**Core**

Professional Skills

Infrastructure Interview Question Bank

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# Infrastructure Interview Question Bank

## Networking

* What happens at the data link layer of the OSI model?
  + What devices can be found at this layer?
* What happens at the network layer of the OSI model?
  + What devices can be found at this layer?
* What’s the difference between the TCP & UDP protocols?
* What is the difference between a hub and a switch?
* What does a router do?
* What’s the purpose of a subnet mask?
* How would you split a class C network into 4 smaller networks?
  + How many hosts could you have on each of the 4 networks?
* What is a MAC address?
* What is ARP and how does it work?
* What do routing protocols do?
* What’s the difference between Link State & Distance Vector routing protocols?
* What is NAT and how does it work?
* What is the port number for telnet?
* What is the port number for http?
* What is an ACL? How does it work?
* What is a broadcast packet?
* What is a three-way handshake?
* What is duplex?
* What is the speed of Ethernet, Fast Ethernet, Gigabit Ethernet?
* If unicast is one type of communication system used in networking, what are the other two?
* What is so special about a Class D network?
* What are the private address ranges in networking?
* What is 169.254.x.x address?
* What is DNS?
* Explain how DHCP works.

## VMware

* What is a hypervisor?
  + What’s the difference between a type 1 and type 2 hypervisor?
* What are the differences between ESX & ESXi?
* In VMware what is a cluster?
  + How would you create one?
  + What are the benefits?
* What is VMotion?
* What things would prevent VMotion from taking place.
* What is a port group?
  + What are the 3 types of port group?
* What is a distributed virtual switch?
  + What are the advantages of using a distributed virtual switch instead of a basic virtual switch?
* What is the difference between HA & FT?
  + Why would you use HA if FT offers higher availability?
* What is a resource pool?
* What is DRS?
* What is DPM?
* How would you set up an isolated network in VMware?
* What is an IQN?
  + What is an IQN’s format?
* What is a SAN?
  + Describe 2 different ways to connect to a SAN.
* How would you ensure that time is synchronised on every VM in a cluster?
* What is EVC and how does it work?
* How would you prevent 2 VMs from being stored on the same ESX host within a cluster?

## Active Directory

* What is a domain?
* What is a forest?
* What’s the difference between a domain and a site?
* What are the 5 FSMO roles?
  + Which two of these roles are at the forest level?
* What would you have to do to a folder to give a single user exclusive access to it?
* If you created a user account on a domain controller in London, why might a user in Manchester not be able to log on with it?
  + What could you do to fix this?
* What is group policy?
  + How would you make a policy apply to all users in the Sales department but not to anybody else?
* What might cause your company’s DNS server to be unable to resolve names on the internet?
* What are the different types of DNS zone?
  + What are the differences between them?
* What are the new features in Windows 2008?
  + Describe how they are an improvement over Windows 2003’s functionality.
* What is the difference between public and private key encryption?
* What is the CRL?
* What are the delta CRL & the online responder?
* What is the difference between web enrolment and auto-enrolment?
* What is the difference between an authoritative restore and a non-authoritative restore?
* What does the system state contain?
* What is the difference between an incremental and differential backup?
  + Which would you choose if restore speed is more important to you than backup speed.

## Red Hat

* What is the Open Source Movement?
* Who created Linux?
* What is the difference between Linux and UNIX?
* How do you change your password in Linux?
* Name 3 ways to get help on a command in Linux?
* What is the top of the file system called in Linux?
* Name 4 directories immediately below the topmost directory in Linux? What do they do?
* Name 2 editors used by Linux to edit a text file?
* How do you remove a file interactively in Linux?
* Where are your log files stored in Linux?
* How do you schedule a process to run repetitively every night in Linux?
* How do you view processes in Linux?
* How do you remove a process which is hanging?
* What are the 4 types of shell in Linux?
* What is globbing?
* How do you redirect output to a file in Linux?
* How do you append output to a file?
* How do you redirect errors to a file?
* How do you search for a file in Linux?
* What does the tee command do?
* What is sed and awk?
* How do you change permissions on a file in Linux?
* How do you change user ownership in Linux?
* How do you compress a file in Linux?
* How do you archive a directory in Linux?

## Troubleshooting

* A user calls you to say that they can’t print. What steps would you take to identify the cause of the problem?
* Nobody in the office is able to log on. Describe the steps you’d take to resolve the problem.
* A user phones you up and says ‘my computer doesn’t work’ but doesn’t give any more information. What questions would you ask them to identify what the problem is?
* Why might you want to reproduce a problem?
* Why might you want to know the version of the software a person is using?
* How do you work out if the problem is a network problem or a server problem?

## ITIL

* What kind of service desks are there?
* What is priority based on?
* What does reliability mean?
* What is MTBF and MTTR mean?
* Name 4 steps in the incident management process?
* Where are all the master copies of your software stored?
* What is a CI?
* What is a KPI?
* What is an SLA?
* What does RACI stand for?
* What is the Demming Cycle?
* What are the 3 types of event management?
* What is access management?
* What does a CAB do?
* Name 3 standards of good management practice?
* If you’ve seen this problem before where do you look? And what are you looking for?
* How do you close a problem?
* If you can’t solve a problem what do you do?

## Interviews with financial clients

When interviewing for a role with a financial client the following preparation could prove to be invaluable:

* Have a look at the Investment Banking definitions and information for help or have a look on these websites:  investopedia.com, wikipedia.com, fsa.gov.uk
* Look at the financial sites- <http://www.lsespreads.com/financial_markets>  ,Bloomberg and Reuters. Familiarise yourself with the latest news in finance. Investment Bankers would be checking this on a daily basis.
* What is the difference between an Investment Bank and a Retail Bank?
* What is a derivative?
* How would you use a derivative?
* What is the difference between a share and a bond?
* What is a credit default swop?
* What do you know about investment banking?
* What is a credit derivative?
* What do you know about FX?
* Why do you want to work for a bank?
* Why do you want to work in finance?
* What is equity?
* Describe the FTSE 100.
* What is a stock?
* What is a bond?
* What is the difference between equity and bonds?
* What is an IPO?