

batman-adv - Bug #338

batman-adv2017.1 unstable with multicast optimization

07/07/2017 09:13 PM - Andre Kasper

Status:	Rejected	Start date:	07/07/2017
Priority:	High	Due date:	
Assignee:	Linus Lüßing	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			
Description			
<p>I'm using freifunk-gluon open-wrt firmware 2017.1.1 This firmware uses batman-adv2017.1.</p> <p>After upgrading to gluon 2017.1 the whole network went unstable (high load, reboots etc.). The gluon developers deactivated Multicast optimizations. The Network became stable again with the 2017.1.1 release.</p> <p>I've updated my Supernodes (batman gws) to batman-adv 2017.1. (MulOpt active) and the whole mesh went unstable again. That means, that also the nodes with MulOpt disabled where affected. I've disabled MU on the supernodes and everything went stable again.</p> <p>==> Something in Multicast Optimization is able to struggle the whole mesh. Maybe some compatibility issues in heterogen. networks with MulOpt enalbed and disabled</p>			
Related issues:			
Is duplicate of batman-adv - Bug #336: tt: store is_wifi & isolation flag per...		Closed	06/10/2017
Is duplicate of batman-adv - Bug #335: tt: remove is_wifi & isolation flag fr...		Closed	06/10/2017

History

#1 - 07/07/2017 09:30 PM - Sven Eckelmann

- Is duplicate of Bug #336: tt: store is_wifi & isolation flag per announcing originator added

#2 - 07/07/2017 09:31 PM - Sven Eckelmann

- Related to Bug #335: tt: remove is_wifi & isolation flag from multicast tt entries added

#3 - 07/07/2017 09:31 PM - Sven Eckelmann

- Related to deleted (Bug #335: tt: remove is_wifi & isolation flag from multicast tt entries)

#4 - 07/07/2017 09:31 PM - Sven Eckelmann

- Is duplicate of Bug #335: tt: remove is_wifi & isolation flag from multicast tt entries added

#5 - 07/07/2017 09:33 PM - Sven Eckelmann

- Assignee changed from batman-adv developers to Linus Lüßing

#6 - 07/11/2017 02:22 AM - Linus Lüßing

- Priority changed from Normal to High

Changing the priority to "High", as there have been independent reports from several communities on the Gluon bug tracker already:

<https://github.com/freifunk-gluon/gluon/issues/1183>

Regarding "I've disabled MU on the supernodes and everything went stable again.": Do you mean you disabled it via "batctl mm 0" or did you recompile batman-adv with "CONFIG_BATMAN_ADV_MCAST=n"?

And concerning the "Assignee", nothing I can do about for now, as far as I can tell. Waiting for some people to test and/or review the patch mentioned in [#336](#).

#7 - 07/11/2017 07:26 AM - Andre Kasper

I've recompiled it.

fyi: The linked gluon ticket is mine.

#8 - 08/14/2017 04:20 PM - Andre Kasper

fyi:

I would like to test this fix, but I don't know how. I would need a fixed batman-adv for my "supernodes". If I understood the problem, it wouldn't make sense to test the fix on the gluon nodes only, without patching the high-traffic supernodes, because if the supernodes confuse the flags, the gluon nodes could not fix it...

Can someone provide an how-to get a batman-adv with enabled fix?

#9 - 08/14/2017 10:16 PM - Linus Lüssing

Sure!

You can grab a version containing this patch via:

```
$ git clone https://git.open-mesh.org/batman-adv.git
$ cd batman-adv
$ git checkout v2017.2
$ git cherry-pick 382d020fe3fa528b1f
$ make
```

(Make sure, you have your kernel headers present/installed. In Debian, the linux-headers-<your-kernel-version> package for instance.)

Then load this newly, externally build kernel module with something like:

```
$ insmod <yourbuildfolder>/batman-adv/build/net/batman-adv/batman-adv.ko
```

Depending on your host configuration you might need to unload any other batman-adv version first:

```
$ modprobe -r batman-adv
```

And might need to load some dependencies manually via modprobe as insmod is not that smart (for instance "modprobe crc16" and "modprobe libcrc32c", check "dmesg" if you have errors while inserting your self built batman-adv.ko).

#10 - 08/24/2017 10:35 PM - Andre Kasper

I've had some time to test it.
The problems seem to resist.

1. Is it important that ALL Nodes in the network have got the new and patched batman-adv?
2. The "clients" are gluon nodes connected via fastd. There is a ticket that BLA maybe broken:
<https://github.com/freifunk-gluon/gluon/issues/1198>

I've many reportings that the supernodes got packages with their own mac... i'm not sure if this is okay, and BLA handles it (just "detected") or if this is an error in batman-adv or gluon

which information should i provide? to find out what's happening?

#11 - 08/29/2017 06:35 PM - Andre Kasper

I'm sorry. I've to report, that I missed to enable BLA on gateway level. I had never enabled it before. The logentries where new, so something is still wrong, because before upgrading these messages where not there. I have now enabled bla, so i can't tell what's happening. any hints what i should check?

#12 - 08/30/2017 02:09 AM - Linus Lüssing

Hi Andre,

Thanks for the additional feedback and testing!

Hm, BLA should be enabled by default since some versions ago. So I'm a little confused why you say you had to enable it on a gateway with batman-adv v2017.2 plus this TT sync patch.

No, you shouldn't need to patch all nodes to notice a difference. Upgrading central nodes, like gateways or nodes with a VPN connection, should reduce the impact of the issue already and should contain infected multicast TT entries to some degree. And upgrading nodes close to the zombie node which triggers the issue for you, should help, too.

Could you share the output of "batctl tg" from a patched gateway? So we can have an overview of the current degree of infection in your network? (e.g. multicast TT entries with a "W" or "I" flag are infected)

#13 - 02/27/2018 01:23 PM - Sven Eckelmann

- *Status changed from New to Rejected*

Closing it because reporter is MIA and we cannot reproduce it.