

batman-adv - Bug #164

Local translation table update on a bat0 MAC change

09/05/2012 08:51 PM - Def D

Status:	Closed	Start date:	09/05/2012
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:	2012.4.0		

Description

Using batman-adv 2012.3.0

When I change the MAC adresse of bat0, the local translation table is not well updated.

```
root@openwrt:/# batctl tl
Locally retrieved addresses (from bat0) announced via TT (TTVN: 184):
* 26:aa:aa:aa:aa:aa [.P...]
* xx:xx:xx:xx:xx:xx [.....]
* xx:xx:xx:xx:xx:xx [.....]
root@openwrt:/# ifconfig bat0 hw ether 36:aa:aa:aa:aa:aa
root@openwrt:/# batctl tl
Locally retrieved addresses (from bat0) announced via TT (TTVN: 186):
* 26:aa:aa:aa:aa:aa [.P...]
* 36:aa:aa:aa:aa:aa [.....]
* xx:xx:xx:xx:xx:xx [.....]
* xx:xx:xx:xx:xx:xx [.....]
```

--> The adresse 26:aa:aa:aa:aa:aa is not deleted because tagged as NoPurge.

--> The adresse 36:aa:aa:aa:aa:aa is not tagged as NoPurge.

```
static int batadv_interface_set_mac_addr(struct net_device *dev, void *p)
{
    struct batadv_priv *bat_priv = netdev_priv(dev);
    struct sockaddr *addr = p;

    if (!is_valid_ether_addr(addr->sa_data))
        return -EADDRNOTAVAIL;

    /* only modify transtable if it has been initialized before */
    if (atomic_read(&bat_priv->mesh_state) == BATADV_MESH_ACTIVE) {
        batadv_tt_local_remove(bat_priv, dev->dev_addr,
                               "mac address changed", false);
        batadv_tt_local_add(dev, addr->sa_data, BATADV_NULL_IFINDEX);
    }

    memcpy(dev->dev_addr, addr->sa_data, ETH_ALEN);
    dev->addr_assign_type &= ~NET_ADDR_RANDOM;
    return 0;
}
```

I think the adresse 36:aa:aa:aa:aa:aa is not tagged as NoPurged because the function *batadv_tt_local_add* is called before the update of mac adresse *memcpy(dev->dev_addr, addr->sa_data, ETH_ALEN)*;

I'm right ?

Thanks.

History

#1 - 09/06/2012 08:42 AM - Antonio Quartulli

Def D wrote:

I think the adresse 36:aa:aa:aa:aa:aa is not tagged as NoPurged because the function *batadv_tt_local_add* is called before the update of mac adresse *memcpy(dev->dev_addr, addr->sa_data, ETH_ALEN)*;

I'm right ?

Exactly. In *tt_local_add()* the code compares the new address with the bat0 one and if they are equal it adds the NoPurge flag.

We need to copy the address in 'dev->dev_addr' before invoking *tt_local_add*, but then we have to pay attention to invoke *tt_loval_del* with the correct argument.

are you going to send a patch to fix this?

#2 - 09/06/2012 12:03 PM - Def D

- File *batman-adv_002_fix_softiface_mac_update_remove_old_tt_entry.patch* added

- File *batman-adv_001_fix_softiface_mac_update.patch* added

Antonio Quartulli wrote:

We need to copy the address in 'dev->dev_addr' before invoking *tt_local_add*, but then we have to pay attention to invoke *tt_loval_del* with the correct argument.

Thank you

Antonio Quartulli wrote:

are you going to send a patch to fix this?

I can try

- *batman-adv_001_fix_softiface_mac_update.patch*
Update *dev->dev_addr* before calling *tt_local_add* into function *interface_set_mac_addr*
- *batman-adv_002_fix_softiface_mac_update_remove_old_tt_entry.patch*
To allow removing old MAC adresse: Add argument *force* in function *tt_local_remove* to remove flag *NoPurge*

Tested on my boards.

It is fine ?

#3 - 09/06/2012 12:59 PM - Antonio Quartulli

I don't think we really need Patch 002. The NOPURGE flag is used only to avoid to purge the entry in case of timeout, therefore in this case the deletion will happen anyway.

For patch 001, instead of adding an else branch, what about storing the old mac in a local variable, passing it to the tt_local_del and so moving the memcpy before the if-loop?

By the way, now I think it would be better to use the git-format-patch and send it over the ml.

#4 - 09/10/2012 06:43 PM - Def D

- Patch 001
Using a local variable to store old MAC address use a memcpy that can be avoided.
The else branch introduce a duplicate memcpy code to update dev->dev_addr, but it is more optimized. isnt it ?
- Patch 002
Ok, I understand why the patch is not relevant.

#5 - 09/19/2012 05:43 PM - Def D

- *File batman-adv_001_fix_softiface_mac_update_v2.patch added*

Antonio Quartulli wrote:

For patch 001, instead of adding an else branch, what about storing the old mac in a local variable, passing it to the tt_local_del and so moving the memcpy before the if-loop?

I did as you suggested.

Using git-format-patch.

I will (re)send to mailing list.

#6 - 11/10/2012 05:08 PM - Antonio Quartulli

- *Status changed from New to Resolved*

#7 - 08/31/2013 08:42 PM - Antonio Quartulli

- *Status changed from Resolved to Closed*

#8 - 02/11/2017 09:18 AM - Sven Eckelmann

- *Target version set to 2012.4.0*

Files

batman-adv_001_fix_softiface_mac_update.patch	599 Bytes	09/06/2012	Def D
batman-adv_002_fix_softiface_mac_update_remove_old_tt_entry.patch	1.97 KB	09/06/2012	Def D
batman-adv_001_fix_softiface_mac_update_v2.patch	1.27 KB	09/19/2012	Def D