

batman-adv - Bug #397

BATMAN_V throughput on bridge, vxlan and veth

07/29/2019 04:51 PM - Linus Lüßing

Status:	New	Start date:	07/29/2019
Priority:	Normal	Due date:	
Assignee:	batman-adv developers	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			

Description

For these interfaces, bridge, vxlan and veth, batman-adv currently uses the 1Mbit/s default throughput. Also see:

<https://github.com/freifunk-gluon/gluon/issues/1728>

For vxlan Matthias is currently working on a patch to inherit the properties from its parent device (similar to what vlan does).

For veth ethtool reports 10Gbit/s, which is way more reasonable value for an in-kernel connection than our 1MBit/s default value:

```
$ ethtool veth0
Settings for veth0:
    Supported ports: [ ]
    Supported link modes:   Not reported
    Supported pause frame use: No
    Supports auto-negotiation: No
    Supported FEC modes:   Not reported
    Advertised link modes:  Not reported
    Advertised pause frame use: No
    Advertised auto-negotiation: No
    Advertised FEC modes:  Not reported
    Speed: 10000Mb/s
    Duplex: Full
    Port: Twisted Pair
    PHYAD: 0
    Transceiver: internal
    Auto-negotiation: off
    MDI-X: Unknown
    Link detected: yes
```

However batman-adv uses the default 1MBit/s throughput value due to auto-negotiation being disabled. We could add an exception in batman-adv for veth to disregard the auto-negotiation property, however that would not be sufficient for applications with for instance v(x)lans stacked on top of veth.

For bridge interfaces it is even more tricky.

History

#1 - 07/29/2019 05:00 PM - Linus Lüßing

Approaches that could be worth discussing:

- Should veth be patched to advertise auto-negotiation=on?
- Should batman-adv be patched to disregard auto-negotiation property for veth?
- Should the bridge be patched to advertise the minimum speed of all bridge ports?
- Should there be a user, per hard-iface option in batman-adv to always fetch the speed regardless of the auto-negotiation flag?
- Should the auto-negotiation flag check in batman-adv be removed and instead applying the default throughput to a list of specific interface types, only? (e.g. tap, l2tp, ...)