

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	[Git, Change]	81553	78.291381
1	[Git, Commit]	10617	10.192385
2	[File, Git]	5497	5.277154
3	[Git, Tag]	1314	1.261448
4	[Author, Git, Person]	1221	1.172168
5	[Json, Key]	668	0.641284
6	[Json, Value, Scalar]	603	0.578884
7	[Committer, Git, Person]	371	0.356162
8	[NPM, Dependency]	338	0.324482
9	[Type, TS, Primitive]	291	0.279362
10	[Type, TS, Declared]	276	0.264962
11	[TS, ExternalDeclaration]	214	0.205441
12	[Type, TS, Literal]	136	0.130561
13	[Json, Value, Object]	133	0.127681
14	[Type, TS, Union]	119	0.114241
15	[Type, TS, ObjectMember]	101	0.096961
16	[NPM, Script]	91	0.087361
17	[TS, Property]	65	0.062400
18	[TS, Function]	47	0.045120
19	[Type, TS, FunctionParameter]	40	0.038400
20	[Type, Object, TS]	39	0.037440
21	[Git, Branch]	36	0.034560
22	[File, Directory]	34	0.032640
23	[Type, TS, Function]	34	0.032640
24	[TS, Parameter]	33	0.031680
25	[Package, File, Json, NPM]	29	0.027840
26	[TS, Variable]	24	0.023040
27	[TS, ExternalModule]	23	0.022080
28	[Value, TS, Literal]	20	0.019200
29	[JQAssistant, Rule, Concept]	19	0.018240

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)

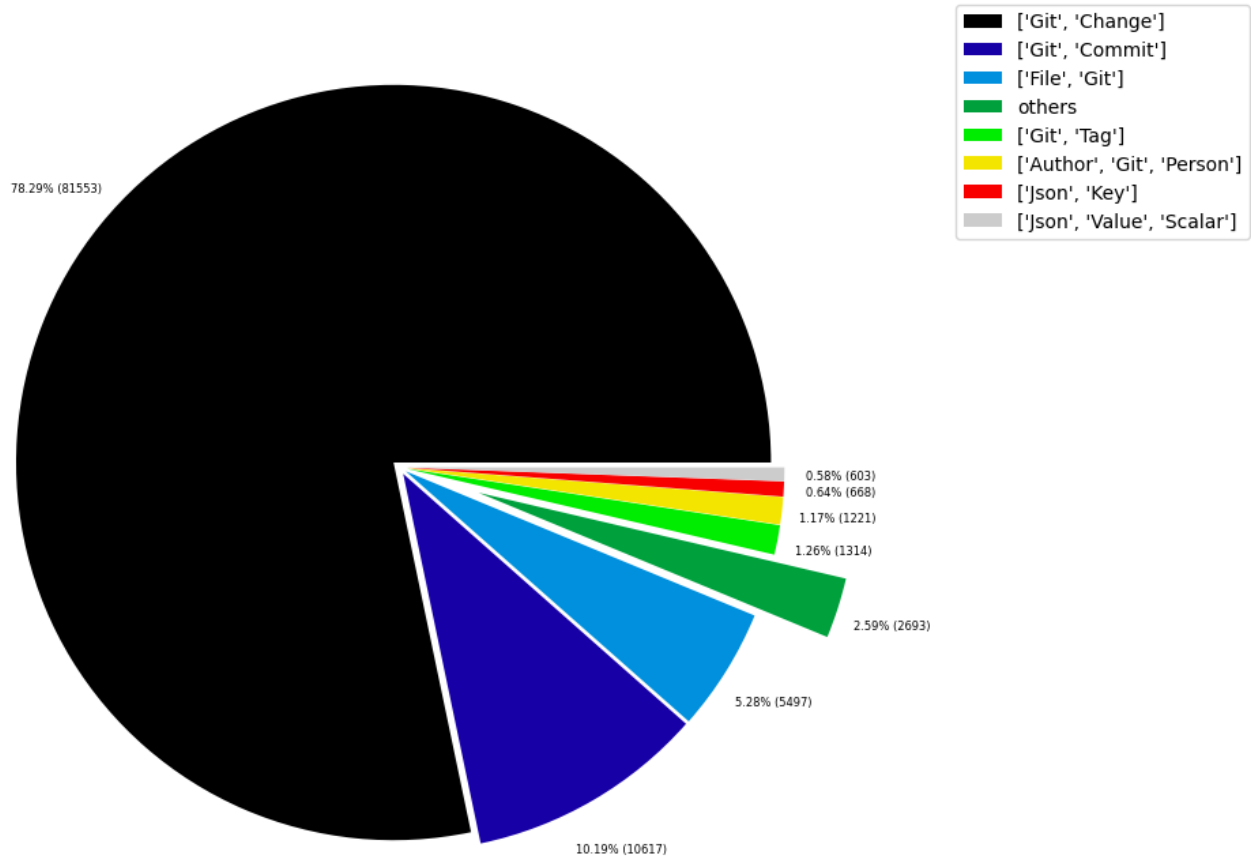


Table 1b - Lowest node count by label combination

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	0.00096
1	[File, TS, Scan]	1	0.00096
2	[TS, Method]	1	0.00096
3	[Repository, File, Git]	1	0.00096
4	[TS, Constructor]	1	0.00096
5	[Value, TS, ObjectMember]	1	0.00096
6	[TS, Class]	1	0.00096
7	[TS, Enum]	2	0.00192
8	[Value, Object, TS]	3	0.00288
9	[Type, TS, Tuple]	3	0.00288
10	[Value, TS, Function]	4	0.00384
11	[TS, TypeParameter]	4	0.00384
12	[Value, TS, Complex]	5	0.00480
13	[NPM, Engine]	6	0.00576
14	[Project, TS]	6	0.00576
15	[File, Local]	6	0.00576
16	[Value, TS, Call]	6	0.00576
17	[Value, TS, Member]	6	0.00576
18	[File, TS, Local, Module]	6	0.00576
19	[Type, TS, TypeParameterReference]	6	0.00576
20	[TS, EnumMember]	8	0.00768
21	[Type, TS, NotIdentified]	11	0.01056
22	[Json, Value, Array]	12	0.01152
23	[Value, TS, Declared]	13	0.01248
24	[TS, TypeAlias]	16	0.01536
25	[File, Directory, Local]	16	0.01536
26	[TS, Interface]	17	0.01632
27	[Type, TS, Intersection]	17	0.01632
28	[JQAssistant, Rule, Concept]	19	0.01824
29	[Value, TS, Literal]	20	0.01920

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)

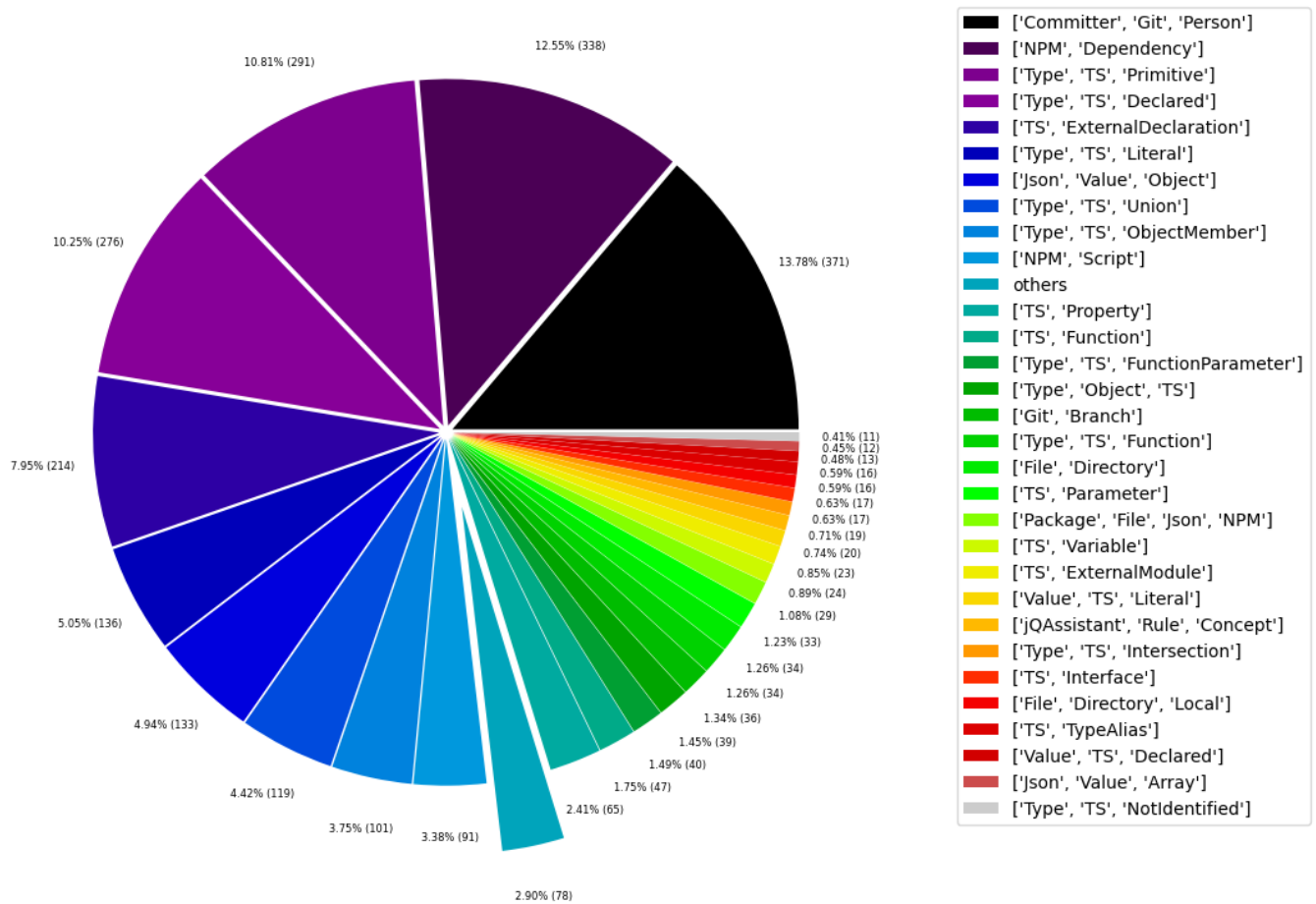


Table 1c - Highest node count by single label

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.

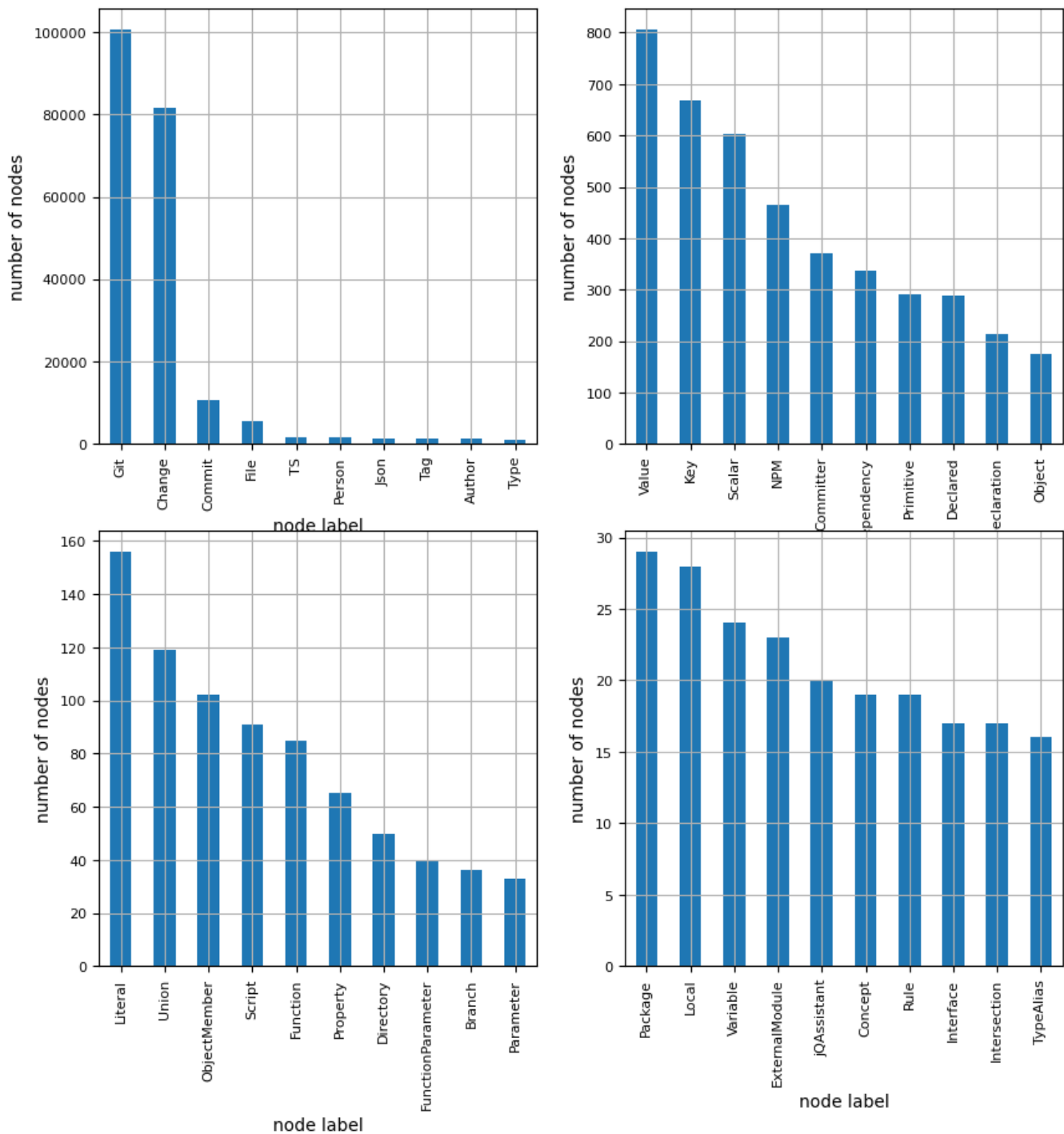
	nodeLabel	nodesWithThatLabel	nodesWithThatLabelPercent
0	Git	100610	96.586218
1	Change	81553	78.291381
2	Commit	10617	10.192385
3	File	5590	5.366434
4	TS	1600	1.536010
5	Person	1592	1.528330
6	Json	1445	1.387209
7	Tag	1314	1.261448
8	Author	1221	1.172168
9	Type	1073	1.030087
10	Value	806	0.773765
11	Key	668	0.641284
12	Scalar	603	0.578884
13	NPM	464	0.445443
14	Committer	371	0.356162
15	Dependency	338	0.324482
16	Primitive	291	0.279362
17	Declared	289	0.277442
18	ExternalDeclaration	214	0.205441
19	Object	175	0.168001
20	Literal	156	0.149761
21	Union	119	0.114241
22	ObjectMember	102	0.097921
23	Script	91	0.087361
24	Function	85	0.081601
25	Property	65	0.062400
26	Directory	50	0.048000
27	FunctionParameter	40	0.038400
28	Branch	36	0.034560
29	Parameter	33	0.031680
30	Package	29	0.027840
31	Local	28	0.026880
32	Variable	24	0.023040
33	ExternalModule	23	0.022080
34	jqAssistant	20	0.019200
35	Concept	19	0.018240
36	Rule	19	0.018240
37	Interface	17	0.016320
38	Intersection	17	0.016320
39	TypeAlias	16	0.015360

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: 311165

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONTAINS_CHANGE	81553	26.208925
1	MODIFIES	81553	26.208925
2	UPDATES	53363	17.149422
3	COMMITTED	21234	6.824032
4	CREATES	19664	6.319477
5	DELETES	11723	3.767455
6	HAS_PARENT	11663	3.748172
7	HAS_COMMIT	10617	3.412016
8	HAS_FILE	5497	1.766587
9	RENAMES	3197	1.027429
10	HAS_NEW_NAME	1726	0.554690
11	HAS_TAG	1314	0.422284
12	ON_COMMIT	1314	0.422284
13	HAS_AUTHOR	1221	0.392396
14	DEPENDS_ON	961	0.308839
15	HAS_KEY	668	0.214677
16	HAS_VALUE	668	0.214677
17	CONTAINS	594	0.190896
18	HAS_COMMITTER	371	0.119229
19	OF_TYPE	337	0.108303
20	EXPORTS	283	0.090949
21	REFERENCES	197	0.063310
22	DECLARES	186	0.059775
23	DECLARES_DEV_DEPENDENCY	169	0.054312
24	DECLARES_DEPENDENCY	161	0.051741
25	HAS_MEMBER	102	0.032780
26	HAS_TYPE_ARGUMENT	94	0.030209
27	DECLARES_SCRIPT	91	0.029245
28	RETURNS	82	0.026353
29	HAS_PARAMETER	73	0.023460

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)

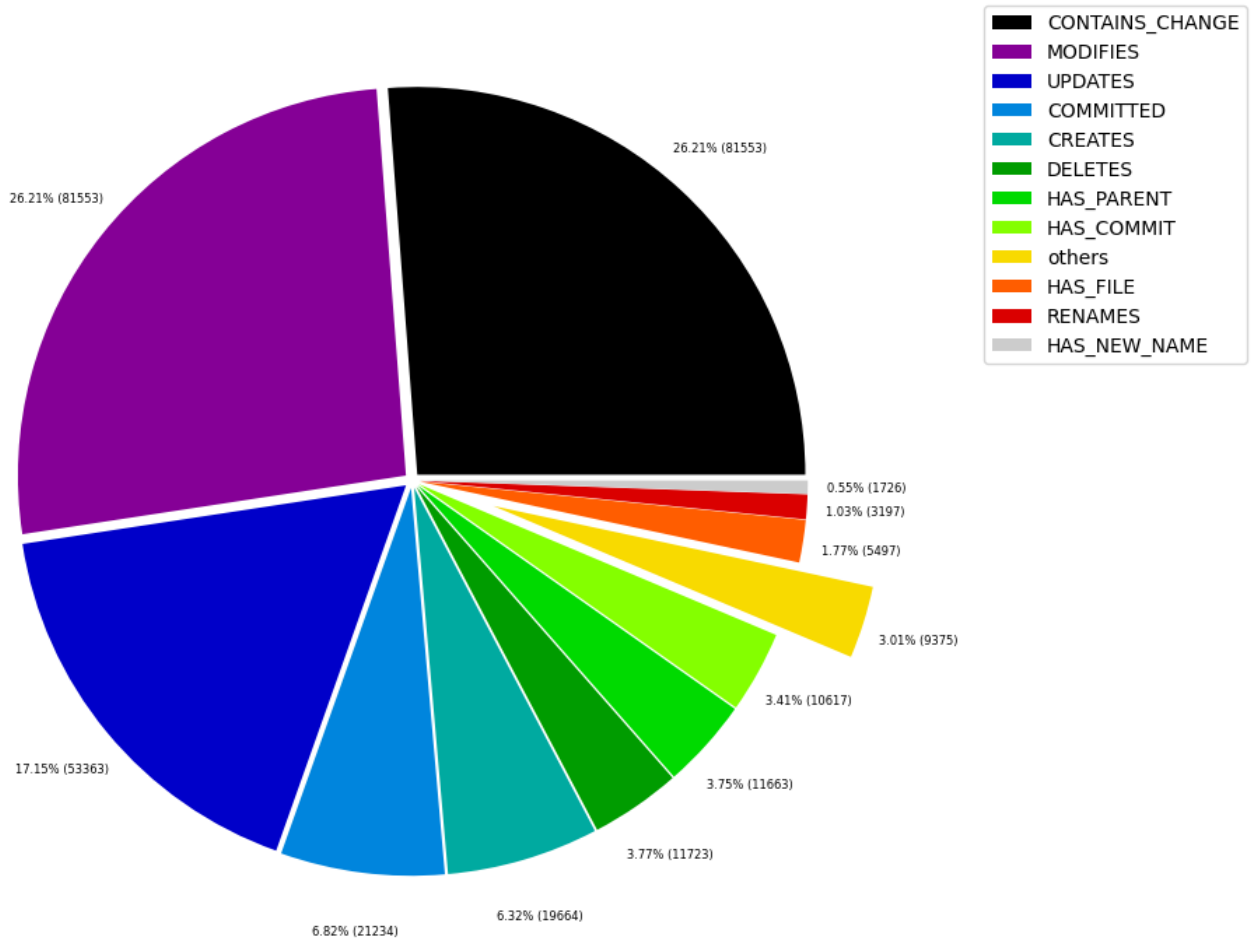


Table 2b - Lowest relationship count by type

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.

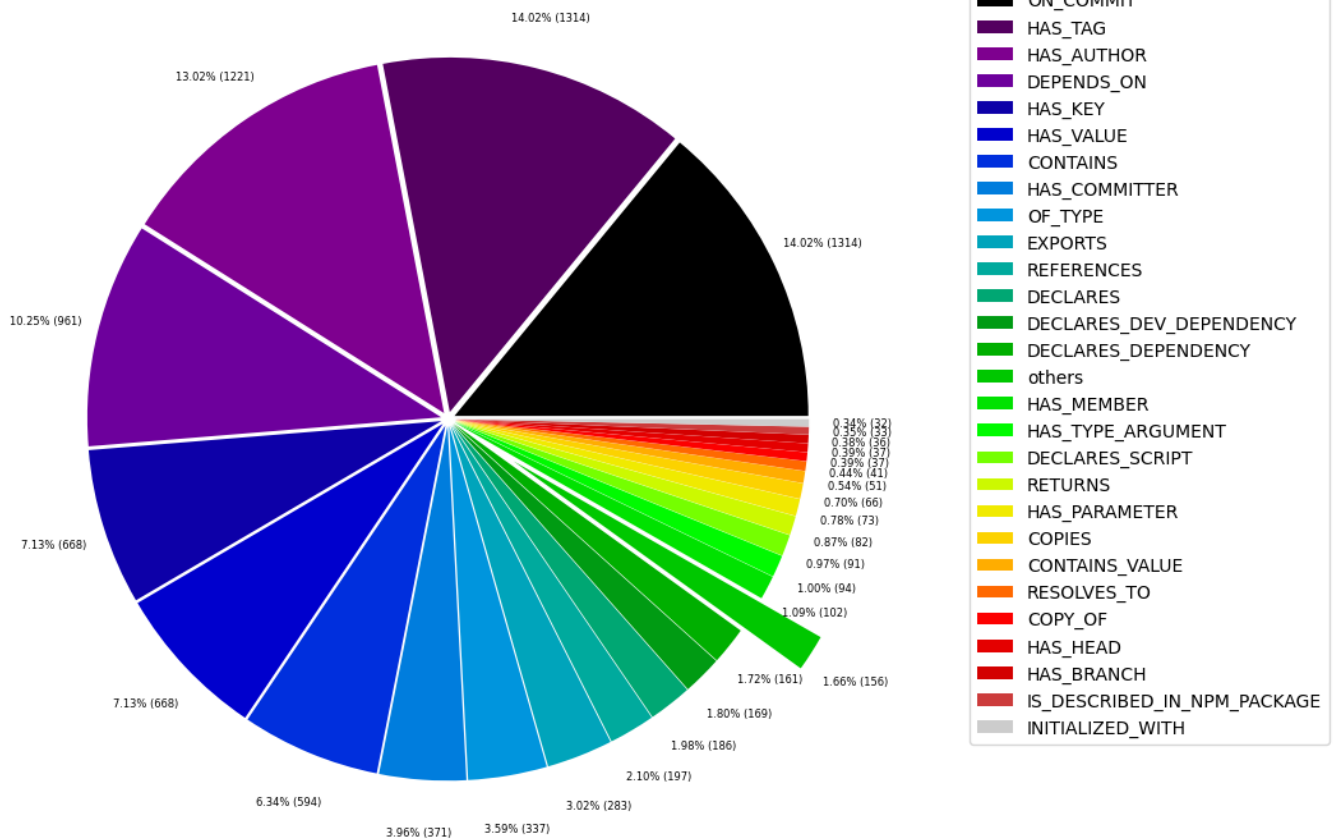
	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	PROVIDED_BY_NPM_DEPENDENCY	1	0.000321
1	IS_IMPLEMENTED_IN	2	0.000643
2	CONSTRAINED_BY	4	0.001285
3	REFERENCED_PROJECTS	5	0.001607
4	CONTAINS_PROJECT	6	0.001928
5	DECLARES_ENGINE	6	0.001928
6	EXTENDS	6	0.001928
7	HAS_ARGUMENT	6	0.001928
8	CALLS	6	0.001928
9	HAS_NPM_PACKAGE	6	0.001928
10	HAS_ROOT	6	0.001928
11	MEMBER	6	0.001928
12	PARENT	6	0.001928
13	HAS_CONFIG	6	0.001928
14	SIMILAR	6	0.001928
15	DECLARES_PEER_DEPENDENCY	8	0.002571
16	INCLUDES_CONCEPT	19	0.006106
17	USES	23	0.007392
18	REQUIRES_CONCEPT	28	0.008998
19	INITIALIZED_WITH	32	0.010284
20	IS_DESCRIBED_IN_NPM_PACKAGE	33	0.010605
21	HAS_BRANCH	36	0.011569
22	HAS_HEAD	37	0.011891
23	COPY_OF	37	0.011891
24	RESOLVES_TO	41	0.013176
25	CONTAINS_VALUE	51	0.016390
26	COPIES	66	0.021211
27	HAS_PARAMETER	73	0.023460
28	RETURNS	82	0.026353
29	DECLARES_SCRIPT	91	0.029245

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	numberOfNodes'
0	[Git, Change]	MODIFIES	[File, Git]	81553	81553	
1	[Git, Commit]	CONTAINS_CHANGE	[Git, Change]	81553	10617	
2	[Git, Change]	UPDATES	[File, Git]	53363	81553	
3	[Git, Change]	CREATES	[File, Git]	19664	81553	
4	[Git, Change]	DELETES	[File, Git]	11723	81553	
5	[Git, Commit]	HAS_PARENT	[Git, Commit]	11663	10617	
6	[Repository, File, Git]	HAS_COMMIT	[Git, Commit]	10617	1	
7	[Author, Git, Person]	COMMITTED	[Git, Commit]	10617	1221	
8	[Committer, Git, Person]	COMMITTED	[Git, Commit]	10617	371	
9	[Repository, File, Git]	HAS_FILE	[File, Git]	5497	1	
10	[Git, Change]	RENAMES	[File, Git]	3197	81553	
11	[File, Git]	HAS_NEW_NAME	[File, Git]	1726	5497	
12	[Repository, File, Git]	HAS_TAG	[Git, Tag]	1314	1	
13	[Git, Tag]	ON_COMMIT	[Git, Commit]	1314	1314	
14	[Repository, File, Git]	HAS_AUTHOR	[Author, Git, Person]	1221	1	
15	[Json, Value, Object]	HAS_KEY	[Json, Key]	668	133	
16	[Json, Key]	HAS_VALUE	[Json, Value, Scalar]	552	668	
17	[Repository, File, Git]	HAS_COMMITTER	[Committer, Git, Person]	371	1	
18	[TS, Function]	DEPENDS_ON	[TS, ExternalDeclaration]	289	47	
19	[File, TS, Local, Module, Mark4ModuleWeaklyCon...]	DEPENDS_ON	[TS, ExternalDeclaration]	232	4	
20	[TS, ExternalModule]	EXPORTS	[TS, ExternalDeclaration]	214	23	
21	[Package, File, Json, NPM]	DECLARES_DEV_DEPENDENCY	[NPM, Dependency]	169	29	
22	[Package, File, Json, NPM]	DECLARES_DEPENDENCY	[NPM, Dependency]	161	29	
23	[Type, TS, Union]	CONTAINS	[Type, TS, Primitive]	147	119	
24	[Type, TS, Declared]	REFERENCES	[TS, ExternalDeclaration]	142	276	
25	[TS, Function]	DEPENDS_ON	[TS, ExternalModule]	132	47	
26	[Type, TS, Union]	CONTAINS	[Type, TS, Literal]	119	119	
27	[Json, Key]	HAS_VALUE	[Json, Value, Object]	104	668	
28	[Type, Object, TS]	HAS_MEMBER	[Type, TS, ObjectMember]	101	39	
29	[Package, File, Json, NPM]	DECLARES_SCRIPT	[NPM, Script]	91	29	

Graph Density

total_number_of_nodes (vertices): 104166

total_number_of_relationships (edges): 311165

-> total directed graph density: 2.8677608775499985e-05

-> total directed graph density in percent: 0.0028677608775499984