Netmod WG
November 8, 2018

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