YANG Tree Diagrams
draft-ietf-netmod-yang-tree-diagrams-01

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Repo: https://github.com/netmod-wg/yang-tree-diagrams/
Background: YANG Tree Representation

- Previously
  - All documents copy & paste (& change) the same basic text
  - Readers had to carefully read this text to find the differences between documents
  - No schema mount representation

- Now
  - draft-ietf-netmod-yang-tree-diagrams
  - Single document defining YANG Tree Representation
Changes since last meeting

- draft-ietf-netmod-yang-tree-diagrams-00
  - Adopted as WG draft
- draft-ietf-netmod-yang-tree-diagrams-01
  - Filled in some planned sections
  - Added tree representation for Schema Mount
  - Aligned examples with draft-ietf-rtgwg-ni-model-03
Changes and Additions

- Added description of full tree, including all elements
  - Matching existing conventions
- Module, augment, rpcs, notifications
- Submodules, groupings
- Collapsed node representation
- Wrapping long lines

Remaining Changes

- Extensions
  - Currently not shown, representation is TBD
Schema Mount Additions

- **mp** for schema mount points
- **/** for a mounted module
- **@** for a node made available via a schema mount parent reference
- Module (nodes/leaves/etc) marked **ro** when schema mount config leaf = false

Example

```plaintext
+-mp vrf-root?
  +--ro rt:Routing-state/
    | ... +--ro rt:Routing/
    | ... +--ro if:Interfaces@
    | ... +--ro if:Interfaces-State@
    ...```

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module: ietf-network-instance
  +--rw network-instances
  |    +--rw network-instance* [name]
  |       +--rw name           string
  |       +--rw enabled?       boolean
  |       +--rw description?   string
  |       +--rw (ni-type)?
  |           | +--:(l3vpn)
  |           |    | +--rw l3vpn:l3vpn
  |           |    |    | ... // config data
  |           |    | +--ro l3vpn:l3vpn-state
  |           |    |    | ... // state data
  |       +--rw (root-type)?
  |           +--:(vrf-root)
  |               +--mp vrf-root
  |                   ...

Reminder: modules included under root is an implementation time choice

+--ro rt:routing-state/
  |    | +--ro router-id? yang:dotted-quad
  |    |    | +--ro control-plane-protocols
  |    |    |    | +--ro control-plane-protocol* [type name]
  |    |    |    |    | +--ro ospf:ospf/
  |    |    |    ...
  |    | +--rw rt:routing/
  |    |    | +--rw router-id? yang:dotted-quad
  |    |    |    | +--rw control-plane-protocols
  |    |    |    |    | +--rw control-plane-protocol* [type name]
  |    |    |    |    |    | +--rw ospf:ospf/
  |    |    |    |    |    |    | +--rw instance* [af]
  |    |    |    |    |    |    |    | +--rw areas
  |    |    |    |    |    |    |    |    | +--rw area* [area-id]
  |    |    |    |    |    |    |    |    |    | +--rw interfaces
  |    |    |    |    |    |    |    |    |    |    | +--rw interface* [name]
  |    |    |    |    |    |    |    |    |    |    |    | +--rw name if:interface-ref
  |    |    |    |    |    |    |    |    |    |    |    |    | +--rw cost? uint16
  |    |    |    |    |    |    |    |    |    |    |    |    |    | +--ro if:interfaces@
  |    |    |    |    |    |    |    |    |    |    |    |    |    |    ... ...
  |    |    |    |    |    |    |    |    |    |    |    |    | +--ro if:interfaces-state@
  |    |    |    |    ... ...
  |    |    ... ...
  |    +--ro if:interfaces@
Next Steps

- Fill in TBDs
- Confirm current tree representation
- More feedback
- WG LC before next meeting if no substantive changes?