

draft-verdt-netmod-yang-versioning-reqs-01

Netmod WG

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Netmod YANG Version Design Team

Joe Clarke (presenting)

Netmod Versioning Design Team Status

- We've held regular weekly meetings + emails
- Refining requirements => updated reqs draft
- Discussing possible solutions => wip soln comparison draft
 - Will be presented next

A big thank you to all contributors (for time and expertise):

Balazs, Benoit, Ebben, Jason, Joe, Juergen, Mahesh, Michael, Qin, Reshad, Rob, Susan

Changes Since -00

- Definition added for “non-backwards-compatible”
- Clarification provided on what clients should do with instance data that has been changed in a backwards compatible way
 - Note: by “instance data” this is data returned from a NETCONF/RESTCONF server (though it could apply to the instance data mentioned in draft-lengyel-netmod-yang-instance-data)
- Reworded requirement 1.2 to avoid needless client work for unchanged nodes or nodes that were changed in backwards-compatible ways
- New requirement 1.4 added for supporting over-arching software releases

Non-backwards-compatible

“Non-backwards-compatible (NBC): In the context of this document, the term 'non-backwards-compatible' refers to a change or set of changes between two YANG module revisions that do not adhere to the list of allowable changes specified in Section 11 "Updating a Module" of [RFC7950], with the following additional clarification:

- Any addition of, or change to, a "status" statement that allows a server to remove support for a schema node is considered a non-backwards-compatible change”

Additional Terminology

BC => Backwards compatible

NBC => Non-backwards-compatible

At head => The head of YANG module development history (could be branched)

Requirement 1.2 Text

- OLD

A mechanism is REQUIRED to update a module in a non-backward compatible way without forcing all clients/servers to access data nodes in the model on new paths, or in a new module namespace. Specifically, if a particular data node is updated in a non-backward compatible way then it may be desirable for it to be available on the same path and in the same module namespace.

- NEW

Non-backwards-compatible updates of a module MUST not impact clients that only access data nodes of the module that have either not been updated or have been updated in backwards-compatible ways.

New Requirement 1.4

“The solution **MUST** allow for modules to be versioned by software release. In particular, backwards-compatible enhancements and bug fixes **MUST** be allowed in any non-latest release.”

Discussion on Reqs 3.1 and 3.2

- 3.1

The solution MUST provide a mechanism to allow servers to support existing clients in a backwards-compatible way.

- 3.2

The solution MUST provide a mechanism to allow servers to simultaneously support clients using different revisions of modules. A client's choice of particular revision of one or more modules may restrict the particular revision of other modules that may be used in the same request or session.

Next Steps

- The Design Team feels the requirements are complete based on feedback from the WG
- Resolve discussion items (ongoing)
- We ask that the requirements draft is adopted as a working group document