

# YANG Model Coordination Group

IETF 92  
Dallas, Texas

# What is this?

- Directorate
  - Carl Moberg
  - Dean Bogdanovic
  - Dave Meyer
  - (Deborah Brungard)
- Spending 1/3 of our time, for one year period
- Mission

Help with the development and coordination of the numerous YANG models within the IETF, and the promotion of YANG modeling in the industry.
- <http://www.ietf.org/iesg/directorate/yang-model-coordination-group.html>

# Initial Job Description

- Compiling, publishing, and maintaining an inventory of YANG models both produced by the IETF and available at other locations.
- Evaluating and documenting how the existing YANG models fit together. Example: can the IGP, QoS, and ACL YANG models work together?
- Documenting and tracking open issues (especially the issues crossing drafts, WGs, and areas) including issues of interaction and overlap of YANG models.
- Generating and leading the discussions on the resolution of the open issues, in collaboration with the authors, WGs, WG chairs, YANG doctors, rtg-yang-coord mailing list, and the appropriate ADs
- Participating in YANG model related design teams, as needed, to assist in the coordination as well as technical work.

# Initial Job Description (part 2)

- Assisting with the coordination of design teams working to produce YANG models that describe and enable the provisioning and management of services.
- Documenting and tracking functionality missing from YANG models including entire missing models.
- Documenting YANG issues arising from YANG models
- Producing monthly reports for the IETF community and present a summary of progress at each IETF meeting in the OPS-AREA meeting.
- Close work with the OPS AD on building a community of YANG modelers that will bring YANG work into the IETF as appropriate, and that will enable interactions between IETF YANG models and models produced outside the IETF

# Outcome1 : Inventory/Compilation

				characters
service-function-chain@2014-07-01.yang	<a href="#">draft-penno-sfc-yang-13.txt</a>	<a href="#">Email Authors</a>	FAILED	<p>service-function-chain@2014-07-01.ya  top-level data nodes: service-function-  service-function-chain@2014-07-01.ya  value should be "urn:ietf:params:xml:r  service-function-chain@2014-07-01.ya  service-function-chain@2014-07-01.ya  service-function-chain@2014-07-01.ya  service-function-chain@2014-07-01.ya  service-function-chain@2014-07-01.ya  exceeds 70 characters  service-function-chain@2014-07-01.ya  "revision" must have a "reference" sub  service-function-chain@2014-07-01.ya  service-function-chain@2014-07-01.ya  must have a "description" substatemen  service-function-chain@2014-07-01.ya  exceeds 70 characters  service-function-chain@2014-07-01.ya</p>
mpls-ldp.yang	<a href="#">draft-openconfig-mpls-consolidated-model-00.txt</a>	<a href="#">Email Authors</a>	FAILED	<p>mpls-ldp.yang:6: warning: IETF rule (1)  "urn:ietf:params:xml:ns:yang:mpls-ldp  mpls-ldp.yang:58: warning: IETF rule (1)  mpls-ldp.yang:63: warning: IETF rule (1)  mpls-ldp.yang:111: warning: IETF rule (1)</p>
				lman-control@2014-10-27.yang:1: wa

# Outcome1 : Inventory/Compilation

- Number of correctly extracted YANG models from IETF drafts: 113
- Number of YANG models in IETF drafts that passed compilation: 28/113
- Number of all YANG models in IETF drafts (good, but also example, badly formatted, etc. ): 187

<http://www.claise.be/IETFYANGPageCompilation.html>

# Compilation Mistakes (RFC 6087)

```
<CODE BEGINS> file "ietf-foo@2010-01-18.yang"
```

```
module ietf-foo {  
  // ...  
  revision 2010-01-18 {  
    description "Latest revision";  
    reference "RFC XXXX";  
  }  
  // ...  
}
```

Don't put xxx as the module name

```
IFTF 92 <CODE ENDS>
```

# Outcome1 : Inventory/Compilation

- All draft authors have been notified
- Next steps:
  - Post the code
  - Integrate the tool with idnits
  - Same reporting for opendaylight



# Outcome 2: Industry Landscape

- What is being developed in the different SDOs and opensource project?

IETF, IEEE, Metro Ethernet Forum, CableLabs, Opendaylight, ETSI NFV, Broadband Forum, Open Networking Foundation

- In the process of establishing contacts
- Please review

<http://trac.tools.ietf.org/area/ops/trac/wiki/YANGModelingEffortsInTheIndustry>

# Outcome 3: Terminology

- draft-bogdanovic-netmod-yang-model-classification
- Abstract: “... A consistent terminology would help models categorization, assist in the analysis the YANG data modeling effort in the IETF and in the industry, and facilitate the YANG-related discussions between different groups.”

# Outcome 4: Training

- NETCONF/YANG training
- On the IETF web site
- Going through professional review now
- For 3 audiences
  - What is YANG/NETCONF?
  - For YANG model development
  - For developers

# Outcome 5: What to Standardize?

- Survey: YANG models required by operators
- Ideally, a combination of technology and RFC
- Currently compiling the list of missing YANG models

# Any questions?