NETMOD Versioning Solution Overview

NETMOD WG

March 2021

Presenting on behalf of the authors:
Jason Sterne

Agenda

This presentation:

> **Solution Overview – Jason Sterne**

Following presentations on individual drafts:

> **YANG Module Versioning – Reshad Rahman**
>
> **YANG Semantic Versioning – Joe Clarke**

Recap - YANG Versioning Solution Overview

Complete solution consists of five drafts:

1. Updated YANG Module Revision Handling:
   Can notify of nbc changes between module revisions, allows branched revision   history, revision-labels

2. Module semantic version number scheme:
   Allows use of YANG semver for module revision-labels and package versioning

3. Versioned YANG packages:
   Versioning at the schema level rather than individual modules

4. Protocol operations for package version selection:
   Devices can support multiple schema versions, clients can select for session

5. YANG schema comparison tooling:
   Tooling to algorithmically compare module or schema revisions

Latest working drafts can all be found here: https://github.com/netmod-wg/yang-ver-dt

General update on weekly Versioning calls

- Focus shifted back to Module Versioning and YANG Semver drafts

- A number of difficult major issues were still open (details in upcoming presentations)

- Held two NETMOD Virtual Interim meetings:
  - Decent attendance (18 and 12 people)
  - Successful in moving key outstanding issues forward

- A number of issues are still open against both drafts, although they are trending towards more minor issues now

Next Steps

- Authors + interested parties continue to meet on a weekly call to progress this work
  - Meetings are open to all
  - key issues are brought back to WG mailing list
  - Weekly meeting is currently on Tues @2pm UK time / 9am Eastern.
    Thanks to the authors and contributors for their regular attendance
- Issues tracked in github, discussed on WG mail list
  https://github.com/netmod-wg/yang-ver-dt
- Phase work on the documents:
  - Try to wrap up Module Versioning and YANG Semver
  - Move onto Packages in the next few months
  - Version Selection and Schema Comparison to follow

How far to progress first 2 drafts?

The authors aren't certain when to take the first two drafts (Module Versioning and YANG Semver) to WGLC:

1. Now while all the issues are fresh in our minds, or

2. After the other 3 drafts have progressed further so we can make changes to the first two

   - We have found this necessary a few times when we've discussed the other 3 drafts
   - locking down the two drafts now may create a barrier for making further useful changes to Packaging, and Version Selection.

Proposal: don't ask for formal WGLC review but at the appropriate point (target before next IETF) announce that authors are done with the first 2 drafts (barring anything coming up in the subsequent drafts).