

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]	78704	78.003528
1	[Git, Commit]	10410	10.317350
2	[File, Git]	5403	5.354913
3	[Git, Tag]	1229	1.218062
4	[Author, Git, Person]	1197	1.186347
5	[Json, Key]	668	0.662055
6	[Json, Value, Scalar]	603	0.597633
7	[Committer, Git, Person]	371	0.367698
8	[NPM, Dependency]	330	0.327063
9	[Type, TS, Primitive]	291	0.288410
10	[Type, TS, Declared]	276	0.273544
11	[TS, ExternalDeclaration]	215	0.213086
12	[Type, TS, Literal]	136	0.134790
13	[Json, Value, Object]	133	0.131816
14	[Type, TS, Union]	119	0.117941
15	[Type, TS, ObjectMember]	101	0.100101
16	[NPM, Script]	91	0.090190
17	[TS, Property]	65	0.064421
18	[TS, Function]	47	0.046582
19	[Type, TS, FunctionParameter]	40	0.039644
20	[Type, Object, TS]	39	0.038653
21	[File, Directory]	34	0.033697
22	[Type, TS, Function]	34	0.033697
23	[TS, Parameter]	33	0.032706
24	[Git, Branch]	32	0.031715
25	[Package, File, Json, NPM]	29	0.028742
26	[TS, ExternalModule]	25	0.024777
27	[TS, Variable]	24	0.023786
28	[Value, TS, Literal]	20	0.019822
29	[JQAssistant, Rule, Concept]	19	0.018831

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>

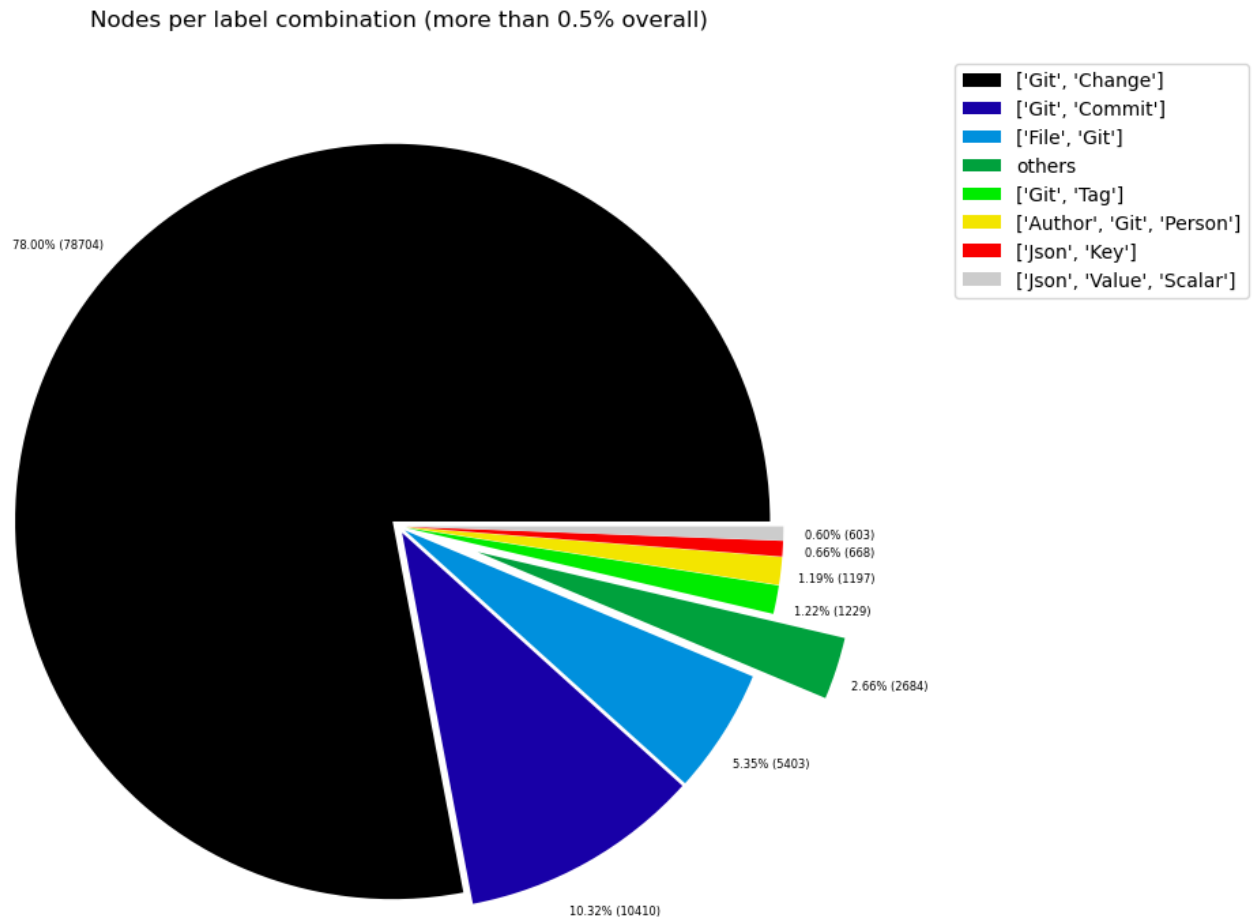


Table 1b - Lowest node count by label combination

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	0.000991
1	[File, TS, Scan]	1	0.000991
2	[TS, Method]	1	0.000991
3	[Repository, File, Git]	1	0.000991
4	[TS, Constructor]	1	0.000991
5	[Value, TS, ObjectMember]	1	0.000991
6	[TS, Class]	1	0.000991
7	[TS, Enum]	2	0.001982
8	[Value, Object, TS]	3	0.002973
9	[Type, TS, Tuple]	3	0.002973
10	[Value, TS, Function]	4	0.003964
11	[TS, TypeParameter]	4	0.003964
12	[Value, TS, Complex]	5	0.004955
13	[NPM, Engine]	6	0.005947
14	[Project, TS]	6	0.005947
15	[File, Local]	6	0.005947
16	[Value, TS, Call]	6	0.005947
17	[Value, TS, Member]	6	0.005947
18	[File, TS, Local, Module]	6	0.005947
19	[Type, TS, TypeParameterReference]	6	0.005947
20	[TS, EnumMember]	8	0.007929
21	[Type, TS, NotIdentified]	11	0.010902
22	[Json, Value, Array]	12	0.011893
23	[Value, TS, Declared]	13	0.012884
24	[TS, TypeAlias]	16	0.015858
25	[File, Directory, Local]	16	0.015858
26	[TS, Interface]	17	0.016849
27	[Type, TS, Intersection]	17	0.016849
28	[JQAssistant, Rule, Concept]	19	0.018831
29	[Value, TS, Literal]	20	0.019822

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)

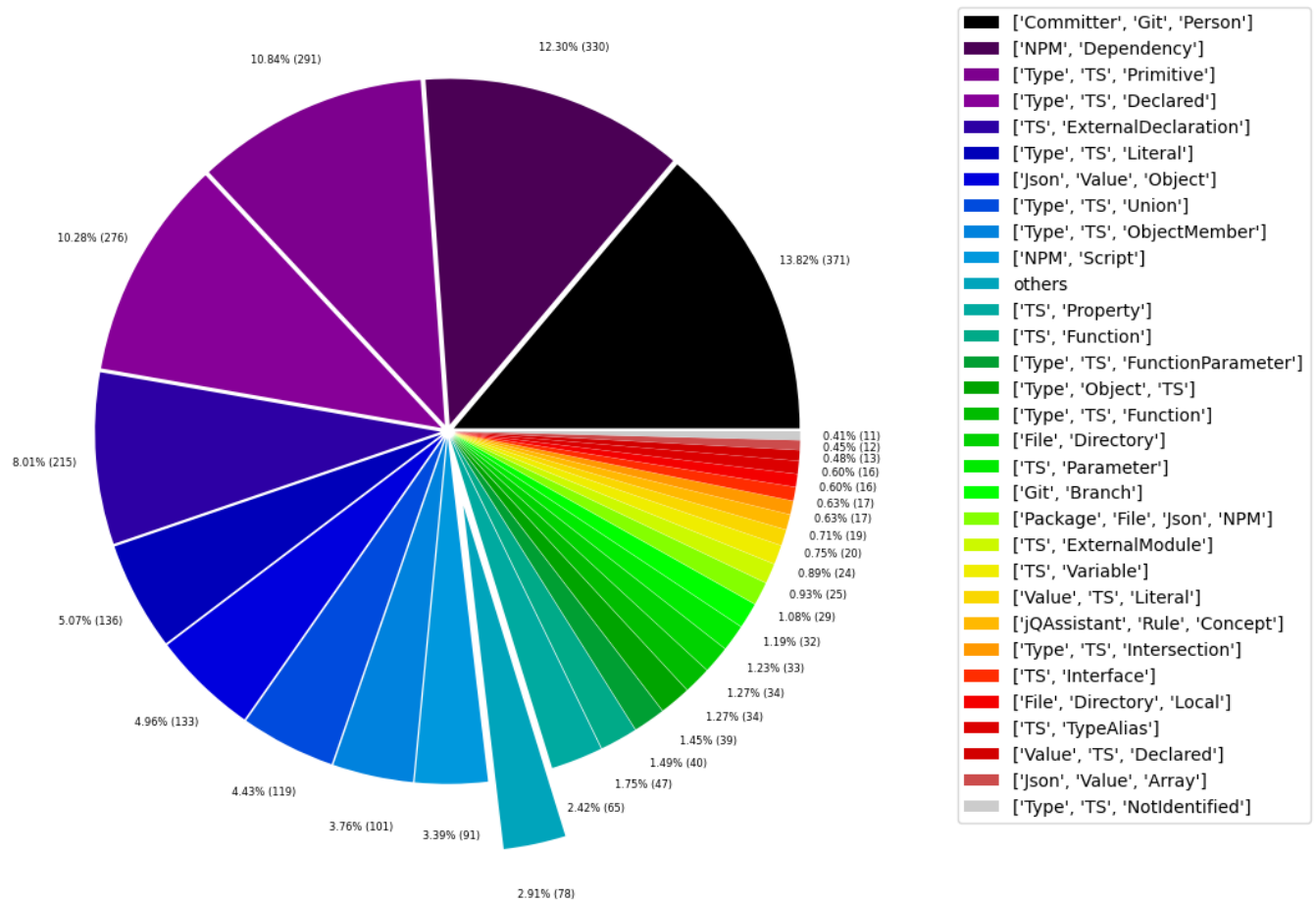


Table 1c - Highest node count by single label

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.

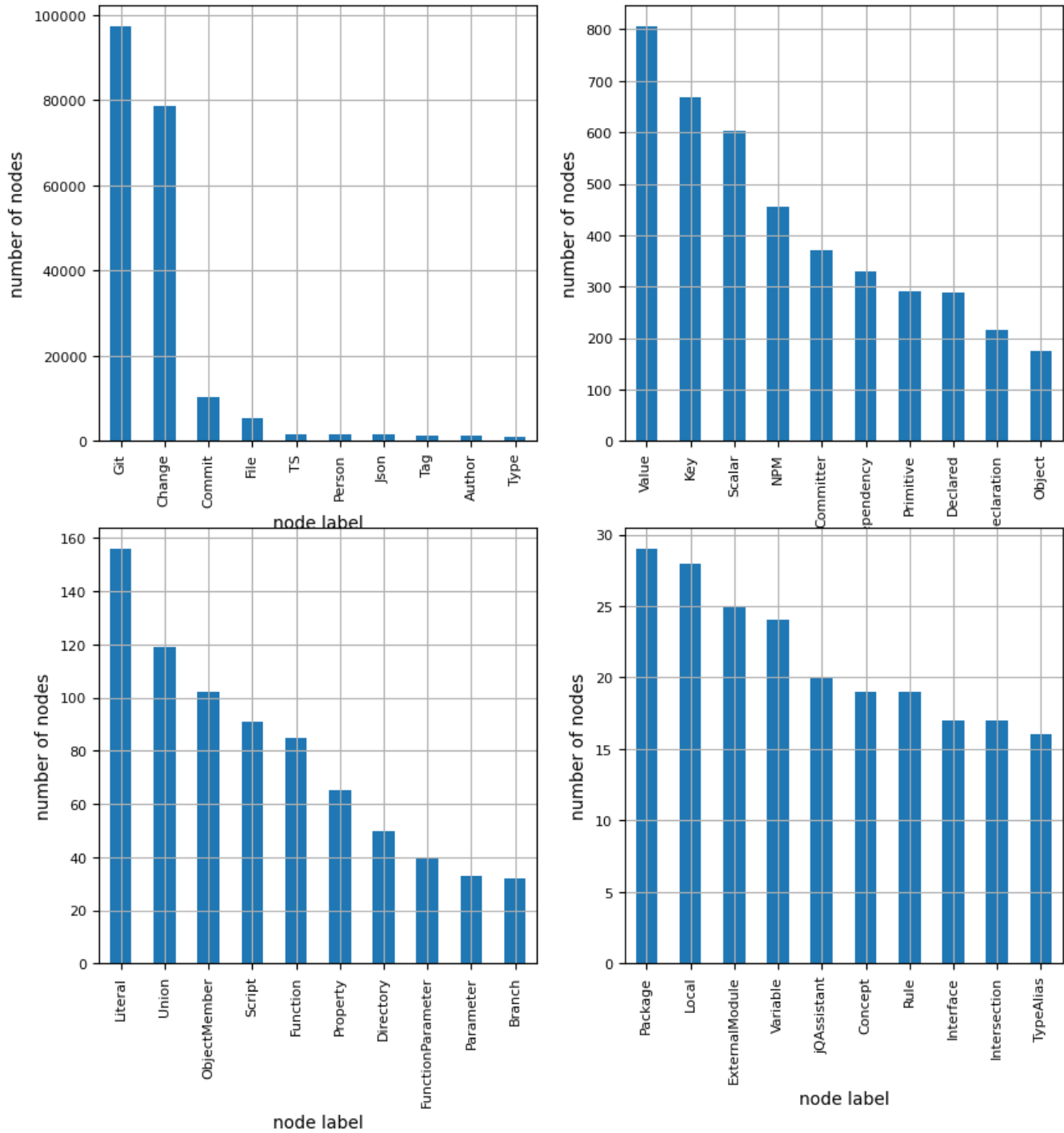
	nodeLabel	nodesWithThatLabel	nodesWithThatLabelPercent
0	Git	97347	96.480604
1	Change	78704	78.003528
2	Commit	10410	10.317350
3	File	5496	5.447085
4	TS	1603	1.588733
5	Person	1568	1.554045
6	Json	1445	1.432139
7	Tag	1229	1.218062
8	Author	1197	1.186347
9	Type	1073	1.063450
10	Value	806	0.798827
11	Key	668	0.662055
12	Scalar	603	0.597633
13	NPM	456	0.451942
14	Committer	371	0.367698
15	Dependency	330	0.327063
16	Primitive	291	0.288410
17	Declared	289	0.286428
18	ExternalDeclaration	215	0.213086
19	Object	175	0.173442
20	Literal	156	0.154612
21	Union	119	0.117941
22	ObjectMember	102	0.101092
23	Script	91	0.090190
24	Function	85	0.084243
25	Property	65	0.064421
26	Directory	50	0.049555
27	FunctionParameter	40	0.039644
28	Parameter	33	0.032706
29	Branch	32	0.031715
30	Package	29	0.028742
31	Local	28	0.027751
32	ExternalModule	25	0.024777
33	Variable	24	0.023786
34	jqAssistant	20	0.019822
35	Concept	19	0.018831
36	Rule	19	0.018831
37	Interface	17	0.016849
38	Intersection	17	0.016849
39	TypeAlias	16	0.015858

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: 300974

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONTAINS_CHANGE	78704	26.149767
1	MODIFIES	78704	26.149767
2	UPDATES	52043	17.291527
3	COMMITTED	20820	6.917541
4	CREATES	18719	6.219474
5	HAS_PARENT	11443	3.801990
6	DELETES	10930	3.631543
7	HAS_COMMIT	10410	3.458771
8	HAS_FILE	5403	1.795172
9	RENAMES	2988	0.992777
10	HAS_NEW_NAME	1685	0.559849
11	HAS_TAG	1229	0.408341
12	ON_COMMIT	1229	0.408341
13	HAS_AUTHOR	1197	0.397709
14	DEPENDS_ON	959	0.318632
15	HAS_KEY	668	0.221946
16	HAS_VALUE	668	0.221946
17	CONTAINS	594	0.197359
18	HAS_COMMITTER	371	0.123266
19	OF_TYPE	337	0.111970
20	EXPORTS	276	0.091702
21	REFERENCES	197	0.065454
22	DECLARES	186	0.061799
23	DECLARES_DEV_DEPENDENCY	169	0.056151
24	DECLARES_DEPENDENCY	161	0.053493
25	HAS_MEMBER	102	0.033890
26	HAS_TYPE_ARGUMENT	94	0.031232
27	DECLARES_SCRIPT	91	0.030235
28	RETURNS	82	0.027245
29	HAS_PARAMETER	73	0.024255

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)

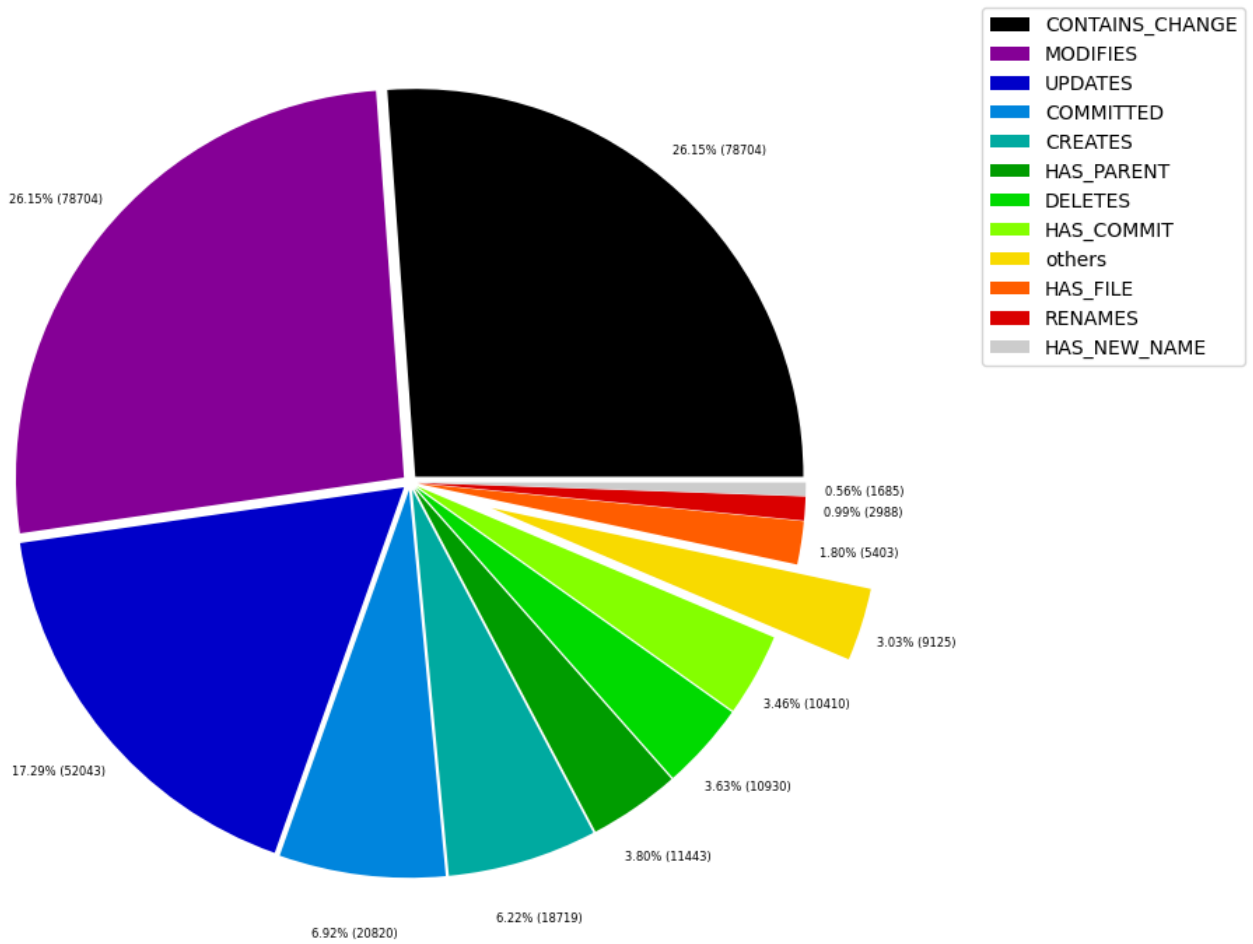


Table 2b - Lowest relationship count by type

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.

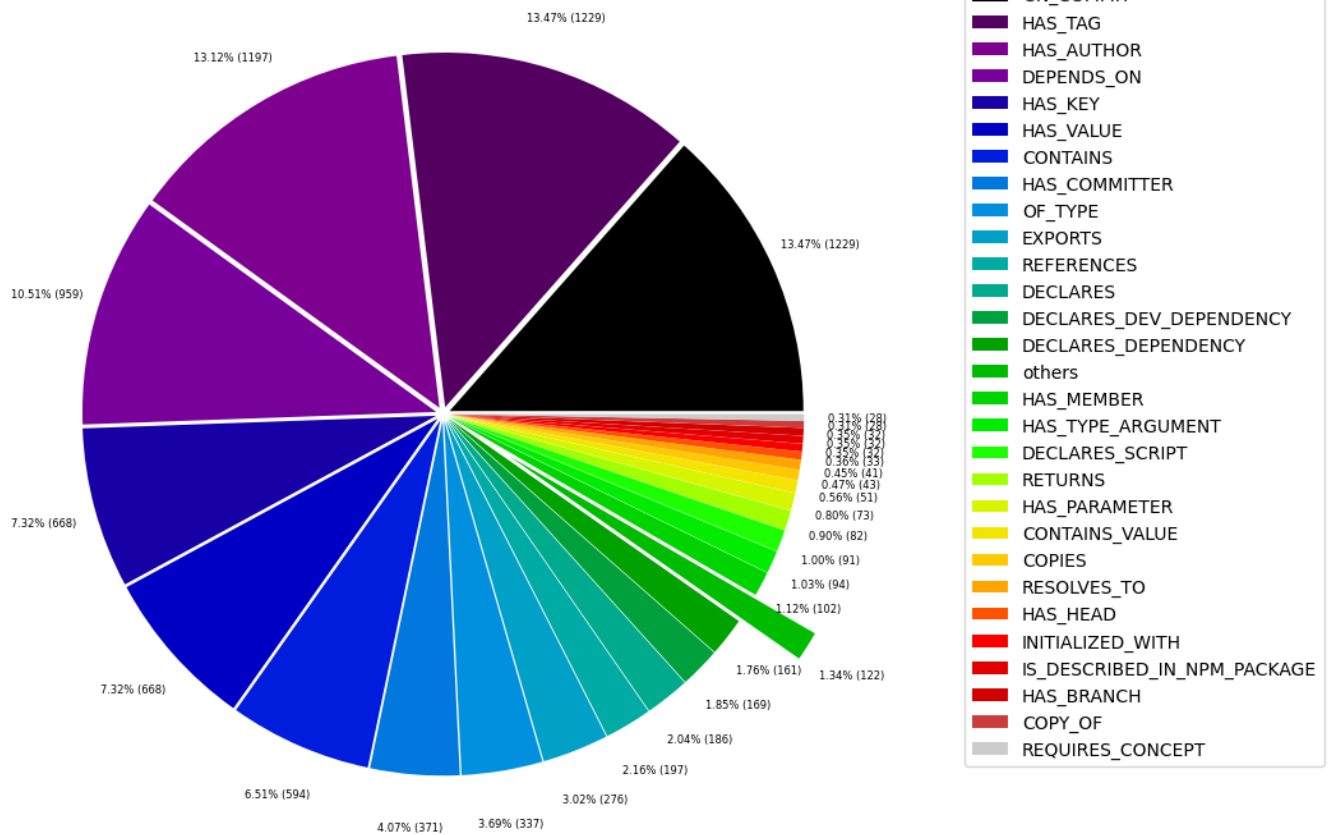
	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	PROVIDED_BY_NPM_DEPENDENCY	1	0.000332
1	IS_IMPLEMENTED_IN	2	0.000665
2	CONSTRAINED_BY	4	0.001329
3	REFERENCED_PROJECTS	5	0.001661
4	CONTAINS_PROJECT	6	0.001994
5	DECLARES_ENGINE	6	0.001994
6	EXTENDS	6	0.001994
7	HAS_ARGUMENT	6	0.001994
8	CALLS	6	0.001994
9	HAS_NPM_PACKAGE	6	0.001994
10	HAS_ROOT	6	0.001994
11	MEMBER	6	0.001994
12	PARENT	6	0.001994
13	HAS_CONFIG	6	0.001994
14	SIMILAR	6	0.001994
15	INCLUDES_CONCEPT	19	0.006313
16	USES	25	0.008306
17	REQUIRES_CONCEPT	28	0.009303
18	COPY_OF	28	0.009303
19	INITIALIZED_WITH	32	0.010632
20	HAS_BRANCH	32	0.010632
21	IS_DESCRIBED_IN_NPM_PACKAGE	32	0.010632
22	HAS_HEAD	33	0.010964
23	RESOLVES_TO	41	0.013622
24	COPIES	43	0.014287
25	CONTAINS_VALUE	51	0.016945
26	HAS_PARAMETER	73	0.024255
27	RETURNS	82	0.027245
28	DECLARES_SCRIPT	91	0.030235
29	HAS_TYPE_ARGUMENT	94	0.031232

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]	78704	78704	
1	[Git, Commit]	CONTAINS_CHANGE	[Git, Change]	78704	10410	
2	[Git, Change]	UPDATES	[File, Git]	52043	78704	
3	[Git, Change]	CREATES	[File, Git]	18719	78704	
4	[Git, Commit]	HAS_PARENT	[Git, Commit]	11443	10410	
5	[Git, Change]	DELETES	[File, Git]	10930	78704	
6	[Repository, File, Git]	HAS_COMMIT	[Git, Commit]	10410	1	
7	[Author, Git, Person]	COMMITTED	[Git, Commit]	10410	1197	
8	[Committer, Git, Person]	COMMITTED	[Git, Commit]	10410	371	
9	[Repository, File, Git]	HAS_FILE	[File, Git]	5403	1	
10	[Git, Change]	RENAMES	[File, Git]	2988	78704	
11	[File, Git]	HAS_NEW_NAME	[File, Git]	1685	5403	
12	[Repository, File, Git]	HAS_TAG	[Git, Tag]	1229	1	
13	[Git, Tag]	ON_COMMIT	[Git, Commit]	1229	1229	
14	[Repository, File, Git]	HAS_AUTHOR	[Author, Git, Person]	1197	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]	285	47	
19	[TS, ExternalModule]	EXPORTS	[TS, ExternalDeclaration]	215	25	
20	[File, TS, Local, Module, Mark4ModuleWeaklyCon...]	DEPENDS_ON	[TS, ExternalDeclaration]	192	2	
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]	131	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): 100898

total_number_of_relationships (edges): 300974

-> total directed graph density: 2.9564338695200646e-05

-> total directed graph density in percent: 0.0029564338695200645