Subject: PCI Passthrough
Posted by fwse on Sun, 23 Aug 2009 16:05:31 GMT
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Hi!

The Wiki documentation sounds like it would/should be possible to get a plain PCI device passed into a VE. The device is not really a network device/network card, so it's not not just a network driver.

My - simple? - question is: how to do this (with vzctl)?

The device to be exported:
(lspci -s 01:09.0 -v -v):

```
************************************************************
************************************************************
myHN:~# lspci -s 01:09.0 -v -v -k
01:09.0 Multimedia controller: Philips Semiconductors TriMedia TM1300 (rev 82)
      Subsystem: AVM GmbH Fritz!Card DSL
      Control: I/O- Mem+ BusMaster+ SpecCycle- MemWINV+ VGASnoop- ParErr- Stepping-
SERR+ FastB2B- DisINTx-
      Status: Cap- 66MHz- UDF- FastB2B- ParErr- DEVSEL=medium >TAbort- <TAbort- <MAbort-
>SERR- <PERR- INTx-
      Latency: 64 (750ns min, 250ns max), Cache Line Size: 64 bytes
      Interrupt: pin A routed to IRQ 11
      Region 0: Memory at fd800000 (32-bit, non-prefetchable) [size=8M]
      Region 1: Memory at fd600000 (32-bit, non-prefetchable) [size=2M]

myHN:~#

************************************************************
************************************************************
```

Related to this (primary) question: How to access the device from inside the VE/VPS? Loading modules?

Thanks for any hints!

P.S. All the above is running on amd64/4core machines

Subject: Re: PCI Passthrough
Posted by divB on Mon, 07 Sep 2009 22:57:02 GMT
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No, this won't be possible by concept!!

OpenVZ is an OS-level virtualization. That means that there is exactly one kernel and set of modules which are shared amongst all VEs. This is NOT like Xen!

Using a PCI device inside a VE depends on the device driver. You can load the driver only on HN!

Usually you will get a device node to access your device. In this case you can make the devicenode be accessible from a VE.

Subject: Re: PCI Passthrough
Posted by andreas2 on Tue, 08 Sep 2009 14:45:32 GMT
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Quote:
>Using a PCI device inside a VE depends on the device driver. You >can load the driver only on HN!

>Usually you will get a device node to access your device. In this >case you can make the devicenode be accessible from a VE.

QUESTION:
How can I create this device node in the client?
mknod says "no permission", creating it in Host (+moving to client) doesn't work, too, there is no permission to use the module and modprobe is not allowed.

thanks, Andrew

Subject: Re: PCI Passthrough
Posted by divB on Tue, 08 Sep 2009 18:50:18 GMT
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vzctl --help !

Regards,
divB