

Augmenting the IETF processing with Open Source Development of Yang Modules

Tom Nadeau, Andy Bierman, Kiran
Koushik

IETF #90, Toronto

Objective

- To support IETF process to produce standard YANG models quickly
- Provide an environment for collaborative model development
- Set an example for other Standard's bodies(ONF etc)

Lets Try A Different Approach

- Community-driven
 - Brings together consumers (i.e.: our current and future customers) with developers
- Source code developed along side models
 - “Running code and rough consensus”
 - This includes proprietary and “standard” models, or a place to develop/evolve them
 - Some may be extracted and made into RFCs at the IETF or other standards orgs
 - ODL as an example, but others are interested too
 - All models will be available and eventually built into ODL upstream releases
 - Code developed in a github “sandbox”
 - Lifts overhead of building drafts (non-IETF people have a hard time with drafts)
 - Easy access for implementation

Community Yang Repository

- Community GitHub Repository Created
 - <https://github.com/YangModels/yang>
- Paired with yangcentral.com
 - Continuous build (jenkins/gerrit)
 - Bugzilla issue/change tracking
- Open source +1/-1 committer model used for patches to files
- Yuma Works, Pyang and Tail-F used
- IETF Yang Doctors included for expert reviews
- Some companies uploading their models to the repo
- ODL models uploaded
- IETF Yang Doctor's connected to public list started

For Starters An Experiment with the IETF

- Benoit Claise and Tom Nadeau have setup an experiment
- Created 3 YANG models on the public git repo using a community-oriented approach
 - Collaborators are part of a GitHub group with committer privileges
 - Diffs generated easily and reviewed during process
 - Specific instance where Git version control was very useful.
- Explicit project management with specific deadlines & weekly sync up

Going Forward...

- IETF Licensing issues discussed (explicit IPR disclosure)
- Complete netconf central integration
- Additional design teams spinning up (I2VPN, i2rs?)
- Continue development of common models (where this makes sense) within the community
- Improve collaboration environment