

From the editors Virtual Desk - 30 August 2010

This week is VMworld. I expect that while you are reading this newsletter this week that there will be loads of announcements from VMworld that will be of interest to you. I will continue my VMworld news as well as other news section for you over the next 2 weeks or so. If you are attending VMworld and have anything newsworthy that you wish to share please let me know. On that point you are always welcome to share any news pertinent to VMware that I may miss. I am only one person and able to gather so much. I have my sources but any hints and tips that you have please share with me for future newsletters.

This week I spent 3 days on the vSphere Design course which is part of the new VCAP certification. I haven't been on a course as good as this in ages and found it to be an extremely productive 3 days. I was lucky enough to spend the time with a number of my TAM customers as well so the opportunity to work with them outside of our usual work environment was definitely a plus. The course itself is really more of a workshop and you spend the 3 days working in a team designing a vSphere environment. The result is that you are well equipped after the course with the necessary tools and techniques to create a vSphere design for a new system or alternatively go back and look at the design of your existing environment. All too often we presume that a vSphere installation because it was done prior to us must either be correct or no able to change however as we all found out this is not necessarily the truth and that the VMware education team have now prepared a course that will really enhance new and existing vSphere environments. I really suggest that you check this course out in your region and if there is no course scheduled speak to your TAM and see what you can get organized. That is what we did, there was no course scheduled for our region so I arranged with education to give us the opportunity to fill a course and then it will be run for us locally, this was easily achieved as interest in this seems to be high.

For those of you at VMworld this week I expect a report back for next week's newsletter and of course a few VMware goodies for those of us who are not lucky enough to attend this amazing event. Have a wonderful week.

Warm Regards
Neil Isserow
VMware TAM
Queensland
Australia



Product updates

vCenter Application Discovery Manager 6.1

<http://www.vmware.com/products/application-discovery-manager/>

Please see Release Notes and other documentation below:

http://www.vmware.com/support/pubs/adm_pubs.html

Hyperic 4.4 - with vSphere integration

Unmatched Performance Management for Virtualized Java Apps

SpringSourceHyperic 4.4 greatly simplifies the management of virtualized custom applications by maintaining a continually updated inventory of VMware vSphere ESXi and ESX hosts, as well as their corresponding virtual machines and guest operating systems. This lets you much more quickly find, fix, and prevent application performance problems wherever they occur across virtual and private cloud infrastructures.

<http://www.springsource.com/hyperic44>

VMware vCenter Application Discovery Manager (ADM) 6.0.8 is now available on vmware.com

Main Product Page: <http://www.vmware.com/products/application-discovery-manager/index.html>

Download Page:

http://downloads.vmware.com/d/info/datacenter_downloads/vmware_vcenter_application_discovery_manager/6_0

VMware vCenter Capacity IQ 1.0.4

This release now support vSphere 4.1

http://www.vmware.com/support/pubs/ciq_pubs.html

Release: VMware Workstation 7.1.1 / Player 3.1.1 / ACE 2.7.1

At the end of last week VMware updated its desktop virtualization platform Workstation and Player, as well as its platform wrapper ACE.

Workstation 7.1.1 (build 282343) only introduce support for ESX 4.1 as guest operating system. VMware introduced the capability to run its bare-metal hypervisor as a guest OS inside its hosted virtualization platform in Workstation 7.0, after the community requested the capability for a long, long time.

Player 3.1.1 and ACE 2.7.1 (build 282343) are for bug fixing only.

http://feedproxy.google.com/~r/Virtualization_info/~3/mOzLiiH1K4U/release-vmware-workstation-7-1-1-player-3-1-1-ace-2-7-1.html

Thinapp 4.6 released

Thinapp 4.6 was released and it brings up quite a few new functionalities. There is a new "ThinDirect" feature which allows redirecting of URLs from native to virtual browsers. Useful when you want to keep IE6 for custom made applications which you have to access via an URL and those applications are usually non compatible with IE7 or IE8. Before you had to know which browser to use for the non-compatible URLs, but now the redirection of URL make things transparent for the end user which does not have to worry about that any more.

The feature is called ThinDirect - users are automatically redirected to the appropriate browser (virtual or native and back again) as they navigate through different pages without interruption to their work-flow.

<http://www.vladan.fr/thinapp-4-6-released/>

Blogs and latest news articles from around the web

VMworld 2010 NEWS

Some Pre-VMworld Product Announcements

There were several new product announcements that hit the wire today. I don't have time to go in-depth on any of these, but I did want to point them out very briefly. If time permits, I'll try to provide a bit more detail in the near future.

<http://feeds.scottlowe.org/~r/slowe/content/feed/~3/PLtVx8FqD9I/>

The future of VMware Workstation

A VMworld session to attend if you're present at VMworld this year.

If you're coming to VMworld 2010 this year and you're using VMware Workstation 7 as your desktop virtualization software you might want to know some more news for the future. So to get a peak about new functionalities in the future releases of VMware Workstation you can attend this session:

"The Future of VMware Workstation and Cloud Development" (DV6946). Presented by Jason Joel and Rajat Goel.

<http://www.vladan.fr/the-future-of-vmware-workstation/>

SRM Futures: Host Based Replication

If you're attending the VMworld 2010 next week you might want to consider putting the following session on your most wanted list.

Session ID: BC8432

Session Title: SRM Futures: Host Based Replication

<http://feedproxy.google.com/~r/Ntpronl/~3/AOsRvY2iaUE/1564-SRM-Futures-Host-Based-Replication.html>

VMWorld 2010 VIRTUMANIA Infosmack Productions #smackup

For those attending VMWorld 2010 in San Francisco, CA, On Wednesday September 1 at 1:00 PM PST take a break from the sessions and stop by to meet VIRTUMANIA and Infosmack personalities Marc Farley, Rick Vanover, and me in person on the VMWorld 2010 Solutions Exchange floor. The Veeam and 3PAR booths are adjacent to each other, so this tweet up will be in the general area at both booths from 1 PM to 2 PM PST.

RSVP at twtvite.com/vmworld2010smackup and then add to your calendar:

<http://feedproxy.google.com/~r/vmetc/~3/5g6WMzXUTec/>

Office of the CTO Blogs: Quick preview of security sessions at VMworld 2010

VMworld 2010 is almost upon us. We have a lot to talk about on the security front, as we begin the process of "building in" security into virtualization and cloud infrastructures, and embark on the journey to secure private and hybrid clouds. The keynotes from Paul and Steve are always insightful - this year, in addition, there is a bit to talk about in the area of security, so do tune in!

I have a couple of sessions:

SE8389 - Architectural Overview of Virtualization Security for the Private Cloud

SE8520 - Panel Discussion - Private Cloud - Virtualization Security and Compliance, Meeting PCI Standards

<http://communities.vmware.com/blogs/cto-allwyn/2010/08/27/quick-preview-of-security-sessions-at-vmworld-2010>

VMworld Blog: VMware Labs "Flings Station"

Drop by VMware Labs "Flings Station" at the VMworld Social Media & Blogger Lounge and "Suggest a Fling" to get a FREE T-shirt. The lounge will be located in Moscone South lobby, near the bookstore. Look for the pod showing demos for VMware Labs and VMware Communities.

<http://www.vmworld.com/blogs/vmworld/2010/08/26/vmware-labs-flings-station>

Rethink IT: Virtualization and Cloud Management at VMworld 2010

Hello, this is Martin Klaus again from the vCenter Product Marketing team. VMworld San Francisco is less than one week away and it's bound to be an awesome event for virtualization and cloud management. We have more than 20 management sessions, and the buzz around management is heating up -- as Dan Kusnetzky pointed out in his blog. As a track owner for the Private Cloud Management track I get to work with all the presenters of these sessions, and from what I've seen I can tell you that each and every session delivers thought provoking, high-quality content. There are too many diverse sessions to summarize in a few sentences, but here are some highlights that you cannot afford to miss:

<http://blogs.vmware.com/rethinkit/2010/08/virtualization-and-cloud-management-at-vmworld-2010.html>

VMworld Blog: Foursquare at VMworld 2010

Foursquare is going to be a big part of VMworld 2010 this year. You will be able to check-in locations all over the place!

First up, what is this Foursquare thing?

From Business insider:

"Foursquare is primarily for letting your friends know where you are and figuring out where they are. Secondly, it's for collecting points, prize "badges," and eventually, coupons, for going about your everyday business."

Read more: <http://www.businessinsider.com/how-hit-location-based-social-app-foursquare-works-2010-1#ixzz0xkh15URk>

<http://www.vmworld.com/blogs/vmworld/2010/08/26/foursquare-at-vmworld-2010>

It is going to be a crazy week again! Check all these activities out.

Well next week is for sure going to be a crazy week again. Starting this Saturday the first parties and gatherings will take place. If you are travelling to VMworld in San Francisco you can find a great link with all activities on the VMworld communities; <http://www.vmworld.com/docs/DOC-4760> View VMworld 2010 Events in a larger map <http://www.run-virtual.com/?p=504>

The PowerCLI Universe @ VMworld Tech Exchange

Monday August 30th 2010

Tech Exchange for Developers

vSphere PowerCLI Engineering will walk the audience through PowerCLI and reveal some really cool things happening with PowerCLI and Onyx

Vladimir G. VMware vSphere R&D Manager

Yavor B. VMware vSphere R&D Manager

Session IDL PPC-11

Session Title: Automating vSphere Management using PowerCLI and Onyx

Tuesday and Thursday

VMworld

Alan R and Luc D blow the doors out of the event. Due to overwhelming popularity this session has been repeated.

Show up early seating is limited, and dont miss out.

Session ID: TA6944

Session Title: PowerCLI is for Administrators !

<http://blogs.vmware.com/vipowershell/2010/08/the-powercli-universe-vmworld-tech-exchange.html>

GENERAL VMWARE NEWS

File system Alignment redux

So I wrote a post a little while ago about filesystem alignment, and why I think it's important. You can read it here. Obviously, the issue of what to do with guest OS file systems comes up from time to time too. When I asked a colleague to build some VMs for me in our lab environment with the system disks aligned he dismissed the request out of hand and called it an unnecessary overhead. I'm kind of at that point in my life where the only people who dismiss my ideas so quickly are my kids, so I called him on it. He promptly reached for a tattered copy of EMC's Techbook entitled "Using EMC CLARiiON Storage with VMware vSphere and VMware Infrastructure" (EMC P/N h2197.5 – get it on Powerlink). He then pointed me to this nugget from the book. <http://www.penguinpunk.net/blog/?p=515>

Cisco 9124(e) firmware downgrade

Sometimes, for any number of reasons, you'll find yourself wanting to downgrade the firmware on your Cisco edge devices to match what you have running in the core. Fortunately, at least for the 9100-series switches, this is basically the same as upgrading the firmware. I've included the commands to run here, and also the full output of the process. For the director-class switches, there are a few more things to do, such as clearing out the space on the standby supervisor as well as the active sup card. I'll try and post something 9500-series specific in the next few weeks. In short, do this (assuming you're loading version 3.3(4a) of the code): <http://www.penguinpunk.net/blog/?p=506>

Twitter Follow-Up: How to Manage a Default Route?

I posted a tweet earlier today that asked this question:

If I shouldn't use "ip default-network" because it's classful, then should I redistribute a static default route?

What prompted this question was some work I was doing earlier today in preparation for my CCNA exam. I had a five-site hub-and-spoke network in GNS3 running EIGRP, with lightweight OpenBSD VMs attached behind each router so that I could test end-to-end connectivity (i.e., ping a host behind one router from a host behind another router). This configuration is working fine.

<http://feeds.scottlowe.org/~r/slowe/content/feed/~3/jdZkHR-ney0/>

New User's Guide to Configuring VMware ESXi Networking via CLI

This is one article in a series of articles focused toward new users. Some other New User's Guide articles include:

New User's Guide to Configuring VMware ESX Networking via CLI

New User's Guide to Configuring Cisco MDS Zones via CLI

New User's Guide to Managing Cisco MDS Zones via CLI

This particular article is a follow-up of sorts to the first article listed above. While that article focused on virtual networking with VMware ESX, this article focuses on virtual networking with VMware ESXi. Given that VMware's stated focus is on VMware ESXi moving forward, I thought this article would be helpful and timely.

<http://feeds.scottlowe.org/~r/slowe/content/feed/~3/eP9B7-0s8tk/>

A Free PowerCLI poster

Free PowerCLI poster has made its apparition.

If you're fan of PowerCLI, you might want to have a look at PowerCLI poster which is now available as a free download.

In case you're attending VMworld 2010 at SF, you might even get a printed copy !!

<http://www.vladan.fr/a-free-powercli-poster/>

VMware partners with Symantec on ApplicationHA

Enforce VMware HA with Symantec's ApplicationHA.

Symantec is about to release (in September) new product called ApplicationHA. What's that? It is based on the Veritas Cluster Server technology and provides application availability in coordination with VMware HA. As you know the VMware HA help to restart your VM on another server, but what about the application which is running inside of that VM? This application is not crash consistent so in up to 30% of the cases you can loose some data.

<http://www.vladan.fr/vmware-partners-with-symantec-on-applicationha/>

Get free upgrade of VMware Fusion and run vSphere 4.1

VMware Fusion 3.1.1 update available too.

With the recent release of VMware Workstation 7.1 which I reported few days back, there has been an updates also to VMware Player, VMware ACE and VMware Fusion 3.1.1. I don't know if I had ever talked about the following, because since I'm working on a PC, the VMware Fusion has the possibility to run ESXi 4.1 now. It's fully supported.

<http://feedproxy.google.com/~r/EsxVirtualization/~3/Ib-6DjfvPU/>

vSphere 4.1 to 4.0 differences

William Lam over at [virtuallyghetto](#) has posted a great article with a lot of in-depth knowledge regarding the secrets of the vsish shell. While I was reading through the article I discovered a link to a DeepDive training that deserves a post of its own. The two slide decks are created by Iwan Rahabok who works as a Senior Systems Consultant at VMware and can be found here:

<http://feedproxy.google.com/~r/Ntprnl/~3/uOuqHZWnHZE/1560-vSphere-4.1-to-4.0-differences.html>

New Book: VMware High Availability Constructs By Duncan Epping and Frank Denneman

Pearson IT Certification has released the first sample chapter of the upcoming book "VMWare High Availability Constructs" written by Duncan Epping and Frank Denneman.

Duncan Epping is a Consulting Architect working for VMware as part of the Cloud Practice. Duncan works primarily with Service Providers and large Enterprise customers. He is focused on designing Public Cloud Infrastructures and specializes in bc-dr, vCloud and VMware HA. Duncan is a VMware Certified Professional and among the first VMware Certified Design Experts (VCDX 007). Duncan is the owner of [Yellow-Bricks.com](#), one of the leading VMware/virtualization blogs worldwide (recently voted number 1 worldwide on [vsphere-land.com](#)) and co-author of the "vSphere Quick Start Guide" and "Foundation for Cloud Computing with VMware vSphere 4," which has recently been published by Usenix/Sage (#21 in the Short Topics Series). He can be followed on twitter at <http://twitter.com/DuncanYB>.

Frank Denneman is a Senior Consultant working for VMware as part of the Professional Services Organization. Frank works primarily with large Enterprise customers and Service Providers. He is focused on designing large vSphere Infrastructures and specializes in Resource Management and DRS in general. Frank is a VMware Certified Professional and among the first VMware Certified Design Experts (VCDX 029). Frank is the owner of [FrankDenneman.nl](#) an upcoming blog which has recently been voted number 14 worldwide on [vsphere-land.com](#). He can be followed on twitter at <http://twitter.com/FrankDenneman>.

<http://feedproxy.google.com/~r/Ntprnl/~3/tZcgVsFc5zs/1563-New-Book-VMware-High-Availability-Constructs-By-Duncan-Epping-and-Frank-Denneman.html>

Book Review: Maximum vSphere

Maximum vSphere is a new book by Eric Siebert, writer and purveyor of VMware information at [vSphere-land](#). Not only that, Simon Seagrave of TechHead fame contributed two chapters and VMware's John Troyer provided his individual style to the Foreword — be sure not to miss it.

For those in a hurry, here is the executive summary: buy the book, it is an excellent practical guide and reference. The cover promises Tips, How-Tos, and Best Practices for Working with VMware vSphere 4 — and the Maximum vSphere delivers on all counts.

http://feedproxy.google.com/~r/vcritical/~3/D_HX0ided4I/

Installing the vSphere 4.0 Host Update Utility

This came up in the comments to one of my other posts, so I thought I'd share.

Note: The Host Update Utility was deprecated with 4.1, so if you came here looking for that... my apologies.

The vSphere Host Update Utility, as far as I can tell is not actually offered as a separate download, but is rather bundled with the vSphere client and is a selectable option during installation. As admins most of us are trained to ignore these extra screens (after-all, who wants yet another Friendster toolbar installed?). This one is safe however, promise!

http://feedproxy.google.com/~r/ProfessionalVmware/~3/zd0_2S63UHI/

Finding Virtual Center Logs on Windows Server 2008

Well, if that wasn't an SEO title, I'm not sure what is. Basically, I find myself often having to find this in either the VMware KB or via Google each time I need it.

Where are the logs?

C:\ProgramData\VMware\VMware VirtualCenter

<http://feedproxy.google.com/~r/ProfessionalVmware/~3/6sHUImH1Pcc/>

Virtualizing Drives With VMware ThinApp

A recent customer came to me with the requirement that each application have its' media inserted into the cd/dvd-rom drive before running.

One solution outside the ThinApp world would have been to mount an ISO of the media for each application as a virtual drive. Tools that allow mounting ISO files as a virtual cd/dvd-rom drive such as Daemon Tools and Magic ISO have existed for some time now. The problem is these applications are not end user friendly and becomes even more complex when dealing with multiple pieces of software with a requirement to have media inserted.

<http://www.vfail.net/2010/08/03/virtualizing-drives-with-vmware-thinapp-2/>

A Quick ThinApp Troubleshooting Tip

This is a quick and easy method for troubleshooting ThinApp applications that do not shut down properly. Using all the advanced log tracing at times is more complex for some people who are just casually and occasionally building ThinApp packages.

In Windows task manager you can add a column for Command Line, which will show the path to the file being run. By doing this you will often see several different instances of application xyz.exe, all with different paths. When a ThinApp fails to shutdown you will often find that it is a component such as an application update or something like .net that is hung.

<http://www.vfail.net/2010/08/17/a-quick-thinapp-troubleshooting-tip/>

Native 10GbE FCoE – now: simple, non-disruptive, for the masses and inexpensive....

A big part of today's announcement (just warming up for VMworld :-)) that might have gotten buried underneath all coolness of: 1) Unisphere; 2) sub-LUN FAST, 3) FAST Cache, 4) Compression; 5) VAAI firmware support; 6) and a huge performance boost at the high-end of the Celerra with new Westmere based gateways; 7) New lower cost 100GB and 200GB solid state flash drives... was big news..

EMC supports simple, non-disruptive hot add of Native 10GbE FCoE to the huge installed base of EMC CLARiiON and EMC Celerra customers – opening up the converged storage network market like crazy.

So – what exactly am I talking about? <http://feedproxy.google.com/~r/typepad/dsAV/~3/Wz-1wHzJp1w/native-10gbe-fcoe-now-simple-non-disruptive-for-the-masses-and-inexpensive.html>

VMware vCloud Blog: Getting to Know vCloud (Part II)

Previously, I wrote about my experimentation with Terremark's vCloud Express. I found it insanely easy to create a VM from one of Terremark's templates. Yet, as we know, simply creating VM's isn't the end of the story.

<http://blogs.vmware.com/vcloud/2010/08/getting-to-know-vcloud-part-ii.html>

Two new HA Advanced Settings

Just noticed a couple of new advanced settings in the vCenter Performance Best Practices whitepaper:

`das.perHostConcurrentFailoversLimit`

When multiple VMs are restarted on one host, up to 32 VMs will be powered on concurrently by default. This is to avoid resource contention on the host. This limit can be changed through the HA advanced option:

`das.perHostConcurrentFailoversLimit`. Setting a larger value will allow more VMs to be restarted concurrently and might reduce the overall VM recovery time, but the average latency to recover individual VMs might increase. We recommend using the default value.

`das.sensorPollingFreq`

The `das.sensorPollingFreq` option controls the HA polling interval. HA polls the system periodically to update the cluster state with such information as how many VMs are powered on, and so on. The polling interval was 1 second in vSphere 4.0. A smaller value leads to faster VM power on, and a larger value leads to better scalability if a lot of concurrent power operations need to be performed in a large cluster. The default is 10 seconds in vSphere 4.1, and it can be set to a value between 1 and 30 seconds.

<http://feedproxy.google.com/~r/YellowBricks/~3/sDymWSOCha8/>

Layer 2 Adjacency for vMotion (vmkernel)

Recently I had a discussion around Layer 2 adjacency for the vMotion(vmkernel interface) network. With that meaning that all vMotion interfaces, aka vmkernel interfaces, are required to be on the same subnet as otherwise vMotion would not function correctly.

Now I remember when this used to be part of the VMware documentation but that requirement is nowhere to be found anywhere. I even have a memory of documentation of the previous versions stating that it was "recommended" to have layer-2 adjacency but even that is nowhere to be found. The only reference I could find was an article by Scott Lowe where Paul Pindell from F5 chips in and debunks the myth, but as Paul is not a VMware spokes person it is not definitive in my opinion. Scott also just published a rectification of his article after we discussed this myth a couple of times over the last week. <http://feedproxy.google.com/~r/YellowBricks/~3/LUYOWdKITko/>

VMware vCenter Update Manager 4.1 Performance and Best Practices

VMware vCenter Update Manager provides a patch management framework for VMware vSphere. IT administrators can use it to patch and upgrade VMware ESX/ESXi hosts, apply patches to Windows and certain versions of Linux in virtual machines, upgrade VMware Tools and virtual hardware for virtual machines, and patch and upgrade virtual appliances. A new white paper, VMware vCenter Update Manager Performance and Best Practices, is now available.

<http://blogs.vmware.com/performance/2010/08/vmware-vcenter-update-manager-41-performance-and-best-practices.html>

SAP Performance on vSphere 4.1 with DB2 and SUSE 10

VMware published a paper which shows that vSphere 4.1, out of the box, easily supports a demanding SAP ERP installation by allowing administrators to either scale up or scale out.

Scaling Up By Adding Processors

To test scale-up performance, a similarly-configured physical machine and virtual machine were used to see how many SAP users could be supported with one, two, four, and eight processors.

<http://blogs.vmware.com/performance/2010/08/sap-performance-on-vsphere-41-with-db2-and-suse-10.html>

KB Article "VMware vCenter Update Manager host tasks might fail in slow networks" Published

Simplify management of VMware vSphere by automating patches and updates. VMware vCenter Update Manager makes it easy to manage tracking and patching of VMware vSphere hosts, as well as selected Windows virtual machines. A new KB article, "VMware vCenter Update Manager host tasks might fail in slow networks", is now available.

<http://blogs.vmware.com/performance/2010/08/kb-article-vmware-vcenter-update-manager-host-tasks-might-fail-in-slow-networks-published.html>

Storage IO Control Whitepaper

As a new feature introduced in the 4.1 release of vSphere 4.1, Storage I/O control (SIOC) provides I/O prioritization for virtual machines running on a cluster of ESX servers that share a common pool of storage. During periods of high I/O congestion, SIOC will engage to dynamically adjust the I/O queue slots on each ESX server accessing that shared resource to align the available throughput to the prioritization of virtual machines running on shared datastore. This paper explains the basic mechanics of how this new feature works and addresses considerations for use of this virtualization environments.

<http://www.vmware.com/files/pdf/techpaper/VMW-vSphere41-SIOC.pdf>

Resolution Paths – What are they and why do I care?

You're all familiar with the VMware Knowledge Base, but have you ever heard of Resolution Paths? Perhaps not. Stated as simply as possible, Resolution Paths are collections of modular steps that can be used to solve tech support issues. But they are noteworthy for some very special reasons; reasons that I think you'll care about. Let me fill you in a bit.

Early on in VMware's history we saw a pattern in calls into support. We took a hard look at the problems causing the most calls and set out to break down the problem solving process for these problems. The result are what we call Resolution Paths.

<http://blogs.vmware.com/kb/2010/08/resolution-paths-what-are-they-and-why-do-i-care.html>

TRAINING AND CERTIFICATION

VMware vSphere: Design Workshop [V4]

This course explores a design methodology, criteria, and approach for designing a VMware vSphere™ 4 virtual datacenter architecture consisting of VMware® ESX™/ESXi 4 and VMware vCenter™ Server 4. This course, by discussing the benefits and risks of available design alternatives, provides information that supports making sound design decisions. This course also provides an opportunity to practice your design skills by working with peers on a design project.

Objectives:

- Identify design goals, requirements, and constraints
- Identify useful information for making design decisions
- Recognize and analyze best-practice recommendations
- Analyze alternative design choices
- Identify risks
- Work in a design team on a design project

Outline: Module 1: Course Introduction

- Provide a general overview of the course

Module 2: Design Process Overview

- Discuss the design methodology, criteria, and approach
- Introduce an example five-step design process

Module 3: ESX/ESXi Host Design

- Identify useful information for making host design decisions
- Analyze best practices and host design alternatives

Module 4: vSphere Virtual Datacenter Design

- Identify useful information for making vCenter Server, database, cluster, and resource pool design decisions
- Analyze best practices and vCenter Server, database, cluster, and resource pool design alternatives

Module 5: vSphere Network Design

- Identify useful information for making network design decisions
- Analyze best practices and network design alternatives

Module 6: vSphere Storage Design

- Identify useful information for making storage design decisions
- Analyze best practices and storage design alternatives

Module 7: Virtual Machine Design

- Identify useful information for making virtual machine design decisions
- Analyze best practices and virtual machine design alternatives

Module 8: Management and Monitoring Design

- Identify useful information for making management and monitoring design decisions
- Analyze best practices and management and monitoring design alternatives

Design Workshop

- Small group case study workshop to practice using the methodology, criteria, and approach required to design a vSphere virtual datacenter

The VCAP4-DCD Exam Blueprint Guide has become available

The VCAP-DCD is directed toward IT Architects and Consulting Architects who are capable of designing VMware solutions in a multi-site, large enterprise environment. They have a deep understanding both of VMware core components and their relation to storage and networking, and also of datacenter design methodologies. They also possess knowledge of applications and physical infrastructure, as well as their relationship to the virtual infrastructure. http://feedproxy.google.com/~r/Ntpronl/~3/EY_j5zySUcI/1556-The-VCAP4-DCD-Exam-Blueprint-Guide-has-become-available.html

VMware vSphere: Manage for Performance [V4]

This hands-on training course explores the management of performance in a VMware vSphere™ environment. It provides the knowledge and skills necessary to make fundamental design decisions that enhance performance and to meet performance goals in an already-deployed vSphere installation. The course is based on VMware® ESX™ 4.0, ESXi 4.0, and vCenter™ Server 4.0.

Objectives:

- Explain the performance impact of using different monitor modes
- Use vSphere tools to monitor the performance of ESX/ESXi hosts
- Diagnose performance problems relating to CPU, memory, network, and storage on an ESX/ESXi host
- Discuss how to achieve an optimal virtual machine configuration
- Discuss guidelines for monitoring application performance

Outline: Course Outline

Module 1: Course Introduction

Module 2: Performance in a Virtualized Environment

- Discuss the vSphere performance troubleshooting methodology
- Discuss software and hardware virtualization techniques and their impact on performance
- Monitor performance using vCenter Server performance charts and the ESX/ESXi resxstop command

Module 3: CPU Performance

- Discuss the CPU scheduler and other features that have an impact on CPU performance
- Monitor key CPU performance metrics
- Troubleshoot common CPU performance problems

Module 4: Memory Performance

- Discuss memory reclamation techniques and memory overcommitment
- Monitor key memory performance metrics
- Troubleshoot common memory performance problems

Module 5: Guidelines for DRS and Resource Controls

- Discuss performance guidelines for DRS clusters, resource pools, and resource allocation settings

Module 6: Network Performance

- Discuss the performance features of modern network adapters
- Monitor key network performance metrics
- Troubleshoot common network performance problems

Module 7: Storage Performance

- Discuss how storage protocols, VMware vStorage VMFS configuration, load balancing, and queuing affect performance
- Monitor key storage performance metrics
- Troubleshoot common storage performance problems

Module 8: Virtual Machine Performance

- Discuss guidelines for configuring a virtual machine for optimal performance

Module 9: Application Performance

- Discuss tools and guidelines for application performance