

batman-adv - Bug #145

"INFO: possible circular locking dependency detected" on module unloading

02/15/2011 10:59 AM - Linus Lüssing

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:	2011.2.0		

Description

When doing a rmmmod off the batman-adv kernel module, the info about a possible circular locking dependency shows up (see below). Despite from that, the system is continuing to run normal, so no kernel freeze. Reproducible: always

kvm image: Linux mesh-node1 2.6.37 #3 SMP PREEMPT Mon Feb 7 07:53:08 GMT 2011 i686 GNU/Linux
(kernel has been compiled with extra kernel hacking debug stuff)

batman-adv: svn rev. 1945; also present in v2011.0.0

```
[ 104.055934] batman_adv: B.A.T.M.A.N. advanced devel (compatibility version 12) loaded
[ 104.406641] batman_adv: bat0: Adding interface: eth1
[ 104.414163] batman_adv: bat0: The MTU of interface eth1 is too small (1500) to handle the trans
port of batman-adv packets. Packets going over this interface will be fragmented on layer2 which c
ould impact the performance. Setting the MTU to 1527 would solve the problem.
[ 104.430237] batman_adv: bat0: Not using interface eth1 (retrying later): interface not active
[ 104.443770] batman_adv: bat0: Adding interface: eth2
[ 104.467688] batman_adv: bat0: The MTU of interface eth2 is too small (1500) to handle the trans
port of batman-adv packets. Packets going over this interface will be fragmented on layer2 which c
ould impact the performance. Setting the MTU to 1527 would solve the problem.
[ 104.480623] batman_adv: bat0: Not using interface eth2 (retrying later): interface not active
[ 104.608414] eth1: link up, 100Mbps, full-duplex, lpa 0x05E1
[ 104.621756] batman_adv: bat0: Interface activated: eth1
[ 104.677809] eth2: link up, 100Mbps, full-duplex, lpa 0x05E1
[ 104.683625] batman_adv: bat0: Interface activated: eth2
[ 119.319279]
[ 119.319281] =====
[ 119.320075] [ INFO: possible circular locking dependency detected ]
[ 119.320075] 2.6.37 #3
[ 119.320075] -----
[ 119.320075] rmmmod/2977 is trying to acquire lock:
[ 119.320075] (s_active#58){++++.+}, at: [<c1146aef>] sysfs_remove_dir+0x5e/0x6c
[ 119.320075]
[ 119.320075] but task is already holding lock:
[ 119.320075] (rtnl_mutex){+.+.+.}, at: [<c1429703>] rtnl_lock+0xf/0x11
[ 119.320075]
[ 119.320075] which lock already depends on the new lock.
[ 119.320075]
[ 119.320075]
[ 119.320075] the existing dependency chain (in reverse order) is:
[ 119.320075]
[ 119.320075] -> #1 (rtnl_mutex){+.+.+.}:
[ 119.320075]   [<c1087d68>] lock_acquire+0xce/0xeb
[ 119.320075]   [<c154a9b3>] +mutex_lock_common+0x3e/0x3a6
[ 119.320075]   [<c154adaa>] mutex_lock_nested+0x2b/0x33
[ 119.320075]   [<c1429703>] rtnl_lock+0xf/0x11
[ 119.320075]   [<c14200f5>] register_netdev+0xc/0x3f
[ 119.320075]   [<f1d0dfff>] softif_create+0x38/0x137 [batman_adv]
[ 119.320075]   [<f1d099eb>] hardif_enable_interface+0x4f/0x22a [batman_adv]
[ 119.320075]   [<f1d07cc2>] store_mesh_iface+0xed/0x113 [batman_adv]
[ 119.320075]   [<c11defd1>] kobj_attr_store+0x1a/0x22
[ 119.320075]   [<c11457df>] sysfs_write_file+0xb9/0xe4
[ 119.320075]   [<c10fcd50>] vfs_write+0x84/0xde
[ 119.320075]   [<c10fce43>] sys_write+0x3b/0x60
```

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[ 119.320075] [<c154c45d>] syscall_call+0x7/0xb
[ 119.320075]
[ 119.320075] -> #0 (s_active#58){++++.+}:
[ 119.320075] [<c1087a00>] +lock_acquire+0x966/0xc00
[ 119.320075] [<c1087d68>] lock_acquire+0xce/0xeb
[ 119.320075] [<c11469f3>] sysfs_addrm_finish+0x92/0xf9
[ 119.320075] [<c1146aef>] sysfs_remove_dir+0x5e/0x6c
[ 119.320075] [<c11df397>] kobject_del+0xf/0x2c
[ 119.320075] [<c11df3e6>] kobject_release+0x32/0x50
[ 119.320075] [<c11e0191>] kref_put+0x39/0x44
[ 119.320075] [<c11df330>] kobject_put+0x37/0x3c
[ 119.320075] [<f1d07689>] sysfs_del_hardif+0xd/0x16 [batman_adv]
[ 119.320075] [<f1d0969a>] hardif_remove_interface+0x23/0x3e [batman_adv]
[ 119.320075] [<f1d09989>] hardif_remove_interfaces+0x6d/0x80 [batman_adv]
[ 119.320075] [<f1d11825>] batman_exit+0x17/0x3c [batman_adv]
[ 119.320075] [<c109226e>] sys_delete_module+0x184/0x1dc
[ 119.320075] [<c154c45d>] syscall_call+0x7/0xb
[ 119.320075]
[ 119.320075] other info that might help us debug this:
[ 119.320075]
[ 119.320075] 1 lock held by rmmmod/2977:
[ 119.320075] #0: (rtnl_mutex){+..+}, at: [<c1429703>] rtnl_lock+0xf/0x11
[ 119.320075]
[ 119.320075] stack backtrace:
[ 119.320075] Pid: 2977, comm: rmmmod Not tainted 2.6.37 #3
[ 119.320075] Call Trace:
[ 119.320075] [<c15496c7>] ? printk+0xf/0x11
[ 119.320075] [<c1086d5d>] print_circular_bug+0x90/0x9c
[ 119.320075] [<c1087a00>] +lock_acquire+0x966/0xc00
[ 119.320075] [<c1087d68>] lock_acquire+0xce/0xeb
[ 119.320075] [<c1146aef>] ? sysfs_remove_dir+0x5e/0x6c
[ 119.320075] [<c11469f3>] sysfs_addrm_finish+0x92/0xf9
[ 119.320075] [<c1146aef>] ? sysfs_remove_dir+0x5e/0x6c
[ 119.320075] [<c1146aef>] sysfs_remove_dir+0x5e/0x6c
[ 119.320075] [<c11df397>] kobject_del+0xf/0x2c
[ 119.320075] [<c11df3e6>] kobject_release+0x32/0x50
[ 119.320075] [<c11df3b4>] ? kobject_release+0x0/0x50
[ 119.320075] [<c11e0191>] kref_put+0x39/0x44
[ 119.320075] [<c11df330>] kobject_put+0x37/0x3c
[ 119.320075] [<f1d07689>] sysfs_del_hardif+0xd/0x16 [batman_adv]
[ 119.320075] [<f1d0969a>] hardif_remove_interface+0x23/0x3e [batman_adv]
[ 119.320075] [<f1d09989>] hardif_remove_interfaces+0x6d/0x80 [batman_adv]
[ 119.320075] [<f1d11825>] batman_exit+0x17/0x3c [batman_adv]
[ 119.320075] [<c109226e>] sys_delete_module+0x184/0x1dc
[ 119.320075] [<c1085771>] ? put_lock_stats+0xd/0x22
[ 119.320075] [<c108583b>] ? lock_release_holdtime+0xb5/0xba
[ 119.320075] [<c10e96ff>] ? sys_munmap+0x39/0x3f
[ 119.320075] [<c154c490>] ? restore_all_notrace+0x0/0x18
[ 119.320075] [<c154c45d>] syscall_call+0x7/0xb
[ 119.595625] batman_adv: bat0: Interface deactivated: eth1
[ 119.599457] batman_adv: bat0: Removing interface: eth1
[ 119.605511] batman_adv: bat0: Interface deactivated: eth2
[ 119.613108] batman_adv: bat0: Removing interface: eth2
[ 119.625336] netconsole: network logging stopped, interface bat0 unregistered

```

History

#1 - 03/01/2011 01:26 AM - Linus Lüssing

Might be related, sparse 0.4.3:

```

make CC=~/.dev/sparse/cgcc
      <-(Tue,Mar01)-
make -C /lib/modules/2.6.32-5-amd64/build REVISION=v0.2-319-gf39fe6f M=/home/linus/Freifunk/batman/batman-adv-
t_x PWD=/home/linus/Freifunk/batman/batman-adv-t_x -j 2 modules
maker1: Entering directory @/usr/src/linux-headers-2.6.32-5-amd64'
/usr/src/linux-headers-2.6.32-5-common/arch/x86/Makefile:81: stack protector enabled but no compiler support

```

```
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/aggregation.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/bat_debugfs.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/bat_sysfs.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/bitarray.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/gateway_client.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/gateway_common.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/hard-interface.o
/home/linus/Freifunk/batman/batman-adv-t_x/hard-interface.c:420:26: warning: context imbalance in 'hardif_add_
interface' - different lock contexts for basic block
/home/linus/Freifunk/batman/batman-adv-t_x/hard-interface.c:499:9: warning: context imbalance in 'hardif_remov
e_interfaces' - wrong count at exit
/home/linus/Freifunk/batman/batman-adv-t_x/hard-interface.c:550:24: warning: context imbalance in 'hard_if_eve
nt' - different lock contexts for basic block
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/hash.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/icmp_socket.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/main.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/originator.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/ring_buffer.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/routing.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/send.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/soft-interface.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/translation-table.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/unicast.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/vis.o
CC [M] /home/linus/Freifunk/batman/batman-adv-t_x/bat_printk.o
LD [M] /home/linus/Freifunk/batman/batman-adv-t_x/batman-adv.o
Building modules, stage 2.
MODPOST 1 modules
CC /home/linus/Freifunk/batman/batman-adv-t_x/batman-adv.mod.o
LD [M] /home/linus/Freifunk/batman/batman-adv-t_x/batman-adv.ko
maker1: Leaving directory @/usr/src/linux-headers-2.6.32-5-amd64'
make CC=~/.dev/sparse/gcc 11.84s user 1.83s system 88% cpu 15.439 total
```

#2 - 05/07/2011 05:27 AM - Linus Lüssing

- Assignee deleted (Anonymous)

- Status changed from New to Closed

Fixed in b278a6c

#3 - 02/11/2017 09:35 AM - Sven Eckelmann

- Target version set to 2011.2.0