Routing Area Yang Architecture
Design Team Update

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Wiki: http://trac.tools.ietf.org/area/rtg/trac/wiki/RtgYangArchDT
Repo: https://github.com/ietf-rtg-area-yang-arch-dt/
Design Team Summary

• Chartered in the routing area (by Alia)
  • Announced 3/26/2015

Original charter:
• Focus on needs of YANG models produced in the routing area
  1. Highest priority: An overall architecture for
     “the protocols and functionality contained inside the Routing Area”
     • May identify additional desirable models and common functionality; those suggestions can be raised in Netmod
  2. Conventions
     • Input to netmod WG and draft-ietf-netmod-rfc6087bis
  3. Best current practices for how new features can easily augment existing YANG models

• Design team closing
  • As discussed at IETF 101
  • DT has accomplished main objectives
  • There is always more work, but can be addressed through normal WG processes
Design Team Related Work

- NDMA
- Routing WG drafts/rfcs
- Other WG drafts/rfcs
Network Management Datastore Architecture (NDMA)

• Early focus of DT, more on requirements than solutions
• draft-ietf-netmod-revised-datastores to be published as RFC 8342
• Guidelines developed with RTG area work in mind
• Fully embraced by IETF Routing Area
  • Most models refactored
  • RFC 8022 BIS to be published as RFC 8349
    • Follows guidelines
      ▪ Modules revised rather than renamed (e.g., ietf-routing-2)
      ▪ State Trees Retained (e.g., ietf-routing-state)
      ▪ Status state trees is “obsolete” rather than “deprecated” since there is minimal implementation
    • Routing Area YANG models should augment this version of draft.
Routing WG Drafts/RFCs

- Key architecture enablers for routing area
  - YANG Logical Network Elements – draft-ietf-rtgwg-lne-model
    - In RFC editor queue
    - Gated by NETMOD YANG Schema Mount
    - Foundation for logical systems/routers
  - YANG Network Instances – draft-ietf-rtgwg-ni-model
    - In RFC editor queue
    - Gated by NETMOD YANG Schema Mount
    - Foundation for BESS WG LxVPNs

- Routing Area Common YANG Data Types
  - RFC8294

- Network Device YANG Organizational Models
  - Expired draft-rtgyangdt-rtgwg-device-model
  - Foundation for LNE and NI work
  - Will not be progressed in current form
    - Could be revived based but based on YANG Module Tags
    - Contact authors if interested in this
Other WG Drafts/RFCs

- YANG Module Tags
  - draft-rtgyangdt-netmod-module-tags now draft-ietf-netmod-module-tags
  - Many comments received during adoption, participate in NetMod if interested

- Schema Mount
  - Key enabler for Nis and LNEs
  - WG LC completed being discussed in NetMod**
  - Work starting in NetMod on YL-bis optimized version
    - Please participate if interested

- YANG Tree Diagrams
  - Outgrowth of DT work, but not a DT draft
  - To be published as RFC8340
What’s Undone

- Open issues left from original (private and public list)
  - Handling YANG module revisions
    - Will likely impact area’s models when they are revised
  - Being discussed in NetMod
    - Contribute there if interested in this work

- Thank you all who contributed to the work!
  - DT Members: Acee Lindem, Anees Shaikh, Christian Hopps, Dean Bogdanovic, Ebban Aries, Lou Berger, Qin Wu, Rob Shakir, Xufeng Liu, Yingzhen Qu, Stephane Litkowski, Yan Gang
  - Many other collaborators in RTG and OPS Areas
Thank you!