

YANG Usage Guidelines

draft-ietf-netmod-rfc6087bis-06

NETMOD WG

IETF #95 Buenos Aires, Argentina

Andy Bierman <andy@yumaworks.com>

v0.1

Agenda

- Issue Tracker Status
 - Open Issue: Use of anyxml
 - New Issues added since Draft -06 published
- Changes in Draft -06
 - Issue: CODE vs EXAMPLE vs fragment
- Next Steps
 - Draft -07 will be ready for WGLC

Current Issue Tracker Status

- ! **add guidelines on open vs. closed system** NEW
#32 opened 4 days ago by abierman
- ! **guideline against nodes 'reserved for future use'** NEW
#31 opened 5 days ago by abierman
- ! **typos in <https://tools.ietf.org/html/draft-ietf-netmod-rfc6087bis-05>** REVIEW
#29 opened on Feb 11 by abierman
- ! **advice on using action-stmt vs. rpc-stmt** REVIEW
#28 opened on Feb 4 by abierman
- ! **advice on partial YANG examples** REVIEW
#27 opened on Feb 3 by abierman
- ! **advice on anyxml** OPEN
#26 opened on Feb 3 by bclaise
- ! **guidelines on changes in published vs. work-in-progress** REVIEW
#25 opened on Dec 18, 2015 by abierman

Open Issue: Use of anyxml

6020bis mentions:

```
Since the use of anyxml limits the manipulation of the content, it is
RECOMMENDED that the "anyxml" statement not be used to define
configuration data.
```

```
It should be noted that in YANG version 1, anyxml was the only
statement that could model an unknown hierarchy of data. In many
cases this unknown hierarchy of data is actually modelled in YANG,
but the exact YANG model is not known at design time. In these
situations, it is RECOMMENDED to use anydata (Section 7.10) instead
of anyxml.
```

6087bis mentions:

```
The "anyxml" statement MUST NOT be used to represent a conceptual
subtree of YANG data nodes. The "anydata" statement MUST be used for
this purpose.
```

I see two discrepancies:

RECOMMENDED versus MUST NOT

configuration data versus "a conceptual subtree of YANG data nodes": not too clear to me

Regards, Benoit

Open Issue: Use of anyxml (2)

- What restriction is appropriate for IETF?
 - Says **MUST NOT** use anyxml as a data node (use anydata instead)
- Should this be changed to **SHOULD NOT**?

New Issues (for draft-07)

- Reserved for Future Use
 - Do not add data nodes unless they are needed now; Add real nodes in a future module revision
- Open vs. Closed Systems
 - Standard modules running on an open system cannot assume a fixed set of known modules and revisions

Change Log from Draft-06

- Changed example 'my-module' to 'example-module'
- Added section Updating YANG Modules (Published vs. Unpublished)
- Added Example Modules section
- Added "<EXAMPLE BEGINS>" convention for full example modules
- Added section on using action vs. rpc
- Changed term "operational state" to "operational data"
- Added section on YANG Data Node Constraints
- Added guidelines on using must vs. when statements
- Made ietf-foo module validate for I-D submission

Issue: Example YANG

- `<CODE BEGINS> ... <CODE ENDS>`
 - For complete normative YANG [sub]modules intended for extraction and pass `pyang --ietf`
- `<EXAMPLE BEGINS> ... <EXAMPLE ENDS>`
 - For complete example YANG [sub]modules intended for extraction but not pass `pyang --ietf`
- no tags at all
 - For partial example YANG modules not intended for extraction or compilation

Next Steps

- Update draft with guidelines for new and open issues
- Ready to start WGLC on next draft