

Updated YANG Module Revision Handling

[draft-verdt-netmod-yang-module-versioning-01](#)

NETMOD WG

November 19, 2019

Netmod YANG Version Design Team

Presenting: Bo Wu

Recap: Updated YANG Module Revision Handling

[draft-verdt-netmod-yang-module-versioning](#)

- Core enhancements to YANG to:
 - *Allow* non linear module development (e.g. for bugfixes)
 - *Document* when non-backwards-compatible changes have occurred in revision history
- Module revisions are still uniquely identified by revision date, but allow a freeform text label to be associated with a revision
 - *Label could be semver based or a different scheme*
- “Import by revision-date or derived” (using revision history)
- Define backwards-compatible vs non-backwards-compatible changes
- Clarify/improve YANG “status” handling
- Refresh guidelines for updating YANG modules

Changes since -00 draft (IETF 105)

1. If a 'revision-label' takes the format of a 'YANG semver' then it MUST be treated as a 'YANG semver'
2. New revisions of IETF modules MUST include revision-labels that conform to YANG Semver
3. Imports revision-identifier from RFC6991-bis
4. Some minor cleanup/improvements to draft and YANG modules

Open issues/next steps (1)

1. Resolve potential YANG library ambiguity issue:

Is the schema defined by YANG library always well defined?

RFC 7950, section 5.6.5 has rules that bind to “yang-library:/modules-state/” but that doesn’t really help with RFC 8525.

a) RFC 7950 section 5.6.5 rule:

➤ If imported module version is ambiguous then choose the latest revision.

b) Module versioning draft (currently) has a different definition:

➤ If imported module version is ambiguous then choose the implemented revision or otherwise latest import-only version.

Should we fix in the module versioning draft, or would an RFC 8525 errata suffice?

Open issues/next steps (2)

2. Further specification of changes that could be classified as BC:

- Is it affected by “config true” vs “config false”?
- What about adding/removing/changing extension statements?
- What about changing imported version?
- Other changes ...

- Perhaps an exhaustive list isn't required, and instead can rely on the generic statement, e.g. “unless the change cannot break a reasonably coded client then the change is classified as NBC.”