

Self Describing Data Object Tags

draft-ietf-netmod-node-tags-01

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Document Status

- draft-ietf-netmod-node-tags-00 was adopted in December 28 2020.
 - Two WG adoption calls on draft-ietf-netmod-yang-node-tags was issued on v-05 and v-06 in August 17 and December 7 2020, the second one ended in December 21.
 - Many thanks to Juergen Schoenwaelder, Liu Peng, Duzhongpeng, Chang Liu, Paul, Wei Wang, YuanZhang, Lou Berger, YingzhengQu, Dhruv Dhody, Mohamed Boucadair, Boyuan Yan, Ander liu, Peng liu for valuable input and comments.
- Changes in v-01 since IETF 109
 - Add update to RFC8407 in the front page of this draft
 - Merge self describing data object tag use case section into introduction section as a subsection;
 - Clarify the relation between data object, object tag, property tag and metric tag in Self Describing Data Object Tags Use Case section;
 - Add one glossary section;
 - Clarify the applicable scope of context information tag

Issue1:Update RFC8407

- RFC8819 introduces guideline to Model writer for standard module level tag definition in the section 6
 - Which require updating to RFC8407
- Similar to RFC8819, this draft introduce Guidelines to Model Writers for standard data object tag definition in section 7
 - Which also require updating to RFC8407
- Proposal: Update RFC8407

Issue 2: Data node tag identification

Data Object tag Module Tree Overview

```
module: ietf-data-object-tags
augment /tags:module-tags/tags:module:
  +--rw data-object-tags
    +--rw data-object* [object-name]
      +--rw object-name      nacm:node-instance-identifier
      +--rw tag*             tags:tag
      +--rw masked-tag*     tags:tag
```

- "ietf-data-object-tags" module augments Module tag model and provides tag management.
- Under the top level node "data-object-tags", it introduces three types of data object level tags i.e., opm tag, metric-group tag, multi-source tag, can be used to tag the same data object
 - OPM tag: First Level tag
 - Multi-Source tag: Second level tag (Context information tag)
 - Metric-group tag: second level tag (Context information tag)
- The question is when multiple such data node tags are associated with data object, is object-name sufficient enough to identify these tags:
 - Each data object can only have one single object tag, or one single property tag, or one single metric tag,
 - Two multi-source aggregation types associated with one data object can not coexist at the same time
 - Metric classification type associated with one data object are excluded from each other
- **Conclusion: Yes.**

Next Step

- draft-richih-opsawg-openmetrics-00 has been brought to IETF for discussion
 - It define open metric for both pull or pushed based data collection
 - 8 metric types are proposed
 - Gauge: current measurements, such as bytes of memory currently used
 - Counter:measure discrete events
 - StateSet:represent a series of related boolean values
 - Info: expose textual information
 - Histogram: measure distributions of discrete events
 - GaugeHistogram: measure current distributions
 - Summary:
- Address any comments raised in the meeting.