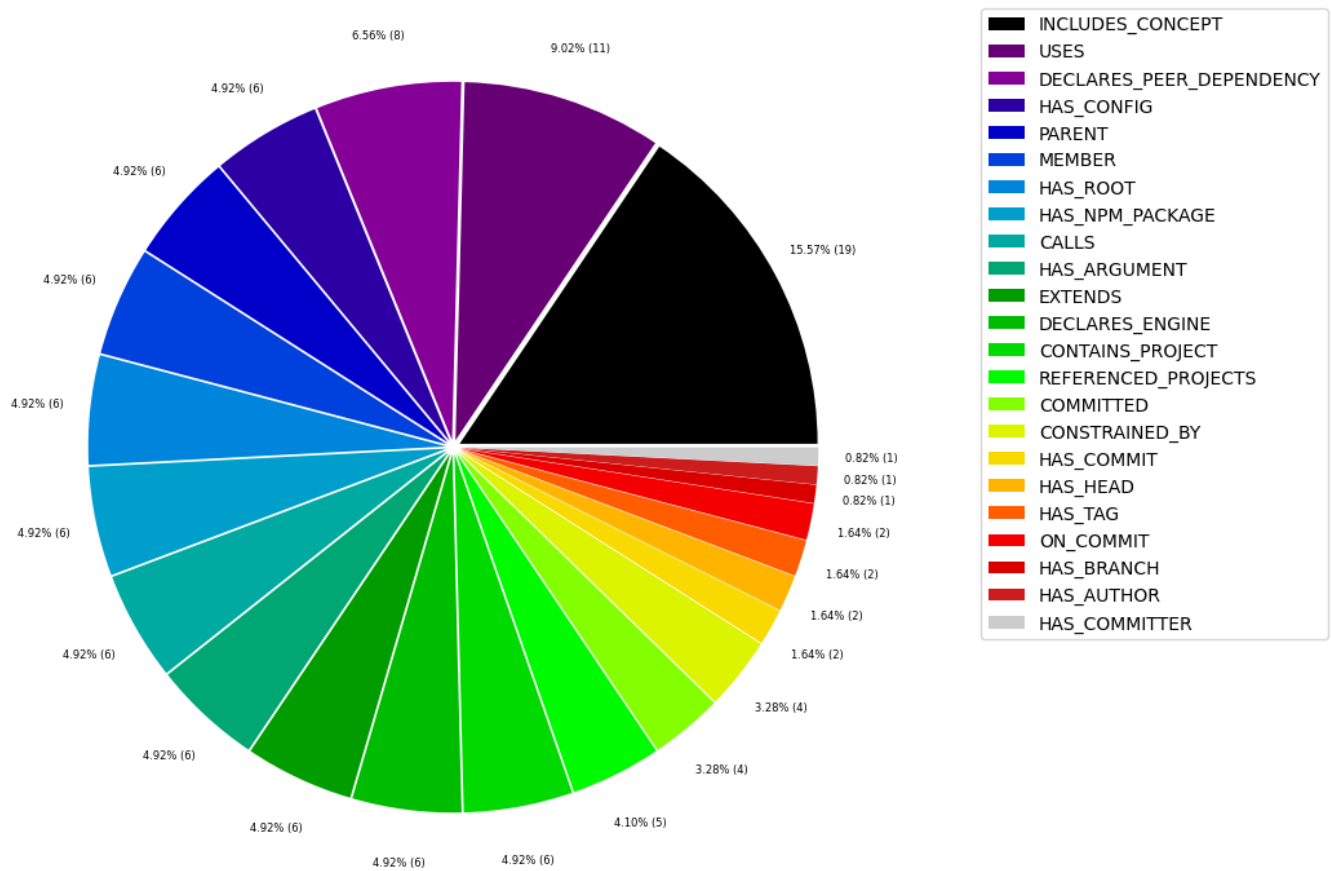
	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	HAS_COMMITTER	1	0.020538
1	HAS_BRANCH	1	0.020538
2	HAS_AUTHOR	1	0.020538
3	ON_COMMIT	2	0.041076
4	HAS_TAG	2	0.041076
5	HAS_HEAD	2	0.041076
6	HAS_COMMIT	2	0.041076
7	CONSTRAINED_BY	4	0.082152
8	COMMITTED	4	0.082152
9	REFERENCED_PROJECTS	5	0.102690
10	CALLS	6	0.123229
11	CONTAINS_PROJECT	6	0.123229
12	DECLARES_ENGINE	6	0.123229
13	EXTENDS	6	0.123229
14	HAS_ROOT	6	0.123229
15	HAS_CONFIG	6	0.123229
16	HAS_NPM_PACKAGE	6	0.123229
17	PARENT	6	0.123229
18	HAS_ARGUMENT	6	0.123229
19	MEMBER	6	0.123229
20	DECLARES_PEER_DEPENDENCY	8	0.164305
21	USES	11	0.225919
22	INCLUDES_CONCEPT	19	0.390224

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.

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Relationship types (less than 0.5% overall)



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	34	
16	[TS, Interface]	DECLARES	[TS, Property]	61	17	
17	[File, Directory]	CONTAINS	[Package, File, Json, NPM]	58	34	
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	[File, TS, Local, Module]	EXPORTS	[TS, ExternalDeclaration]	32	6	
28	[Type, TS, ObjectMember]	OF_TYPE	[Type, TS, Primitive]	32	101	
29	[File, TS, Local, Module]	EXPORTS	[TS, Function]	31	6	

Graph Density

total_number_of_nodes (vertices): 3550

total_number_of_relationships (edges): 4869

-> total directed graph density: 0.0003864607764932792

-> total directed graph density in percent: 0.03864607764932792