



Troubleshooting

Version: 3448

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BGP/Troubleshooting

Peer can not establish a session with my router

Common configuration errors

- Is the IP address for failed peer correct?
- Is the Router ID set correctly? It should be an IP address assigned on the router.
- How many hops away is the peer? Default setting requires a peer to be adjacent.
- Does the router have any firewall rules blocking BGP traffic? This is particularly relevant if you've hardened the router.
- Is the correct interface and source IP being used? Specify the interface with `update-source` to ensure the correct source IP address is used. This is particularly important if an MD5 password is configured for the peer. Specify the correct `update-source` for the peer if a password is set and the kernel debug log is full of messages like:

```
MD5 Hash NOT expected but found (192.168.100.220, 54367)->(172.20.0.2, 179)
```

Peer session is established, but routes are not propagating

Common configuration errors

No routes installed from EBGP multihop peer (nexthop inaccessible)

Some providers require you to establish 2 peering sessions. The first is with your nexthop upstream. This session will typically send you a /32 route to the second BGP peer. The second BGP peer is often a route reflector which is multiple hops into your provider's network. Quagga, by design, will not install a route via a nexthop which is learned via the same routing protocol (EBGP in this case). This means that all the routes learned from the second peer will be inaccessible because the second peer's IP (nexthop) was also learned via EBGP from the first peer.

Solution

One of the following should be implemented:

- A static route to the second BGP peer must be added via the first BGP peer's IP address in `wan.conf`

Or

- A default route via the first BGP peer's IP address must be added.

