Yang Data Model for BGP

draft-zhdankin-idr-bgp-cfg-00

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IDR Interim Session Update

Update

- Draft Name changed from draft-zhdankin-netmod-bgpcfg-01 to draft-zhdankin-idr-bgp-cfg-00
 - Work for the Protocol Yang models to be done in the protocol WG
- Added Co-authors
 - Sue Hares (Huawei)
 - Mahesh Jethanandani (Ciena)
 - Xu Feng (Ericsson)
- Incorporated Comments from Adam Simpson (ALU) & Gunter Vandevelde

Update

- Update to BGP Model
 - Added BGP Protocol version
 - Added BGP Neighbor Groups (Peer Groups)
 - Added Neighbor based Transport Parameters
 - Added BGP Route Flap Dampening Support

BGP Yang Model

- module: bgp
 - +--rw bgp-routing
 - +--rw bgp-router
 - +--rw bgp-version? string
 - | +--rw local-as-number? uint32
 - | +--rw local-as-identifier? inet:ip-address
 - | +--rw rpki-config
 - | | |
 - | +--rw af-configuration
 - |
 - +--rw bgp-neighbors
 - +--rw bgp-neighbor-af
 - |
 - +--rw bgp-neighbors-groups
 - |

Major Differences

- Neighbor list is a list inside a container in bgp-yang versus a list in oc-bgp model
- Neighbor group is a container with Nbrs having leaf reference in bgp-yang versus having an individual nbr for inheritance in oc-bgp
- Global Address-familes are containers in bgp-yang versus lists in oc-bgp model
- Import/export (partial L3VPN semantics) present in ocbgp model

Major Differences

- Important to get these resolved to come to a single model at a high level
 - Versioning should help navigate the differences
- Working with oc-bgp draft authors: Rob & Aneesh to resolve these differences

Major Differences

RFCs supported by bgp-yang and oc-bgp RFC4271 BGP Protocol Specification [bgp-yang & oc-bgp] RFC1997 BGP Community Attribute [bgp-yang & oc-bgp] RFC4456 BGP Route Reflection [bgp-yang & oc-bgp] RFC4760 BGP Multiprotocol Specification [bgp-yang & oc-bgp] RFC3065 Autonomous System Confederations for BGP [bgpyang & oc-bgp] RFC2439 BGP Route Flap Dampening [bgp-yang & oc-bgp] RFC 4724 BGP Graceful Restart [bgp-yang & oc-bgp] RFC 6811 BGP Origin Validation [bgp-yang]

Questions?