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commit 9ea003c4671b2fc455320ecf6d4a43b0a3c1878a (patch)
tree 4992e2841f7d28a08e22a6ba709c83b985092dec
parent 2a2a0f2be34c50f0f976315e7d872c21cebd3c44 (diff)
download linux-9ea003c4671b2fc455320ecf6d4a43b0a3c1878a.tar.gz

diff options

context: 3
space: include
mode: unified

net: macvlan: fix memory leaks of macvlan_common_newlink

[Upstream commit 23569b5652ee8e8e55a12f7835f59af6f3cefc30]

kmemleak reports memory leaks in macvlan_common_newlink, as follows:

```
ip link add link eth0 name .. type macvlan mode source macaddr add
<MAC-ADDR>
```

kmemleak reports:

```
unreferenced object 0xfffff8880109bb140 (size 64):
comm "ip", pid 284, jiffies 4294986150 (age 430.108s)
hex dump (first 32 bytes):
00 00 00 00 00 00 b8 aa 5a 12 80 88 ff ff .....Z....
80 1b fa 0d 80 88 ff ff 1e ff ac af c7 c1 6b 6b .....kk
backtrace:
[<ffffffffff813e06a7>] kmem_cache_alloc_trace+0x1c7/0x300
[<ffffffffff81b66025>] macvlan_hash_add_source+0x45/0xc0
[<ffffffffff81b66a67>] macvlan_changelink_sources+0xd7/0x170
[<ffffffffff81b6775c>] macvlan_common_newlink+0x38c/0x5a0
[<ffffffffff81b6797e>] macvlan_newlink+0xe/0x20
[<ffffffffff81d97f8f>] __rtnl_newlink+0x7af/0xa50
[<ffffffffff81d98278>] rtnl_newlink+0x48/0x70
...
```

In the scenario where the macvlan mode is configured as 'source', macvlan_changelink_sources() will be executed to reconfigure list of remote source mac addresses, at the same time, if register_netdevice() return an error, the resource generated by macvlan_changelink_sources() is not cleaned up.

Using this patch, in the case of an error, it will execute macvlan_flush_sources() to ensure that the resource is cleaned up.

Fixes: aa5fd0fb7748 ("driver: macvlan: Destroy new macvlan port if macvlan_common_newlink failed.")

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Diffstat

-rw-r--r-- drivers/net/macvlan.c 4

1 files changed, 3 insertions, 1 deletions

```
diff --git a/drivers/net/macvlan.c b/drivers/net/macvlan.c
index 1080d6ebff63b6..9983d37ee87d93 100644
--- a/drivers/net/macvlan.c
+++ b/drivers/net/macvlan.c
@@ -1533,8 +1533,10 @@ destroy_macvlan_port:
     /* the macvlan port may be freed by macvlan_uninit when fail to register.
      * so we destroy the macvlan port only when it's valid.
      */
-    if (create && macvlan_port_get_rtnl(lowerdev))
+    if (create & macvlan_port_get_rtnl(lowerdev)) {
+        macvlan_flush_sources(port, vlan);
        macvlan_port_destroy(port->dev);
+
    }
    return err;
}
EXPORT_SYMBOL_GPL(macvlan_common_newlink);
```

generated by cgit 1.2.3-korg (git 2.43.0) at 2025-05-01 16:27:14 +0000