

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: 92791

	nodeLabels	nodesWithThatLabels	nodesWithThatLabelsPercent
0	[Git, Change]	71722	77.294134
1	[Git, Commit]	9845	10.609865
2	[File, Git]	5049	5.441260
3	[Author, Git, Person]	1181	1.272753
4	[Git, Tag]	1048	1.129420
5	[Json, Key]	668	0.719897
6	[Json, Value, Scalar]	603	0.649848
7	[Committer, Git, Person]	371	0.399823
8	[NPM, Dependency]	330	0.355638
9	[Type, TS, Primitive, ExternalType]	291	0.313608
10	[Type, TS, Declared, ExternalType]	286	0.308220
11	[TS, ExternalDeclaration]	211	0.227393
12	[Type, TS, Literal, ExternalType]	136	0.146566
13	[Json, Value, Object]	133	0.143333
14	[Type, TS, Union, ExternalType]	120	0.129323
15	[Type, TS, ObjectMember, ExternalType]	98	0.105614
16	[NPM, Script]	91	0.098070
17	[TS, Property]	65	0.070050
18	[TS, Function]	47	0.050651
19	[Type, Object, TS, ExternalType]	38	0.040952
20	[Type, TS, FunctionParameter, ExternalType]	38	0.040952
21	[File, Directory]	34	0.036641
22	[TS, Parameter]	33	0.035564
23	[Type, TS, Function, ExternalType]	33	0.035564
24	[Package, File, Json, NPM]	29	0.031253
25	[TS, ExternalModule]	25	0.026942
26	[Git, Branch]	25	0.026942
27	[TS, Variable]	24	0.025865
28	[Value, TS, Literal]	20	0.021554
29	[jqAssistant, Rule, Concept]	19	0.020476

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>

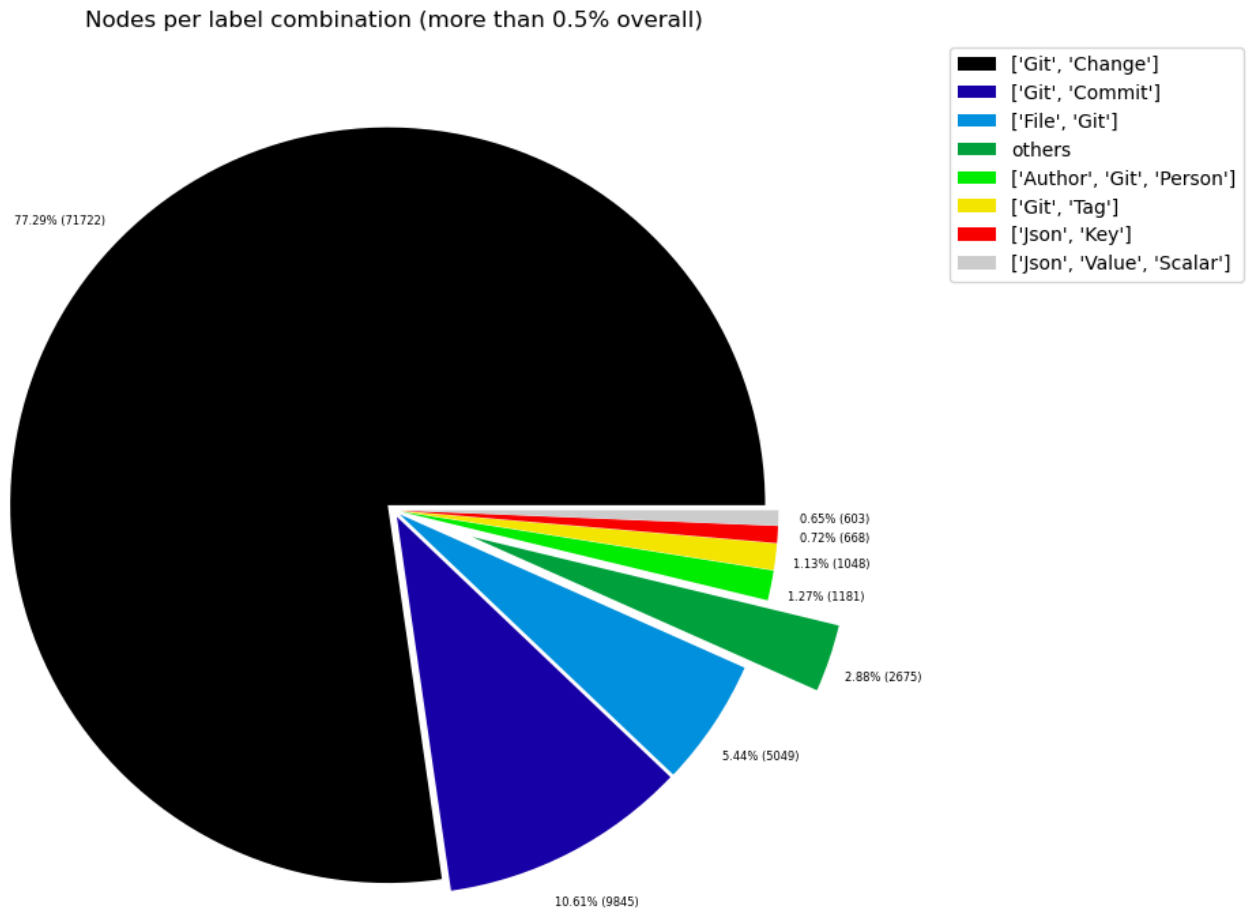


Table 1b - Lowest node count by label combination

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	0.001078
1	[File, TS, Scan]	1	0.001078
2	[TS, Method]	1	0.001078
3	[Value, TS, ObjectMember]	1	0.001078
4	[TS, Constructor]	1	0.001078
5	[TS, Class]	1	0.001078
6	[TS, Enum]	2	0.002155
7	[Value, Object, TS]	3	0.003233
8	[Type, TS, Tuple, ExternalType]	3	0.003233
9	[Value, TS, Function]	4	0.004311
10	[TS, TypeParameter]	4	0.004311
11	[Value, TS, Complex]	5	0.005388
12	[NPM, Engine]	6	0.006466
13	[Project, TS]	6	0.006466
14	[File, Local]	6	0.006466
15	[Value, TS, Call]	6	0.006466
16	[Value, TS, Member]	6	0.006466
17	[File, TS, Local, Module]	6	0.006466
18	[Type, TS, TypeParameterReference, ExternalType]	6	0.006466
19	[TS, EnumMember]	8	0.008622
20	[Type, TS, NotIdentified, ExternalType]	11	0.011855
21	[Json, Value, Array]	12	0.012932
22	[Value, TS, Declared]	13	0.014010
23	[TS, TypeAlias]	14	0.015088
24	[File, Directory, Local]	16	0.017243
25	[Type, TS, Intersection, ExternalType]	17	0.018321
26	[TS, Interface]	18	0.019398
27	[jQAssistant, Rule, Concept]	19	0.020476
28	[Value, TS, Literal]	20	0.021554
29	[TS, Variable]	24	0.025865

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)

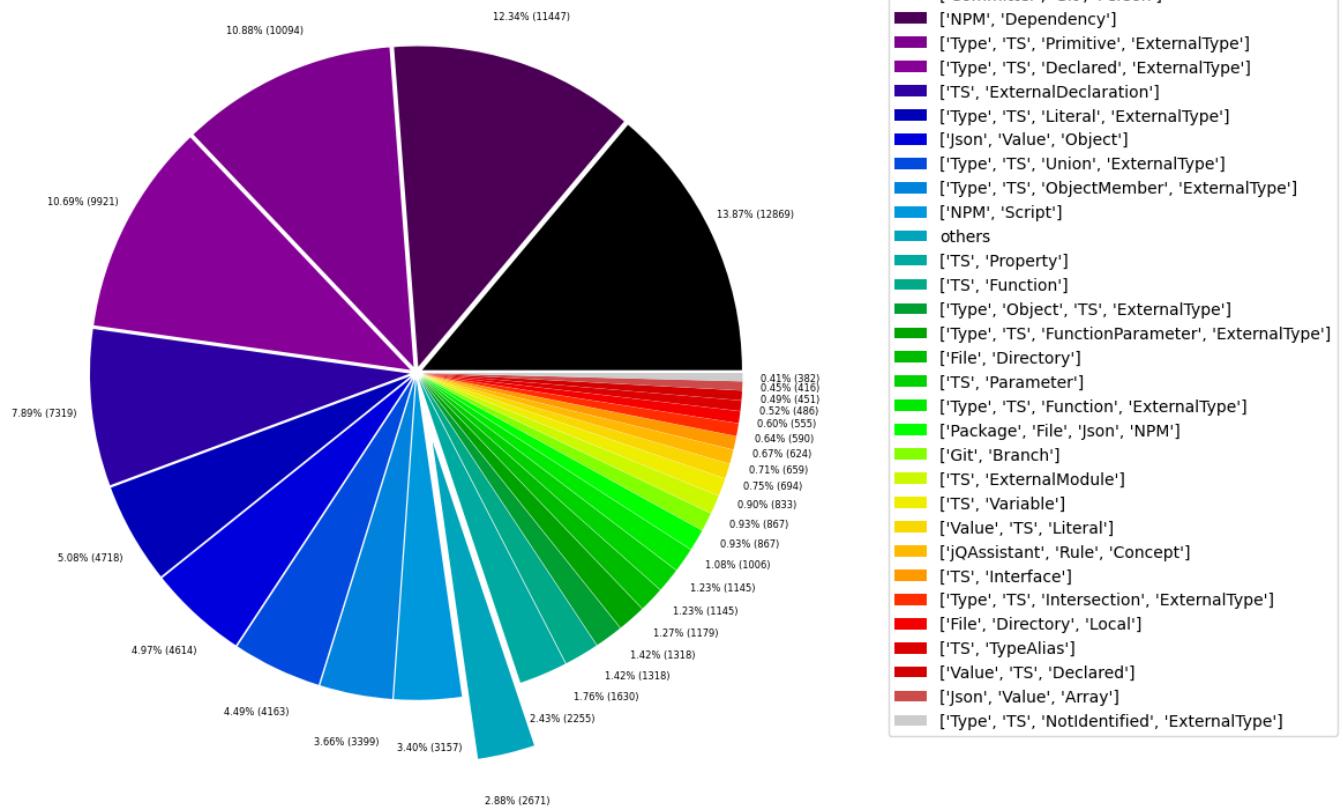


Table 1c - Highest node count by single label

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.

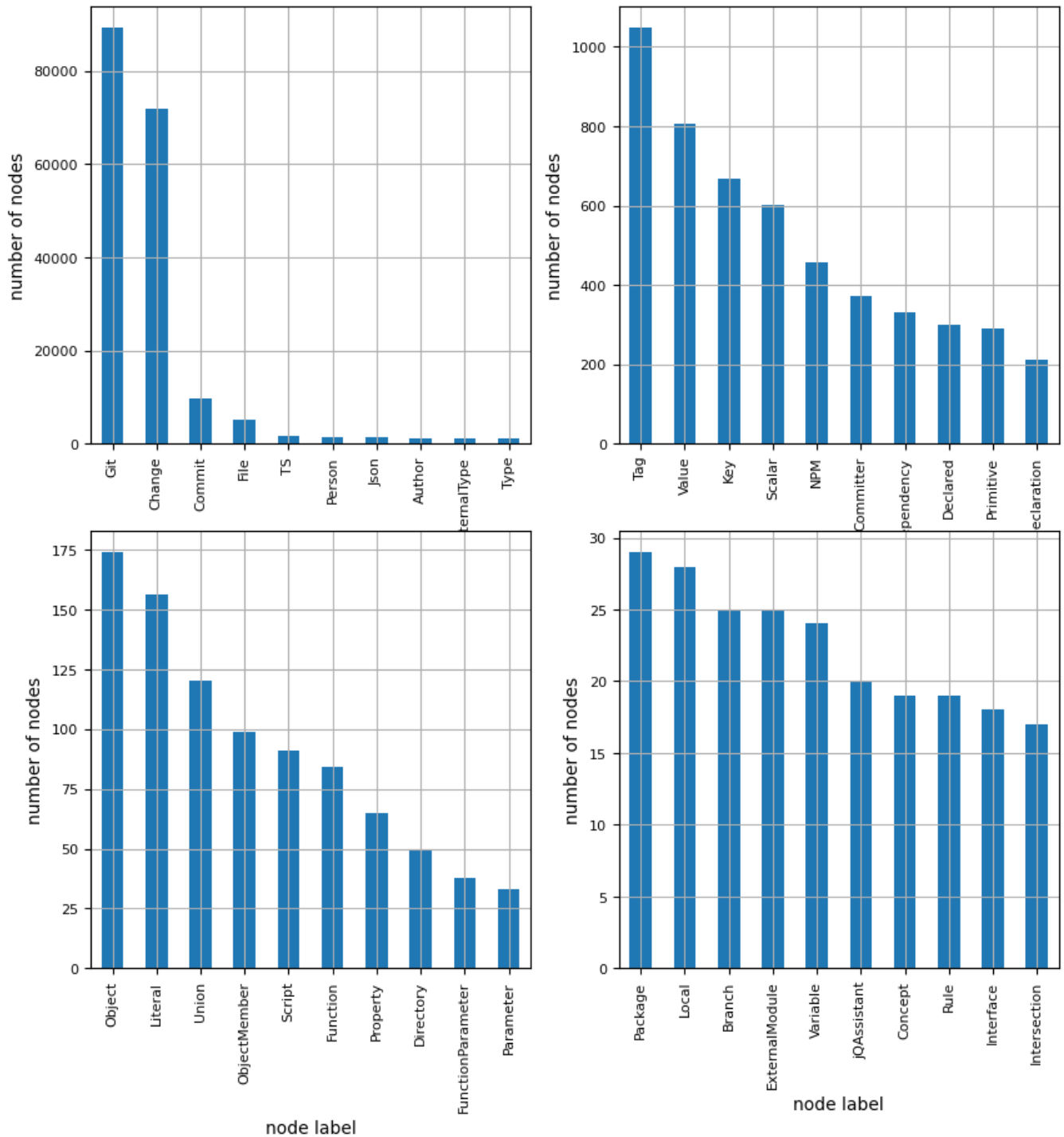
	nodeLabel	nodesWithThatLabel	nodesWithThatLabelPercent
0	Git	89241	96.174198
1	Change	71722	77.294134
2	Commit	9845	10.609865
3	File	5141	5.540408
4	TS	1602	1.726461
5	Person	1552	1.672576
6	Json	1445	1.557263
7	Author	1181	1.272753
8	ExternalType	1077	1.160673
9	Type	1077	1.160673
10	Tag	1048	1.129420
11	Value	806	0.868619
12	Key	668	0.719897
13	Scalar	603	0.649848
14	NPM	456	0.491427
15	Committer	371	0.399823
16	Dependency	330	0.355638
17	Declared	299	0.322230
18	Primitive	291	0.313608
19	ExternalDeclaration	211	0.227393
20	Object	174	0.187518
21	Literal	156	0.168120
22	Union	120	0.129323
23	ObjectMember	99	0.106691
24	Script	91	0.098070
25	Function	84	0.090526
26	Property	65	0.070050
27	Directory	50	0.053885
28	FunctionParameter	38	0.040952
29	Parameter	33	0.035564
30	Package	29	0.031253
31	Local	28	0.030175
32	Branch	25	0.026942
33	ExternalModule	25	0.026942
34	Variable	24	0.025865
35	jqAssistant	20	0.021554
36	Concept	19	0.020476
37	Rule	19	0.020476
38	Interface	18	0.019398
39	Intersection	17	0.018321

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



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: 258735

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONTAINS_CHANGE	71722	27.720254
1	MODIFIES	71722	27.720254
2	UPDATES	47874	18.503102
3	COMMITTED	19690	7.610103
4	CREATES	16664	6.440567
5	HAS_PARENT	10840	4.189615
6	DELETES	9889	3.822057
7	RENAMES	2705	1.045471
8	HAS_NEW_NAME	1543	0.596363
9	ON_COMMIT	1048	0.405048
10	DEPENDS_ON	953	0.368331
11	HAS_KEY	668	0.258179
12	HAS_VALUE	668	0.258179
13	CONTAINS	604	0.233443
14	OF_TYPE	330	0.127544
15	EXPORTS	271	0.104740
16	REFERENCES	198	0.076526
17	DECLARES	185	0.071502
18	DECLARES_DEV_DEPENDENCY	169	0.065318
19	DECLARES_DEPENDENCY	161	0.062226
20	HAS_MEMBER	99	0.038263
21	HAS_TYPE_ARGUMENT	99	0.038263
22	DECLARES_SCRIPT	91	0.035171
23	RETURNS	81	0.031306
24	RESOLVES_TO	80	0.030920
25	HAS_PARAMETER	71	0.027441
26	CONTAINS_VALUE	51	0.019711
27	INITIALIZED_WITH	32	0.012368
28	COPIES	29	0.011208
29	REQUIRES_CONCEPT	28	0.010822

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>

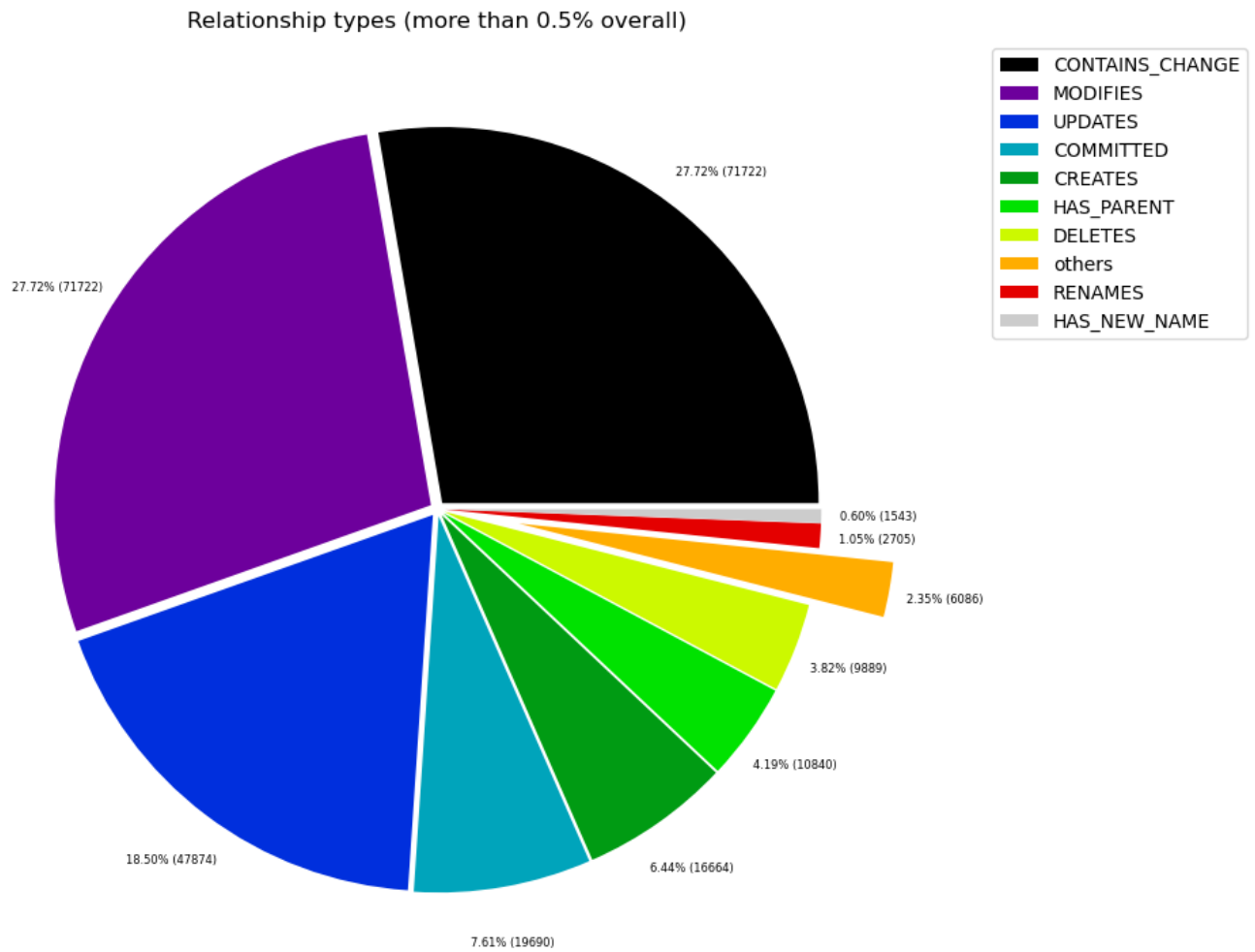


Table 2b - Lowest relationship count by type

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.

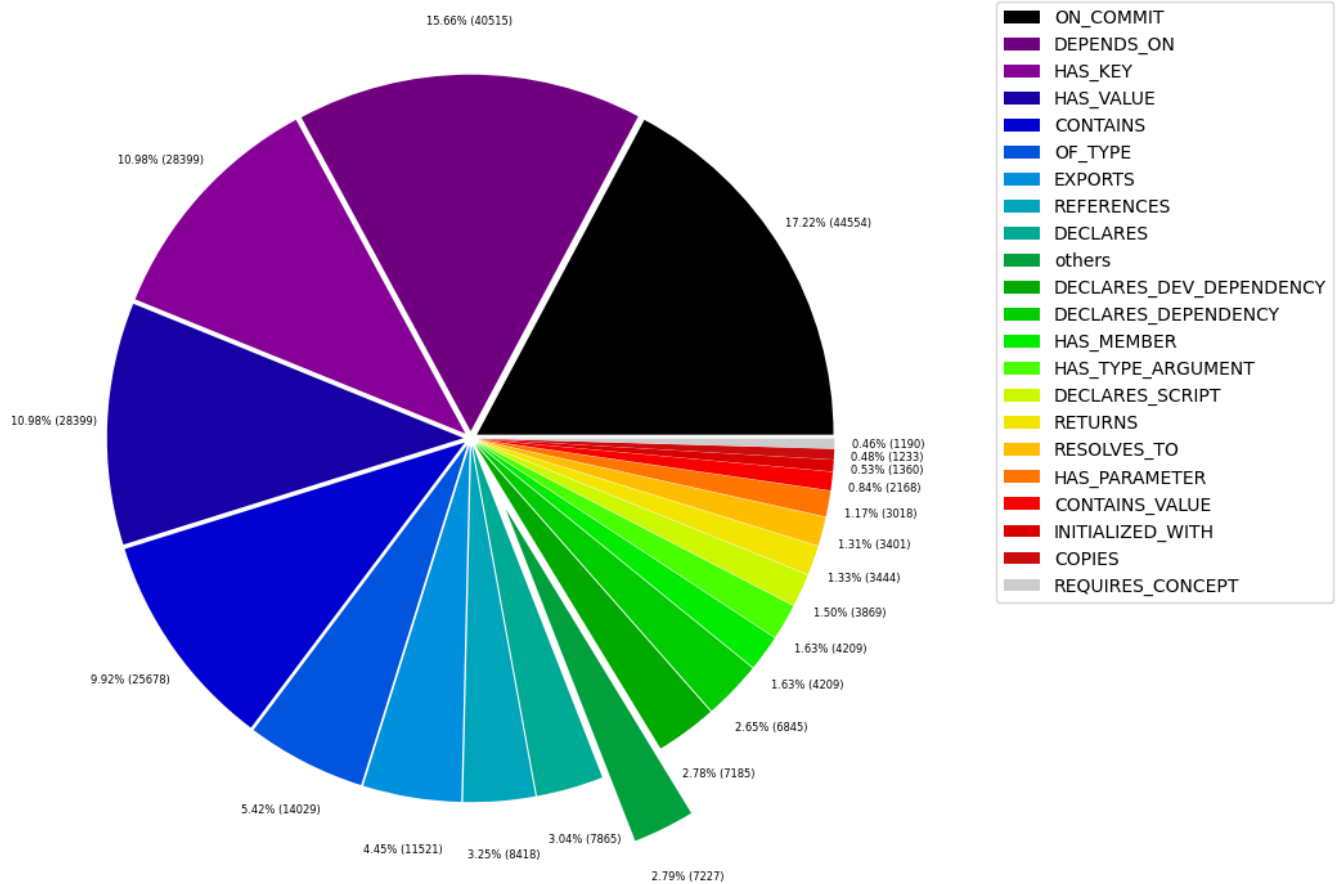
	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONSTRAINED_BY	4	0.001546
1	REFERENCED_PROJECTS	5	0.001932
2	MEMBER	6	0.002319
3	HAS_ROOT	6	0.002319
4	HAS_NPM_PACKAGE	6	0.002319
5	HAS_CONFIG	6	0.002319
6	HAS_ARGUMENT	6	0.002319
7	DECLARES_ENGINE	6	0.002319
8	CONTAINS_PROJECT	6	0.002319
9	CALLS	6	0.002319
10	PARENT	6	0.002319
11	EXTENDS	7	0.002705
12	SIMILAR	10	0.003865
13	INCLUDES_CONCEPT	19	0.007343
14	COPY_OF	21	0.008116
15	USES	25	0.009662
16	HAS_HEAD	25	0.009662
17	REQUIRES_CONCEPT	28	0.010822
18	COPIES	29	0.011208
19	INITIALIZED_WITH	32	0.012368
20	CONTAINS_VALUE	51	0.019711
21	HAS_PARAMETER	71	0.027441
22	RESOLVES_TO	80	0.030920
23	RETURNS	81	0.031306
24	DECLARES_SCRIPT	91	0.035171
25	HAS_TYPE_ARGUMENT	99	0.038263
26	HAS_MEMBER	99	0.038263
27	DECLARES_DEPENDENCY	161	0.062226
28	DECLARES_DEV_DEPENDENCY	169	0.065318
29	DECLARES	185	0.071502

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>

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, Commit]	CONTAINS_CHANGE	[Git, Change]	71722		9845
1	[Git, Change]	MODIFIES	[File, Git]	71722		71722
2	[Git, Change]	UPDATES	[File, Git]	47874		71722
3	[Git, Change]	CREATES	[File, Git]	16664		71722
4	[Git, Commit]	HAS_PARENT	[Git, Commit]	10840		9845
5	[Git, Change]	DELETES	[File, Git]	9889		71722
6	[Author, Git, Person]	COMMITTED	[Git, Commit]	9845		1181
7	[Committer, Git, Person]	COMMITTED	[Git, Commit]	9845		371
8	[Git, Change]	RENAMES	[File, Git]	2705		71722
9	[File, Git]	HAS_NEW_NAME	[File, Git]	1543		5049
10	[Git, Tag]	ON_COMMIT	[Git, Commit]	1048		1048
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]	280		47
14	[TS, ExternalModule]	EXPORTS	[TS, ExternalDeclaration]	211		25
15	[File, TS, Local, Module, Mark4ModuleWeaklyCon...	DEPENDS_ON	[TS, ExternalDeclaration]	188		3
16	[Package, File, Json, NPM]	DECLARES_DEV_DEPENDENCY	[NPM, Dependency]	169		29
17	[Package, File, Json, NPM]	DECLARES_DEPENDENCY	[NPM, Dependency]	161		29
18	[Type, TS, Union, ExternalType]	CONTAINS	[Type, TS, Primitive, ExternalType]	149		120
19	[Type, TS, Declared, ExternalType]	REFERENCES	[TS, ExternalDeclaration]	139		286
20	[TS, Function]	DEPENDS_ON	[TS, ExternalModule]	129		47
21	[Type, TS, Union, ExternalType]	CONTAINS	[Type, TS, Literal, ExternalType]	119		120
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]	78		120
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		5049

Graph Density

total_number_of_nodes (vertices): 92791

total_number_of_relationships (edges): 258735

-> total directed graph density: 3.005025428988939e-05

-> total directed graph density in percent: 0.003005025428988939