

Virtualizes VC or not



[fuzzylee](#) 6 posts since

Jul 26, 2008

Some one suggested to us that we should virtualize our VC, why?

Tags: esx, vmaware, vc



[tibmeister](#) 3 posts since

Sep 10, 2007 **1. Re: Virtualizes VC or not** Jul 28, 2008 7:43 PM

I generally steer people away from virtualizing the Virtual Center. The reason why is that there is a certian loss of control over a cluster if you loos the Virtual Center, so putting all the eggs in one basket may not be in the best interest.



[Rick Scherer](#) 19 posts since

Sep 10, 2007 **2. Re: Virtualizes VC or not** Aug 18, 2008 3:27 PM

Best practice (IMO) is to use physical hardware for your VirtualCenter server, but since MSCS is now supported with VirtualCenter I do not see a reason why you cannot have two VC Virtual Machines running on separate ESX hosts.

Assumptions would be that your using DRS/HA.

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For more information on VC MCSC check out http://www.vmware.com/pdf/VC_MSCS.pdf



Even Glemmestad 3 posts since

Aug 6, 2008 3. **Re: Virtualizes VC or not** Aug 18, 2008 11:42 PM

Even with MS Clustering service I would not virtualize VC. It does protect you against hardware failure, yes. But what about systemwide failure?

What if, for some reason, your VC virtual server refused to power on... due to, let's say... licensing problems? Let's learn something from what happened with VMWare ESX 3.5 Update 2. Will it happen again? Probably not. But probably is not good enough for me. Human errors will continue to pop up and kick you hard when you least expect it. THAT we can at least learn from history. It's a universal truth.

I like to sleep at night. That's why we run VC on a separate physical server. It takes away the link between ESX failure and VC failure completely!

Imho, you need that safety. If your manager doesn't want to give you the budget for a separate server, you need to tell him about Update 2. If your VC server was running on a virtual machine then, AND the ESX server went down at the same time, HA would not be able to save you. You would be stuck without VC until the patch was released.


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Go physical.



[Rick Scherer](#) 19 posts since

Sep 10, 2007 4. **Re: Virtualizes VC or not** Aug 19, 2008 12:12 AM

 in response to: [Even Glemmestad](#)

I completely agree with you Even, but as a statistics minor in my College years the chances of having two ESX hosts going down at the same time and there being a licensing bug going around is so low that its not even worth worrying about.

The skeptic in me also believes that if your having that many problems going on at once its most likely being caused by an environmental issue that you need to worry about before bringing back up your systems (Isolated and/or Regional disasters, Datacenter failures (power, AC, etc.)...)

Having two VC servers in VM using MSCS and spread across fully redundant hardware should effectively give you 99.999+% reliability, assuming you have full redundancy in all areas of VirtualCenter (Hardware, Environmentals, Software, Database).

Long story short, if you have two VC servers in MSCS over redundant hardware and are still worried about failure then you have no faith in your overall design.

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[Even Glemmestad](#) 3 posts since

Aug 6, 2008 5. **Re: Virtualizes VC or not** Aug 19, 2008 12:34 AM

in response to: [Rick Scherer](#)

Hi Rick,

You are right, and I should have added that in a non-production environment running VC on VMs is fully allowed. This is also true for a system on a very tight budget and that is non-critical, ie. one that can survive a half day or more downtime. Many production systems cannot survive that long, such as trading platforms, factory production systems, corporate emails, etc.

Every heard of the perfect storm? 😊 You can bet that during the Update 2 licensing bug phase, there were ESX servers dropping because of hardware failures at the same time.

Hardware failures on their own were not a problem (MSCS, VMWare HA, etc), and the licensing issue was not a problem unless you had to power on servers during the fault phase. However, if the two unrelated (and "unthinkable") incidents happened at the same time (which you will find out it did for a lot of people last week) you have a serious problem.

If you have a system with a high demand for uptime, a critical system (vmware is now at the CORE of many datacenters), I would not run VC as a virtual server. It just isn't worth the risk, however small, for the small amount of money it costs to have a separate physical server watching over your VMWare system.

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I do, however, acknowledge there are times when running a VC as a VM is perfectly fine.

Kind regards,

Even Glemmestad



[Robert Wissinger](#) 1 posts since

Apr 30, 2008 6. **Re: Virtualizes VC or not** Aug 29, 2008 4:48 AM

in response to: [Even Glemmestad](#)

VMware fully supports running your Virtual Center as a virtual machine. I have Virtual Center running as a VM and have experienced no problems. I wouldn't discourage anyone away from this idea. It really comes down to your knowledge level. If your ESX experience is at the novice level you may be more comfortable running VC as a physical server. If your confidence and experience with ESX is advanced/expert then why would you? In the very unlikely event your virtual VC server develops problems that you can't overcome, setting up a physical VC is a rather quick process anyway. Running VC as a VM provides advantages in server consolidation, ability to transfer from one host to another enabling maintenance perks, ability to take snapshots of your VC and provides high availability for the

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virtual center server. Keep in mind that VC is required to configure HA but if it goes down HA still functions.



[Michael Unsworth](#) 18 posts since

May 12, 2008 7. **Re: Virtualizes VC or not** Sep 10, 2008 12:44 PM

We've virtualized VC with no problems. One thing we did to keep it segregated is to put it on a server which we installed ESXi on, which is separate from our ESX servers.

To me, this is a great solution, especially now that ESXi is free.



[John Taft](#) 1 posts since

Aug 25, 2008 8. **Re: Virtualizes VC or not** Sep 11, 2008 12:33 PM

👤 in response to: [Michael Unsworth](#)

Running vc on esx was the recommendation by VMware staff in my recent VMware 3.5 fast-track class.



[Robert Jones](#) 7 posts since

May 2, 2008 9. **Re: Virtualizes VC or not** Sep 12, 2008 8:06 AM

Not that this hasn't been answered in 50 different ways, but my two cents is to NOT do it. We did and regret it. We are buying a physical box to move this to. You lose too much control if it's virtual.

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[Michael Unsworth](#) 18 posts since

May 12, 2008 10. **Re: Virtualizes VC or not** Sep 12, 2008 8:40 AM

in response to: [John Taft](#)

What happens if the ESX server that it is running on goes down though? How is it supposed to be able to still manage all of the other VMs on that server? It just seems counter-productive to have VC on an ESX server that it is managing. Seems like an odd thing for VMWare to recommend.



[Robert Jones](#) 7 posts since

May 2, 2008 11. **Re: Virtualizes VC or not** Sep 12, 2008 8:43 AM

in response to: [Michael Unsworth](#)

Perhaps they are **assuming** you have multiple ESX host. In that case, you can bring up VC on another functioning host.



[tibmeister](#) 3 posts since

Sep 10, 2007 12. **Re: Virtualizes VC or not** Sep 12, 2008 8:50 AM

in response to: [Michael Unsworth](#)

So that's when you put all your faith in HA. HA does not require VC to function. A cluster can live without VC for a short period of time (I personally don't like longer than an hour).



[Michael Unsworth](#) 18 posts since

May 12, 2008 13. **Re: Virtualizes VC or not** Sep 12, 2008 9:33 AM

in response to: [Robert Jones](#)

True, which we do, but if the ESX server that VC is on goes down, VC goes down, along with whatever else was running on that host. How is VC then supposed to be able to bring those guests in the cluster back up? You can do this manually, but one of the features of VC is that it is supposed to be able to do this automatically, which reduces your downtime.

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Edit: Being still new to Virtual Infrastructure, I did not realize that HA could still function while VC is down, but my argument against not recommending this remains the same.

Message was edited by: Michael Unsworth



[Robert Jones](#) 7 posts since

May 2, 2008 14. Re: **Virtualizes VC or not** Sep 12, 2008 9:44 AM

↑ in response to: [Michael Unsworth](#)

I am making other **assumptions**. We are running a Fibre SANS on the back end, so all of our VM's technically live there. So if the ESX host that was running VC VM goes down, I can just bring it up on another functioning host since the actual VM files are still accessible.

Granted, if you are storing the vmdk files on the local ESX host and it goes down, then yes, I suppose you would lose it for a while till you could manually add everything back into inventory. Sorry for the **assumption**.



[fuzzylee](#) 6 posts since

Jul 26, 2008 15. Re: **Virtualizes VC or not** Sep 12, 2008 10:24 AM

To answer all assumptions, yes it is running on multiple ESX, (DRS and HA). and fiber SANs.

And it was Suggested by VMware sales and tech that came to our office to do presentation, but after i read and did some reasearch, I think VC on VM shouldn't be too bad.



[Robert Jones](#) 7 posts since

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May 2, 2008 16. **Re: Virtualizes VC or not** Sep 12, 2008 10:55 AM


 in response to: [fuzzylee](#)

Don't get me wrong. It does work. We are running it that way now. We have had some HA issues that have caused us to want to remove VC from the ESX. As long as everything is working as it should, you won't have any problems.



[fuzzylee](#) 6 posts since

Jul 26, 2008 17. **Re: Virtualizes VC or not** Sep 12, 2008 2:28 PM

 in response to: [Robert Jones](#)

What kind of control you talking about?



[Jason Langdon](#) 68 posts since

Sep 24, 2007 18. **Re: Virtualizes VC or not** Sep 13, 2008 3:34 AM

 in response to: [fuzzylee](#)

I'm running a VM/VC in my test lab and have not experienced any issued to date that resulted in lose of functionality and/or control.

While I am still using a physical VC in the production environment, I too am considering the possibility of virtualizing the system.

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My plan is to keep the existing physical server on-line while I create a new VM and and configure it as both the VC and the license server. Once everything is configured I plan on making several clones (2-3) and storing them on localstorage of different ESX servers. This way, if I loose the VM/VC I will always have at least one copy to fall back on.

Jason



Jacob Broido 1 posts since

Jun 21, 2008 19. Re: **Virtualizes VC or not** Sep 15, 2008 10:17 AM

I am running as VC as a VM on a VMWare Server(not ESX).Thus eliminating the link between the managing VC and the managed ESX machines.

This approach lets you enjoy the benifits of the virtual hardware while not putting all your eggs in one basket. VC VM itself is stored on a SAN and easily migratable to another VMWare Server(scripting) in case of a failure of the physical node.

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[Stefan Rush](#) 6 posts since

Sep 17, 2008 20. **Re: Virtualizes VC or not** Sep 17, 2008 4:00 PM

Well gang after managing 16 host using a VC as a VM I would say it's the best way to go till you hit ESX Host number 17 then it's time to go physical. However I would recommend clustering the the physical server with a VM so you don't loose any of the ESX sexiness 😊



[schambers](#) 7 posts since

Sep 10, 2007 21. **Re: Virtualizes VC or not** Sep 22, 2008 3:54 AM

NOTE TO ALL

1) You don't need VC to manage HA recoveries - VC is like any other application running on VMware, it is abstracted from the hard work going on beneath it.

2) If VC is running on a physical server and that physical server dies, then whilst you are taking time to recover it you find an ESX Server host has died - just to back up #1 above, your VMs running on that host will be recovered by HA **even though VC isn't available and is being recovered**

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3) If VC is running in a virtual server and the underlying physical server dies, then the other hosts in the cluster will manage the recovery of your VC VM within minutes.

VC in a VM has been a **head block** for years - time to get over it, people, there are no excuses not to run VC in a VM anymore... let's all move on to the next hard problems 😊



[Jason Langdon](#) 68 posts since

Sep 24, 2007 22. **Re: Virtualizes VC or not** Sep 22, 2008 7:55 AM

👤 in response to: [schambers](#)

Vmware announced at VMworld that VC will soon be released as a linux-based virtual appliance.

Jason

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[Robert Jones](#) 7 posts since

May 2, 2008 23. **Re: Virtualizes VC or not** Sep 22, 2008 9:52 AM

↑ in response to: [schambers](#)

I don't disagree with that. Again, our VC is a VM, but we had some issue twith HA and DRS that scared the crap out of us and made us jump the gun on moving it to a physical box. Being VMWare noobs ,we budgeted for the hardware, but after attending VMWorld and getting a better understanding of things made us rethink it. For now we will leave it as is.



[Even Glemmestad](#) 3 posts since

Aug 6, 2008 24. **Re: Virtualizes VC or not** Sep 23, 2008 2:35 AM

I have to issue a rebuttal of my previous statement. We have gone virtual instead of physical.

Several reasons made the choice easier:

- HA in case of physical machine failure (most "VC-inaccessible" failures are due to hardware, and not to Virtual Center / VMWare failure)

- Power savings (virtual wins over physical)

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- Space savings (same as above)

- Time-to-restore (Image level backups of VC server)

"What if VMWare servers stop working at all, due to licensing or a VMWare bug?"

For this reason, we always keep a image-level backup of the VC server (VMDK-type backup). If we need to bring this up again quickly, all we do is push in an installation of ESXi on a physical server and copy over / restore the VC virtual machine. Quick and easy online again.

Hope this helps for anyone currently choosing between the two, as we have done.

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Kind regards,

Even Glemmestad



[nunezi](#) 2 posts since

Jun 25, 2008 25. **Re: Virtualizes VC or not** Jan 2, 2009 10:11 PM

[↑](#) in response to: [fuzzylee](#)

I'm a VMware expert and having been running ESX for more than 3 yrs in an enterprise production environment.

I don't run VC on VM for one reason. In our environment, we need 99.9% uptime on all monitoring and management tools for all production systems. The only way I would or any enterprise environment should ever put VC on VM is in a MSC VM environment. We don't run MSC on any VM's so we would have to dedicate two phy servers to for ESX MSC clusters. Since we don't run MSC on VM i'm not inclined to dedicate two phy servers just for run VC.

I have a phy server with total redundancy. Dual power supplies connected to two power strips connected to two separate circuits. As all enterprise

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datacenters should be. RAID on the drives, Dual fiber cards each connected to two fiber switches that in turn have dual paths to the SAN. Dual NIC's each connected to two network switches. The SQL DB is backed up three times a day to disk on the Backup server and then to tape at nite. I have a VM clone of the phy machine in case the VC phy server catches fire. If there's an issue with VC, I can have it up and running within about 10 mins. I've done D.R. testing.

If I were running MSC on VM and had at least a pair of ESX servers setup for MSC VM's in production then, I would virtualized VC. I see VC as an integral part of my Virtual environment and it's my eyes into it. I want it up and running at all times. When an ESX server and VM work as they are supposed to then there wouldn't be any issues with ANY VM's. But, the reason we all have jobs is for architecting and environment that minimized down time to the most smallest detail that our business needs lets us. Warehouse needs to be up and running at ALL times. We cannot run into a scenario where VC is virtualized, the ESX server goes down and the VC Guest is unable to start after HA moved it to another host and a warehouse Guest on a running ESX server is having problems. I know have two issues i need to deal with. Finding the warehouse guest in my 26 host environment and getting VC up and running A.S.A.P. along with dealing with day to day activities. This scenario is not acceptable in our environment.

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That being said, it all depends on your budget and on business needs.

If business says no down time and the budget is there then, design and environment to cover all possibilities. If not, try to cover as many possibilities as possible. If you are working with a small environment and the budget isn't there make sure all parties understand the possible out comes to scenarios and the implicated down times.

Ok, i'm rambling now ... lol 😊 ... hope everyone has a great New Year. Be safe and live life ... make it a life to remember.

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[Virtual_JTW](#) 5 posts since

Sep 10, 2007 26. **Re: Virtualizes VC or not** Jan 9, 2009 1:27 PM

See: <http://communities.vmware.com/blogs/ManualAutomation/2008/11/24/virtualizing-virtual-center-revisisted>



[sanju86](#) 1 posts since

Jan 10, 2009 27. **Re: Virtualizes VC or not** Jan 10, 2009 8:38 AM

I was frustrated and had spent way too much time on the issue. While I intended to follow-up, other priorities came up and I never quite got back to it. In January, I had the privilege of doing a joint presentation with Chris Sator from VMWare for an Electrical Distribution companies conference. I mentioned the problem to Chris, and he suggested that at this point it may be best to simply rebuild the server. So I did. And, lo and behold, everything works just fine now.

-

sanju

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Online Dating



Erik Scholten 22 posts since

Dec 19, 2007 28. **Re: Virtualizes VC or not** Jan 22, 2009 2:20 PM

Hello guys,

My personal opinion? Virtual VC all the way. It's not so much of a discussion anymore as VMware will release a virtual vCenter appliance any time soon.

A colleague of mine wrote a great article on the subject which can be found here:

<http://www.vmguru.nl/wordpress/2009/01/vcenter-physical-or-virtual/>

<http://www.vmguru.nl>

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[James Shelton](#) 1 posts since

Aug 20, 2008 29. **Re: Virtualizes VC or not** Feb 19, 2009 11:23 AM

[↑](#) in response to: [fuzzylee](#)

Well...you can add my opinion to the "why the heck not" stack.

I mean...I run a true enterprise environment, and I must have 24/7/365 access as much as the next...but if I have my VC database living on a Oracle 10G RAC and I have beter than N +1 redundancy in my hosts and I have solid backup methodologies...please inform me how I'm going to "suffer" in the event of a VC outage strictly due to virtualizing my VC server? I mean...how am I at any more risk than I would be on physical hardware? My database lives elsewhere and I can rebuild my VC in a matter of less than an hour. Whoopti-do...no DRS for a bit...no machine deployments for a bit...and I don't rely on VC for performance or other forms of monitoring anyway. For us it's just a no-brainer...besides...we need the stinkin' power freed up by getting rid of another underutilized box in our datacenter...