

Two Computers in One?

Posted by polraudio - 2010/05/19 15:15

Is it possible to use a separate mouse and keyboard?

What im trying to say is i have my laptop hooked up to a monitor as extended desktop with VMLite running XP on the extended side. I wanted to know if i can have it like another computer so someone else can use the VM XP while im on the other monitor using my Windows 7?

Using laptop if you need to know.

If you need me to draw a pic or more information just ask

EDIT: Added Pic

<http://img526.imageshack.us/img526/2364/explan.png>

Thanks in advance.

=====

Re: Two Computers in One?

Posted by admin - 2010/05/19 15:28

This is a very good observation, and we've been thinking about this since day one when we started VMLite project.

The answer is "yes, it's possible", but you may have to wait for a while. Our next release (probably 1 month away) will have USB support, and you can plugin additional USB keyboard, additional USB mouse, then assign them to the virtual machine. This way, it might enable 2 people to use one computer.

We haven't tested it yet, though.

=====

Re:Two Computers in One?

Posted by polraudio - 2010/05/19 16:03

Sweet cant wait to try it out and make a guide on it if it works.

Thanks for the info.

=====

Re:Two Computers in One?

Posted by admin - 2010/05/22 13:47

I just did some tests with our new version, it works perfectly. One PC with VMLite can be used by 2 or more people, as multiple computers.

=====

Re:Two Computers in One?

Posted by helpdesk98 - 2010/05/22 15:05

awesome I can't wait for the next version to come out!

=====

Re:Two Computers in One?

Posted by polraudio - 2010/05/23 11:03

Sweet! Cant wait to use it. Thank you.

=====

Re:Two Computers in One?

Posted by admin - 2010/05/26 22:53

was wondering if you also want an virtualized and independent audio device? so the other person can hear sound.

=====

Re:Two Computers in One?

Posted by polraudio - 2010/05/27 13:19

If its not to much trouble. How would you do it tho? Make it so the headphone ports are used for the Virtual and the speakers are used for the Physical?

EDIT: The external monitor is connected through HDMI if you need to know.

If you don't want to do it you don't have to.

=====

Re:Two Computers in One?

Posted by admin - 2010/05/27 20:08

you can plugin USB sound card, if we virtualize USB sound device.

=====

Re:Two Computers in One?

Posted by polraudio - 2010/05/27 22:10

Yea that sounds like a good idea.

=====

Re:Two Computers in One?

Posted by admin - 2010/05/27 22:50

polraudio wrote:

EDIT: The external monitor is connected through HDMI if you need to know.
quote]

Is that a TV? does it work well?

=====

Re:Two Computers in One?

Posted by polraudio - 2010/05/28 08:21

Yea its connected to a Samsung 40" HD 1080p TV. With HDMI it carries the sound and video to the TV.

Works perfect as extended for VMLite.

=====

Re:Two Computers in One?

Posted by admin - 2010/08/17 08:03

You can do it now with version 3.2.6.

Using the Single Computer by Multiple People

VMLite contains built-in features that allow mutiple people to use a single physical computer at the same time. Each user can run a different operating system without conflicts, and each user sees an independent physical computer, with his or her own display, keyboard and mouse. This functionality is made possible due to VMLite's multiple monitor and USB device supports.

Requisites

- your computer must have at least one external monitor port
- your computer must have at least two USB ports
- one external monitor
- one USB keyboard

one USB mouse

Steps

Plugin the external monitor, keyboard and mouse to the corresponding ports. Only USB keyboard and USB mouse are supported. Make sure to setup the external monitor as extension of your desktop. start a virtual machine, for example, the VMLite XP Mode virtual machine, in normal display mode. disable mouse integration of the vm by clicking the vm window's menu File > Disable Mouse Integration. This is very important, otherwise your external mouse won't work. Note once integration is disabled, you will have to press the Host key (right control key, by default) to release your primary mouse to the host desktop.

click on vm window's menu Devices > USB Devices..., and attach your USB keyboard and mouse, below is a screenshot:

http://www.vmlite.com/images/fbfiles/images/usb_mouse_keyboard.png

If you want your keyboard and mouse to attach to the vm at boot time, you can configure the USB Device Filters from VMLite Workstation when the vm is offline.

drag your vm window to the external monitor, and click menu File > Enter Fullscreen mode, the vm should display exclusively on the external monitor.

a second person should be able to use the virtual machine now from the 2nd set of display, keyboard and mouse, as if it is a real physical computer.

when done, you can shut down the vm, and unplug the monitor, keyboard and mouse from your computer.

don't forget to enable the mouse integration of your vm next time after it boots, you can do so from vm window's menu File > Enable Mouse Integration.

=====

Re:Two Computers in One?

Posted by polraudio - 2010/08/17 09:14

Works perfectly. Thank you very much. :woohoo:

=====

Re:Two Computers in One?

Posted by husk3r - 2011/01/13 13:13

this is amazing, it really works !!! thank you.

=====

Re:Two Computers in One?

Posted by admin - 2011/01/21 10:16

If we provide a hardware device that allows you to use one computer as multiple PCs, will you be interested?

Say, the device costs about \$100, it can hook up a monitor, keyboard and sound card, connect by one USB cable, or as wireless.

=====

Re:Two Computers in One?

Posted by b_oberon - 2011/01/21 12:59

Not really sure if it would be useful to home users. But IMO it can be very useful in educational and office environments.

PS Mainframes are back)) Big computer and a lot of dumb terminals))

=====

Re:Two Computers in One?

Posted by admin - 2011/01/21 13:30

We do have prototypes of such devices, works nicely. The different thing (compared to other terminals) is that each user sees a totally different and separated OS, it could be Linux or Winodws, running as guest from VMLite Workstation.

=====

Re:Two Computers in One?

Posted by b_oberon - 2011/01/21 14:17

Virtualization allows to improve utilization (it's well-known that usually PC is idle most of the time). But it raises some licensing considerations as VMLite Workstation runs under Windows (correct me if I'm wrong). I think it would be better to use some bare-metal or Linux based hypervisor in such scenario.

=====

Re:Two Computers in One?

Posted by polraudio - 2011/01/21 18:36

Sounds interesting. Do you happen to have any pics of the device?

=====

Re:Two Computers in One?

Posted by admin - 2011/01/21 21:17

For the license issue, you will have to purchase more Windows license for teh virtual machines. bare metal is not as efficient as you would think. Hosted virtualization might performing better. If you look at Xen/ESX, the device emulation is still needed to be done using some host services. So guest still goes to hypervisor, then redirected to dom0 or another layer for processing, could be even slower. This is a rather interesting debate, I don't want to go too far :)

As for pic, we don't want to reveal it yet, it's small device, less than 300g, 7cm long, with display output, audio in/out, keyboard, moust ports, etc.

=====

Re:Two Computers in One?

Posted by linksep - 2011/01/31 17:41

admin wrote:

If we provide a hardware device that allows you to use one computer as multiple PCs, will you be interested?

Say, the device costs about \$100, it can hook up a monitor, keyboard and sound card, connect by one USB cable, or as wireless.

That sounds awesome! I'd be all over that for home theater (virtual-) PCs if it had a HDMI port and wireless N or Gig-ethernet (assuming home theater devices don't start shipping with Windows Phone like OSes that can access your home network).

=====

Re:Two Computers in One?

Posted by asturias - 2011/02/23 09:43

I setup successfully the Guest XP mode using wireless USB and Mouse (Connect via USB receiver) and the host use laptop keyboard

BUT

How can i setup the Guest to use laptopkeyboard and the Host to use USB wireless Keyboard&Mouse? The reason is i want to play game on the host with external monitor instead on the guest (Better 3D support, better delay time), and i dont want to play game with laptop keyboard (It's hard to use becasue key spacing), laptop LCD. My wife will use the laptop with Guest OS to surf web, excel...

Did anyone try this? Or any suggestion? I appreciate for any help

Thanks & Best Rgds
Quang

=====

Re:Two Computers in One?

Posted by admin - 2011/02/23 14:15

Nice to know wireless mouse worked !

This is good question, you want the guest to use built-in keyboard and mouse, right now it won't work, guest has to rely on USB devices.

Can you insert 2 wireless mouses? This way, you leave one to host

asturias wrote:

I setup successfully the Guest XP mode using wireless USB and Mouse (Connect via USB receiver) and the host use laptop keyboard

BUT

How can i setup the Guest to use laptopkeyboard and the Host to use USB wireless Keyboard&Mouse? The reason is i want to play game on the host with external monitor instead on the guest (Better 3D support, better delay time), and i dont want to play game with laptop keyboard (It's hard to use because key spacing), laptop LCD. My wife will use the laptop with Guest OS to surf web, excel...

Did anyone try this? Or any suggestion? I appreciate for any help

Thanks & Best Rgds
Quang

Re:Two Computers in One?

Posted by asturias - 2011/02/23 16:27

admin wrote:

Nice to know wireless mouse worked !

This is good question, you want the guest to use built-in keyboard and mouse, right now it won't work, guest has to rely on USB devices.

Can you insert 2 wireless mouses? This way, you leave one to host

I have 2 wireless mouse (1 alone and 1 come with wireless keyboard) and i can setup like u said. But my problem is the laptop have keyboard and i want use it for the guest, will In the future it work? Or have any software support that?

Thanks
Quang.

Re:Two Computers in One?

Posted by admin - 2011/03/12 13:03

Attached is the device that we are going to sell to our users.

You can connect the device to local network, and allow a virtual machine to be used by a second person. http://www.vmlite.com/images/fbfiles/images/vmlite_client_network_version.jpg

Features:

- (1) Device is small, 100g in weight, 97mm(L) x 75m(W) x 26mm (H) in dimension
- (2) Gigbit ethernet port
- (3) DVI output, 2 USB ports, audio output, reset button, power input
- (4) Support up to 6 devices per physical computer, so one computer can be used by 7 people at the same time. We will increase this limit to more people in future.
- (5) display resolution up to 1920x1080.

=====

Re:Two Computers in One?

Posted by Natrix - 2011/10/31 11:41

can this device be used on virtual machine on other system like Xen or XenServer if in the virtual machine I passthrough the usb controller natively with Intel VT-D and plug this device.

XenServer use VGA standard windows drivers, but I can passthrough a Graphic card to the vm to. I search for a working USB solution for zero-client in XenServer. (In xen we can passthrough any usb device.)

For now on XenServer only VGA passthrough work well for multimedia(but cost a graphic card for every vm). other USB device working with displaylink need a Graphic Card too.

I succed pass vga to with an USB 2.0 to VGA adaptor, but it freeze sometime.

If your device work with controlling a PC ("no VM") with usb, but a PC with VGA standard driver like in Xen, It probaly work great on XenServer VM. then you will have the only dapator working stable with VT-d usb passthrough!

=====

Re:Two Computers in One?

Posted by Natrix - 2011/10/31 11:42

QUOTE (4) Support up to 6 devices per physical computer, so one computer can be used by 7 people at the same time.

do you mean control the same Windows OS !?! or control VM the windows host?

=====

Re:Two Computers in One?

Posted by huisinro - 2011/10/31 12:09

It refers the total number of devices can be attached to a physical computer. 6 such devices can be connected to a pc, with each device assigned to a vm. This limit should be more in the future.

Natrix wrote:

QUOTE (4) Support up to 6 devices per physical computer, so one computer can be used by 7 people at the same time.

do you mean control the same Windows OS !?! or control VM the windows host?

=====

Re:Two Computers in One?

Posted by huisinro - 2011/10/31 12:15

The picture shows the network version, which requires some software to run on the host in order to use the devices. At the moment, this piece of software works only on Windows host.

However, we do have the USB version, which can connect directly to a host with no software required. This version has better chance to work with Xen server. Since it's used based, so you will have to connect the device using USB cable, which is quite distance limited.

Our device has graphics card builtin, so I don't think you need to insert a new graphics care in your host? Do I under you correctly?

Natrix wrote:

can this device be used on virtual machine on other system like Xen or XenServer if in the virtual machine I passthrough the usb controller natively with Intel VT-D and plug this device.

XenServer use VGA standard windows drivers, but I can passthrough a Graphic card to the vm to. I search for a working USB solution for zero-client in XenServer. (In xen we can passthrough any usb device.)

For now on XenServer only VGA passthrough work well for multimedia(but cost a graphic card for every vm). other USB device working with displaylink need a Graphic Card too.

I succed pass vga to with an USB 2.0 to VGA adaptor, but it freeze sometime.

If your device work with controlling a PC ("no VM") with usb, but a PC with VGA standard driver like in Xen, It probaly work great on XenServer VM. then you will have the only dapator working stable with VT-d usb passthrough!

=====

Re:Two Computers in One?

Posted by Natrix - 2011/10/31 23:21

eeee..

=====

Re:Two Computers in One?

Posted by Natrix - 2011/10/31 23:40

huisinro wrote:

Our device has graphics card builtin, so I don't think you need to insert a new graphics care in your host? Do I under you correctly?

not that it need another new graphics card, but if it rely on the one already there. Can you disable the primary graphic card and let your device do all the work ? or like in XenServer can you use your device with a primary graphic card (a virtual one in XenServer) installed with the driver from windows the "Standart VGA driver" who do not provide avanced 3D feature like directx but working for normale user who use flashplayer on web, play video ...

So if you can test your device with a Windows host with a primary graphic card installed with the driver "Standart VGA driver" from Microsoft (the universel VGA driver windows use before installing the specific driver like one from Nvidia or Ati.) If it work then should work great in Xen/XCP/XenServer.)

Your device is available now ? Then I buy it now !(remmender that I dont want use it with VMLite workstation at all.) What is the price ?

=====

Re:Two Computers in One?

Posted by huisinro - 2011/11/01 09:58

Thanks for the info. It's working on Windows host with VMLite. Basically, we assign the vm console to a device, and attach usb keyboard/mouse to the vm too. We don't use any of the PCI forwarding. We designed this for vmlite, and never checked other virtual machine software, so honestly speaking, I am not sure whether it will work for XenServer. We will test it a bit, but not a high priority. I think vmlite performs better than Xen, and has better guest additions, etc.

The network version of the device is around \$100 a piece as retail, more volumes would be cheaper. The USB version is around \$75 a piece.

=====

Re:Two Computers in One?

Posted by Natrix - 2011/11/01 14:03

Your right VMLite perform better for some usage, but I really need to use Xen for its device passthrough. I don't think, just for now, that vmlite perform better than a real graphic adaptor in xen for use with CAD graphic and every multimedia/game possible. but I think with your fast advancement with directx and opengl emulation it will be more great than xen in the future! Who know maybe you will have a Pool of VMLite in High availability soon!

Thank you very much for your time.

=====

Re:Two Computers in One?

Posted by Natrix - 2011/11/01 14:10

huisinro wrote:

The network version of the device is around \$100 a piece as retail, more volumes would be cheaper. The USB version is around \$75 a piece.

So if I understand correctly your device its not vmlite dependant ?
And if I understand correctly again your device can be install on a native Windows 7 PC (no vmlite, no vm) for redirecting VGA/Audio/Usb over network with your software installed for driving by network your device.

I'm sure you can sell it for Windows VM Zero-Client in Xen.(your will be the only know device for multiseat working in Xen, for sure because every other have the requirement of the "famous" displaylink tech.)

Can I buy one already for testing ?
The network version would be great for me.
I will be please to make some test by my side and tell you my results.

Thanks!

=====

Re:Two Computers in One?

Posted by huisinro - 2011/11/02 22:46

Sorry for this late reply. We need to do some initial tests, I don't want to disappoint you.

I just attached 4 clients to my laptop, they appear as 4 extra monitors, and vmlite workstation can assign vm to each of these displays, but it's not through USB attachment. It's using multi-screen APIs.

This is a picture shows 4 monitors from these 4 devices:

<http://www.vmlite.com/images/zeroclient.jpg>

=====

Re:Two Computers in One?

Posted by Natrix - 2011/11/03 12:58

If you want immitate a Xen VM just switch your primary card to the "Standard VGA graphic card" the one from Microsoft the universal driver before you install your Nvidia driver.

I made some test with USb to Vga adaptor it work.

So now your zero client device should work two with Usb passthrough (VT-d requirement) from Xen or simply with your Network device (no requirement from Xen).

p.s I hope one day VMLite workstation can be install in a linux Xen-VM with a PV kernel. All that with no need of primary graphic card and since vmlite/virtualbox work in software mode without need VT-x who is not present at the PV kernel of the Xen-VM. That would very be interesting to test performance with multi-user from vmlite and multi-vm from xen...(it sound crazy I know, but these day with a big server and ssd nothing impossible)

=====