

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: 92861

	nodeLabels	nodesWithThatLabels	nodesWithThatLabelsPercent
0	[Git, Change]	71781	77.299404
1	[Git, Commit]	9851	10.608329
2	[File, Git]	5051	5.439313
3	[Author, Git, Person]	1182	1.272870
4	[Git, Tag]	1049	1.129645
5	[Json, Key]	668	0.719355
6	[Json, Value, Scalar]	603	0.649358
7	[Committer, Git, Person]	371	0.399522
8	[NPM, Dependency]	330	0.355370
9	[Type, TS, Primitive, ExternalType]	291	0.313372
10	[Type, TS, Declared, ExternalType]	286	0.307987
11	[TS, ExternalDeclaration]	211	0.227221
12	[Type, TS, Literal, ExternalType]	136	0.146455
13	[Json, Value, Object]	133	0.143225
14	[Type, TS, Union, ExternalType]	120	0.129225
15	[Type, TS, ObjectMember, ExternalType]	98	0.105534
16	[NPM, Script]	91	0.097996
17	[TS, Property]	65	0.069997
18	[TS, Function]	47	0.050613
19	[Type, Object, TS, ExternalType]	38	0.040921
20	[Type, TS, FunctionParameter, ExternalType]	38	0.040921
21	[File, Directory]	34	0.036614
22	[TS, Parameter]	33	0.035537
23	[Type, TS, Function, ExternalType]	33	0.035537
24	[Package, File, Json, NPM]	29	0.031229
25	[Git, Branch]	26	0.027999
26	[TS, ExternalModule]	25	0.026922
27	[TS, Variable]	24	0.025845
28	[Value, TS, Literal]	20	0.021538
29	[jqAssistant, Rule, Concept]	19	0.020461

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)

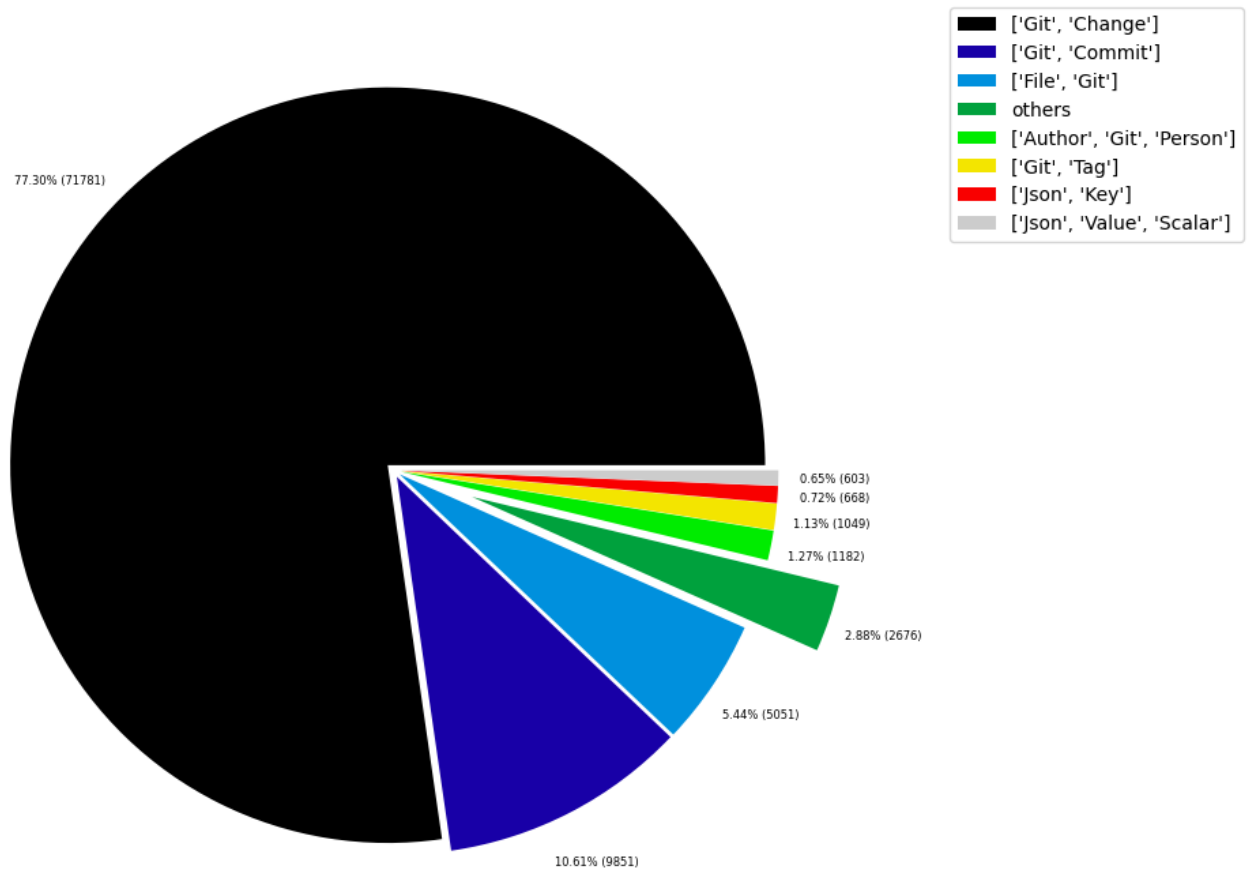


Table 1b - Lowest node count by label combination

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	0.001077
1	[File, TS, Scan]	1	0.001077
2	[TS, Method]	1	0.001077
3	[Value, TS, ObjectMember]	1	0.001077
4	[TS, Constructor]	1	0.001077
5	[TS, Class]	1	0.001077
6	[TS, Enum]	2	0.002154
7	[Value, Object, TS]	3	0.003231
8	[Type, TS, Tuple, ExternalType]	3	0.003231
9	[Value, TS, Function]	4	0.004308
10	[TS, TypeParameter]	4	0.004308
11	[Value, TS, Complex]	5	0.005384
12	[NPM, Engine]	6	0.006461
13	[Project, TS]	6	0.006461
14	[File, Local]	6	0.006461
15	[Value, TS, Call]	6	0.006461
16	[Value, TS, Member]	6	0.006461
17	[File, TS, Local, Module]	6	0.006461
18	[Type, TS, TypeParameterReference, ExternalType]	6	0.006461
19	[TS, EnumMember]	8	0.008615
20	[Type, TS, NotIdentified, ExternalType]	11	0.011846
21	[Json, Value, Array]	12	0.012923
22	[Value, TS, Declared]	13	0.013999
23	[TS, TypeAlias]	14	0.015076
24	[File, Directory, Local]	16	0.017230
25	[Type, TS, Intersection, ExternalType]	17	0.018307
26	[TS, Interface]	18	0.019384
27	[jQAssistant, Rule, Concept]	19	0.020461
28	[Value, TS, Literal]	20	0.021538
29	[TS, Variable]	24	0.025845

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)

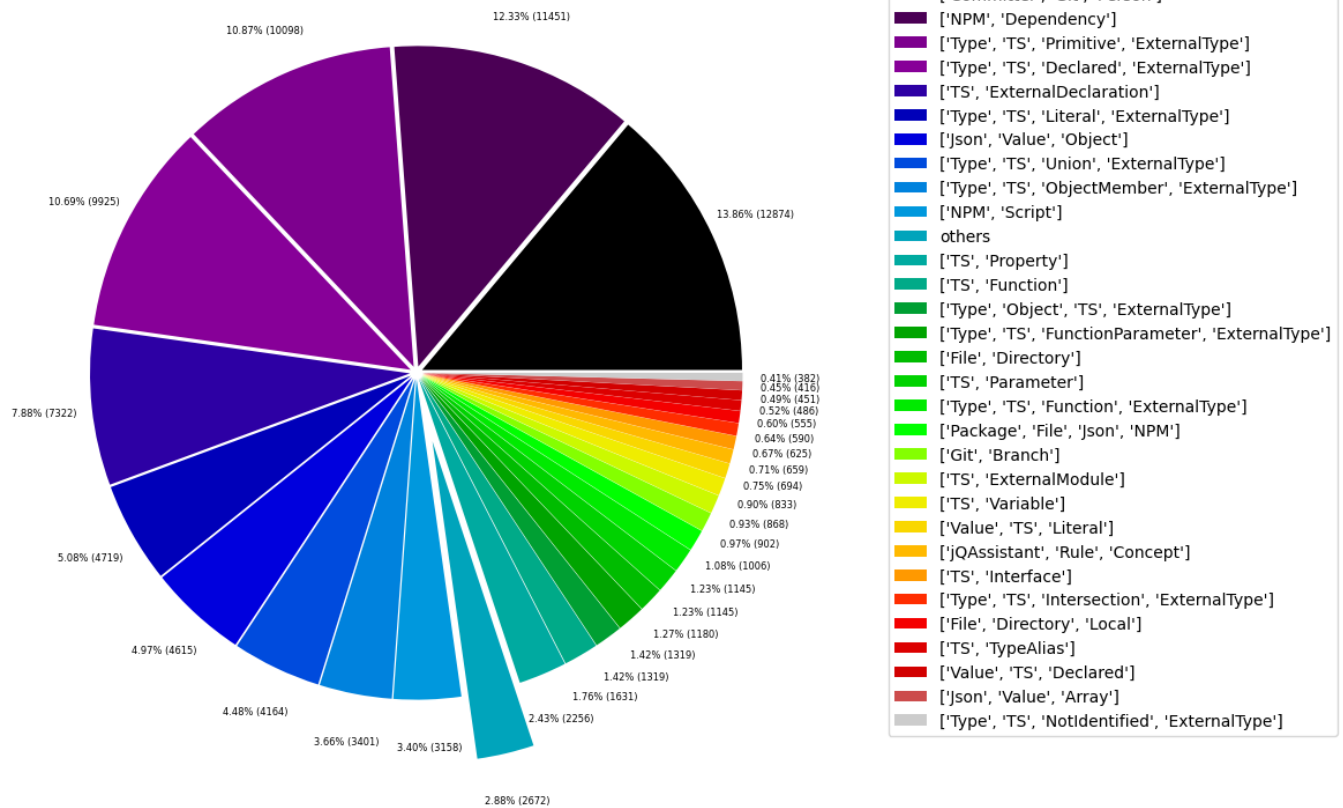


Table 1c - Highest node count by single label

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.

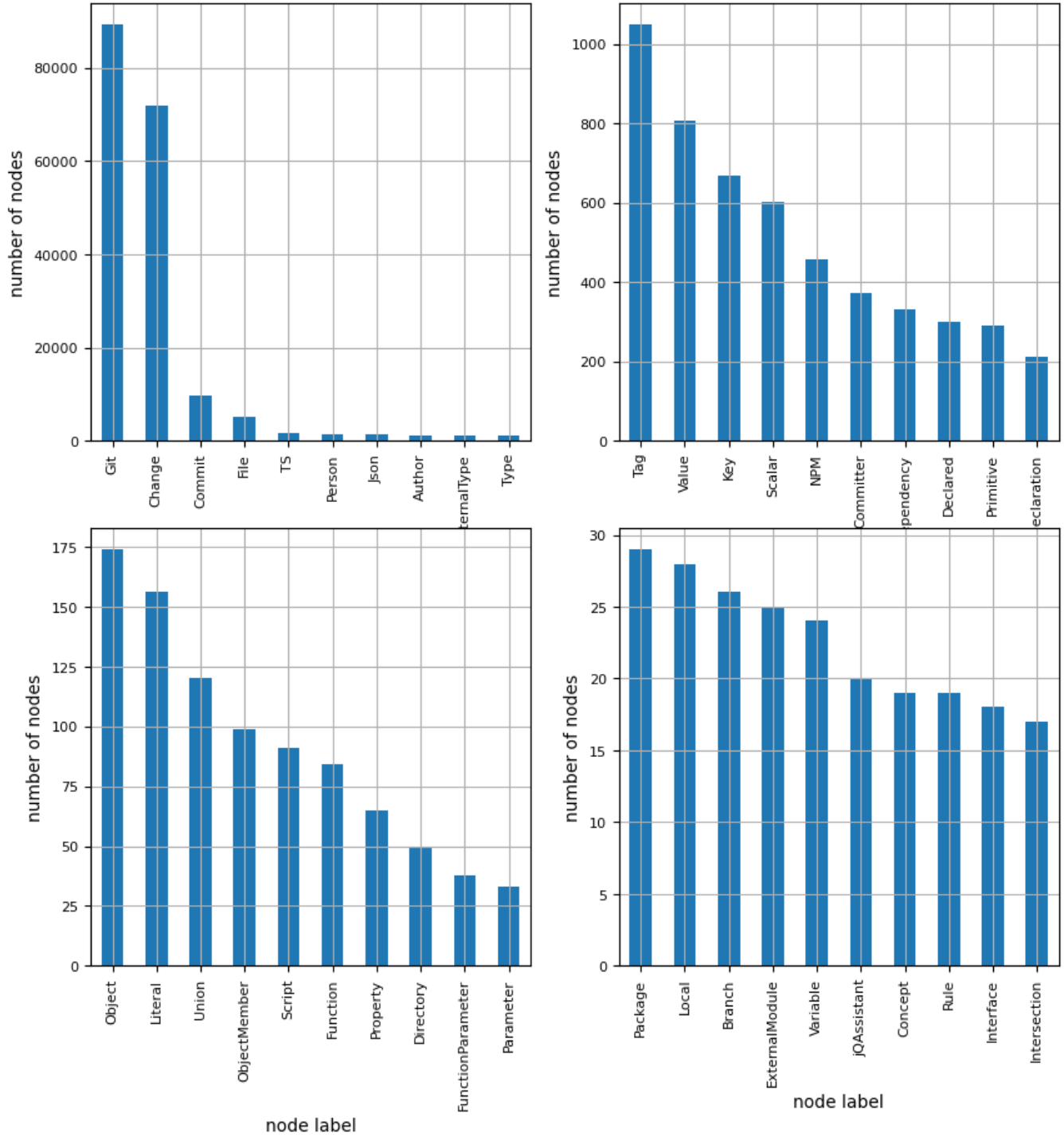
	nodeLabel	nodesWithThatLabel	nodesWithThatLabelPercent
0	Git	89311	96.177082
1	Change	71781	77.299404
2	Commit	9851	10.608329
3	File	5143	5.538385
4	TS	1602	1.725159
5	Person	1553	1.672392
6	Json	1445	1.556089
7	Author	1182	1.272870
8	ExternalType	1077	1.159798
9	Type	1077	1.159798
10	Tag	1049	1.129645
11	Value	806	0.867964
12	Key	668	0.719355
13	Scalar	603	0.649358
14	NPM	456	0.491057
15	Committer	371	0.399522
16	Dependency	330	0.355370
17	Declared	299	0.321987
18	Primitive	291	0.313372
19	ExternalDeclaration	211	0.227221
20	Object	174	0.187377
21	Literal	156	0.167993
22	Union	120	0.129225
23	ObjectMember	99	0.106611
24	Script	91	0.097996
25	Function	84	0.090458
26	Property	65	0.069997
27	Directory	50	0.053844
28	FunctionParameter	38	0.040921
29	Parameter	33	0.035537
30	Package	29	0.031229
31	Local	28	0.030153
32	Branch	26	0.027999
33	ExternalModule	25	0.026922
34	Variable	24	0.025845
35	jQAssistant	20	0.021538
36	Concept	19	0.020461
37	Rule	19	0.020461
38	Interface	18	0.019384
39	Intersection	17	0.018307

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: 258935

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONTAINS_CHANGE	71781	27.721629
1	MODIFIES	71781	27.721629
2	UPDATES	47923	18.507734
3	COMMITTED	19702	7.608859
4	CREATES	16672	6.438682
5	HAS_PARENT	10847	4.189082
6	DELETES	9892	3.820264
7	RENAMES	2706	1.045050
8	HAS_NEW_NAME	1543	0.595902
9	ON_COMMIT	1049	0.405121
10	DEPENDS_ON	953	0.368046
11	HAS_KEY	668	0.257980
12	HAS_VALUE	668	0.257980
13	CONTAINS	604	0.233263
14	OF_TYPE	330	0.127445
15	EXPORTS	271	0.104659
16	REFERENCES	198	0.076467
17	DECLARES	185	0.071447
18	DECLARES_DEV_DEPENDENCY	169	0.065267
19	DECLARES_DEPENDENCY	161	0.062178
20	HAS_MEMBER	99	0.038234
21	HAS_TYPE_ARGUMENT	99	0.038234
22	DECLARES_SCRIPT	91	0.035144
23	RETURNS	81	0.031282
24	RESOLVES_TO	80	0.030896
25	HAS_PARAMETER	71	0.027420
26	CONTAINS_VALUE	51	0.019696
27	INITIALIZED_WITH	32	0.012358
28	COPIES	29	0.011200
29	REQUIRES_CONCEPT	28	0.010814

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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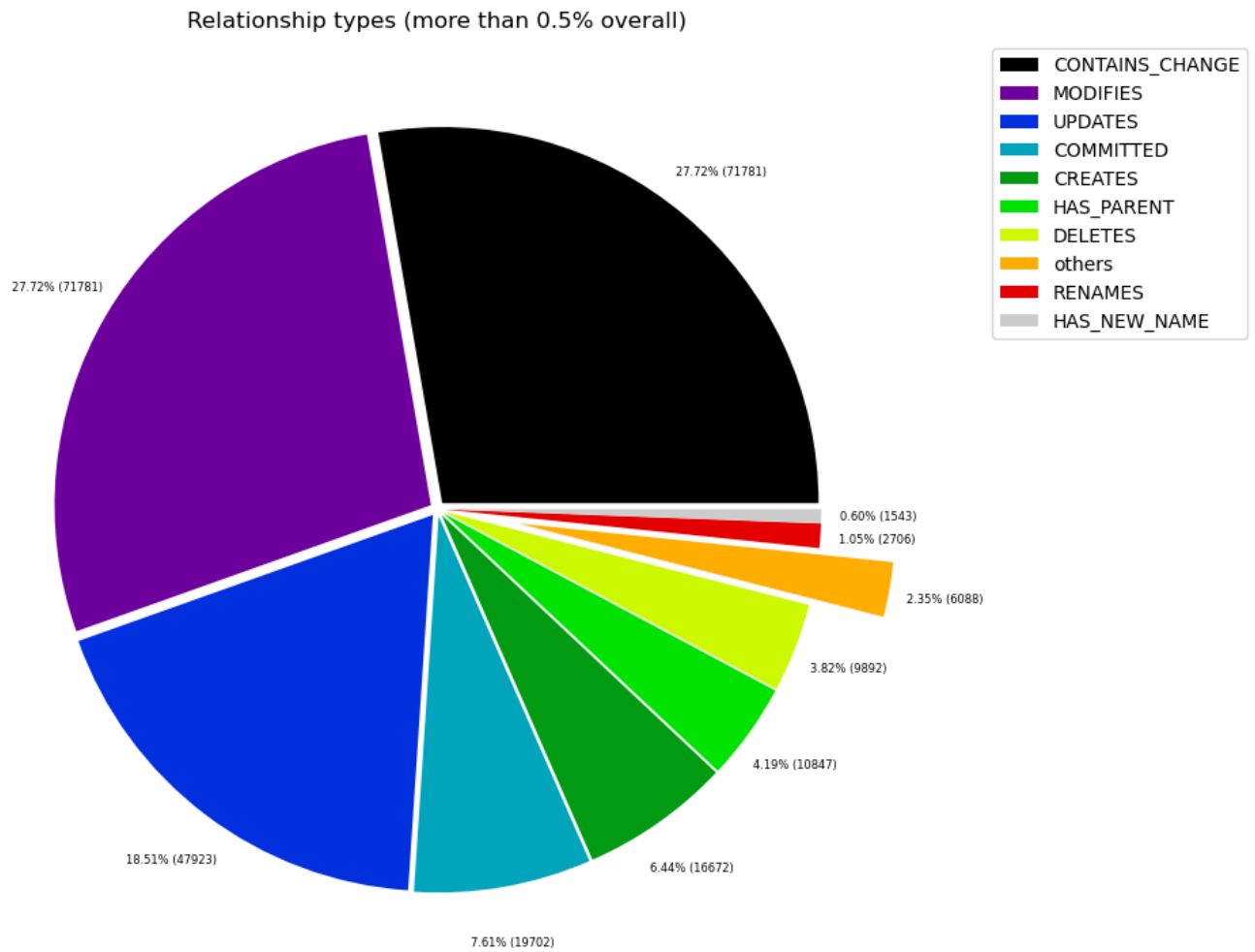


Table 2b - Lowest relationship count by type

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.

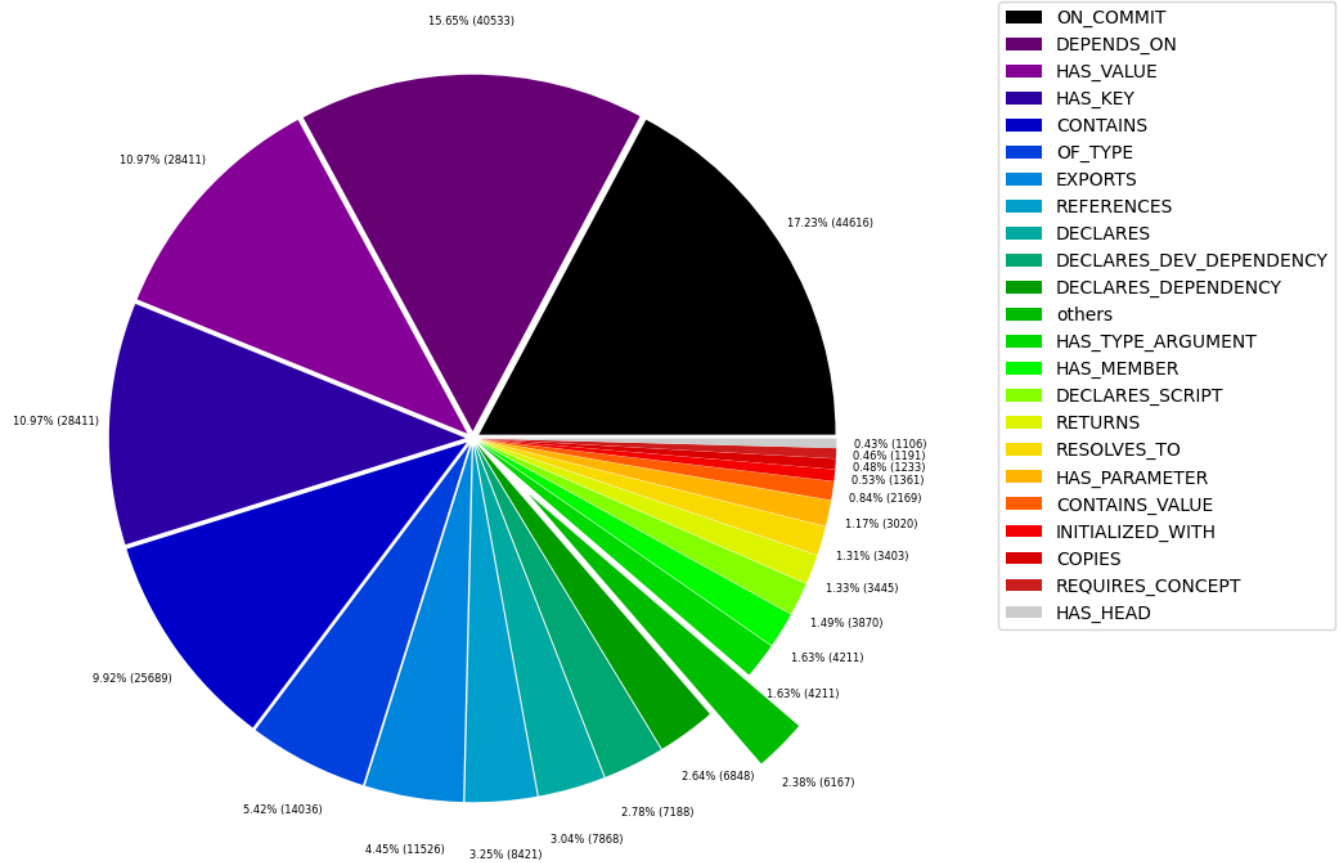
	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONSTRAINED_BY	4	0.001545
1	REFERENCED_PROJECTS	5	0.001931
2	MEMBER	6	0.002317
3	HAS_ROOT	6	0.002317
4	HAS_NPM_PACKAGE	6	0.002317
5	HAS_CONFIG	6	0.002317
6	HAS_ARGUMENT	6	0.002317
7	DECLARES_ENGINE	6	0.002317
8	CONTAINS_PROJECT	6	0.002317
9	CALLS	6	0.002317
10	PARENT	6	0.002317
11	EXTENDS	7	0.002703
12	SIMILAR	10	0.003862
13	INCLUDES_CONCEPT	19	0.007338
14	COPY_OF	21	0.008110
15	USES	25	0.009655
16	HAS_HEAD	26	0.010041
17	REQUIRES_CONCEPT	28	0.010814
18	COPIES	29	0.011200
19	INITIALIZED_WITH	32	0.012358
20	CONTAINS_VALUE	51	0.019696
21	HAS_PARAMETER	71	0.027420
22	RESOLVES_TO	80	0.030896
23	RETURNS	81	0.031282
24	DECLARES_SCRIPT	91	0.035144
25	HAS_TYPE_ARGUMENT	99	0.038234
26	HAS_MEMBER	99	0.038234
27	DECLARES_DEPENDENCY	161	0.062178
28	DECLARES_DEV_DEPENDENCY	169	0.065267
29	DECLARES	185	0.071447

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, Commit]	CONTAINS_CHANGE	[Git, Change]	71781		9851
1	[Git, Change]	MODIFIES	[File, Git]	71781		71781
2	[Git, Change]	UPDATES	[File, Git]	47923		71781
3	[Git, Change]	CREATES	[File, Git]	16672		71781
4	[Git, Commit]	HAS_PARENT	[Git, Commit]	10847		9851
5	[Git, Change]	DELETES	[File, Git]	9892		71781
6	[Author, Git, Person]	COMMITTED	[Git, Commit]	9851		1182
7	[Committer, Git, Person]	COMMITTED	[Git, Commit]	9851		371
8	[Git, Change]	RENAMES	[File, Git]	2706		71781
9	[File, Git]	HAS_NEW_NAME	[File, Git]	1543		5051
10	[Git, Tag]	ON_COMMIT	[Git, Commit]	1049		1049
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		5051

Graph Density

total_number_of_nodes (vertices): 92861

total_number_of_relationships (edges): 258935

-> total directed graph density: 3.002816005560969e-05

-> total directed graph density in percent: 0.003002816005560969