draft-wilton-netmod-intf-ext-yang

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Problem space

- Interface Mgmt YANG (RFC 7223) scope is very broad
- Defines a model for only the most generic interface properties
- In RFC 7223, if-type specific extension models are proposed
- But some minor features/commands are common across many types of switch/router interfaces
- Desirable to have a standard definition for these common feature/commands

Proposed solution

- Define a YANG model with common interface config for network devices
- Configuration includes:

  MTU

  Link flap mitigation (carrier delay + dampening)

  Loopback

  Encapsulation

  Sub-interface

draft-wilton-netmod-intf-vlan-yang

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Problem space

- Various vendors use a sub-interface based model to implement L2VPN and CE services
- Traffic on an Ethernet (or LAG) interface is classified to children sub-interfaces
- Features/forwarding can be applied to the sub-interfaces *just like any other if:interface*
- Complements the formal 802.1Q bridge model defined in IEEE

Proposed solution

- Two YANG modules that augment ietf interfaces/encapsulation node in intf-extensions
- If-l3-vlan module provides basic classification to L3 services using 1 or 2 VLAN tags
- flexible-encapsulation module provides more advanced capabilities for L2 services:
  - Can match on ranges of tags
  - Can be extended to match other L2 header fields
  - Allows for VLAN tag rewriting before L2 forwarding

Summary

- Seeking review, feedback, expression of interest, …
- Any questions (on either draft)?