

NETMOD Versioning Design Team Update

NETMOD WG

November 19, 2019

Netmod YANG Versioning Design Team

Presenting: Rob Wilton

Agenda

- **DT Update overview & status update – Rob Wilton (10 mins)**
[draft-ietf-netmod-yang-versioning-reqs-01](#)
[draft-verdt-netmod-yang-solutions-02](#)
- **Updated YANG Module Revision Handling – Bo Wu (10 mins)**
[draft-verdt-netmod-yang-module-versioning-01](#)
- **YANG Semantic Versioning – Joe Clarke (10 mins)**
[draft-verdt-netmod-yang-semver-01](#)
- **YANG Packages – Rob Wilton (25 mins)**
[draft-rwilton-netmod-yang-packages-02](#)
- **YANG Schema Version Selection – Joe Clarke (Reshad Rahman) (25 mins)**
[draft-wilton-netmod-yang-ver-selection-01](#)
- **YANG Schema Comparison – Rob Wilton (15 mins)**
draft-verdt-netmod-yang-schema-comparison-00
- **Next Steps Discussion – Rob Wilton**

Design Team Update

- Continued with semi-regular weekly meetings since IETF 105
- Lots of good work has been done, so thank you to all (past & current) DT members: Balazs Lengyel, Benoit Claise, Bo Wu, Ebben Aries, Jason Sterne, Joe Clarke, Juergen Schoenwaelder, Mahesh Jethanandani, Michael Wang, Qin Wu, Reshad Rahman, Rob Wilton
- DT output since 105:
 1. Trivially updated solution overview draft
 2. Refinements to YANG Module Revision Handling draft
 3. Significant updates to Semver, Packages, and Version Selection drafts
 4. Initial (early) revision of Schema Comparison draft

YANG Module Versioning Requirements

[draft-ietf-netmod-yang-versioning-reqs-01](#)

- Document is stable – no changes since IETF 105 & none anticipated

YANG Versioning Solution Overview

[draft-verdt-netmod-yang-solutions-02](#)

- Overall shape/scope of the solution is unchanged since IETF 105
- Minor updates to solution overview draft:
 - Removed simplification/duplication of requirements
 - Updated document references
- -02 not yet updated with schema comparison draft

Recap - YANG Versioning Solution Overview

Proposed 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

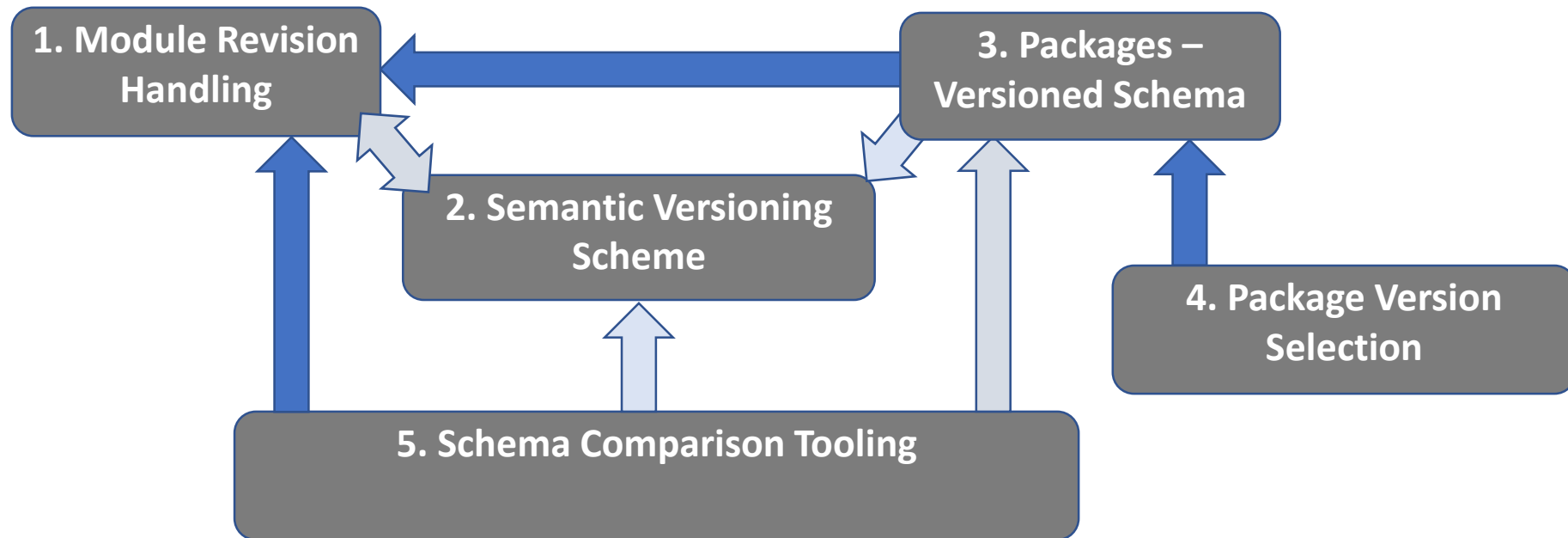
4. Protocol operations for package version selection:

Devices can support multiple schema versions, clients can select for session

5. YANG schema comparison tooling:

Tooling to algorithmically compare module or schema revisions

YANG versioning solution – dependencies:



Dependency



Possible user dependency

DT – Potential Next steps

After solution presentations, the DT would like feedback from WG:

- Does the WG agree with the overall approach of the solution?
- Should the WG adopt some/all of the solution drafts?