

## Debian8 (Jessie) on Turris Omnia

woosting

Sep 2

Continuing the discussion from [Multiple virtual servers \(LXC containers\) possible?:](#)

One of the marketed Turris Omnia's features is running your own virtual server on it (even [specifically referring to Debian](#)).

- Will the newer Debian releases that have 'systemd on board' (i.e. Jessie-or-newer) run as the Omnia (LXC) container (using the 'out of the box' Omnia OS / software)?

I am asking as: I have read about (and encountered) the [systemd problem running Debian8 in a non-systemd "mother OS"](#) in my preparations on other systems.

miska Turris Team

Sep 2

openSUSE with systemd runs in LXC on Omnia just fine, so I think it should be safe to assume that systemd wouldn't have any problem even in Debian.

andrewsh

Oct 6

Well, it does indeed work. However, I'm having troubles with the default LXC configuration: the network works in a very strange way:

```
root@LXC_NAME:~# ifup eth0
Internet Systems Consortium DHCP Client 4.3.1
Copyright 2004-2014 Internet Systems Consortium.
All rights reserved.
For info, please visit https://www.isc.org/software/dhcp/

Listening on LPF/eth0/36:e4:92:4b:42:c3
Sending on   LPF/eth0/36:e4:92:4b:42:c3
Sending on   Socket/fallback
DHCPDISCOVER on eth0 to 255.255.255.255 port 67 interval 4
DHCPDISCOVER on eth0 to 255.255.255.255 port 67 interval 7
DHCPDISCOVER on eth0 to 255.255.255.255 port 67 interval 17
DHCPDISCOVER on eth0 to 255.255.255.255 port 67 interval 19
DHCPDISCOVER on eth0 to 255.255.255.255 port 67 interval 14
5 bad udp checksums in 5 packets
No DHCPOFFERS received.
No working leases in persistent database - sleeping.
```

On the host, I see the following in the logs:

```
2016-10-06T18:51:53+02:00 info dnsmasq-dhcp[1777]: DHCPDISCOVER(br-lan) 36:e4:92:4b:
2016-10-06T18:51:53+02:00 info dnsmasq-dhcp[1777]: DHCPOFFER(br-lan) 192.168.1.205 3
2016-10-06T18:51:54+02:00 info dnsmasq-dhcp[1777]: DHCPDISCOVER(br-lan) 36:e4:92:4b:
2016-10-06T18:51:54+02:00 info dnsmasq-dhcp[1777]: DHCPOFFER(br-lan) 192.168.1.205 3
2016-10-06T18:52:01+02:00 info dnsmasq-dhcp[1777]: DHCPDISCOVER(br-lan) 36:e4:92:4b:
2016-10-06T18:52:01+02:00 info dnsmasq-dhcp[1777]: DHCPOFFER(br-lan) 192.168.1.205 3
2016-10-06T18:52:18+02:00 info dnsmasq-dhcp[1777]: DHCPDISCOVER(br-lan) 36:e4:92:4b:
2016-10-06T18:52:18+02:00 info dnsmasq-dhcp[1777]: DHCPOFFER(br-lan) 192.168.1.205 3
2016-10-06T18:52:40+02:00 info dnsmasq-dhcp[1777]: DHCPDISCOVER(br-lan) 36:e4:92:4b:
2016-10-06T18:52:40+02:00 info dnsmasq-dhcp[1777]: DHCPOFFER(br-lan) 192.168.1.205 3
...
```

**miska** Turrís Team

Oct 7

andrewsh:

5 bad udp checksums in 5 packets

Quick google search suggests that there was(is?) a bug in ISC DHCP client:

<https://bugs.debian.org/cgi-bin/bugreport.cgi?bug=717217>

Workaround suggested in other bug I found suggests calling

```
ethtool -K veth* tx off
```

(where veth\* is the name of your veth interface) directly on Omnia. Other option might be trying different dhcp client - for example systemd-networkd.

🔗 **LXC container and DHCP on br-lan**

**andrewsh**

Oct 7

Ha, good catch, I didn't even notice that checksum message. Thanks for the workaround, I will however try to install a fixed version.

**woosting**

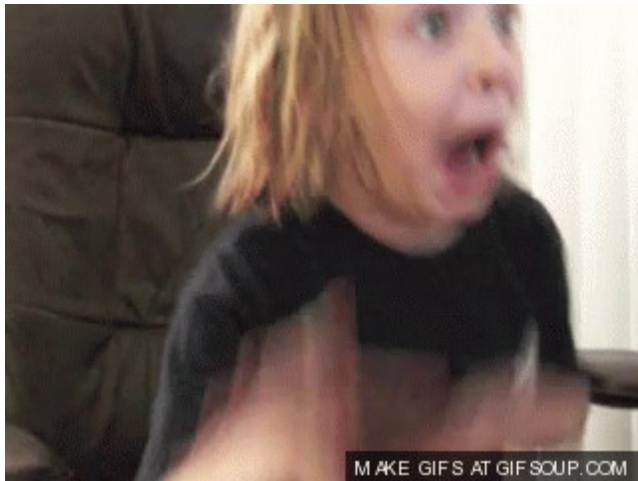
Oct 7

This all seem pretty complex... or at least not "out of the box".

Should I 'take a week of of work' to get it all up and running? You guys got me scared! 😞

This will be a critical device in my network topology - I cant afford it to be down due to me tweaking too much (not that this is your problem 😞 I know; but hopefully someone is able to take me by the hand

once I get to it; checking e-mail box first thing of the day - everyday).



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**andrewsh**

Oct 7

Hmm, it seems there isn't ethtool in Turrís OS, and for some reason installing upstream OpenWRT package didn't work (?)

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**miska** Turrís Team

Oct 7

Well, there is no ethtool as part of default image, but it can be installed via `opkg update && opkg install ethtool` from TurrísOS repositories. So far I was using just openSUSE in container which is not affected, but tried Debian and seems that calling `ethtool -K veth* tx off` made even dhclient in Debian get ip address. It should be probably possible to automate this workaround, will try. btw. When booted Debian container it got IPv6 without any issue via RA or whatever.

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**andrewsh**

Oct 7

Well, it didn't seem to be available when I tried to install it — now it worked, thanks.

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**Christian\_Kuhnel**

Oct 15

miska:

Workaround suggested in other bug I found suggests calling  
`ethtool -K veth* tx off`

Well this works, but I need to do that again every time I restart the container.

Does anyone know a good permanent solution besides having static ip configuration in the container?

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**miska** Turris Team You can drop dhclient from Debian and use systemd-networkd or you can put script that calls it in configuration of the container. Oct 15

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**Big\_boss** Oct 15

Couldn't you just through that in the rc.local? Like Miska said.

I mean the LXC is still the OS, so i expect that it also should have some sort of start-on-boot function. Of course till it is fixed, till then when it is automated, then you should have no worries anymore.

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**janskyj** Oct 20

Hello,  
another solution could to remove isc-dhcp-client package and install dhcpcd5 package instead. Debian scripts will use it automatically. If cz.nic can do it in prepared image, we can get better "out of the box" experience.

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## 🔗 LXC container and DHCP on br-lan

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**technik007\_cz** 15d

janskyj:

another solution could to remove isc-dhcp-client package and install dhcpcd5 package instead.

This is working for me, thanks [@janskyj](#)  
(U need "apt-get download dhcpcd5" on your turris terminal screen, then move downloaded \*.deb package to your lxc container root folder, then log in lxc container and run apt-get remove isc-dhcp-client -y && dpkg -i dhcpcd5.deb in folder where you put deb file and reboot and it should work instantly. )

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**woosting** 1h

Just a small message to extend my hand to you guys [@miska](#) [@andrewsh](#) [@janskyj](#) and [@technik007\\_cz](#) (and possibly others that helped in the discussion but were not listed by me)! You lot saved me - and my friends (yes I pulled in 2 other guys to the Omnia-world) - so much time!!

Happy to inform you that I have multiple Debian (and Ubuntu) containers running by doing:

technik007\_cz:

(U need "apt-get download dhcpcd5" on your turris terminal screen, then move downloaded \*.deb package to your lxc container root folder, then log in lxc container and run apt-get remove isc-dhcp-client -y && dpkg -i dhcpcd5.deb in folder where you put deb file and reboot and it should work instantly. )

But the rest (references to the Debian bug and proposed workaround) really helped us understanding the issue!

Thanks again peeps.