

Newbie 3i Console/Management Question ...



[Kevin Gao](#) 206 posts since

Mar 27, 2008

Hi everyone,

Please excuse me but I'm a VMWare newbie. Our not-for-profit foundation has been using VMWare Server 1 and also BETA 2 since last year. We're looking to move toward Infrastructure or 3i this year.

Could someone please clarify what we'll need to properly manage 3i (Remote GUI console and etc)? I had initially thought that we'll need the following:

- Virtual Center Foundation (we're on a budget so everything will be Foundation)
- Virtual Infrastructure Foundation
- ESX Server 3i

After chatting with an online VMWare pre-sales person; I learned that we won't need VC Foundation. Unfortunately I'm still a little hazy on this as the rep informed me that 3i can not have VC Console functionality. Could someone please explain? Any insight would be greatly appreciated as I'm trying to make an informed decision to management. Being NFP I'd like to make sure the budget is as efficient as possible.

Thanks a lot everyone!



[jgilmartin](#) 15 posts since

Jul 6, 2006 1. **Re: Newbie 3i Console/Management Question** Mar 27, 2008 3:11 PM

Kevin - It depends somewhat on the number of servers you are virtualizing and the management functionality you want. Here are the basics:

An ESX3i license will give you single server partitioning. You will manage that server on a 1:1 basis with the VI Client, a windows GUI. This will allow you to create and view your virtual machines including accessing their consoles remotely. If you have more than one host, you will only be able to connect to one at a time.

A VI Foundation license plus VC Foundation will allow you manage multiple ESX3i servers from a single interface. You will see all the physical servers and virtual machines associated with those hosts. You will also be able to: create templates and clone VMs which can be a great time saver in deploying new machines, automatically apply patches to Windows VMs and the ESXi hosts with Update Manager, and use Consolidated Backup with your 3rd party backup software to backup VMs or VM data (this last assumes shared storage). VC Foundation manages up to 3 ESXi hosts.

By contrast, a VI Enterprise license plus VC Foundation plus shared storage (NAS, iSCSI, FC) gives you access to live migration (VMotion + Storage VMotion), high availability, and resource management (DRS).



[Kevin Gao](#) 206 posts since

Mar 27, 2008 2. **Re: Newbie 3i Console/Management Question** Mar 27, 2008 3:15 PM

👤 in response to: [jgilmartin](#) Great thanks for the fast reply and the answer. Looks like I will only purchase the ESX Server 3i with our new servers then. I don't mind connecting to each host manually (we can only afford 3 hosts anyways so it isn't an issue).

Thanks once again and have a great day! Cheers



[fejf](#) 219 posts since

May 29, 2007 3. **Re: Newbie 3i Console/Management Question** Mar 27, 2008 3:16 PM

Depends on what you want. If you don't want a central management you can stick with ESX3 or ESX3i only without a Virtual Center. But you have to connect to each esx server separately if you want to make changes. With virtual center you have a central point of management where all ESX servers are listed. The interface is mainly the same but provides more features if you use the Virtual Center: you connect with the VI-Client to the ESX servers or VC server.

Virtual Infrastructure is just a generic term for the products associated with ESX3 / 3i and Virtual Center.

fejf



[Kevin Gao](#) 206 posts since

Mar 27, 2008 4. **Re: Newbie 3i Console/Management Question** Mar 27, 2008 3:22 PM

👤 in response to: [fejf](#)

Hi Fejf,

I'd go for VC but since I can manage ESX3i without it (just takes more manual work); we'll just save that money. 😊

By the way this forum is great; 2 helpful replies within 10 minutes!!!



[jgilmartin](#) 15 posts since

Jul 6, 2006 5. **Re: Newbie 3i Console/Management Question** Mar 27, 2008 4:50 PM

👤 in response to: [Kevin Gao](#)

Kevin - You can do a free evaluation of VC for 60 days. If you go with ESXi, I still suggest giving the eval a try. You might find benefit from the provisioning, templates, cloning, etc.



[Dave.Mishchen...](#) 8,948 posts since

Nov 15, 2005 6. **Re: Newbie 3i Console/Management Question** Mar 27, 2008 6:59 PM

👤 in response to: [Kevin Gao](#) Hi Kevin, a few other things to consider

1) 3i (installable or embedded) is only supported on a very limited hardware set right now. See this document for servers that are supported - http://www.vmware.com/pdf/vi35_systems_guide.pdf. What model of servers do you plan to you?

2) As you mention in your initial post, 3i has no service console so it is harder to troubleshoot.

3) What are you going to be using for VM backup? Two popular packages as examples (esXpress and vRangerPro) do not support 3i yet.

4) What hardware specs do you have planned to use? It may be the case that you could go with 2 host and find some extra fund for the VC Foundation edition. Three 3i hosts will be \$1500 plus support and VC Foundation for 3

hosts is \$3K plus support so the difference may be worth the additional feature set that you would gain. That said, I started using ESX without VC and you can get away without using VC. You can even use shared storage without VC as well.



Kevin Gao 206 posts since

Mar 27, 2008 7. **Re: Newbie 3i Console/Management Question** Mar 28, 2008 9:39 AM

in response to: [Dave.Mishchen...](#)

Hi Dave,

- 1) We're running HP DL380 / 385's so they should be OK.
- 2) I thought that I could use the VI Client to connect as per the previous post?
- 3) We're not using any VM backup software. I'll be using BackupExec to backup the more important images. Our mission critical applications like MS Exchange are not virtualized. Most of our virtual guests will be running test software and staging platforms. Sorry I didn't make myself clearer.
- 4) I don't think we can afford shared storage yet at this stage. I was looking for the cheapest way to virtualize 2-3 HP hosts. Looks like the cheapest by far is ESX Server 3i without VC.



Dave.Mishchen... 8,948 posts since

Nov 15, 2005 8. **Re: Newbie 3i Console/Management Question** Mar 28, 2008 9:55 AM

in response to: [Kevin Gao](#) Here's the support matrix for HP servers - <http://h71028.www7.hp.com/enterprise/cache/505363-0-0-0-121.html>. Note that not all DL380/385 models are supported. That may be a case that they just haven't been supported but for older models it could be that they won't work 100% either. ESX supports a very limited hardware set so it's best to stick with something that is explicitly stated as supported.

You will be able to use the VI client for all your day to day management. If you run into any snags, ESX 3.5 is easier to troubleshoot due to the service console.

What sort of hardware specs will your hosts have and how many VMs do you plan to run?



Kevin Gao 206 posts since

Mar 27, 2008 9. **Re: Newbie 3i Console/Management Question** Mar 28, 2008 10:03 AM

in response to: [Dave.Mishchen...](#)

We're just starting off with 2 servers for now:

HP DL385 G2 with 2x2.6Ghz dualcore Opterons and 8GB of RAM. 3 Guests: Windows 2003 WSUS patch server, Windows 2008 Longhorn for platform testing, Windows Vista for platform testing


HP DL385 G2 with 2x2.6Ghz dualcore Opterons and 4GB of RAM. 2 Guests: Red Hat ES staging server (web applications), Windows 2003 with SQL 2005 and MOSS (Sharepoint) for testing

As you can see most of the guests are just for testing. The only production guest is the WSUS patch server and that's not exactly going to affect the business if it goes down for a week. I'd love to get ESX 3.5 Foundation but at a cost for \$1,500 per server versus \$500...I can't easily justify it.




fejf 219 posts since

May 29, 2007 10. Re: **Newbie 3i Console/Management Question** Mar 28, 2008 10:06 AM

 in response to: [Kevin Gao](#)

2) You can use the VI Client to manage the ESX3i-Server but you don't have the possibility to log into the Service Console (the Linux Management part of ESX3). E.g. if the management demon (hostd) is stuck in some way there is the possibility to log into the linux service console and restart the service - you can't do that with esx3i. Another example is backup software: if you use agents inside the virtual machines there is no problem but you have to pay for a agent in each virtual machine. With ESX3 there is the possibility to install a backup agent (see backup software compatibility list) in the service console which means that you pay for one backup agents to backup multiple machines.

4) "cheap storage": by the way: you can use a standard pc with linux and nfs as storage - it's not the best way to go

but it's cheap 



[Charu](#) 18 posts since

Jun 15, 2006 11. Re: **Newbie 3i Console/Management Question** Mar 28, 2008 10:12 AM

 in response to: [fejf](#)

One correction: you CAN restart management agents in ESXi (ESX Server 3i). From the DCUI (console interface), you can select the option "restart management agents" and this will restart the various management agents on the system, such as hostd, vpxa, etc,



[amirs](#) 15 posts since

Nov 5, 2007 12. Re: **Newbie 3i Console/Management Question** Mar 30, 2008 10:06 PM

Hi Kevin,


I am the product manager for ESXi and would like to speak with you personally if possible. Could you follow up by sending me an email at amirs@vmware.com and letting me know where I could reach you?

Thanks.



[Scott@68](#) 10 posts since

Apr 7, 2008 13. Re: **Newbie 3i Console/Management Question** Apr 7, 2008 5:42 AM

 in response to: [amirs](#) I am looking for some clarification on ESX Vi foundation and ESX 3i. Unless I am missing it there is conflicting information and even my sales reps and two people I have talked to at VMWare have given me different information.

I am trying to decide between the ESX Vi foundation Acceleration Kits (basically ESX Foundation for 3 dual processors servers + Virtual Center for three servers) or using ESX 3i plus the full Virtual Center. I was told by one person in sales that I could stack the ESX Foundation licenses - if I bought one now and one three months from now my Virtual Center would be expanded to 6 servers? Is that correct?

I would prefer to go with the ESX 3i type server but again have two conflicting pieces of information. The VMware Key Features Summary basically says you can use Virtual Center but there is very little that VMWare Consolidated Backup will do, another article by Charu Chaubal - the VMWare INFORMATION GUIDE seems to indicate that Virtual Center is fully functional and there is complete support for VCB.

Newbie 3i Console/Management Question ...

Basically, ESX 3i meets all my needs but I would like the ability to use Virtual Center and full blown Consolidated Backup is a must.

Can anybody please clarify ..

Thank you,

Scott



[jgilmartin](#) 15 posts since

Jul 6, 2006 14. **Re: Newbie 3i Console/Management Question** Apr 7, 2008 8:33 AM

in response to: [Scott@68](#)

Hi Scott,

VMware ESXi (aka ESX 3i) is available for sale on its own as a standalone license. Purchased this way, it does NOT include a VirtualCenter agent so is not manageable by VC

VMware ESXi is also available inside the VI Foundation bundle, per your question. That bundle includes the VirtualCenter Agent, UpdateManager, and Consolidated Backup.

The Foundation Acceleration kit offers 3 VI Foundation licenses plus one VirtualCenter Foundation license (i.e. the VC Foundation license is essentially free). VirtualCenter Foundation is fully functional but can manage just 3 nodes. You cannot stack VC Foundation licenses. If you want to manage >3 nodes, you will need a VirtualCenter Server license. (There is an upgrade available.)

Does that answer your questions?

-John



[Scott@68](#) 10 posts since

Apr 7, 2008 15. **Re: Newbie 3i Console/Management Question** Apr 7, 2008 9:27 AM

in response to: [jgilmartin](#) John -

Thank you for such a clear answer.

Could you answer one other question. I am looking at a HP server that has the integrated ESX 3i (Stand Alone) option. Basically - it appears to just be the OS on a USB stick inside the server. If I purchase that then I will still need the Foundation Acceleration Kit (bundle) to get all my features. Looks like I am buying ESX twice then. There is an option for the ESX 3i Enterprise but that is way out of my price range or needs.

Looks like if I want to go ESX 3i - then I need to install to the hard drive just like the ESX Infrastructure on my other server. I liked the idea of the stripped down OS and separate from the RAID array (local storage not SAN). Would I just be better off suing the full blown product then?

Any idea if you can mount you own USB flash drive inside the server. I have seen the documentation people have down on creating their own USB boot devices but I do not want the boot device accessible ont he outside of the server.

Final question - sorry, these are more HP specific, anyone know if I lose HP functionality by using the stock software directly from VMWare? Integration into SIM or can that be added?

Thanks again,

Newbie 3i Console/Management Question ...

Scott



[jgilmartin](#) 15 posts since

Jul 6, 2006 16. **Re: Newbie 3i Console/Management Question** Apr 7, 2008 9:46 AM

in response to: [Scott@68](#)

Scott,

Yes, HP is not currently offering the VI Foundation license with their ESXi option kit. However, I believe they have an unlicensed option kit available as well. That is, you buy essentially a media kit (USB key with software, documentation, etc) along with your server, but there is no VI license. Then you can buy the VI Foundation Acceleration kit separately (also available from HP, I believe) which gives you the licenses. I can verify this.

The USB kit in the HP option kit do mount internally on the motherboard. HP has internal USB connections on all the qualified servers.

The HP image of ESXi does have customizations around CIM (Common Information Model) which will give you HP-specific hardware management info.

John



[Scott@68](#) 10 posts since

Apr 7, 2008 17. **Re: Newbie 3i Console/Management Question** Apr 7, 2008 10:06 AM

in response to: [jgilmartin](#) John -

Thanks again, no need to look any further for info. That is enough info to get back to my HP Reseller with. They are fabulous with SKU's but it seems not many vendors understand the hooks in the licensing models.

Thanks - you have been enormously helpful!

Scott



[Scott@68](#) 10 posts since

Apr 7, 2008 18. **Re: Newbie 3i Console/Management Question** Apr 7, 2008 10:41 AM

in response to: [jgilmartin](#) John -

Sorry - need to ask this one as well. I did find the Media Kit you refereed to but it mentions it is for the ELA (Enterprise License Agreements). Any idea if this would work with the Foundation License and only activate those pieces I am licensed for with the Foundation License? If so that is the ideal solution for me.

HP integrated VMware ESX Server 3i ELA Unlicensed

NOTE: For customers with existing Enterprise License Agreements. Sold factory installed only. HP image shipped on USB key, pre-installed on internal USB port of the server. HP image incorporates HP Systems Insight Manager providers.

Hopefully - that will be the last question.

Thanks,


Scott

Newbie 3i Console/Management Question ...



[jgilmartin](#) 15 posts since

Jul 6, 2006 19. **Re: Newbie 3i Console/Management Question** Apr 7, 2008 12:58 PM

 in response to: [Scott@68](#)

Scott,


The reason it is listed as "ELA" is because it is targeted to that audience (i.e., companies that have existing licenses already and don't want to buy a new one). In reality, this is just an unlicensed version of ESXi. You can apply any license you want against it (e.g. Foundation, Standard, or Enterprise). So, yes, this is the SKU to buy if you want ESXi to run on internal USB on your HP server and you plan to separately procure your license(s).

John



[Scott@68](#) 10 posts since

Apr 7, 2008 20. **Re: Newbie 3i Console/Management Question** Apr 7, 2008 1:05 PM

 in response to: [jgilmartin](#) John,

Thanks yet again ,

No more question (really this time).

Thank you,

Scott