

BGP YANG Model

draft-ietf-idr-bgp-model-13

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Status (-13)

- Structure of the model
 - Holding up w.r.t. to future extensions
 - Test with L3VPN model
- BGP model
 - Updated to match with rfc9127-bis (BFD YANG)
 - Support for BGP MED Considerations (RFC 4451)
 - Send community now an identity (from an enum)
 - Makes it extensible for wide communities in the future
 - Addition of large communities

Status (-13 cont)

- BGP Policy model
 - Support for next-hop (match & set)
 - Support for Large community set (match & set)
 - Example for BGP Policy configuration



Issues

- Tracked here
 - <https://github.com/mjethanandani/ietf-bgp-yang/issues>
- Major issues (not an exhaustive list)
 - Maintenance of Extended communities (Issue #96)
 - As an IANA module??
 - Extended community typedef (Issue #66)
 - Overlaps with RFC 8294 (Routing YANG types)
 - The generic community types have the formats (as4:as2 as an example), but absent the type/sub-type
 - No as-path Regex (Issue #91)
 - Vendor specific. Leave it as a string??
 - Replace peer AS in the AS Path (Issue #70)
 - Semantics are different between vendors



Next Steps

- Structural issues have been addressed
- Interface with other modules, e.g. BFD, TCP, Keychain have been examined
 - Keychain is a reference
 - BFD interface cleaned up
 - Issue with TCP-AO configuration to be resolved
- L3VPN YANG model
 - Some changes in the L3VPN model needed
 - Example validates the changes

