
Subject: Re: [PATCH 3/7 net-2.6.25] [IPV4]: Prohibit assignment of 0.0.0.0 as interface address.

Posted by [den](#) on Fri, 25 Jan 2008 15:12:41 GMT

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Daniel Lezcano wrote:

> Denis V. Lunev wrote:

>> Daniel Lezcano wrote:

>>> Denis V. Lunev wrote:

>>>> I could hardly imagine why somebody needs to assign 0.0.0.0 as an
>>>> interface

>>>> address or interface destination address. The kernel will behave in a
>>>> strange

>>>> way in several places if this is possible, as ifa_local != 0 is
>>>> considered

>>>> as initialized/non-initialized state of the ifa.

>>> AFAICS, we should be able to set an interface address to 0.0.0.0, in
>>> order to remove an IP address from an interface and keep this one up.

>>> I see two trivial cases:

>>> * remove the ipv4 on an interface but continue to use it through ipv6

>>> * move ipv4 address from the interface to an attached bridge

>>

>> For this case there is an IOCTL/netlink "remove IP address".

>

> And I forgot to mention the general broadcast.

> This is need for the dhcp protocol. If you are not able to set your

> interface to 0.0.0.0, you will be not able to send a 255.255.255.255

> broadcast message to have your IP address.

>

OK. Dave, pls disregard this patch. I suspect that others in the set
should not intersect with this one.

To summarize the discussion:

there is the only reason for this assignment: old IOCTL interface does
not have a way to remove IP address except this, though netlink has a
method for it that's why I am a little bit confused :)

This is handled in the `__inet_insert_ifa`: ifa is just removed there and,
correctly, ifa with 0.0.0.0 address can't exist in the kernel.

Sorry :)
