

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`.

Total number of nodes: 93973

	nodeLabels	nodesWithThatLabels	nodesWithThatLabelsPercent
0	[Git, Change]	72737	77.402020
1	[Git, Commit]	9958	10.596661
2	[File, Git]	5094	5.420706
3	[Author, Git, Person]	1183	1.258872
4	[Git, Tag]	1075	1.143946
5	[Json, Key]	668	0.710842
6	[Json, Value, Scalar]	603	0.641674
7	[Committer, Git, Person]	371	0.394794
8	[NPM, Dependency]	330	0.351165
9	[Type, TS, Primitive, ExternalType]	285	0.303279
10	[Type, TS, Declared, ExternalType]	272	0.289445
11	[TS, ExternalDeclaration]	215	0.228789
12	[Type, TS, Literal, ExternalType]	136	0.144722
13	[Json, Value, Object]	133	0.141530
14	[Type, TS, Union, ExternalType]	117	0.124504
15	[Type, TS, ObjectMember, ExternalType]	98	0.104285
16	[NPM, Script]	91	0.096836
17	[TS, Property]	65	0.069169
18	[TS, Function]	47	0.050014
19	[Type, Object, TS, ExternalType]	38	0.040437
20	[Type, TS, FunctionParameter, ExternalType]	37	0.039373
21	[File, Directory]	34	0.036181
22	[TS, Parameter]	33	0.035116
23	[Type, TS, Function, ExternalType]	32	0.034052
24	[Package, File, Json, NPM]	29	0.030860
25	[Git, Branch]	26	0.027668
26	[TS, ExternalModule]	25	0.026603
27	[TS, Variable]	24	0.025539
28	[Value, TS, Literal]	20	0.021283
29	[jqAssistant, Rule, Concept]	19	0.020219

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>

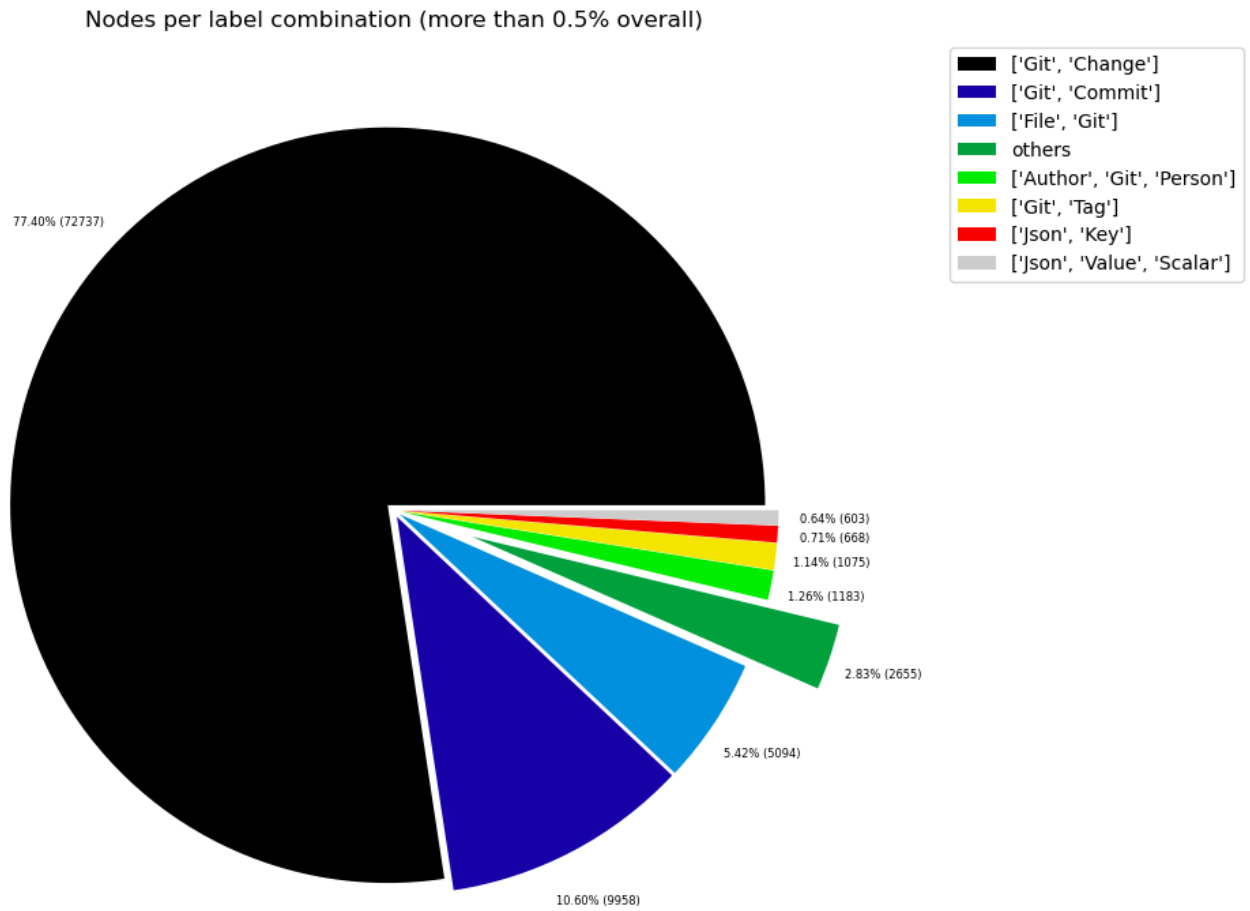


Table 1b - Lowest node count by label combination

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	0.001064
1	[File, TS, Scan]	1	0.001064
2	[TS, Method]	1	0.001064
3	[Value, TS, ObjectMember]	1	0.001064
4	[TS, Constructor]	1	0.001064
5	[TS, Class]	1	0.001064
6	[TS, Enum]	2	0.002128
7	[Value, Object, TS]	3	0.003192
8	[Type, TS, Tuple, ExternalType]	3	0.003192
9	[Value, TS, Function]	4	0.004257
10	[TS, TypeParameter]	4	0.004257
11	[Value, TS, Complex]	5	0.005321
12	[NPM, Engine]	6	0.006385
13	[Project, TS]	6	0.006385
14	[File, Local]	6	0.006385
15	[Value, TS, Call]	6	0.006385
16	[Value, TS, Member]	6	0.006385
17	[File, TS, Local, Module]	6	0.006385
18	[Type, TS, TypeParameterReference, ExternalType]	6	0.006385
19	[TS, EnumMember]	8	0.008513
20	[Type, TS, NotIdentified, ExternalType]	11	0.011705
21	[Json, Value, Array]	12	0.012770
22	[Value, TS, Declared]	13	0.013834
23	[TS, TypeAlias]	14	0.014898
24	[File, Directory, Local]	16	0.017026
25	[Type, TS, Intersection, ExternalType]	17	0.018090
26	[TS, Interface]	18	0.019154
27	[jQAssistant, Rule, Concept]	19	0.020219
28	[Value, TS, Literal]	20	0.021283
29	[TS, Variable]	24	0.025539

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)

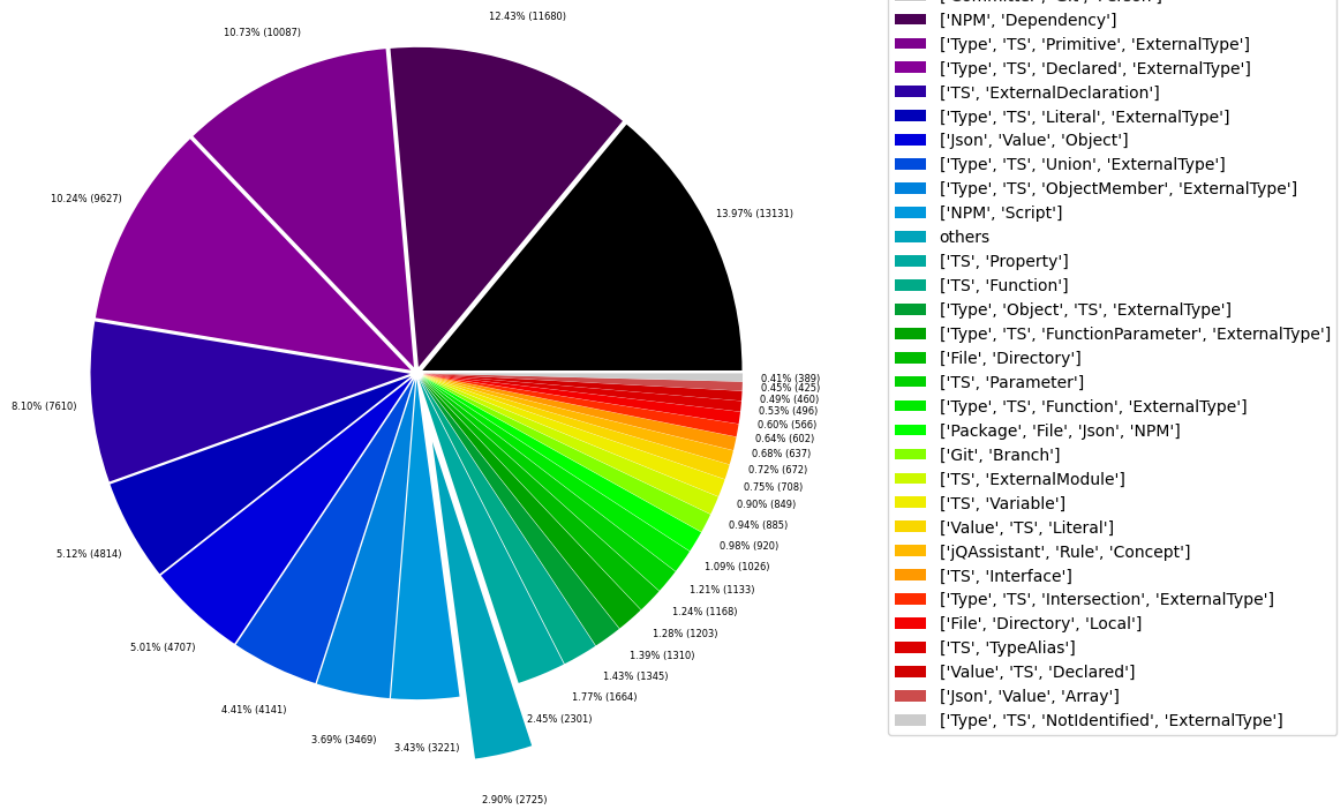


Table 1c - Highest node count by single label

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.

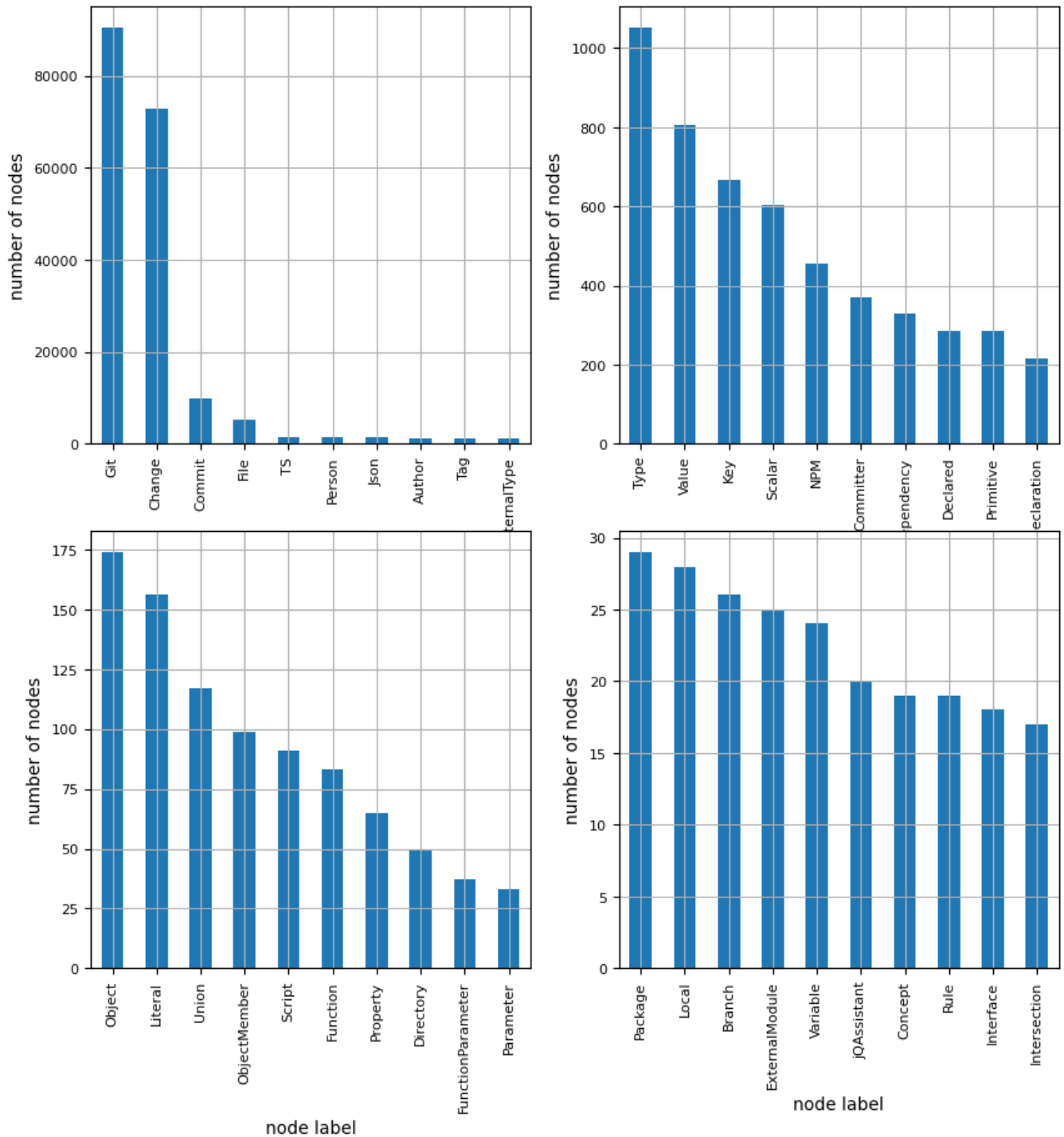
	nodeLabel	nodesWithThatLabel	nodesWithThatLabelPercent
0	Git	90444	96.244666
1	Change	72737	77.402020
2	Commit	9958	10.596661
3	File	5186	5.518606
4	TS	1581	1.682398
5	Person	1554	1.653666
6	Json	1445	1.537676
7	Author	1183	1.258872
8	Tag	1075	1.143946
9	ExternalType	1052	1.119470
10	Type	1052	1.119470
11	Value	806	0.857693
12	Key	668	0.710842
13	Scalar	603	0.641674
14	NPM	456	0.485246
15	Committer	371	0.394794
16	Dependency	330	0.351165
17	Declared	285	0.303279
18	Primitive	285	0.303279
19	ExternalDeclaration	215	0.228789
20	Object	174	0.185160
21	Literal	156	0.166005
22	Union	117	0.124504
23	ObjectMember	99	0.105349
24	Script	91	0.096836
25	Function	83	0.088323
26	Property	65	0.069169
27	Directory	50	0.053207
28	FunctionParameter	37	0.039373
29	Parameter	33	0.035116
30	Package	29	0.030860
31	Local	28	0.029796
32	Branch	26	0.027668
33	ExternalModule	25	0.026603
34	Variable	24	0.025539
35	jqAssistant	20	0.021283
36	Concept	19	0.020219
37	Rule	19	0.020219
38	Interface	18	0.019154
39	Intersection	17	0.018090

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: 262257

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONTAINS_CHANGE	72737	27.735008
1	MODIFIES	72737	27.735008
2	UPDATES	48744	18.586349
3	COMMITTED	19916	7.594078
4	CREATES	16779	6.397923
5	HAS_PARENT	10967	4.181776
6	DELETES	9955	3.795895
7	RENAMES	2741	1.045158
8	HAS_NEW_NAME	1560	0.594836
9	ON_COMMIT	1075	0.409903
10	DEPENDS_ON	962	0.366816
11	HAS_KEY	668	0.254712
12	HAS_VALUE	668	0.254712
13	CONTAINS	589	0.224589
14	OF_TYPE	329	0.125449
15	EXPORTS	275	0.104859
16	REFERENCES	196	0.074736
17	DECLARES	185	0.070541
18	DECLARES_DEV_DEPENDENCY	169	0.064441
19	DECLARES_DEPENDENCY	161	0.061390
20	HAS_MEMBER	99	0.037749
21	HAS_TYPE_ARGUMENT	92	0.035080
22	DECLARES_SCRIPT	91	0.034699
23	RESOLVES_TO	80	0.030504
24	RETURNS	80	0.030504
25	HAS_PARAMETER	70	0.026691
26	CONTAINS_VALUE	51	0.019447
27	COPIES	43	0.016396
28	INITIALIZED_WITH	32	0.012202
29	COPY_OF	28	0.010677

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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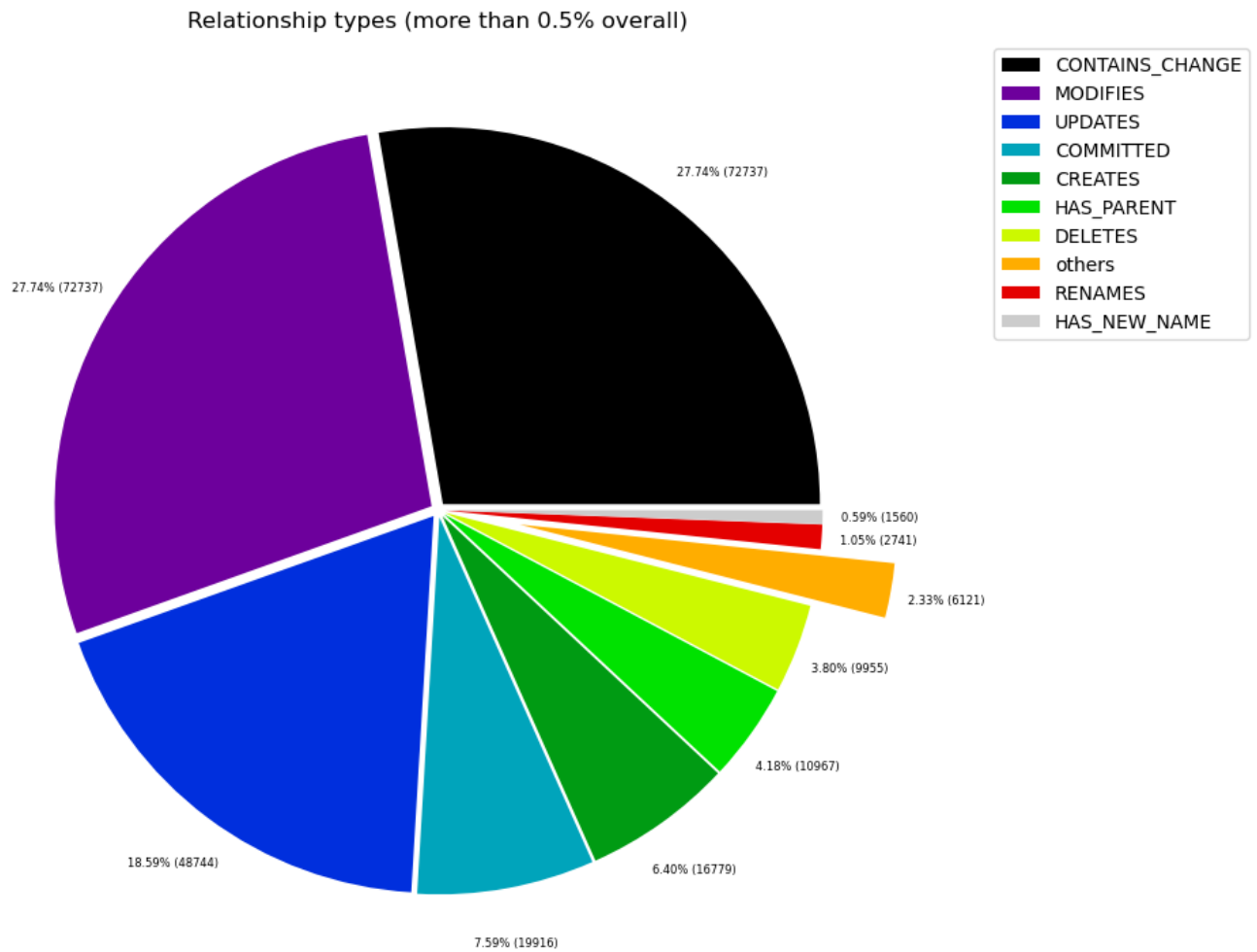


Table 2b - Lowest relationship count by type

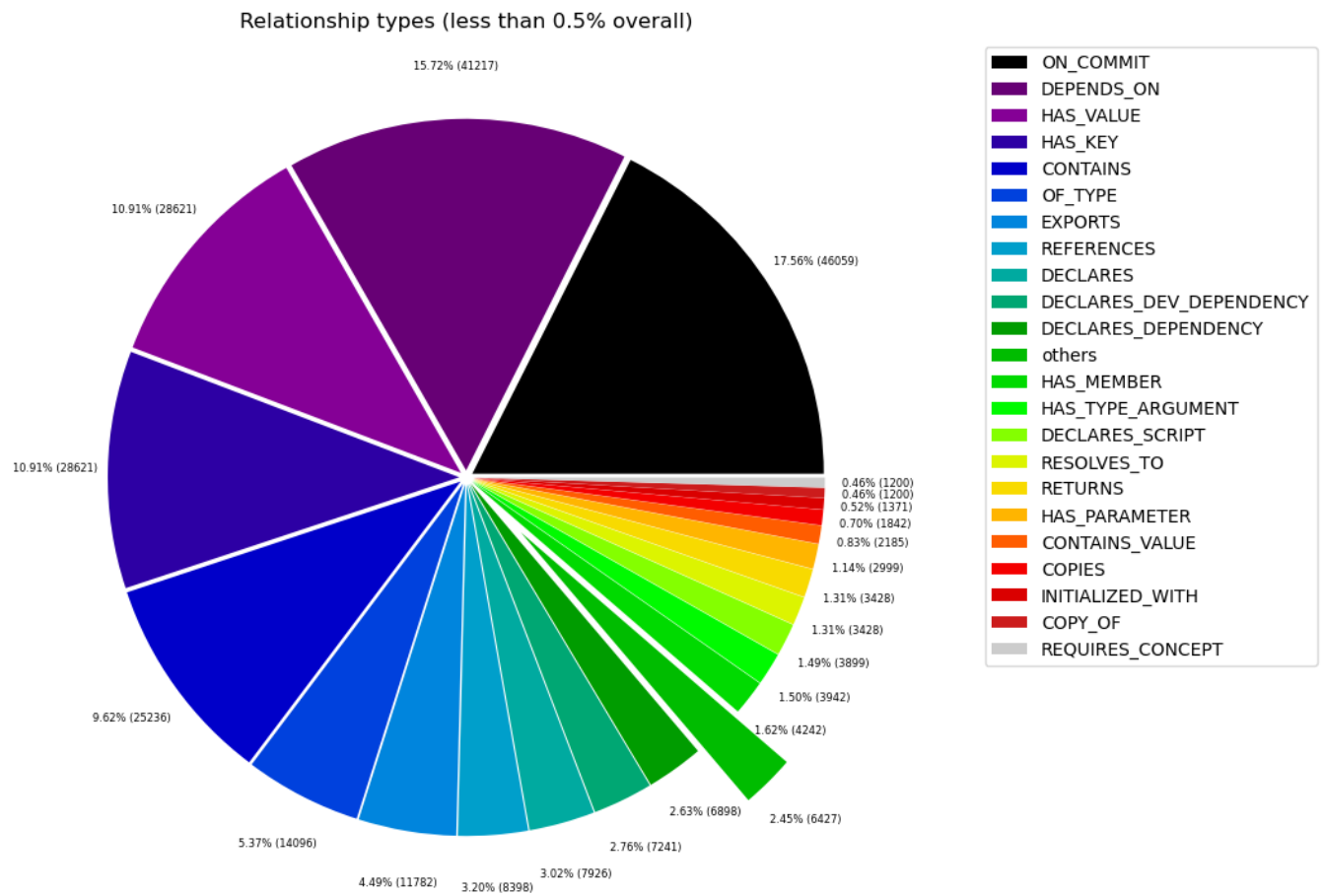
Lists the 30 relationships type with the lowest number of occurrences up to 0.5% of the total node count. This is essentially breaking down the "others" slice from the chart above.

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONSTRAINED_BY	4	0.001525
1	REFERENCED_PROJECTS	5	0.001907
2	MEMBER	6	0.002288
3	HAS_ROOT	6	0.002288
4	HAS_NPM_PACKAGE	6	0.002288
5	HAS_CONFIG	6	0.002288
6	HAS_ARGUMENT	6	0.002288
7	DECLARES_ENGINE	6	0.002288
8	CONTAINS_PROJECT	6	0.002288
9	CALLS	6	0.002288
10	PARENT	6	0.002288
11	EXTENDS	7	0.002669
12	SIMILAR	10	0.003813
13	INCLUDES_CONCEPT	19	0.007245
14	USES	25	0.009533
15	HAS_HEAD	26	0.009914
16	REQUIRES_CONCEPT	28	0.010677
17	COPY_OF	28	0.010677
18	INITIALIZED_WITH	32	0.012202
19	COPIES	43	0.016396
20	CONTAINS_VALUE	51	0.019447
21	HAS_PARAMETER	70	0.026691
22	RETURNS	80	0.030504
23	RESOLVES_TO	80	0.030504
24	DECLARES_SCRIPT	91	0.034699
25	HAS_TYPE_ARGUMENT	92	0.035080
26	HAS_MEMBER	99	0.037749
27	DECLARES_DEPENDENCY	161	0.061390
28	DECLARES_DEV_DEPENDENCY	169	0.064441
29	DECLARES	185	0.070541

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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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 ¹
0	[Git, Commit]	CONTAINS_CHANGE	[Git, Change]	72737	9958	
1	[Git, Change]	MODIFIES	[File, Git]	72737	72737	
2	[Git, Change]	UPDATES	[File, Git]	48744	72737	
3	[Git, Change]	CREATES	[File, Git]	16779	72737	
4	[Git, Commit]	HAS_PARENT	[Git, Commit]	10967	9958	
5	[Author, Git, Person]	COMMITTED	[Git, Commit]	9958	1183	
6	[Committer, Git, Person]	COMMITTED	[Git, Commit]	9958	371	
7	[Git, Change]	DELETES	[File, Git]	9955	72737	
8	[Git, Change]	RENAMES	[File, Git]	2741	72737	
9	[File, Git]	HAS_NEW_NAME	[File, Git]	1560	5094	
10	[Git, Tag]	ON_COMMIT	[Git, Commit]	1075	1075	
11	[Json, Value, Object]	HAS_KEY	[Json, Key]	668	133	
12	[Json, Key]	HAS_VALUE	[Json, Value, Scalar]	552	668	
13	[TS, Function]	DEPENDS_ON	[TS, ExternalDeclaration]	285	47	
14	[TS, ExternalModule]	EXPORTS	[TS, ExternalDeclaration]	215	25	
15	[Package, File, Json, NPM]	DECLARES_DEV_DEPENDENCY	[NPM, Dependency]	169	29	
16	[Package, File, Json, NPM]	DECLARES_DEPENDENCY	[NPM, Dependency]	161	29	
17	[File, TS, Local, Module, Mark4ModuleWeaklyCon...]	DEPENDS_ON	[TS, ExternalDeclaration]	152	2	
18	[Type, TS, Union, ExternalType]	CONTAINS	[Type, TS, Primitive, ExternalType]	144	117	
19	[Type, TS, Declared, ExternalType]	REFERENCES	[TS, ExternalDeclaration]	141	272	
20	[TS, Function]	DEPENDS_ON	[TS, ExternalModule]	131	47	
21	[Type, TS, Union, ExternalType]	CONTAINS	[Type, TS, Literal, ExternalType]	119	117	
22	[Json, Key]	HAS_VALUE	[Json, Value, Object]	104	668	
23	[Type, Object, TS, ExternalType]	HAS_MEMBER	[Type, TS, ObjectMember, ExternalType]	98	38	
24	[Package, File, Json, NPM]	DECLARES_SCRIPT	[NPM, Script]	91	29	
25	[Type, TS, Union, ExternalType]	CONTAINS	[Type, TS, Declared, ExternalType]	69	117	
26	[File, Directory]	CONTAINS	[File, Directory]	63	34	
27	[TS, Interface]	DECLARES	[TS, Property]	61	18	
28	[File, Directory]	CONTAINS	[Package, File, Json, NPM]	58	34	
29	[File, Git]	RESOLVES_TO	[Package, File, Json, NPM]	57	5094	

Graph Density

total_number_of_nodes (vertices): 93973

total_number_of_relationships (edges): 262257

-> total directed graph density: 2.9697885425084462e-05

-> total directed graph density in percent: 0.0029697885425084463