

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: 11758

	nodeLabels	nodesWithThatLabels	nodesWithThatLabelsPercent
0	[Commit, Git, Log]	5626	47.848274
1	[File, Git, Log]	3528	30.005103
2	[Author, Git, Log]	994	8.453819
3	[Type, TS, Primitive, ExternalType]	286	2.432386
4	[Type, TS, Declared, ExternalType]	276	2.347338
5	[TS, ExternalDeclaration]	209	1.777513
6	[Type, TS, Literal, ExternalType]	136	1.156659
7	[Type, TS, Union, ExternalType]	118	1.003572
8	[Type, TS, ObjectMember, ExternalType]	95	0.807961
9	[TS, Property]	65	0.552815
10	[TS, Function]	47	0.399728
11	[Type, TS, Object, ExternalType]	36	0.306175
12	[Type, TS, FunctionParameter, ExternalType]	35	0.297670
13	[TS, Parameter]	33	0.280660
14	[Type, TS, Function, ExternalType]	31	0.263650
15	[TS, ExternalModule]	25	0.212621
16	[TS, Variable]	23	0.195611
17	[TS, Literal, Value]	20	0.170097
18	[JQAssistant, Rule, Concept]	19	0.161592
19	[TS, Interface]	18	0.153087
20	[Type, TS, Intersection, ExternalType]	17	0.144582
21	[File, Directory, Local]	15	0.127573
22	[TS, TypeAlias]	14	0.119068
23	[TS, Declared, Value]	10	0.085048
24	[Type, TS, Notidentified, ExternalType]	10	0.085048
25	[TS, EnumMember]	8	0.068039
26	[Project, TS]	6	0.051029
27	[File, Local]	6	0.051029
28	[File, TS, Local, Module]	6	0.051029
29	[Type, TS, TypeParameterReference, ExternalType]	6	0.051029

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>

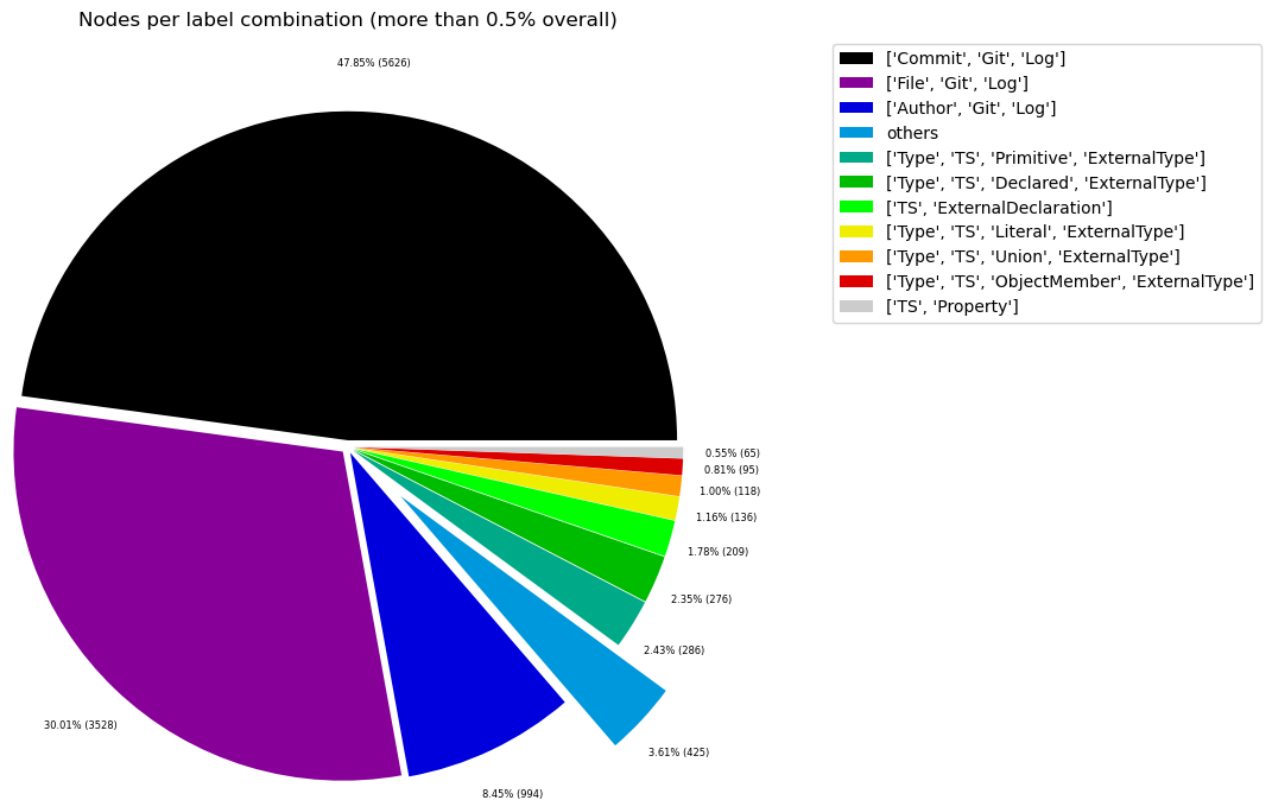


Table 1b - Lowest node count by label combination

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	0.008505
1	[File]	1	0.008505
2	[File, TS, Scan]	1	0.008505
3	[TS, ObjectMember, Value]	1	0.008505
4	[TS, Constructor]	1	0.008505
5	[TS, Method]	1	0.008505
6	[TS, Class]	1	0.008505
7	[TS, Enum]	2	0.017010
8	[File, Directory]	2	0.017010
9	[TS, Object, Value]	3	0.025515
10	[Type, TS, Tuple, ExternalType]	3	0.025515
11	[TS, TypeParameter]	4	0.034019
12	[TS, Function, Value]	4	0.034019
13	[TS, Value, Complex]	5	0.042524
14	[TS, Value, Call]	5	0.042524
15	[TS, Value, Member]	5	0.042524
16	[Type, TS, TypeParameterReference, ExternalType]	6	0.051029
17	[File, TS, Local, Module]	6	0.051029
18	[File, Local]	6	0.051029
19	[Project, TS]	6	0.051029
20	[TS, EnumMember]	8	0.068039
21	[Type, TS, NotIdentified, ExternalType]	10	0.085048
22	[TS, Declared, Value]	10	0.085048
23	[TS, TypeAlias]	14	0.119068
24	[File, Directory, Local]	15	0.127573
25	[Type, TS, Intersection, ExternalType]	17	0.144582
26	[TS, Interface]	18	0.153087
27	[jQAssistant, Rule, Concept]	19	0.161592
28	[TS, Literal, Value]	20	0.170097
29	[TS, Variable]	23	0.195611

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>

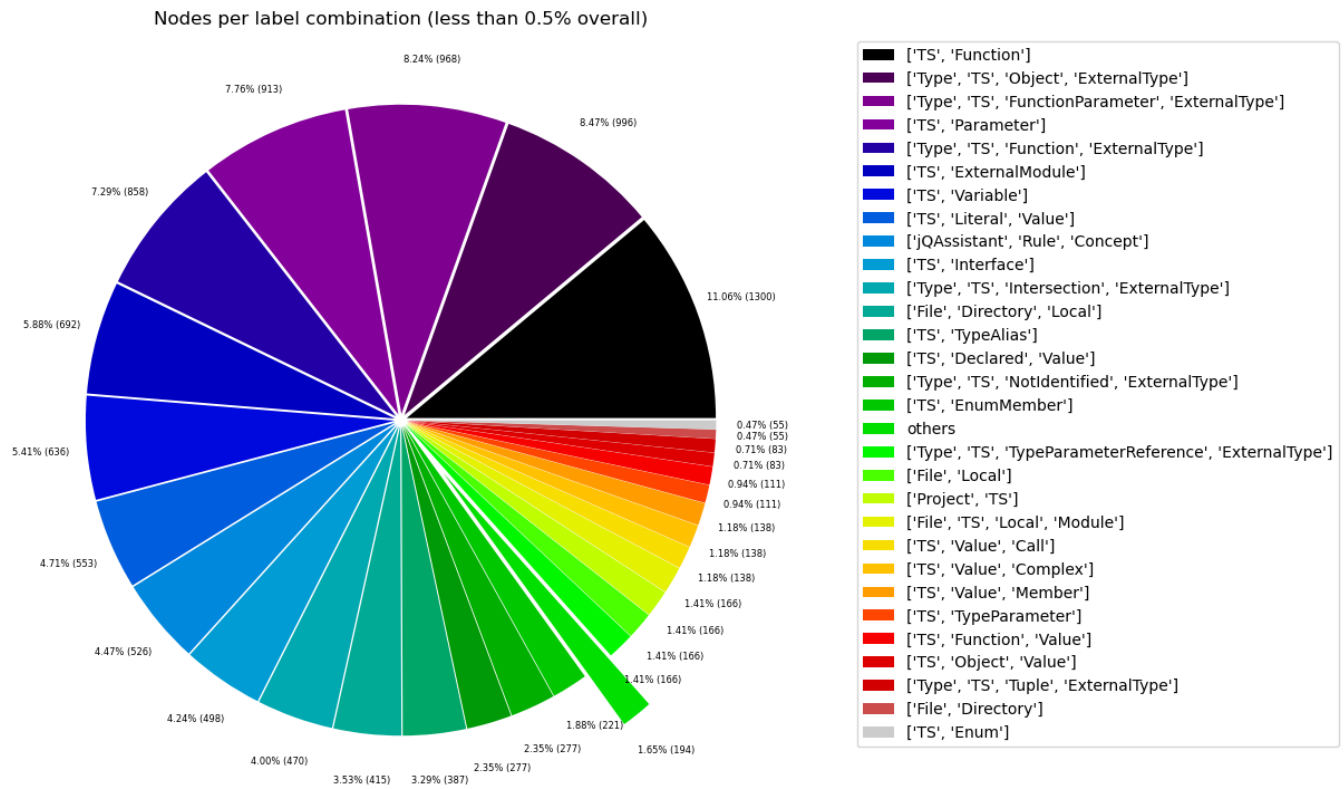


Table 1c - Highest node count by single label

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.

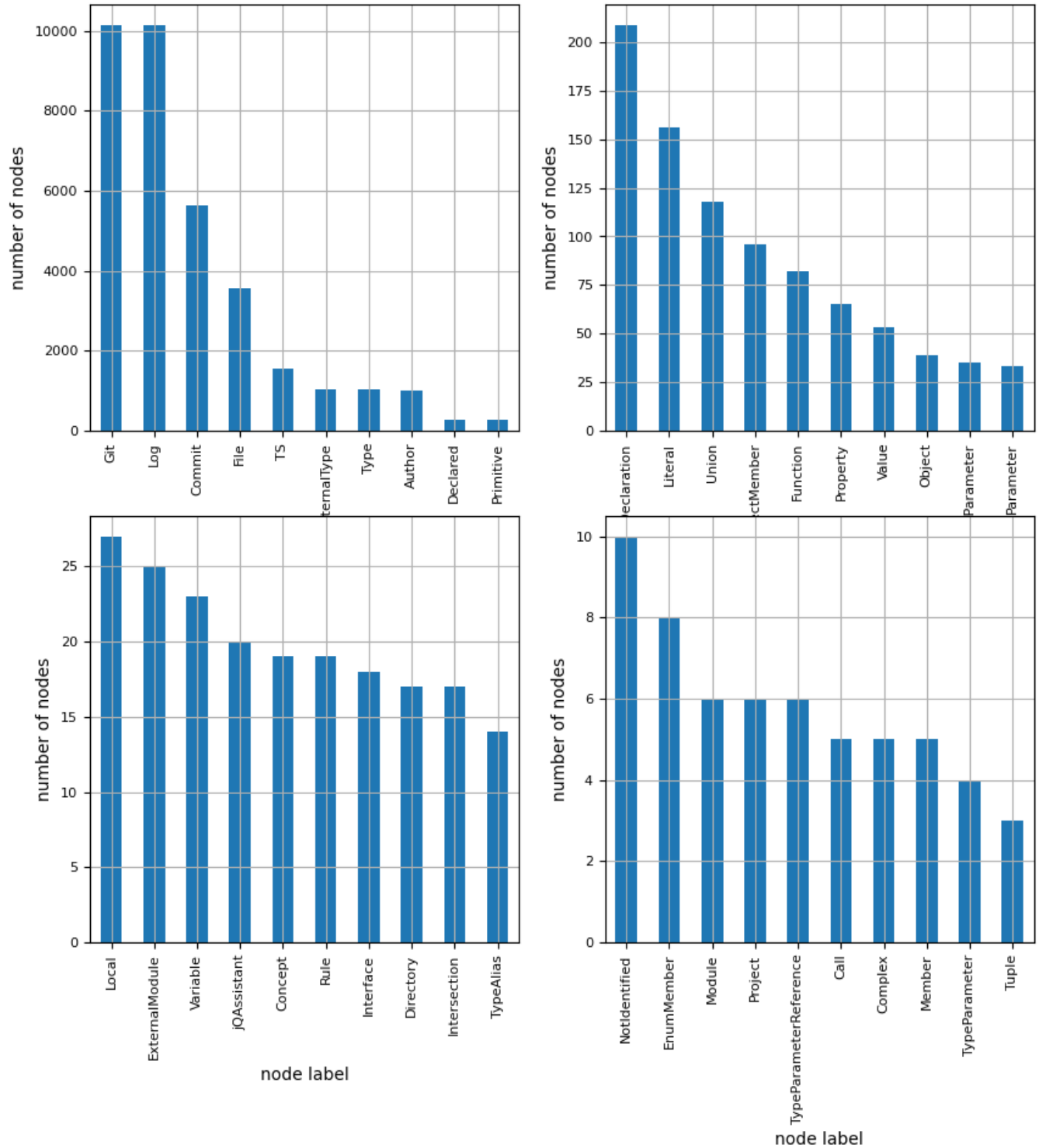
	nodeLabel	nodesWithThatLabel	nodesWithThatLabelPercent
0	Git	10148	86.307195
1	Log	10148	86.307195
2	Commit	5626	47.848274
3	File	3559	30.268753
4	TS	1566	13.318592
5	ExternalType	1049	8.921585
6	Type	1049	8.921585
7	Author	994	8.453819
8	Declared	286	2.432386
9	Primitive	286	2.432386
10	ExternalDeclaration	209	1.777513
11	Literal	156	1.326756
12	Union	118	1.003572
13	ObjectMember	96	0.816465
14	Function	82	0.697398
15	Property	65	0.552815
16	Value	53	0.450757
17	Object	39	0.331689
18	FunctionParameter	35	0.297670
19	Parameter	33	0.280660
20	Local	27	0.229631
21	ExternalModule	25	0.212621
22	Variable	23	0.195611
23	jqAssistant	20	0.170097
24	Concept	19	0.161592
25	Rule	19	0.161592
26	Interface	18	0.153087
27	Directory	17	0.144582
28	Intersection	17	0.144582
29	TypeAlias	14	0.119068
30	NotIdentified	10	0.085048
31	EnumMember	8	0.068039
32	Module	6	0.051029
33	Project	6	0.051029
34	TypeParameterReference	6	0.051029
35	Call	5	0.042524
36	Complex	5	0.042524
37	Member	5	0.042524
38	TypeParameter	4	0.034019
39	Tuple	3	0.025515

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: 34604

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONTAINS_CHANGED	21283	61.504450
1	AUTHORED	5626	16.258236
2	HAS_PARENT	4798	13.865449
3	DEPENDS_ON	947	2.736678
4	CONTAINS	461	1.332216
5	OF_TYPE	318	0.918969
6	EXPORTS	269	0.777367
7	REFERENCES	188	0.543290
8	DECLARES	184	0.531730
9	HAS_MEMBER	96	0.277425
10	HAS_TYPE_ARGUMENT	96	0.277425
11	RETURNS	79	0.228297
12	HAS_PARAMETER	68	0.196509
13	INITIALIZED_WITH	31	0.089585
14	REQUIRES_CONCEPT	28	0.080916
15	USES	25	0.072246
16	RESOLVES_TO	24	0.069356
17	INCLUDES_CONCEPT	19	0.054907
18	SIMILAR	10	0.028898
19	EXTENDS	7	0.020229
20	CONTAINS_PROJECT	6	0.017339
21	HAS_CONFIG	6	0.017339
22	HAS_ROOT	6	0.017339
23	CALLS	5	0.014449
24	HAS_ARGUMENT	5	0.014449
25	MEMBER	5	0.014449
26	PARENT	5	0.014449
27	REFERENCED_PROJECTS	5	0.014449
28	CONSTRAINED_BY	4	0.011559

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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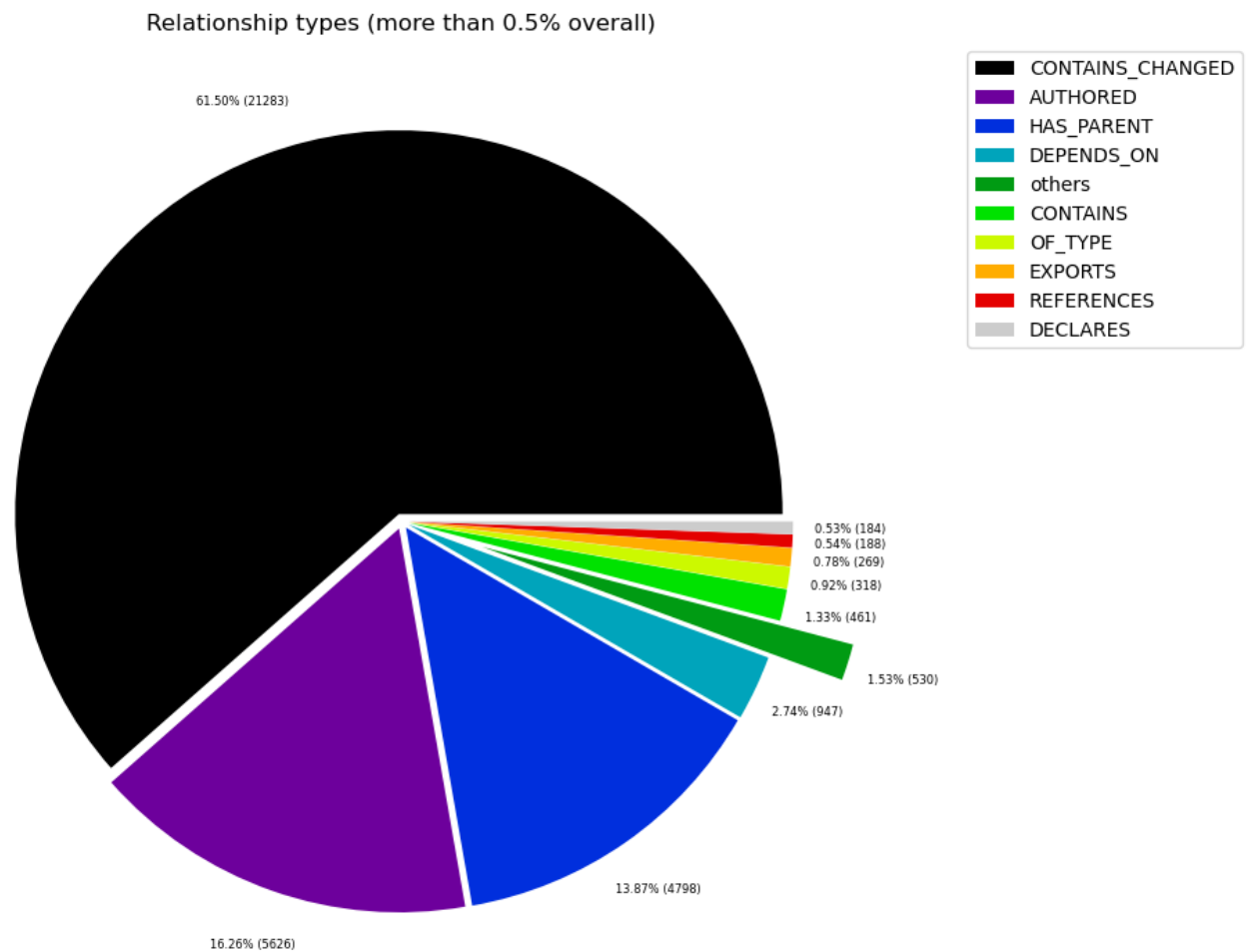


Table 2b - Lowest relationship count by type

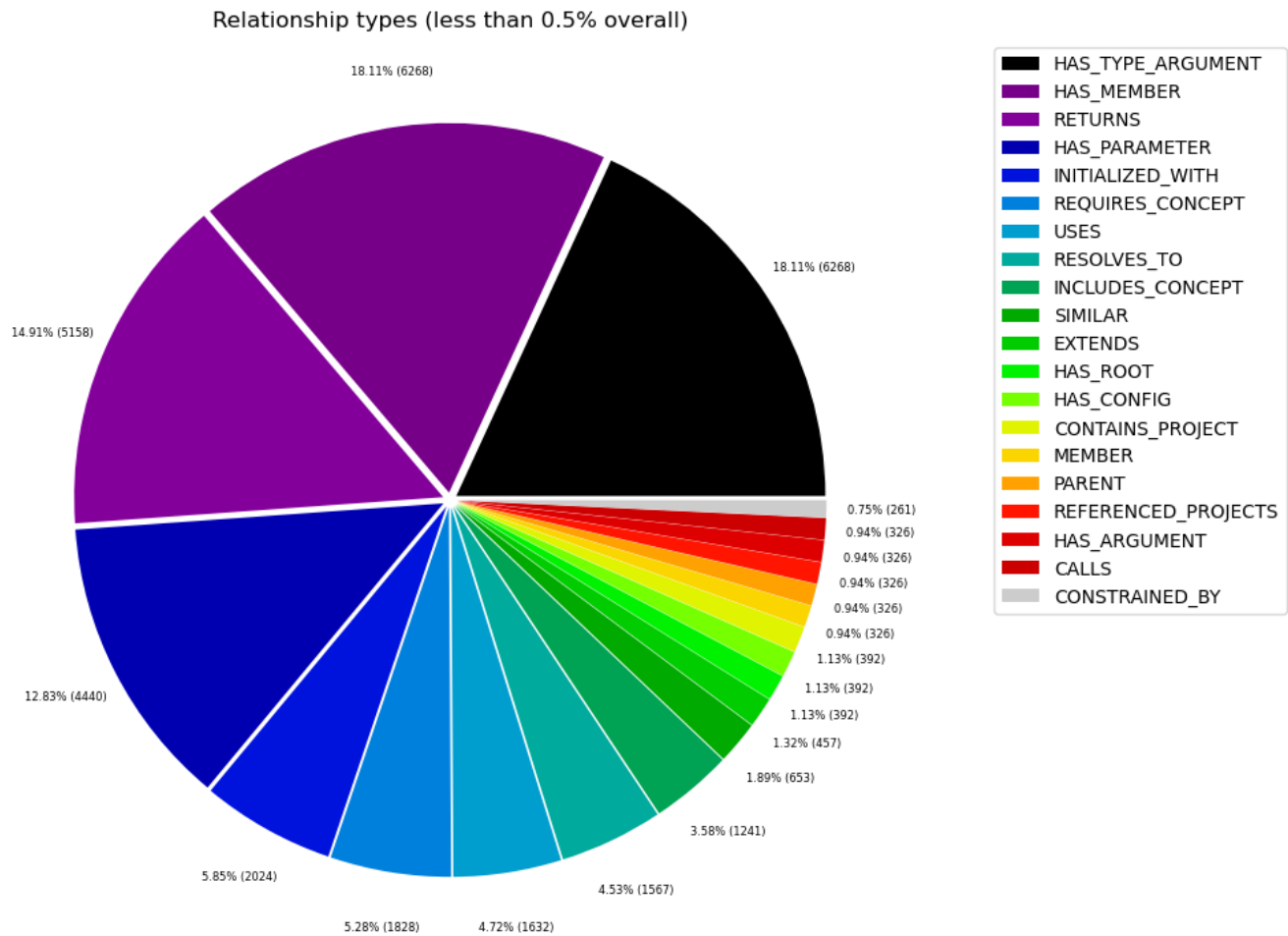
Lists the 30 relationships type with the lowest number of occurrences up to 0.5% of the total node count. This is essentially breaking down the "others" slice from the chart above.

	relationshipType	nodesWithThatRelationshipType	nodesWithThatRelationshipTypePercent
0	CONSTRAINED_BY	4	0.011559
1	PARENT	5	0.014449
2	MEMBER	5	0.014449
3	HAS_ARGUMENT	5	0.014449
4	CALLS	5	0.014449
5	REFERENCED_PROJECTS	5	0.014449
6	HAS_ROOT	6	0.017339
7	HAS_CONFIG	6	0.017339
8	CONTAINS_PROJECT	6	0.017339
9	EXTENDS	7	0.020229
10	SIMILAR	10	0.028898
11	INCLUDES_CONCEPT	19	0.054907
12	RESOLVES_TO	24	0.069356
13	USES	25	0.072246
14	REQUIRES_CONCEPT	28	0.080916
15	INITIALIZED_WITH	31	0.089585
16	HAS_PARAMETER	68	0.196509
17	RETURNS	79	0.228297
18	HAS_TYPE_ARGUMENT	96	0.277425
19	HAS_MEMBER	96	0.277425

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>



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	numberOfNodesWithSam
0	[Commit, Git, Log]	CONTAINS_CHANGED	[File, Git, Log]	21283	5626	
1	[Author, Git, Log]	AUTHORED	[Commit, Git, Log]	5626	994	
2	[Commit, Git, Log]	HAS_PARENT	[Commit, Git, Log]	4798	5626	
3	[TS, Function]	DEPENDS_ON	[TS, ExternalDeclaration]	280	47	
4	[TS, ExternalModule]	EXPORTS	[TS, ExternalDeclaration]	209	25	
5	[Type, TS, Union, ExternalType]	CONTAINS	[Type, TS, Primitive, ExternalType]	147	118	
6	[File, TS, Local, Module, Mark4ModuleWeaklyCon...	DEPENDS_ON	[TS, ExternalDeclaration]	146	1	
7	[Type, TS, Declared, ExternalType]	REFERENCES	[TS, ExternalDeclaration]	130	276	
8	[TS, Function]	DEPENDS_ON	[TS, ExternalModule]	129	47	
9	[Type, TS, Union, ExternalType]	CONTAINS	[Type, TS, Literal, ExternalType]	119	118	
10	[Type, TS, Object, ExternalType]	HAS_MEMBER	[Type, TS, ObjectMember, ExternalType]	95	36	
11	[Type, TS, Union, ExternalType]	CONTAINS	[Type, TS, Declared, ExternalType]	77	118	
12	[TS, Interface]	DECLARES	[TS, Property]	61	18	
13	[TS, Property]	OF_TYPE	[Type, TS, Union, ExternalType]	46	65	
14	[Type, TS, Declared, ExternalType]	HAS_TYPE_ARGUMENT	[Type, TS, Declared, ExternalType]	42	276	
15	[TS, Variable]	DEPENDS_ON	[TS, ExternalDeclaration]	42	23	
16	[File, TS, Local, Module, Mark4ModuleWeaklyCon...	DEPENDS_ON	[TS, ExternalDeclaration]	40	2	
17	[Type, TS, ObjectMember, ExternalType]	OF_TYPE	[Type, TS, Union, ExternalType]	35	95	
18	[Type, TS, Function, ExternalType]	HAS_PARAMETER	[Type, TS, FunctionParameter, ExternalType]	35	31	
19	[TS, Function]	HAS_PARAMETER	[TS, Parameter]	33	47	
20	[Type, TS, ObjectMember, ExternalType]	OF_TYPE	[Type, TS, Primitive, ExternalType]	31	95	
21	[TS, Function]	DEPENDS_ON	[TS, Function]	30	47	
22	[Type, TS, Declared, ExternalType]	HAS_TYPE_ARGUMENT	[Type, TS, Primitive, ExternalType]	28	276	
23	[jQAssistant, Rule, Concept]	REQUIRES_CONCEPT	[jQAssistant, Rule, Concept]	28	19	
24	[File, TS, Local, Module, Mark4ModuleWeaklyCon...	DECLARES	[TS, Function]	27	1	
25	[TS, Interface]	DEPENDS_ON	[TS, ExternalDeclaration]	26	18	
26	[Project, TS]	USES	[TS, ExternalModule]	25	6	
27	[Type, TS, Declared, ExternalType]	REFERENCES	[TS, Interface]	25	276	
28	[File, Directory, Local]	CONTAINS	[File, Directory, Local]	24	15	
29	[File, TS, Local, Module, Mark4ModuleWeaklyCon...	DEPENDS_ON	[TS, ExternalDeclaration]	24	1	

Graph Density

total_number_of_nodes (vertices): 11758

total_number_of_relationships (edges): 34604

-> total directed graph density: 0.0002503204490929993

-> total directed graph density in percent: 0.025032044909299927