
Subject: Re: [Announce] New vzctl and devel kernel releases; OpenVZ wiki
Posted by [TheWiseOne](#) on Wed, 07 Jun 2006 14:52:12 GMT

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Kir Kolyshkin wrote:

> * Support for veth device.

Can you provide details as to how the veth device is different from venet0 ?

Thanks,
Matt

Subject: Re: Re: [Announce] New vzctl and devel kernel releases; OpenVZ wiki
Posted by [Kirill Korotaev](#) on Wed, 07 Jun 2006 16:17:39 GMT

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>> * Support for veth device.

>

>

> Can you provide details as to how the veth device is different from
> venet0 ?

unlike venet, veth is ethernet like adapter with MAC address.
due to this, it can be used in configurations, when veth is bridged to
ethX or other device and VPS user fully setups his networking himself,
including IPs, gateways etc.

List of differences:

- veth allows broadcasts in VPS, so you can use even dhcp server inside VPS or samba server with domain broadcasts or other such stuff.
- veth has some security implications, so is not recommended in untrusted environments like HSP. This is due to broadcasts, traffic sniffing, possible IP collisions etc. i.e. VPS user can actually ruin your ethernet network with such direct access to ethernet layer.
- with venet device, only node administrator can assign IP to VPS. With veth device, network settings can be fully done on VPS side. VPS should setup correct GW, IP/mask etc and node admin then can only choose where your traffic goes.
- veth devices can be bridged together and/or with other devices. For example, in host system admin can bridge veth from 2 VPSs with some VLAN eth0.X. In this case, these 2 VPSs will be connected to this VLAN.
- venet device is a bit faster and more efficient.
- with veth devices IPv6 auto generates an address from MAC.

The brief summary:

	veth	venet
MAC address	+	-
broadcasts inside VPS	+	-
traffic sniffing	+	-
network security	low	hi
(due to broadcasts, sniffing and possible IP collisions etc.)		
can be used in bridges	+	-
performance	fast	fastest

Usage scenarios will be added here soon:
http://wiki.openvz.org/Virtual_Ethernet_device

Thanks,
 Kirill
