

Metadata Quality Report

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ABSTRACT

This report describes the current state of entity data in the Wikidata knowledge base for the domain of computing as compared to January of 2018.

1 Data Curation

I have been curating data in the domain of computing. I wrote SPARQL queries to return data about sets of resources we reuse in EaaS.

| Items | Jan 2018 | Apr 2019 | net change |
|------------------------------|----------|----------|------------|
| Software Items | 64,925 | 69,397 | 4,472 |
| File Format Items | 2,834 | 3,686 | 852 |
| File Format Items with PUIDs | 777 | 1438 | 661 |
| File Format Signatures | 167 | 210 | 43 |
| Emulators | 106 | 132 | 26 |
| File Systems | 146 | 159 | 13 |
| Device Drivers | 17 | 27 | 10 |
| Plugins | 155 | 186 | 13 |
| Config Emulated Env | 0 | 1 | 1 |
| File Format with mediatype | 936 | 1039 | 103 |
| Software by dev w ISNI | 6,677 | 7,040 | 363 |

1.1 Software Items

There was quite a bit of flux in the data related to this query over 2018. I believe this is due to differences in modeling and experiments people are trying with regard to classification.

1.2 File Format Items

There have been 852 new file formats added to Wikidata since Jan 2018.

1.3 File Format Items with PUIDs

The data curation work I prioritized over the last year was to create new items for file formats described in PRONOM. There are 1,500 resources in PRONOM, a certain number of PUIDs have been deprecated.

1.4 File Format Signatures

File format signatures are strings of text that can be used for format identification. The majority of file format signatures stored in PRONOM remain to be added to Wikidata.

1.5 Emulators

Due to the focus of our grant work on emulation, I am prioritizing getting emulators described as extensively as we need for our work.

1.6 File Systems

Having accurate metadata about file systems in Wikidata will have broad appeal among people who are reusing data from Wikidata. I am prioritizing contributing accurate information with references in this area.

1.7 Device Drivers

Drivers are not yet well documented across repositories. We will add drivers as we create additional configured environments that require drivers.

1.8 Plugins

This is not a current priority, but I am interested in watching strategies people use to describe these resources.

1.9 Configured Software Environments

We created our first software environment item.

1.10 File Formats with mediatype

I am working on changing the datatype of mediatype to item in Wikidata. Tracking the usage of the current string datatype to be sure we can convert all of these later.

1.11 Software titles by dev w ISNI

Tracking this so we can see the impact of adding NSRL data. Many of the developers in the NSRL manufacturers table also have ISNI IDs. This can be considered a proxy for software titles likely to be of interest to EaaSI.