NETMOD Versioning Solution Update

NETMOD WG
July 2020

Presenting: Reshad Rahman
Agenda

This slide deck:
   Solution Update – Reshad Rahman

Following presentations on individual drafts:
   Updated YANG Module Revision Handling – 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, handles 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
YANG versioning solution – dependencies:

1. Module Revision Handling
2. Semantic Versioning Scheme
3. Packages - Versioned Schema
4. Package Version Selection
5. Schema Comparison Tooling

Dependency
Possible user dependency (might make use of dependency, but not required)
Requirements and Solution Overview

Drafts

YANG Module Versioning Requirements
draft-ietf-netmod-yang-versioning-reqs-02

• Document is stable – no changes since IETF 106
• Do we aim to take this to informational RFC?
• Bring it to WG LC now?

YANG Module Solution Overview
draft-ietf-netmod-yang-solutions-00

• Do we aim to take this to informational RFC?
• Bring to WG last call once all 5 solution drafts are at WG last call?
Solution Drafts

Updated YANG Module Revision Handling

draft-ietf-netmod-yang-module-versioning
  • Updated since March 2020 virtual interim
  • Presentation to follow

YANG Semantic Versioning

draft-ietf-netmod-yang-semver
  • Updated since March 2020 virtual interim
  • Presentation to follow
Solution Drafts

YANG Packages
draft-ietf-netmod-yang-packages
  • Unchanged since March 2020 virtual interim

YANG Schema Selection
draft-ietf-netmod-yang-ver-selection
  • Unchanged since March 2020 virtual interim

YANG Schema Comparison
draft-ietf-netmod-yang-schema-comparison
  • Unchanged since March 2020 virtual interim
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 (Bo Wu, Jan Lindblad, Italo Busi) for their regular attendance

• Issues tracked in github (https://github.com/netmod-wg/yang-ver-dt), discussed on WG mail list

• Phase work on the documents:
  • module versioning & yang semver first (get to last call)
  • packages, version selection and schema comparison to follow