



Question: Hello there, I'm from Singapore and the event will start at 12AM Singapore Time. Problem is, the event conflicts with whatever's supposed to be going on in the morning Singapore Time which is when the event ends. **Answer:** Thanks for staying up late with us! If you need to leave before the end will get the on demand version up soon after.

08:43:59 PDT

Question: Hello everybody! Greetings from Croatia! **Answer:** Hey Goran! Welcome to the event - so glad you're here!

08:44:39 PDT

Question: Hello everyone **Answer:** Hey Rachid! Glad you're here!

08:45:33 PDT

Question: Hello Greetings from Italy **Answer:** Benvenuti!

08:45:59 PDT

Question: Greetings from Poland **Answer:** Witaj!

08:46:03 PDT

Question: Greetings all from New York! **Answer:** Hello kyar! Welcome!

08:46:09 PDT

Question: Greetings all from New York! **Answer:** Welcome, so glad you're here!

08:46:34 PDT

Question: hello from Costa Rica, **Answer:** Hello! Bienvenido!

08:46:41 PDT

Question: Hi everybody! Greetings from Turkey! **Answer:** Hoş geldiniz! Yani burada sevindim!



08:47:03 PDT

Question: Hi everyone, glad to be here from Germany. **Answer:** Thanks for joining us!

08:48:59 PDT

Question: Greetings from Malaysia **Answer:** Hello Cyrilcwc!

08:49:14 PDT

Question: Hello from Dubai! **Answer:** Thanks for joining from Dubai!

08:49:43 PDT

Question: Hello from Montana! **Answer:** Montana is awesome! Wish I was there today!

08:52:43 PDT

Question: Hello from Canary Islands, Spain **Answer:** Welcome Jose!

08:53:12 PDT

Question: hi from the netherlands **Answer:** Always glad to see people from the Netherlands here!

08:54:01 PDT

Question: Hello from the Wet Coast of Canada. Looking forward to another great learning experience! **Answer:** Hello TimJPSmith! Great to see one of our neighbors to the north!

08:54:22 PDT

Question: Hello Matt! New York Here **Answer:** I love New York! Glad to see you!

08:55:54 PDT

Question: Hello!!! Angelo from Toronto **Answer:** Go Leafs!



08:56:36 PDT

Question: Looks like the world is represented there to day. Even little Flekkejord in Norway Good day (Evening) every one!

Answer: Good evening to Norway! Great to see you Anders!

08:56:55 PDT

Question: Very interested in VDI with zero clients. **Answer:** Sounds like you're in the right place!

08:57:29 PDT

Question: Hi Frank Answer: Great to see you again, Techanalyst! Welcome!

08:57:49 PDT

Question: Here from Atlanta **Answer:** Nice! Great to see you - thanks for joining!

08:58:18 PDT

Question: Hello from Germany Answer: Herzlich Willkommen! So froh, dass du hier bist!

08:59:06 PDT

Question: Frank! Long time, no see! **Answer:** Hey Michael! Yes, it has been a while. Glad to see you in a Jump Start again! Hope you've been enjoying all the new courses in MVA!?

08:59:41 PDT

Question: Afternoon everyone from sunny Melbourne, Florida **Answer:** Corey is here in the studio, but hails from FLA as well. He says hello!

09:00:43 PDT

Question: Hi everyone ,Thank you Microsoft , MVA , teachers , Frank Gartland for new session! **Answer:** Great to see POPA DAN in the house! Welcome...

09:03:56 PDT

Question: Hello everybody! Brazil is here **Answer:** MVA loves Brazil! Welcome Gabriela



09:06:29 PDT

Question: afternoon from sunny and rainy Hertfordshire **Answer:** Great to see mrpaulb back in the house! Always appreciate your thoughtful questions!

09:06:58 PDT

Question: can you deploy remote apps still from RDS 2012? **Answer:** yep, you can publish RemoteApps from RDS or VDI collections in 2012.

09:07:20 PDT

Question: When will teh session begin?

Answer: Hold on to your seat.... we've started already.

09:08:57 PDT

Question: What was the voucher code again? **Answer:** VDI8JS (expires 5/18/2013)

09:09:59 PDT

Question: Hello from Bangalore Answer: Fantastic! So glad you're here - welcome!

09:14:14 PDT

Question: Yay! VDI! Answer: Hey AudibleDesigns! Welcome back!

09:14:45 PDT

Question: Hi guys module 6 Citrix is not available for download on the FAQ page anychance this can be fixed? **Answer:** Yes, module 6 will be posted after lunch.

09:15:02 PDT

Question: why is Corey just on a small laptop? **Answer:** It's his own demo system - opted to not use funky touch monitor

09:16:29 PDT

Question: I attended few of these jumPDTart event a few times. Each time when I apply the voucher, MVA will say voucher expired. **Answer:** The code works ! VDI8JS (expires 5/18/2013)



09:24:24 PDT

Question: its my first time, where can we use the voucher? **Answer:** in the MVA home page go to my dashboard and there is a link redeem code

09:28:13 PDT

Question: How does VDI environment deals with applications like VPN clients that sometimes that over the full network connection.

Answer: you can use your existing VPN to connect to your deployments, or deploy the RD Gateway, which is a "lite vpn" solution that puts just the RDP traffic over SSL.

09:30:50 PDT

Question: does the user profile disk load on a physical machine also for those users who use VDI and a desktop/laptop?

Answer: user profile disk works just with a single VDI/RDS collection, it doesn't roam to physical PCs or between collections. For that, look at UE-V or Roaming User Profiles.

09:32:26 PDT

Question: do you have any monitoring tool for vdi on Win2012 RDS. which user how many time login and use vdi? **Answer:** auditing logon/logoff will tell you who is using it. There is also a Monitoring Pack for SC OpsMan for monitoring RDS.

09:34:23 PDT

Question: Do any of you know if you can successfully run Autodesk Revit (3D software) in VDI - MS or Citrix solution? How good can you get and what type of video cards have you used to make this work? **Answer:** When running VDI on Server 2012 Hyper-V the high end graphics processing apps can have their graphics offloaded to high end graphics cards(Nvidia, ATI, for example) and then provide the visualization to the session via RemoteFX. Also the new version of RDP has enhancements around graphics and touch as well.

09:34:28 PDT

Question: Do any of you know if you can successfully run Autodesk Revit (3D software) in VDI - MS or Citrix solution? How good can you get and what type of video cards have you used to make this work? **Answer:** the RemoteFX vGPU in Hyper-V will let you virtualize a graphics card between multiple VDI clients, but it only works with DirectX apps. - it will work with apps like Autodesk, provided they can do DirectX rendering instead of OpenGL. If your apps are OpenGL only, you can use Citrix, but you have to do a 1:1 mapping of GPUs to VMs.

09:35:41 PDT

Question: Do we have any app in the apPDTore that enables VDI access though mobile devices? **Answer:** there are several. search for RDP clients and you can find a few different RDP clients for iOS, Androide, MacOS, etc. There's not one provided by Microsoft for non-Windows clients though - they are all third party.



09:37:06 PDT

Question: I had a case with the customer today his req was not vdi but he wanted to go with vdi and I ended up explain him session where he saved cost too !

Answer: yep, Sessions can get high density of users/server, and the licensing is less complex. If you don't need users to run their own apps, or run apps that aren't compatible with a Server OS, Sessions is often the best option.

09:38:37 PDT

Question: is there a configuration that allows for a hybrid of pooled/private/session based VDI?? **Answer:** you can mix and match pooled/personal/sessions in the same deployment, or same server.

09:39:48 PDT

Question: Does VDI mean that the OS for clients is running remotely? **Answer:** yes. you are running a VM in the datacenter with Windows 7 or 8 on it, then connecting to it via a Remote Desktop connection.

09:39:50 PDT

Question: What is the voucher good for ?

Answer: All Jump Starts are events managed by the "Microsoft Virtual Academy" (MVA). It's a learning community with loads of expert-led content designed to help IT Pros and developers learn about Microsoft technologies -- and it's all free. The more you learn, the more points you earn. The code is for 50 MVA bonus points. See the FAQ for the link and code.

09:40:36 PDT

Question: I was till now attending all JS (besides 1 I think) and till now all MVA vouchers were working. **Answer:** Hey Matjaz! Always great to see you online! Welcome back!

09:42:10 PDT

Question: can App-V make "XP only" rich client applications run on 2008 R2 RDSH ? **Answer:** maybe. depends on what makes the app not run on Server 2012. If it's just doing an OS version check at launch, packaging it in App-V can work around that.

09:47:50 PDT

Question: what is the cap on Microsoft Connection Broker? as in how many users can a single broker handle... **Answer:** I'll talk about it a little more in the scale session, but 2 brokers (for high availability) can process 5000 logins in less than 5 minutes. 50 new connections in less than 2 seconds.

09:48:51 PDT

Question: can you run pooled, personal and session all on the same hyper V server? **Answer:** yep!



09:50:14 PDT

Question: How does licensing work in App-v? **Answer:** App-V is included with the RDS CAL, or is part of MDOP, which is an add-on purchase to SA.

09:50:51 PDT

Question: Will this work with Lync and Skype RemoteApps,? **Answer:** yes, but we recommend using a USB handset/headset so the audio is going through the USB device, instead of redirected audio inside the session.

09:55:11 PDT

Question: A question on App-V with IE. Is it legal to package IE 6 with App-V and deploy it to end users? This is to cater for IE compatibility issue when moving into Windows 7 or 8 Answer: This is not a supported scenario. See this video for your options - which the methods are still valid (although naming and current version of product will be different) <u>http://technet.microsoft.com/en-us/video/internet-explorer-virtualization-overview</u>

09:56:10 PDT

Question: Is presentation virtualization different from App-v? **Answer:** We addressed this live. Hopefully that answered your question.

09:56:30 PDT

Question: can you show that diagram again please?

Answer: Dinesh. You will see this several times upcoming!

10:06:28 PDT

Question: do you have any scalability tool or method? how can i configure servers hardware for vdi. **Answer:** wait for module 5 - it's all about scale/architecture planning

10:07:03 PDT

Question: wow - how cool Answer: Agreed!

10:08:56 PDT

Question: NEWT is cool! Is it publicly available? Answer: I believe it's part of the XNA SDK for visual studio. That's the only way I'm aware of to get it if you don't work

for Microsoft 🤓



10:13:33 PDT

Question: Is UDP in plain text? **Answer:** nope, we adopted the secure-udp spec. it's encrypted.

10:14:57 PDT

Question: Hello folks! Chris Avis (chris.avis@microsoft.com) here to assist with questions!

Answer: Big welcome to Chris! Glad you're here. Several others behind the scenes as well.

10:15:01 PDT

Question: I know the Remoteapp method is used to eventually route the endpoint client to one of the RDSH Servers in the RDSH Server farm but how can you do this via RDC? Meaning how can I use RDC to create a remote connection (and to which server) if I want to let RDS choose the RDSH Server in the farm for me? Is this possible? **Answer:** the RD Broker should take care of routing for you.

10:15:20 PDT

Question: Just join the program...it's already module 2? Awesome **Answer:** Glad you're here Adibus!

10:15:44 PDT

Question: what if we have bar code readers? **Answer:** they should work - I've done that demo before. we remote the USB bus, if the device doesn't just appear as an input device.

10:16:28 PDT

Question: Can the shift to UDP or RDP be controlled programmatically for user performance management vis a vis customer to customer interactions within a group? **Answer:** it's dynamic - if UDP is available, it will be used. you can control by policy if you don't want to use it.

10:17:46 PDT

Question: Adam, thanks but just a straight RDC into the RD Broker - won't I then be viewing the session on the RD Broker? Or is the RD Broker automatically set to route me to the RDSH farm? **Answer:** ah, I see. you can add entries to your .rdp file to specify to use a broker, or subscribe the RDC settings to the xml feed on the web access server and it will do it for you.

10:19:38 PDT

Question: Thanks Adam **Answer:** Adam is so much the man!



10:20:20 PDT

Question: Techanalyst posted: > Quoted answer: Adam is so much the man!

Answer: still stinging from the comment someone made earlier about marketing guys not being technical 🤐

10:22:55 PDT

Question: With regards to the multi touch capabilities over RemoteFX, what the prerequisite like for the client side which is accessing? Would an iPad or Android tablet benefit from the multitouch just like one would when they are accessing it from a Windows RDP client?

Answer: depends on if the client you are using supports RDP8 and has included support for Win8 gestures. I don't think there are any doing it yet...

10:24:02 PDT

Question: could I run Nun-Microsoft operating system on VDI? **Answer:** we only support Win7 and Win8 VMs. I think Citrix can provide other OSs as well.

10:24:14 PDT

Question: Microsoft provides a VDI plugin for Lync check here : <u>http://technet.microsoft.com/en-us/library/jj205304.aspx</u> **Answer:** Sharing this great link... Lync admins enjoy!

10:25:10 PDT

Question: how many user can get benefit of using hw gpu card? is there any ratio user/hw gpu... **Answer:** it maxes based on the amount of RAM on your GPU - I talk about it in Module 5.

10:26:07 PDT

Question: Concerning the usb redirection, does it work with all USB devices ? **Answer:** it should, we just remote the whole USB bus. You may need the device drivers installed in the VM for it to work.

10:27:11 PDT

Question: is the gpu ram manageble like ram for virtual machines **Answer:** kind of. you specify the resolution and number of monitors you want the VM to deliver, and it allocates a static amount of memory based on that.

10:30:49 PDT

Question: Progressive rendering has been around since the days of modems **Answer:** yeah, but not in the RDP protocol. we used to screenscrape the whole screen, instead of picking codecs based on content.



10:31:13 PDT

Question: this is probably addressed in a later session...but.. with the personal desktop option is it possible to deploy VDI over zero client systems?

Answer: provided the zero client supports the RDP protocol, sure.

10:31:26 PDT

Question: USB redirection works the same under RDS VDI and RDS Terminal Services? **Answer:** yes.

10:32:33 PDT

Question: Going back to AuoCad, so we don't really need a gpu card to properly run AutoCAD in VM with HyperV 2012?

Answer: maybe. it will emulate a GPU on the CPU, so performance may not be acceptable, depending on what you are doing. Not every workload is ideal for VDI/RDS...

10:33:49 PDT

Question: Will the PowerPoint be available after the show? The slides have great information I am trying to take notes on but they are flipping away from the slides so quick. **Answer:** Check out the links in the FAQ -- you can download all of them except mod 6 right now.

10:34:43 PDT

Question: So if I plug in a new USB mouse - my Win 7 VDI VM will automatically starting downloading the drivers similar to what happens on a physical Win 7 machine?

Answer: mouse is a little different, because input devices are remoted automatically, but cameras, printers, etc. should work that way.

10:41:05 PDT

Question: Just to be clear. You saying I can run something like Maya remotely and have it recognize my local Wacom design tablet? **Answer:** yep, your Wacom should work, provided you install the drivers in the remote VM.

10:41:09 PDT

Question: Can we have that url for that blog? Answer: <u>http://blogs.msdn.com/b/rds/archive/2012/11/26/remotefx-features-for-windows-8-and-windows-server-2012.aspx</u>

10:43:49 PDT

Question: If I try to have a server or the remote VM render the 3D CGI work done on my computer with RemoteFX for example as remote rendering, will the rendering process be that smooth and fast? **Answer:** you'll have to try it and see if it works. with RemoteFX vGPU the GPU can be shared by multiple VMs, and it maxes out at around 256mb of gpu RAM, so it probably won't work as well as a local render with access to the whole gpu.





10:46:04 PDT

Question: If I have 4 GPUs on a Graphics card - can set up policy or config of a 1:1 ratio of VM to a GPU? Answer: not with RemoteFX. Citrix can do that though.

10:46:26 PDT

Question: i think that folder redirection would be a better solution that roaming profiles, roaming profiles create problems as they grow

Answer: You should appreciate this demo for sure ...

10:47:01 PDT

Question: What if we are running pooled vms and we can use user disk in it so everytime the user connects in then the disk connects automatically ?? how does it work

Answer: the broker takes care of it for you. at login, it dynamically mounts the user profile .vhd file into the VM in the pool it has routed you to.

10:47:59 PDT

Question: so its not copied over too the local vmdk is it Answer: nope, mounted over the network, not copied.

10:48:03 PDT

Question: HEY!!!! I can hear you Joey! Answer: Exactly why I said it buddy!

10:49:16 PDT

Question: if they are 3 users u1,u2,u3 and they are in a pooled env. so we need to specify at the broker if u1 logs in then attach his disk to the pooled vms?

Answer: happens automatically. when you configure UPD for a collection.

10:49:36 PDT

Question: Adam, thanks - so for RemoteFX, if I have a graphics card then it's just based on pooled/sharing of the GPUs among the VMs but Citrix on the other hand can carve out specific VM to GPU ratios? Answer: exactly.

10:50:32 PDT

Question: if a user decide tu use a normal computer instead of the vm, does it attach the vhd file too ? Answer: no, the UPD is associated with a specific RDS/VDI collection.



10:52:53 PDT

Question: If this is a mount point, you are still coming across the network. How does that same time? **Answer:** it's a .vhd file unique to the user. it just gets mounted into the vm at login time. totally seamless to the user, they save files to c:\mydocs, add IE favorites, etc., and those writes go to the upd .vhd instead of the pooled vm.

10:53:27 PDT

Question: does this UPD work with session virtualization **Answer:** yes, sessions or pooled vms.

10:54:16 PDT

Question: Lets say a upd is mapped to both session and vdi, what happen if I login to both at the same time and perform some editing in the session and vdi?

Answer: this won't work - a UPD is associated with a single collection, which could be a pooled VMs or a session.

11:06:26 PDT

Question: can i take a personal VD offline to my laptop and synch it whenever i'am connected again? **Answer:** there's no official support for that in the native Microsoft solution. Citrix can do it.

11:09:36 PDT

Question: are you talking about xenclient or personal vDisk? **Answer:** xenclient

11:09:47 PDT

Question: So a user cannot start a session on 2 computers at the same time with the same profile ? **Answer:** right

11:12:03 PDT

Question: How is the redirected folder different than the roaming profile? **Answer:** roaming profile has the hkey_current_user regkey data in it. redirected folders are primarily user documents files.

11:12:50 PDT

Question: Profile Disks cannot be used on a Persistent Desktop only Pooled? **Answer:** Correct Kenny. Not on a private (persistant) desktop. Pooled desktops and sessions only.

11:13:13 PDT

Question: so it is just one disk per collection using all users profile **Answer:** it's one share, with a separate .vhd file for each user.



11:13:21 PDT

Question: Collections vs. containers? Answer: We will talk about collections in this module. Stay tuned.

11:13:46 PDT

Question: ah...must be using a pooled VHD setup **Answer:** Hey man good to see you! Yes POOLED or Sessions.

11:13:50 PDT

Question: So what happens if a user try to login on a second computer while being logged somewhere? an error at login ?

Answer: typically, the active connection will be disconnected, and reconnect to the new session you are starting.

11:13:55 PDT

Question: what is url for edge ? **Answer:** edge.technet.com

11:15:14 PDT

Question: Can I combine UPD with folder redirection so that a user can access his/her documents outside of the vm without copying the whole profile?

Answer: As we mentioned during the broadcast that's an ideal scenario!

11:15:22 PDT

Question: Profile Disks cannot be used on a Persistent Desktop only Pooled? **Answer:** profile disks would be redundant with persistent/personal desktops, since the user is always reconnected to that session, and the data isn't discarded at login.

11:15:55 PDT

Question: ⁽²⁾ Hugo....Roaming profiles are Read at Logon and Written back at logoff. Redirected folders are on a file share and are only accessed on demand. When you save a file to My Documents when that folder is redirected, the file is saved to the redirected folder on your file share rather than being written to your Roaming profile. **Answer:** Thanks cdave

11:18:59 PDT

Question: But Adam - can't profile disks on persistent/personal desktops be useful if I needed to re-create my VM and by having the profile disk, my profile is separated/virtualized and not glued to my OS? **Answer:** that's what roaming profiles/redirected folders are for. UPD allows you to give users some basic personalization with pooled vms/sessions.



11:19:50 PDT

Question: can we use profile disk/vhd feature for session based vdi solution as well? **Answer:** Yes supported in sessions.

11:20:31 PDT

Question: How can you make the UP VHD Data available offline, so the docs in My Documents can be available if the user leaves the office?

Answer: You wouldn't use the UP features for this. You'd implement offline files along with folder redirection for this functionality.

11:22:03 PDT

Question: ok thanks and if someone offered both VDI pools and Sessions/RemoteApp would the recommendation then be to use Roaming Profiles since Profile Disks don't span Collections? **Answer:** yes.

11:30:07 PDT

Question: cAN I USE THe same non-domain member HyperV host where i am running the DC and the Virtualization Infrastructure to Host the VM for the virtual desktops or do i need an additional domain joined hyperv server? **Answer:** it does have to be domain joined, but I've hosted a DC and other VMs on the same server used for VDI desktops.

11:31:00 PDT

Question: Quick start only deploys RDWEb apps, no Virtual Desktops... **Answer:** if you choose Virtual Machine Based, instead of Session Based deployment in Quick Deploy, it will prompt you for a .vhd file and create a pool desktop collection based on that .vhd.

11:34:51 PDT

Question: can you elaborate on what licensing is required to be compliant in deploying VDI **Answer:** that's module 7 today - I'll go through all of the licensing scenarios.

11:38:17 PDT

Question: Recap, SBS Deployment: Main Server runs ADDS, DNS, DHCP and HyperV, then it hosts the "servers" to handle the gateway, broker and web access, plus, it should host the VMs to be used as "pooled" desktops. am i missing something?

Answer: can you run hyper-v on SBS? I didn't think you could enable the role, but otherwise, this is correct for a Standard or DataCenter server.

11:38:44 PDT

Question: PowerShell is very easy, **Answer:** Wait until you see the two PowerShell Jump Starts we're delivering in July with Jeffrey Snover.



11:40:45 PDT

Question: How can we add more template ? **Answer:** just add more VMs in hyper-v manager.

11:42:09 PDT

Question: I currently have another Hypervisor and he becomes unstable when the Patch management reboot more than 200 VDIs on the same pool. How many VDI reboot a Hyper-V's pool can handle in the same time before become unstable?

Answer: reboots and patching are very disk i/o intensive. Win8 VMs will automatically stagger out when they start patching to distribute the work over a longer period of time so they don't all slam the disk at once.

11:43:01 PDT

Question: did corey say a RDS host can only be Session OR Applications? **Answer:** yeah, a session host collection can deliver RemoteApps or RemoteDesktops, but not both at the same time.

11:43:45 PDT

Question: what if i already have a golden image the vhd and i want to use that... **Answer:** you can. just sysprep it, then specify that VM is the one you want to use when you create a new collection.

11:43:59 PDT

Question: Adam - your discussion around VDI licensing including CSL sounds good. **Answer:** All of you should definitely stick around for this session -- Adam is a wizard with VDI. Hard to find a technical dude who can explain licensing! He's the guy!

11:44:34 PDT

Question: what type of storage is used for the pooled and personal desktops ? **Answer:** you can choose: locally attached disks, SAN, SMB shares - because we run on top of hyper-v, we support all the hyper-v storage options.

11:45:25 PDT

Question: How can we add more clients? **Answer:** in the collection, you can go to tasks and add more clients. if you have multiple hyper-v hosts, you can specify how many to add to each host separately.

11:46:02 PDT

Question: Great poll posted below -- lots of folks haven't yet answered. Please click the BEST answer. Sharing is Caring!

Answer: I just shared the results if you're interested...



11:46:03 PDT

Question: can we use SQL Express? **Answer:** for what? highly available broker? only a full SQL server is supported.

11:47:20 PDT

Question: was there something you mentioned you can't run if the server is running as a DC?? **Answer:** we don't support RD session hosting on a DC - which makes sense. you don't want users to have an interactive desktop session on your DC, unless you hate security.

11:47:42 PDT

Question: do i needs storage which has a good performan ce (iops) as storage platform (fc, iSCSI) ? **Answer:** yes, and I'll talk about it in module 5.

11:50:18 PDT

Question: if we are using a single server environment, can we use our physical server as our DC, and a virtual server for our RDsession host?? **Answer:** yes, that works.

11:52:37 PDT

Question: Is running Hyper-V and VM's on a DC supported ? **Answer:** it's not ideal, but I believe it is supported.

11:54:26 PDT

Question: What about f users just close the connection window and don't log off? Is there a way to handle this so that pooled vms reset correctly?

Answer: you can configure by policy. by default, if they don't reconnect within 15 minutes, the session logs off and is reset.

11:57:48 PDT

Question: Can you have VDI on a DC? **Answer:** No, because of security reasons.

11:58:33 PDT

Question: A great article about the DC dilemma link](<u>http://blogs.msdn.com/b/virtual_pc_guy/archive/2008/11/24/the-domain-controller-dilemma.aspx</u>)

Answer: virtualized domain controllers are no longer an issue running WS2012 in Hyper-V (also on Windows Server 2012).



12:00:55 PDT

Question: say that again Win to VHD or win2vhd Answer: wim2vhd more info is here <u>http://blogs.msdn.com/b/virtual_pc_guy/archive/2011/06/23/automating-wim2vhd.aspx</u>

12:01:33 PDT

Question: how many sysprep are supported on 7 and 8 **Answer:** I recommend that you snapshot your gold image before you sysprep it, and use that snapshot any time you update the gold image, so the image only thinks it's been sysprepped once.

12:18:56 PDT

Question: nice thank you Robert **Answer:** Sharing.

12:19:40 PDT

Question: Great questions being asked. **Answer:** Agreed... Should be more of the same rest of the way!

12:20:51 PDT

Question: Allot of info guys **Answer:** Lots of great stuff w/ Microsoft VDI. Hope you're enjoying the course.

12:21:54 PDT

Question: Server 2012 indeed, its remarkably different from 2008!!! **Answer:** Thanks for the feedback, Rey! We're glad you're enjoying all the improvements -- yes, there are a ton!

12:23:24 PDT

Question: The recorded sessions you guys will post in a week's time (I believe) will also show these Q&A as well? That would be great. **Answer:** Good question, Kenny. We will post the Q&A Log with all publicly-answered question/answer pairs to MVA.

12:24:59 PDT

Question: <u>http://blogs.msdn.com/b/virtual_pc_guy/archive/2008/11/24/the-domain-controller-dilemma.aspx</u> **Answer:** Sharing... Thanks for posting this Samuel...



12:37:33 PDT

Question: I am looking forward to the Applying ALM with Visual Studio 2012 (exam 70-498) Jump Start May 1, 2013 8:00am - 5:00pm (PDT) BTW, Did Steven Borg, or Anthony Borton published a Training Guide as well? I just blogged about Programming in HTML 5 with Java Script & CSS <u>http://www.onsocialmedia.org/blog</u> Those Training Guides are great! I would love to review the training guides for this event.

Answer: Thanks for the feedback, Techanalyst! Please tweet about your blog post and include the #MSmva hashtag so we can help spread the word!

12:58:45 PDT

Question: which exams of mcsa can i use this event for ? its more an overview of new features like the MVA isnt it ? **Answer:** 70-415 is the exam a lot of the VDI material is located in.

13:01:45 PDT

Question: thanks, n device manager of my virtual machine that has remotefx adapter installed, it only shows 'windows basic video driver'. there is also an 'unknown device'...I thought it should say remote-fx adapter in the vm's device manager

Answer: do you have the vm integration components installed in your VM? what version of windows is your client vm? is RemoteFX installed on the server?

13:04:09 PDT

Question: and I would have to assume remote fx is installed on server since i was able to add it to the vm's hardware under it's setting in hyper-v manager

Answer: got it. is your client VM Enterprise edition? that's required for the vGPU.

13:07:13 PDT

Question: is pro ok?

Answer: take a look at the second table on <u>http://blogs.msdn.com/b/rds/archive/2012/11/26/remotefx-features-for-windows-8-and-windows-server-2012.aspx</u> - needs to be Enterprise.

13:13:48 PDT

Question: please let me know about the madrid event ! Answer: he's talking about TechEd: <u>http://europe.msteched.com/</u>

13:18:24 PDT

Question: Can I use a pool of VM's that use a Server Version instead a client one?.. like 2012 or 2008 R2? **Answer:** we only support Client OS versions for VDI, but you could deploy a bunch of Server OS VMs as RD Session Host servers that only allow one concurrent connection. You'd be doing most of your image management manually though.



13:23:34 PDT

Question: Is there a performance difference with using Hyper-V server versus Server 2012 with Hyper-V? and if there is, is it significant enough to care? **Answer:** No performance difference whatsoever. Hyper-V free edition is the full experience

13:25:59 PDT

Question: Can Hyper-V Server be used as a Cluster File Server node? IOW, not the "compute" but instead the SMB 3.0 element.

Answer: it's just the hypervisor. any other roles you would need to deploy in VMs on top of the hypervisor.

13:30:01 PDT

Question: What is the best way/tools/process to calculate a vdi IOPS? **Answer:** I'll cover that in the next module.

13:32:48 PDT

Question: what do you think about pagefile size in VDI? **Answer:** you want to avoid paging, since it creates tremendous disk i/o. typically just let the OS manage the pagefile.

13:33:56 PDT

Question: what's meant by "Parent"? **Answer:** the master image in a pooled vm deployment.

13:34:28 PDT

Question: Can the storage be on the same physical hosts that the hypervisor is running on? e.g. 3 host Hyper-V cluster with VMs and the VMs have Fileserver roles (clustered as well) managing direct attached storage on the 3 hosts

Answer: sure, provided those local disks can support the IOPS load generated.

13:35:32 PDT

Question: "VMs" is where the differencing disks are located? **Answer:** this is configurable. can be on local or SMB/SAN. You can choose.

13:36:32 PDT

Question: So the Parent is the Gold Image, the VM's are the Differencing Disks, and we don't need to define user? **Answer:** if you're storing user state in a User Profile Disk, then you also need a network share to host those. since it's primarily user docs, it doesn't need to be on highly performant disk.



13:39:59 PDT

Question: is it possible don't use page file in VDI?(page file size 0). what is your recommendation? Answer: I've never seen a recommendation to do so. Suspect it wouldn't be supported. And you'd better make sure you really understand your user workload and allocate enough memory to the VMs.

13:42:35 PDT

Question: is there a HyperV server2012, free_?! Answer: I know this link said "eval" on it, but this is a link to the FREE Windows Hyper-V Server 2012 Product - http://aka.ms/HyperVeval

13:45:19 PDT

Question: will it require a license? Answer: you'll need a license for every VM you install on top of it.

13:47:59 PDT

Question: what is server message block ? just packets of information ? Answer: Server Message Block (SMB) Overview - http://technet.microsoft.com/en-us/library/hh831795.aspx

13:48:30 PDT

Question: what is server message block ? just packets of information ? Answer: SMB is the file sharing protocol in Windows. when you access files on a file share, you're using SMB.

13:48:38 PDT

Question: Sure and more than fair. But the hypervisor itself will not ask for one right? Answer: right.

13:49:14 PDT

Question: Will it work on Windows 8 Hyper-V? (not for production) Answer: Windows 8 Hyper-V does not support clustering.

13:51:31 PDT

Question: would be great if MS gives a sort of personal key to use all licenses in a non commercial way for testing Answer: we do - get a TechNet or MSDN subscription - access to all products for dev/test.

14:09:02 PDT

Question: please let me know if there is a step by step guide to configure the clustered CSV with its cached memory. it is soooo impressive.

Answer: http://blogs.msdn.com/b/clustering/archive/2012/03/22/10286676.aspx



14:13:13 PDT

Question: Can you list the next three session topics? **Answer:** Scale and Performance/Citrix/Licensing

14:17:53 PDT

Question: Hi Adam Answer: Adam Waves while talking.

14:25:38 PDT

Question: which tool were you showng ?? Answer: LoginVSI

14:26:00 PDT

Question: what are those other utilities Adam just mentioned? **Answer:** Liquidware Labs was one

14:26:39 PDT

Question: http://www.loginvsi.com/ Answer: Thanks!

14:27:45 PDT

Question: <u>http://www.liquidwarelabs.com/</u> Answer: Thanks!

14:29:31 PDT

Question: so you're talking about create a "SMB vlan" like we were creating a "iSCSI VLAN"? **Answer:** Exactly the same concept. Just a different protocol.

14:30:56 PDT

Question: Can a storage space be SAS attached enclosures BUT with SATA drives!!? When I do so, it appears WS2012 sees them as being on a SAS bus, AND the config does pass Failover Cluster Validation test! **Answer:** Yes, Yes, Yes

14:31:51 PDT

Question: Can the RDgateway be access through ARR or an F5 load balancer? **Answer:** RD Gateway is just a web app, so you can do to it, anything you can do to a web app. I've put NLB in front of them, as well as netscaler. It's just a web app



14:32:33 PDT

Question: We are working on getting approval from Citrix for some of the content < is there Excalibur / XD 7 related content?

Answer: The Citrix is pretty high level (when to use them vs specific features) which is what they wanted us to do.

14:33:27 PDT

Question: hi corey your talking about big scalability for user setup but whats the best setup for a home desktop training lab. Got desktop with AMD 8150 16 gb and got 500gb sata and a 160 ssd running on w7 with vmware workstation. testing advanced server setups but lots of times i got to high disk ques when running about 7 serveres similtanious how can i speed this up with server 2012 ? **Answer:** My setup for these demos is two W520 laptops with 32GB and SSD, that's it.

14:33:51 PDT

Question: use UE-V to manage user state, when are application settings applied? **Answer:** It's an ongoing process, it happens while logged on, not just on logoff and logon

14:35:00 PDT

Question: which technology used in WIMtoVHD?? **Answer:** Mounting the VHD is automatic and part of the operating system. It's native to create a VHD and mount a WIM in it.

14:35:58 PDT

Question: what if I have blocked USB through group policy and they plug in a usb printer then what? **Answer:** IF you block on the coputer they RDP FROM, then blocked, if you block in the VM, then not blocked.

14:36:26 PDT

Question: CSV Cache = SWEET! Answer: You have no idea HOW sweet......it's unreal

14:36:32 PDT

Question: Hi from the back of the room **Answer:** throw something at them!

14:36:58 PDT

Question: Hey that title belongs to the dos equis guy **Answer:** He runs his one-liners by me for approval



14:39:04 PDT

Question: Who is doing the Leveraging Citrix session? Looking forward to hearing that session it's been difficult to decifer sometimes whether to do MS VDI or Citrix. Looking forward to the deep dive on all the pluses over MS that Citrix offers.

Answer: I'm going to make that up as I go along

14:42:24 PDT

Question: I heard that Corey & Adam use the same hairdresser. Is that true? **Answer:** Gordo, how the hell are ya, did that rum I sent you turn up?

14:42:43 PDT

Question: Can you integrate WSUS for patching? **Answer:** Define "integrate" here

14:44:58 PDT

Question: Are Diff disk destroyed at user log off? Thinking about why they would be on local storage. **Answer:** No, there is a snap that is applied. Well at a very technical level, the application of a snap does involve the

deletion and recreation of the avhd, so I guess yes 🤒

14:46:22 PDT

Question: can you post that simulation program Adam was just talking about **Answer:** <u>http://www.loginvsi.com/</u>

14:46:45 PDT

Question: When you talk about patching, can you deploy those patches/updates via WSUS? **Answer:** So if you leave your reference VM powered on, you can patch it as a normal PC< then power if off to redeploy/update the collection. Using that method you could use WDS, but there is the "manual" step of doing the provisioning of the pooled VM's.

14:48:49 PDT

Question: Scenario: I have a personal pool deployed to a group of users.... When the user log in to any physical machine is there any way to be redirected directly to their VDI session that is in the personal pool? Not natively. It's a really nice feature idea though, to force "vdi only logon". Funny, the VDI PM is in front of me,

perhaps I can drop that in his ear 🤒

14:50:01 PDT

Question: SHOT Answer: Started this game way too late



14:58:28 PDT

Question: If we create smb-storage on hyper-v nodes then can we use this storage space for vms on the same hyper-v nodes?

Answer: The SMB Storage is on file servers, and you can use that for any supported SMB storage. Correct design would suggest you keep storage "groups" isolated (DB, Hyper-V, etc)

14:58:47 PDT

Question: What the? Some paper has just dropped from the top. **Answer:** Per request of @rickstercdn

14:59:55 PDT

Question: Corey is setting examples...-) **Answer:** Someone has to

15:11:47 PDT

Question:

> Quoted question: I heard that Corey & Adam use the same hairdresser. Is that true?
> Quoted answer: Gordo, how the hell are ya, did that rum I sent you turn up?
Answer: hey Gordo! I guess the pubs are closed in NSW now?

15:14:24 PDT

Question: to get back at test licensing, technet isnt for sc2012 isnt it or excahnge ? only for os **Answer:** depending on which level you subscribe to, you can get EVERYTHING

15:18:50 PDT

Question: Can the guys also talk about RDS vs VDI at a tech level as to why one vs the other, esp in re: to app compatibility

Answer: sure. I'll see if I can throw a slide or 2 together and cover it when I kick off licensing in the next module.

15:21:04 PDT

Question: dedicating our night to you... It's 00:20 **Answer:** I hope the coffee is good!

15:23:17 PDT

Question: Adam - which level of TechNet do you need to get Visual Studio? I have TechNet Professional and I do not get VS.

Answer: oh, dev tools you need MSDN instead of TechNet.



15:30:41 PDT

Question: how does the rdp protocol compare to ica in relation to high latency, low bandwith connections. In my current environment we are seeing high 200's low 300's ms in latency for our remote users **Answer:** the RDP improvements in RDP8 gives it very good performance out of the box, we've tested it on interncontinental links with 250ms of latency and still delivered a usable desktop. hard to make a blanket statement about per though, try it out yourself.

15:31:56 PDT

Question: Try to explain better... If I am a support technician and I need to use different VPN clients to connect to other companies environment in order to support them. Sometimes these VPN clients take over the network connection. (Cisco VPN client or Juniper client) in these cases how should we virtualize this environment? I am not aware how to virtualiza the vpn client it self.

Answer: If you use Direct Access you don't have the issue of the connection being impacted because we use split tunneling with DA.

15:32:30 PDT

Question: ICA has always been ahead of RDP, especially over the WAN --- how close is the new RDP 8.0 compared to ICA?

Answer: we're close. Citrix expose more knobs and switches that can tweak perf further, but I've demo'd RDP with 250ms of latency and still had a usable desktop

15:35:18 PDT

Question: hey, when might Module 6 be posted to the FAQ section? **Answer:** it should be soon. we wanted to make sure it was ok with Citrix before we published it. they've given us the ok.

15:36:18 PDT

Question: Watching the video now, wish it was in HD **Answer:** trust me, you don't want to see Corey in HD.

15:37:25 PDT

Question: Could you explain this ? How many VDI users do you have or plan to deploy? 0 or less **Answer:** that was supposed to be 50 or less. it's a typo.

15:38:29 PDT

Question: how many are watching Adam ? **Answer:** almost 200. about half what we started the day with.

15:40:05 PDT

Question: we have a very small network..but...our VDI and OS mix may require the Citrix solution. We are not Enterprise calss, is the VDI in a box going to allow for the various components necessary for the multiple devices **Answer:** When you say multiple devices do you mean IOS, Android and Windows devices?



15:42:01 PDT

Question: before Corey leaves, can he revisited the config of his 2 box and 3 box solution that he described earlier? **Answer:** Box 1 - DC, Box 2 - The rest , Box 3 - Hyper-V

15:52:54 PDT

Question: I have 10 remote users i want to provide with access to Office and save their files in a file server, how do i license office and Windows Server? **Answer:** YOu would license Office and WIndows Server.

15:53:53 PDT

Question: curious what is the device that Joey is using **Answer:** It's a Wacom digitizer, basically a big touch PC, nothing special. It uses big fonts because he is old

15:55:31 PDT

Question: yes, but would a single office license be enough? do i need cals for the RDWeb? **Answer:** If you are providing access via Termial server, Adam will explain that. Office on TS requires Office VL.

15:56:39 PDT

Question: sent to Team: Guys I would be very interested to understand the infrastructure you use to run these JumPDTarts. It would be good to leverage this for live events we run in other regions. Is that possible? [[REPLY: call me on lync i'll show you the studio on the webcam

16:01:42 PDT

Question: Did Adam just say that if you have a Remote Desktop License you are also licensed to use App-V? **Answer:** Yes

16:06:06 PDT

Question: Corey what did you do now! Did pulled the wires? **Answer:** I started torrenting....

16:13:28 PDT

Question: is seeing you guys try to fix it will be recorded as well **Answer:** The recording is not affected by the issues

16:15:38 PDT

Question: I think I'll wait for the recording, 1:13 am in europe... It was a great sessions, I learned a lot. Thanks and See you on the next Jump Start ! **Answer:** Thanks Hugo....



16:16:16 PDT

Question: My finger is pointing at Corey. We all know how happy you are about licensing **Answer:** Hey now.....

16:16:41 PDT

Question: is it possible to know what's the issue and solution applied **Answer:** The AV guy poked the hamster and he started running again.....

16:17:26 PDT

Question: Great job guys! Terrific combination of talent, knowledge, in-the-field experience, technical drill-down and examples! One of the best presentations I've seen in years! How about a session on AppVirt next, pls? **Answer:** Thanks so much, Nuit!

16:25:44 PDT

Question: So with the CSL in the flowchart it shows that an on premise user owned device needs CSL, but if it's off premises we are covered under Roaming Rights. Does that mean that CSL would be required if they brought their device in for a day that was normally utilizing the Roaming Rights? **Answer:** Yes, once it's on the corporate network it needs the license.

16:27:29 PDT

Question: So CSL is probably a good license to grab under all situations of BYOD roll-out. **Answer:** If you already have an EA a CSL is ideal for what you describe. Especially now with it's 67% discount!

16:28:34 PDT

Question: as a serviceprovider, can/may we deploy win7, win8 VDI desktops for our custommers ? **Answer:** Short answer is currently no. Windows does not allow to run multi-tenant.