25 VMware Interview Questions
Tough & Technical

Hello and thanks for download this free list of VMware interview questions from VMinstall.com. You might be wondering why is this list of interview questions is any different from the hundreds of others on the web?

Well, first of all, it’s not a VCP test brain-dump...

Secondly, these interview questions are carefully crafted to narrow the talent pool to the most qualified. Basically, they require hands on experience and time in the trenches to answer them.

By Joe Sanchez
Introduction:

The list of questions below is intentionally broken up into 5 groups. These 5 groups will test for technical proficiency that an experienced VMware administrator will [or should have].

1. System Requirements for ESXi 5.5
2. ESXi 5.5 Installation
3. System Requirements for vCenter
4. vCenter Installation
5. Managing vSphere Resources

The list is also what I use when interviewing someone at an administrator level who will manage the day-to-day support, build, and provisioning.

System Requirements for ESXi

1. Your company has a bunch of unused server hardware and you have been asked to build a vSphere environment. But before you start you want to make sure it is supported by the ESXi version you plan to install. Where would you find a list of hardware that is supported?

Answer: You would check the VMware Compatibility Guide http://www.vmware.com/resources/compatibility/

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2. Your hardware is on the compatibility list and now you need to know what the minimum CPU and memory requirement of an ESXi host when building a 64bit OS that will take full advantage of ESXi features?

Answer: 2 CPU Cores and 8 GB memory (bare minimum)

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3. Before you start installing software what must be enabled in the server BIOS in order to run ESXi?

Answer: The NX/XD bit needs to be enabled.

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4. You also have an old pile of network adapters to choose from. Where would you find a list of network adapters (NIC) that are supported by the version of ESXi you are installing?

Answer: You would check the VMware Compatibility Guide (same link as above)

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5. One of the servers you found wasn’t on the list and now you have a problem that is causing ESXi to purple screen so you call VMware for support. What would happen if they found out your hardware was not supported?

Answer: When hardware is not supported there are known issues that will happen and VMware cannot help to resolve problems due to unsupported hardware.

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ESXi Installation

6. You’ve done this a hundred times. What are 3 methods that can be used when doing an Interactive ESXi installation?

Answer: Boot from a CD/DVD, boot from a USB, and PXE boot from a deployment server on the network.

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7. After so many ESXi builds you have figured out a faster way to do the install using a script. What’s the main difference between an interactive ESXi installation and a scripted installation?

Answer: The interactive install will require you to follow along and fill in the configuration information whereas, in a scripted install, the configuration information will be queried from an unattended text file (boot.cfg). Note: ESXi uses a Kickstart installer similar to Linux.

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8. You can install ESXi in your sleep. What is the command to access the installer window on ESXi 5.5?

Answer: Shift+O will get you to the runweasel command prompt.

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9. Darn, one of your servers is not loading. What the first thing to double-check when having a problem installing ESXi?

Answer: Make sure the hardware clock is set to UTC and the NX/XD bit is enabled in the BIOS.

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10. You’ve typed this stuff in a million times. Name 5 of the 10 bits of information required when installing ESXi?

Answer: Keyboard Layout, VLAN ID, IP Address, Subnet Mask, Gateway, Pri DNS, Sec DNS, Host Name, Installation Location, Root Password.

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**System Requirements for vCenter**

11. You decided not to run the vCenter appliance. What are the minimum hardware requirements for a vCenter 5.x server?

**Answer:** It depends on whether other vSphere services such as single sign-on, inventory service, and the database will be running on the same hardware with vCenter.

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12. You’re going to upgrade vCenter and the old vCenter is running on Windows Server 2003. What Windows Operating System is required for vCenter 5.x?

**Answer:** Windows 2008 SP2

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13. Your creating a list of ports you need the network admin to open on the firewall. What is port 902 used for on vCenter?

**Answer:** Port 902 is the default port vCenter uses to send data to hosts managed by vCenter.

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14. The old vCenter was running MS SQL Express but you are building 10 ESXi hosts. What’s the difference between using MS SQL Server Express and MS SQL Server for vCenter?

**Answer:** MS SQL Server Express is for vSphere installations with up to 5 ESXi hosts and 50 virtual servers.

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15. Your new boss doesn’t like MS SQL and asked you to use Oracle. Does vCenter support Oracle 11c or 12c?

Answer: Yes, but the JDBC driver must be installed manually.

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Managing vCenter Resources

16. You’ve learned over the years there’s more to vSphere than server hardware. What other 2 resources are just as important as servers and need to be properly planned out when designing and building a vSphere Cloud?

Answer: Storage and network resources are crucial for all vSphere Clouds.

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17. VMware vSphere give you options. What are the 4 typical ways storage can be added to a vSphere?

Answer: Storage can be added via iSCSI, FC, NFS and local disk (including DAS).

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18. When setting up a new datastore how many VMFS file systems should be created per LUN?

Answer: The best practice is to only create 1 VMFS file system per LUN.

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19. What is the best plan for a storage failure that impacts multiple datastores?

Answer: Always have a backup of the VMs on a separate storage environment that can be used to restore the lost virtual servers.

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20. Your host is a beast, dual socket with 8 core CPUs and 192 GB of memory. How many virtual servers can be added to a 1TB datastore?

Answer: It depends on the size of the VMs and the performance of the storage. Higher performing storage can be filled to capacity but space should be left for data growth and snapshots. A datastore should never be allowed to fill up 100%.

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21. This is a tough VMware interview question created just for you. Name 4 things that happen on the VMkernel networking layer?

Answer: vMotion, IP storage (iSCSI/NFS), Fault Tolerance and Virtual SAN.

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22. You have a VCP so this should be an easy interview question. What are 2 ways a vSphere admin can separate traffic from distinct environments (ex. Production and test) on the same hosts.

Answer: Either by creating separate vSwitches using dedicated NICs or if NICs are not available by creating separate port groups using different VLAN IDs on the same vSwitch.

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23. True or false. A Distributed Virtual Switch is very much like a physical switch that detects which VMs are logically connected to each port and uses that information to forward network traffic. Hint: It is not used for monitoring and administration across a datacenter.

Answer: False. A Distributed Virtual Switch acts as a single switch across all hosts in a datacenter to provide centralized provisioning, administration, and monitoring of virtual networks.

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24. Another True or false. NIC teams are “normally” put in active/active mode to allow fail-over in the event of a hardware failure.

Answer: False again. NIC teams are normally put in active/standby mode to allow fail-over in the event of a hardware failure. You can use active/active but this would not be standard and would require port channeling at the physical switch.

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25. This is a trick question so think about it! How many physical NICs are needed in an ESXi hosts for hosting 25 virtual servers on iSCSI storage split between 2 diverse environments (web/app).

Answer: The answer is purely subjective. It depends on how much separation is needed for performance and the level of redundancy built into the design for hardware failure. At minimum, maybe 2 (1 for data and 1 for VMkernel) but more should be used.

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Reference: VMware vSphere Documentation