

# Temp- BGP Yang

## 1. Yang Tree

```
module: frr-bgp
augment /frr-rt:routing/frr-rt:control-plane-protocols/frr-rt:control-plane-protocol:
  +--rw bgp
    +--rw bgp
      +--rw global!
        | +--rw local_as inet:as-number
        | +--rw instance-type bgp-instance-type
        | +--rw router-id? yang:dotted-quad
        | +--rw confederation
        | | +--rw identifier? inet:as-number
        | | +--rw member-as* inet:as-number
        | +--rw med-config
        | | +--rw enable-med? boolean
        | | +--rw max-med-admin? uint32
        | | +--rw max-med-onstart-up-time? uint32
        | | +--rw max-med-onstart-up-value? uint32
        | +--rw route-reflector
        | | +--rw route-reflector-cluster-id? bt:rr-cluster-id-type
        | | +--rw no-client-reflect? boolean
        | | +--rw allow-outbound-policy? boolean
        | +--rw route-selection-options
        | | +--rw always-compare-med? boolean
        | | +--rw deterministic-med? boolean
        | | +--rw confed-med? boolean
        | | +--rw missing-as-worst-med? boolean
        | | +--rw aspath-confed? boolean
        | | +--rw ignore-as-path-length? boolean
        | | +--rw external-compare-router-id? boolean
        | | +--rw allow-multiple-as? boolean
        | | +--rw multi-path-as-set? boolean
        | +--rw global-neighbor-config
        | | +--rw dynamic-neighbors-limit? uint32
        | | +--rw log-neighbor-changes? boolean
        | | +--rw packet-quanta-config
        | | | +--rw wpkt-quanta? uint32
        | | | +--rw rpkt-quanta? uint32
        | +--rw graceful-restart
        | | +--rw enabled? boolean
        | | +--rw graceful-restart-disable? boolean
        | | +--rw preserve_fw_entry? boolean
        | | +--rw restart-time? uint16
        | | +--rw stale-routes-time? uint16
        | | +--rw selection-deferral-time? uint16
        | | +--rw rib-stale-time? uint16
        | +--rw global-config-timers
        | | +--rw rmap-delay-time? uint16
        | | +--rw update-delay-time? uint16
        | | +--rw establish-wait-time? uint16
        | | +--rw connect-retry-interval? uint16
        | | +--rw hold-time? uint16
        | | +--rw keepalive? uint16
        | +--rw no-ipv4-unicast-active? boolean
        | +--rw ebgp-multihop-connected-route-check? boolean
        | +--rw no-fast-external-failover? boolean
        | +--rw local-pref? uint32
        | +--rw default-shutdown? boolean
        | +--rw ebgp-requires-policy? boolean
        | +--rw subgroup-pkt-queue-size? uint32
        | +--rw import-check? boolean
        | +--rw graceful-shutdown
        | | +--rw enable? boolean
        | +--rw afi-safis
        | | +--rw afi-safi* [afi-safi-name]
```

```

+---rw afi-safi-name          identityref
+---rw ipv4-unicast
| +---rw static-route* [prefix]
| | +---rw prefix            inet:ipv4-prefix
| | +---rw label-index?     rt-types:mpls-label
| | +---rw backdoor?        boolean
| +---rw aggregate-route* [prefix]
| | +---rw prefix            inet:ipv4-prefix
| | +---rw as-set?           boolean
| | +---rw summary-only?    boolean
| +---rw admin-distance-route* [prefix]
| | +---rw prefix            inet:ipv4-prefix
| | +---rw distance?        uint8
| +---rw route-flap-damping
| | +---rw enable?           boolean
| | +---rw reach-decay?      uint8
| | +---rw reuse-above?      uint16
| | +---rw suppress-above?   uint16
| | +---rw unreach-decay?    uint8
| +---rw use-multiple-paths
| | +---rw ebgp
| | | +---rw maximum-paths?   uint32
| | +---rw ibgp
| | | +---rw maximum-paths?   uint32
| | | +---rw cluster-length-list? boolean
| +---rw redistribution-list* [route-type route-instance]
| | +---rw route-type        frr-rt-type:frr-route-types
| | +---rw route-instance    uint16
| | +---rw metric?           uint32
| +---rw distance
| | +---rw external?         uint8
| | +---rw internal?         uint8
| | +---rw local?            uint8
+---rw ipv6-unicast
| +---rw static-route* [prefix]
| | +---rw prefix            inet:ipv6-prefix
| | +---rw label-index?     rt-types:mpls-label
| | +---rw backdoor?        boolean
| +---rw aggregate-route* [prefix]
| | +---rw prefix            inet:ipv4-prefix
| | +---rw as-set?           boolean
| | +---rw summary-only?    boolean
| +---rw admin-distance-route* [prefix]
| | +---rw prefix            inet:ipv6-prefix
| | +---rw distance?        uint8
| +---rw use-multiple-paths
| | +---rw ebgp
| | | +---rw maximum-paths?   uint32
| | +---rw ibgp
| | | +---rw maximum-paths?   uint32
| | | +---rw cluster-length-list? boolean
| +---rw redistribution-list* [route-type route-instance]
| | +---rw route-type        frr-rt-type:frr-route-types
| | +---rw route-instance    uint16
| | +---rw metric?           uint32
| +---rw distance
| | +---rw external?         uint8
| | +---rw internal?         uint8
| | +---rw local?            uint8
+---rw ipv4-labeled-unicast
+---rw ipv6-labeled-unicast
| +---rw use-multiple-paths
| | +---rw ebgp
| | | +---rw maximum-paths?   uint32
| | +---rw ibgp
| | | +---rw maximum-paths?   uint32
| | | +---rw cluster-length-list? boolean
+---rw l3vpn-ipv4-unicast
+---rw l3vpn-ipv6-unicast
+---rw l3vpn-ipv4-multicast
+---rw l3vpn-ipv6-multicast

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|         +--rw l2vpn-vpls
|         +--rw l2vpn-evpn
|         +--rw ipv4-multicast
|         |   +--rw static-route* [prefix]
|         |   |   +--rw prefix          rt-types:ipv4-multicast-group-address
|         |   |   +--rw label-index?    rt-types:mpls-label
|         |   |   +--rw backdoor?       boolean
|         |   +--rw aggregate-route* [prefix]
|         |   |   +--rw prefix          rt-types:ipv4-multicast-group-address
|         |   |   +--rw as-set?         boolean
|         |   |   +--rw summary-only?   boolean
|         |   +--rw admin-distance-route* [prefix]
|         |   |   +--rw prefix          rt-types:ipv4-multicast-group-address
|         |   +--rw distance
|         |   |   +--rw external?      uint8
|         |   |   +--rw internal?      uint8
|         |   |   +--rw local?         uint8
|         |   +--rw route-flap-damping
|         |   |   +--rw enable?        boolean
|         |   |   +--rw reach-decay?   uint8
|         |   |   +--rw reuse-above?   uint16
|         |   |   +--rw suppress-above? uint16
|         |   |   +--rw unreach-decay? uint8
|         +--rw ipv6-multicast
|         |   +--rw static-route* [prefix]
|         |   |   +--rw prefix          rt-types:ipv6-multicast-group-address
|         |   |   +--rw label-index?    rt-types:mpls-label
|         |   |   +--rw backdoor?       boolean
|         |   +--rw aggregate-route* [prefix]
|         |   |   +--rw prefix          rt-types:ipv6-multicast-group-address
|         |   |   +--rw as-set?         boolean
|         |   |   +--rw summary-only?   boolean
|         |   +--rw admin-distance-route* [prefix]
|         |   |   +--rw prefix          rt-types:ipv6-multicast-group-address
|         |   +--rw distance
|         |   |   +--rw external?      uint8
|         |   |   +--rw internal?      uint8
|         |   |   +--rw local?         uint8
|         +--rw ipv4-flowspec
|         |   +--rw flow-spec-config
|         |   |   +--rw interface?     frr-interface:interface-ref
|         +--rw ipv6-flowspec
+--rw neighbors
|   +--rw neighbor* [remote-address]
|   |   +--rw remote-address          inet:ip-address
|   |   +--rw local-interface?        frr-interface:interface-ref
|   |   +--rw local-port?             inet:port-number
|   |   +--rw peer-group?             -> ../../peer-groups/peer-group/peer-group-name
|   +--rw neighbor-group-config
|   |   +--rw password?               string
|   |   +--rw ttl-security?           uint8
|   |   +--rw solo?                   boolean
|   |   +--rw enforce-first-as?       boolean
|   |   +--rw description?            string
|   |   +--rw passive-mode?           boolean
|   +--rw capability-options
|   |   +--rw dynamic-capability?     boolean
|   |   +--rw strict-capability?      boolean
|   |   +--rw extended-nexthop-capability? boolean
|   |   +--rw no-capability-negotiate? boolean
|   |   +--rw override-capability?    boolean
|   +--rw update-source
|   |   +--rw (source)?
|   |   |   +--:(ip-based)
|   |   |   |   +--rw ip?             inet:ip-address
|   |   |   +--:(interface-based)
|   |   |   |   +--rw interface?      frr-interface:interface-ref
|   +--rw neighbor-remote-as
|   |   +--rw remote-as-type          as-type
|   |   +--rw remote-as?              inet:as-number
+--rw ebgp-multihop

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| +--rw enabled?          boolean
| +--rw multihop-ttl?    uint8
+--rw local-as
| +--rw local-as         inet:as-number
| +--rw no-prepend?      boolean
| +--rw no-replace-as?   boolean
+--rw bfd-options
| +--rw enable            boolean
| +--rw detect-multiplier? uint8
| +--rw required-min-rx?  uint16
| +--rw desired-min-tx?   uint16
| +--rw check-cp-failure? boolean
+--rw admin-shutdown
| +--rw enable            boolean
| +--rw message            string
+--rw graceful-restart
| +--rw (mode)?
| | +--:(graceful-restart-mode)
| | | +--rw enable?          boolean
| | +--:(graceful-restart-helper-mode)
| | | +--rw graceful-restart-helper? boolean
| | +--:(graceful-restart-disable-mode)
| | | +--rw graceful-restart-disable? boolean
+--rw afi-safis
| +--rw afi-safi* [afi-safi-name]
| | +--rw afi-safi-name      identityref
| | +--rw enabled?           boolean
| | +--rw ipv4-unicast
| | | +--rw add-paths
| | | | +--rw path-type?    add-path-type
| | | +--rw as-path-options
| | | | +--rw (allow-as-in)?
| | | | | +--:(occurrence-based)
| | | | | +--rw allow-own-as?          uint8
| | | | | +--:(origin-based)
| | | | | +--rw allow-own-origin-as?   boolean
| | | +--rw replace-peer-as?          boolean
| | +--rw default-originate-options
| | | +--rw send-default-route?        boolean
| | +--rw prefix-limit
| | | +--rw max-prefixes                uint32
| | | +--rw (options)?
| | | | +--:(warning)
| | | | | +--rw warning-only?          boolean
| | | | +--:(restart)
| | | | | +--rw restart-timer?         uint32
| | | | +--:(threshold)
| | | | | +--rw shutdown-threshold-pct? bt:percentage
| | | | +--:(threshold-restart)
| | | | | +--rw tr-shutdown-threshold-pct? bt:percentage
| | | | | +--rw tr-restart-timer?       uint32
| | | | +--:(threshold-warning)
| | | | | +--rw tw-shutdown-threshold-pct? bt:percentage
| | | | | +--rw tw-warning-only?        boolean
| | +--rw nexthop-self
| | | +--rw next-hop-self?            boolean
| | | +--rw next-hop-self-force?      boolean
| | +--rw private-as
| | | +--rw remove-private-as-all?    boolean
| | | +--rw remove-private-as-all-replace? boolean
| | | +--rw remove-private-as?        boolean
| | | +--rw remove-private-as-replace? boolean
| | +--rw weight
| | | +--rw weight-attribute?          uint16
+--rw route-reflector
| +--rw route-reflector-client?        boolean
+--rw route-server
| +--rw route-server-client?           boolean
+--rw send-community
| +--rw send-community?                boolean
| +--rw send-ext-community?            boolean

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|
|         | +--rw send-large-community?      boolean
|         +--rw ipv6-unicast
|         | +--rw nexthop-local-unchanged?    boolean
|         +--rw ipv4-labeled-unicast
|         +--rw ipv6-labeled-unicast
|         +--rw l3vpn-ipv4-unicast
|         +--rw l3vpn-ipv6-unicast
|         +--rw l3vpn-ipv4-multicast
|         +--rw l3vpn-ipv6-multicast
|         +--rw l2vpn-vpls
|         +--rw l2vpn-evpn
|         +--rw ipv4-multicast
|         +--rw ipv6-multicast
|         +--rw ipv4-flowspec
|         +--rw ipv6-flowspec
+--rw unnumbered-neighbor* [interface]
+--rw interface                frr-interface:interface-ref
+--rw v6only?                  boolean
+--rw peer-group?              -> ../../../../peer-groups/peer-group/peer-group-name
+--rw neighbor-group-config
|   +--rw password?            string
|   +--rw ttl-security?        uint8
|   +--rw solo?                boolean
|   +--rw enforce-first-as?     boolean
|   +--rw description?         string
|   +--rw passive-mode?        boolean
|   +--rw capability-options
|   |   +--rw dynamic-capability?      boolean
|   |   +--rw strict-capability?       boolean
|   |   +--rw extended-nexthop-capability?  boolean
|   |   +--rw no-capability-negotiate?    boolean
|   |   +--rw override-capability?       boolean
|   +--rw update-source
|   |   +--rw (source)?
|   |   |   +--rw ip?                inet:ip-address
|   |   |   +--rw (interface-based)
|   |   |   |   +--rw interface?    frr-interface:interface-ref
|   +--rw neighbor-remote-as
|   |   +--rw remote-as-type    as-type
|   |   +--rw remote-as?       inet:as-number
|   +--rw ebgp-multihop
|   |   +--rw enabled?         boolean
|   |   +--rw multihop-ttl?    uint8
|   +--rw local-as
|   |   +--rw local-as         inet:as-number
|   |   +--rw no-prepend?      boolean
|   |   +--rw no-replace-as?   boolean
|   +--rw bfd-options
|   |   +--rw enable           boolean
|   |   +--rw detect-multiplier?  uint8
|   |   +--rw required-min-rx?   uint16
|   |   +--rw desired-min-tx?   uint16
|   |   +--rw check-cp-failure?  boolean
|   +--rw admin-shutdown
|   |   +--rw enable           boolean
|   |   +--rw message          string
|   +--rw graceful-restart
|   |   +--rw (mode)?
|   |   |   +--rw (graceful-restart-mode)
|   |   |   |   +--rw enable?          boolean
|   |   |   +--rw (graceful-restart-helper-mode)
|   |   |   |   +--rw graceful-restart-helper?  boolean
|   |   |   +--rw (graceful-restart-disable-mode)
|   |   |   |   +--rw graceful-restart-disable?  boolean
|   +--rw afi-safis
|   |   +--rw afi-safi* [afi-safi-name]
|   |   |   +--rw afi-safi-name        identityref
|   |   |   +--rw enabled?             boolean
|   |   |   +--rw ipv4-unicast
|   |   |   +--rw ipv6-unicast
```

```

|         +--rw ipv4-labeled-unicast
|         +--rw ipv6-labeled-unicast
|         +--rw l3vpn-ipv4-unicast
|         +--rw l3vpn-ipv6-unicast
|         +--rw l3vpn-ipv4-multicast
|         +--rw l3vpn-ipv6-multicast
|         +--rw l2vpn-vpls
|         +--rw l2vpn-evpn
|         +--rw ipv4-multicast
|         +--rw ipv6-multicast
|         +--rw ipv4-flowspec
|         +--rw ipv6-flowspec
+--rw peer-groups
+--rw peer-group* [peer-group-name]
|   +--rw peer-group-name      string
|   +--rw ipv4-listen-range*    inet:ipv4-address
|   +--rw ipv6-listen-range*    inet:ipv6-address
|   +--rw neighbor-group-config
|     +--rw password?          string
|     +--rw ttl-security?      uint8
|     +--rw solo?              boolean
|     +--rw enforce-first-as?  boolean
|     +--rw description?       string
|     +--rw passive-mode?      boolean
|     +--rw capability-options
|       | +--rw dynamic-capability?    boolean
|       | +--rw strict-capability?     boolean
|       | +--rw extended-nextthop-capability?  boolean
|       | +--rw no-capability-negotiate?  boolean
|       | +--rw override-capability?     boolean
|     +--rw update-source
|       | +--rw (source)?
|       |   +--:(ip-based)
|       |   | +--rw ip?          inet:ip-address
|       |   +--:(interface-based)
|       |   | +--rw interface?  frr-interface:interface-ref
|     +--rw neighbor-remote-as
|       | +--rw remote-as-type  as-type
|       | +--rw remote-as?      inet:as-number
|     +--rw ebgp-multihop
|       | +--rw enabled?        boolean
|       | +--rw multihop-ttl?   uint8
|     +--rw local-as
|       | +--rw local-as        inet:as-number
|       | +--rw no-prepend?     boolean
|       | +--rw no-replace-as?  boolean
|     +--rw bfd-options
|       | +--rw enable          boolean
|       | +--rw detect-multiplier?  uint8
|       | +--rw required-min-rx?   uint16
|       | +--rw desired-min-tx?   uint16
|       | +--rw check-cp-failure?  boolean
|     +--rw admin-shutdown
|       | +--rw enable          boolean
|       | +--rw message         string
|     +--rw graceful-restart
|       | +--rw (mode)?
|       |   +--:(graceful-restart-mode)
|       |   | +--rw enable?      boolean
|       |   +--:(graceful-restart-helper-mode)
|       |   | +--rw graceful-restart-helper?  boolean
|       |   +--:(graceful-restart-disable-mode)
|       |   | +--rw graceful-restart-disable?  boolean
|     +--rw afi-safis
|       +--rw afi-safi* [afi-safi-name]
|         +--rw afi-safi-name      identityref
|         +--rw enabled?           boolean
|         +--rw ipv4-unicast
|         +--rw ipv6-unicast
|         +--rw ipv4-labeled-unicast
|         +--rw ipv6-labeled-unicast

```

```
+--rw l3vpn-ipv4-unicast
+--rw l3vpn-ipv6-unicast
+--rw l3vpn-ipv4-multicast
+--rw l3vpn-ipv6-multicast
+--rw l2vpn-vpls
+--rw l2vpn-evpn
+--rw ipv4-multicast
+--rw ipv6-multicast
+--rw ipv4-flowspec
+--rw ipv6-flowspec
```