Handling YANG Revisions – Discussion Kickoff

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Revision Problem Statement

• YANG module revision rules limits scope of module changes
• YANG lacks syntax to enable tooling to fully reflect all types of module revisions
  - Non-backwards compatible changes
  - Module replacements, i.e., name changes
  - Non-name associated updates
Current Rules

• RFC7950 Section 11
  – Provides rules on updating a module
  – Calls out specific changes that are permitted
  – States:
    • *If the semantics of any previous definition are changed ...then this MUST be achieved by a new definition with a new [module name] identifier”*
    • Obsolete definitions MUST NOT be removed from published modules

• General RFC header rules
  – Can identify which RFCs updated and obsoleted
Implications on Major/Minor Changes

- Broken modules can’t use the same name (e.g., L3SM)
- No way to remove obsoleted nodes and keep name (e.g., 8022bis)
- No way to indicate which module is being obsoleted when using a new module name
- No way to indicate which revision of a module is being updated
- No way to express when a new module updates an existing module
Goal for the WG

• Objective is to support all types of YANG module revisions
  – Some solutions have been proposed
    • In drafts and e-mail
  – Others may be possible

• This session kicks off the WG discussion
Discussion