

Linux admin interview questions

1. How do you take a single line of input from the user in a shell script?
2. Write a script to convert all DOS style backslashes to UNIX style slashes in a list of files.
3. Write a regular expression (or sed script) to replace all occurrences of the letter ‘f’, followed by any number of characters, followed by the letter ‘a’, followed by one or more numeric characters, followed by the letter ‘n’, and replace what’s found with the string “UNIX”.
4. Write a script to list all the differences between two directories.
5. Write a program in any language you choose, to reverse a file.
6. What are the fields of the password file?
7. What does a plus at the beginning of a line in the password file signify?
8. Using the man pages, find the correct ioctl to send console output to an arbitrary pty.
9. What is an MX record?
10. What is the prom command on a Sun that shows the SCSI devices?
11. What is the factory default SCSI target for /dev/sd0?
12. Where is that value controlled?
13. What happens to a child process that dies and has no parent process to wait for it and what’s bad about this?
14. What’s wrong with sendmail? What would you fix?
15. What command do you run to check file system consistency?
16. What’s wrong with running shutdown on a network?
17. What can be wrong with setuid scripts?
18. What value does spawn return?
19. Write a script to send mail from three other machines on the network to root at the machine you’re on. Use a ‘here doc’, but include in the mail message the name of the machine the mail is sent from and the disk utilization statistics on each machine?
20. Why can’t root just cd to someone’s home directory and run a program called a.out sitting there by typing “a.out”, and why is this good?
21. What is the difference between UDP and TCP?
22. What is DNS?
23. What does nslookup do?
24. How do you create a swapfile?
25. How would you check the route table on a workstation/server?
26. How do you find which ypmaster you are bound to?
27. How do you fix a problem where a printer will cutoff anything over 1MB?
28. What is the largest file system size in solaris? SunOS?
29. What are the different RAID levels?

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Interview questions for Linux admin

1. Advantages/disadvantages of script vs compiled program.

2. Name a replacement for PHP/Perl/MySQL/Linux/Apache and show main differences.
3. Why have you chosen such a combination of products?
4. Differences between two last MySQL versions. Which one would you choose and when/why?
5. Main differences between Apache 1.x and 2.x. Why is 2.x not so popular? Which one would you choose and when/why?
6. Which Linux distros do you have experience with?
7. Which distro do you prefer? Why?
8. Which tool would you use to update Debian / Slackware / RedHat / Mandrake / SuSE ?
9. You're asked to write an Apache module. What would you do?
10. Which tool do you prefer for Apache log reports?
11. Your portfolio. (even a PHP guest book may work well)
12. What does 'route' command do?
13. Differences between ipchains and iptables.
14. What's eth0, ppp0, wlan0, ttyS0, etc.
15. What are different directories in / for?
16. Partitioning scheme for new webserver. Why?

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Unix/Linux programming interview questions

Question 1: What is the major advantage of a hash table? (Asked by Silicon Magic Corp. people)

Answer: The major advantage of a hash table is its speed. Because the hash function is to take a range of key values and transform them into index values in such a way that the key values are distributed randomly across all the indices of a hash table.

Question 2: What are the techniques that you use to handle the collisions in hash tables?(Asked by Silicon Magic Corp. people)

Answer: We can use two major techniques to handle the collisions. They are open addressing and separate chaining. In open addressing, data items that hash to a full array cell are placed in another cell in the array. In separate chaining, each array element consists of a linked list. All data items hashing to a given array index are inserted in that list.

Question 3: In Unix OS, what is the file server? (Asked by Silicon Magic Corp. people)

Answer: The file server is a machine that shares its disk storage and files with other machines on the network.

Question 4: What is NFS? What is its job?(Asked by Silicon Magic Corp. people)

Answer: NFS stands for Network File System. NFS enables filesystems physically residing on one computer system to be used by other computers in the network, appearing to users on the remote host as just another local disk.

Question 5: What is CVS? List some useful CVS commands.(Asked by Silicon Magic Corp.people)

Answer: CVS is Concurrent Version System. It is the front end to the RCS revision control system which extends the notion of revision control from a collection of files in a single directory to a hierarchical collection of directories consisting of revision controlled files. These directories and files can be combined together to form a software release.

There are some useful commands that are being used very often. They are

cvs checkout
cvs update
cvs add
cvs remove
cvs commit

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Unix/Linux administration interview questions

What is LILO?

LILO stands for Linux boot loader. It will load the MBR, master boot record, into the memory, and tell the system which partition and hard drive to boot from.

What is the main advantage of creating links to a file instead of copies of the file?

A: The main advantage is not really that it saves disk space (though it does that too) but, rather, that a change of permissions on the file is applied to all the link access points. The link will show permissions of lrwxrwxrwx but that is for the link itself and not the access to the file to which the link points. Thus if you want to change the permissions for a command, such as su, you only have to do it on the original. With copies you have to find all of the copies and change permission on each of the copies.

Write a command to find all of the files which have been accessed within the last 30 days.

find / -type f -atime -30 > December.files

This command will find all the files under root, which is '/', with file type is file. '-atime -30' will give all the files accessed less than 30 days ago. And the output will put into a file call December.files.

What is the most graceful way to get to run level single user mode?

A: The most graceful way is to use the command init s.

If you want to shut everything down before going to single user mode then do init 0 first and from the ok prompt do a boot -s.

What does the following command line produce? Explain each aspect of this line.

```
$ (date ; ps -ef | awk '{print $1}' | sort | uniq | wc -l) >> Activity.log
```

A: First let's dissect the line: The date gives the date and time as the first command of the line, this is followed by the a list of all running processes in long form with UIDs listed first, this is the ps -ef. These are fed into the awk which filters out all but the UIDs; these UIDs are piped into sort for no discernible reason and then onto uniq (now we see the reason for the sort - uniq only works on sorted data - if the list is A, B, A, then A, B, A will be the output of uniq, but if it's A, A, B then A, B is the output) which produces only one copy of each UID.

These UIDs are fed into wc -l which counts the lines - in this case the number of distinct UIDs running processes on the system. Finally the results of these two commands, the date and the wc -l, are appended to the file "Activity.log". Now to answer the question as to what this command line produces. This writes the date and time into the file Activity.log together with the number of distinct users who have processes running on the system at that time. If the file already exists, then these items are appended to the file, otherwise the file is created.

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Solaris interview questions

1. **List the files in current directory sorted by size ?** - ls -l | grep ^- | sort -nr
2. **List the hidden files in current directory ?** - ls -a1 | grep "^\."
3. **Delete blank lines in a file ?** - cat sample.txt | grep -v '^\$' > new_sample.txt
4. **Search for a sample string in particular files ?** - grep .Debug. *.confHere grep uses the string .Debug. to search in all files with extension..conf. under current directory.
5. **Display the last newly appending lines of a file during appending data to the same file by some processes ?** - tail .f Debug.logHere tail shows the newly appended data into Debug.log by some processes/user.
6. **Display the Disk Usage of file sizes under each directory in currentDirectory ?** - du -k * | sort .nr (or) du .k . | sort -nr
7. **Change to a directory, which is having very long name ?** - cd CDMA_3X_GEN*Here original directory name is ..CDMA_3X_GENERATION_DATA..
8. **Display the all files recursively with path under current directory ?** - find . -depth -print

9. **Set the Display automatically for the current new user ?** - export DISPLAY=`eval 'who am i | cut -d"(" -f2 | cut -d")" -f1`Here in above command, see single quote, double quote, grave ascent is used. Observe carefully.
10. **Display the processes, which are running under yourusername ?** - ps .aef | grep MaheshvjHere, Maheshvj is the username.
11. **List some Hot Keys for bash shell ?** - **Ctrl+l** . Clears the Screen. **Ctrl+r** . Does a search in previously given commands in shell. **Ctrl+u** - Clears the typing before the hotkey. **Ctrl+a** . Places cursor at the beginning of the command at shell. **Ctrl+e** . Places cursor at the end of the command at shell. **Ctrl+d** . Kills the shell. **Ctrl+z** . Places the currently running process into background.
12. **Display the files in the directory by file size ?** - ls .ltr | sort .nr .k 5
13. **How to save man pages to a file ?** - man <command> | col .b > <output-file>Example : man top | col .b > top_help.txt
14. **How to know the date & time for . when script is executed ?** - Add the following script line in shell script.eval echo "Script is executed at `date`" >> timeinfo.infHere, .timeinfo.inf. contains date & time details ie., when script is executed and history related to execution.
15. **How do you find out drive statistics ?** - iostat -E
16. **Display disk usage in Kilobytes ?** - du -k
17. **Display top ten largest files/directories ?** - du -sk * | sort -nr | head
18. **How much space is used for users in kilobytes ?** - quot -af
19. **How to create null file ?** - cat /dev/null > filename1
20. **Access common commands quicker ?** - ps -ef | grep -i \$@
21. **Display the page size of memory ?** - pagesize -a
22. **Display Ethernet Address arp table ?** - arp -a
23. **Display the no.of active established connections to localhost ?** - netstat -a | grep EST
24. **Display the state of interfaces used for TCP/IP traffic ?** - netstat -i
25. **Display the parent/child tree of a process ?** - ptree <pid> Example: ptree 1267
26. **Show the working directory of a process ?** - pwdx <pid> Example: pwdx 1267
27. **Display the processes current open files ?** - pfiles <pid> Example: pfiles 1267
28. **Display the inter-process communication facility status ?** - ipcs
29. **Display the top most process utilizing most CPU ?** - top .b 1
30. **Alternative for top command ?** - prstat -a

Linux interview questions

*** How to check all open ports on linux machine and block unused ports?**

```
netstat -t  
#nmap -v localhost for tcp  
#nmap -sU localhost for udp  
  
#netstat -tulp  
or  
#netstat -tulpn
```

to verify the open ports

*** how u use the iptable firewall to restrict ssh,telnet,ftp**

For SSH
iptables -A INPUT -s -p tcp --dport <22> -j
REJECT/DROP/DENY

For Telnet
iptables -A INPUT -s -p tcp --dport <23> -j
REJECT/DROP/DENY

For FTP
iptables -A INPUT -s -p tcp --dport <21> -j
REJECT/DROP/DENY

*** what is the difference between unix and linux**

graphics is the main difference
extra more command are in linux
userfriendly then unix

the unix is the platform dependent the linux is platform
independent. we can't install unix in all machine we
required a special machine to install unix, but linux is
not like that it support all machines

filesystem are different
there diff lies in kernel
linux is under gpl and unix proprietary

Difference Between Linux and Unix

- 1) Linux default shell is /bin/bash, where Unix default shell is /bin/sh (other shell also supported)
 - 2) Linux Store all their command history, but if the default shell is /bin/sh in Unix, then Unix not store Command history.
 - 3) Linux support Tab key, but unix not support Tab key
-

Who owns the data dictionary?

The Oracle user SYS owns all base tables and user-accessible views of the data dictionary. Therefore, no Oracle user should ever alter (update, delete, or insert) any rows or schema objects contained in the SYS schema, because such activity can compromise data integrity. The security administrator should keep strict control of this central account.

which file contains information about os wether it's 32 bit or 64 bit?

ANS: /proc/cpuinfo
or
\$uname -m
or
/usr/bin/file

what contains information about file and directory creating time or modification time?

An inode is a data structure on a Unix / Linux file system. An inode stores basic information about a regular file, directory, or other file system object. You can use following two commands to display an inode:

[a] ls command : list directory contents

What are RPM?s, what do they offer?

The full form of RPM is Redhat Package Manager.

rpm is a powerful Package Manager, which can be used to build, install, query, verify, update, and erase individual software packages. A package consists of an archive of files and meta-data used to install and erase the archive files.

[b] stat command : display file or file system status

eg : # stat /etc/group

Output:

```
File: `/etc/group'
Size: 566 Blocks: 16 IO Block: 4096
regular file
Device: fd00h/64768d Inode: 2443679 Links: 1
Access: (0644/-rw-r--r--)Uid: ( 0/ root) Gid: ( 0/ root)
Access: 2009-08-12 08:23:31.245032672 +0530
Modify: 2002-01-01 05:54:15.000000000 +0530
Change: 2002-01-01 05:54:15.000000000 +0530
```

***how to confirm from client end about nfs server sharing?**

with mount and showmount -e server IP

How do i check which nfs version I am using ?

```
rpcinfo -p localhost | grep -i nfs
```

This cmd is used for nfs version

```
rpm -qa | grep nfs
```

```
rpm -qi nfs nfs-utils
```

```
yum info nfs nfs-utils
```

Through ssh whole directory structure from / is shared regardless the user we have connected with
..... how do i prevent sharing ??

```
vi /etc/ssh/sshd_config
```

"in last line enter the following entry"

```
AllowUsers "username"
```

And

```
vi /etc/hosts.deny
"in last line enter the following entry"
sshd: ALL EXCEPT "DOMAIN-NAME"
```

It's beneficial to use `setfacl` command for securing your stuff..

*** what restrict telnet for root itself but allow for other user**

Root can log in through telnet session, but by default it is disabled. You can enable by appending `/etc/securetty` file open `/etc/securetty` using `vi`

```
#vi /etc/securetty
```

```
pts/0
pts/1
```

don't remove anything from this `/etc/securetty`, just append your entry

```
vi /etc/pam.d/login
```

auth required pam_securetty.so == 1st line
should be placed as required. If we change the option as sufficient instead of required telnet can log in as "root".

How to send automated email to a set of people at fixed time ?

- 1) just create a alias of people and create a command file and create a crond entry
- 2) configure sendmail & postfix to configure procmail..
Or configure Q-mail / Squirrel mail & use contab

How do I check which package has installed some command suppose ls, mkdir or whatever ???

```
rpm -qa | grep "package name"
```

```
rpm -qa | grep
```

yum install it will show already installed or not if not then it will install
Pirut same as yum
rpm -qa /usr/bin/ls
gives you from which rpm the "ls" command is installed.

What is the difference between Telnet and SSH?

ssh is a secured shell, where telnet is not a secured one. When you ssh to transfer data between a system, the data will be sent in the encrypted form, where the hacker cannot encode or decode it. While you telnet, the data sent between the system is alphabetical format(ASCII), where everyone can understand. Moreover, as per network security, telnet and ftp are prohibited. Always, trust SSL based data transfer.

Telnet ->
It's just getting (Telnet) a connection to the server.
It's not more secure. Anybody can use it.
It can be easily hacked. It can be easily read by anybody in that network

SSH -> secured socket shell
It's more secure than Telnet.
This has an encryption and decryption of the data /usr/pwd
None can hack this. It is the good way to transfer the data

What is the difference between home directory and working directory?

home directory is one over which user has complete control and it is its default working directory when it logs in. while the working directory is the user's current directory which may or may not be his home directory.

How can you see all mounted drives?

with df -hT command and
with the mount command.
#vi /etc/fstab contains permanent mounts

When you install RedHat what is the kernel mode ? What is kernel compilation / upgrade ?

Kernel mode, also referred to as system mode, is one of the two distinct modes of operation of the CPU in Linux. The other is user mode, a non-privileged mode for user programs, that is, for everything other than the kernel.

When the CPU is in kernel mode, it is assumed to be executing trusted software, and thus it can execute any instructions and reference any memory addresses. The kernel is trusted software, but all other programs are considered untrusted software. Thus, all user mode software must request use of the kernel by means of a system call in order to perform privileged instructions, such as process creation or input/output.

Kernel compilation is installing a new kernel or adding custom modules to the same kernel.

Kernel upgradation is upgrading it to a different version altogether.

what is the difference between fork and thread ? and parent and child process in fork system call?

fork() system call in UNIX causes creation of a new process the new process (child process) which is an exact copy of the calling process(parent process).return value from fork () is used to distinguish the parent from the child; the parent receives the child's process id, but the child receives zero.

A thread is a stream of instructions that can be scheduled as an independent unit.

A thread is a stream of instructions that can be scheduled as an independent unit. It is important to understand the difference between a thread and a process. A process contains two kinds of information: resources that are available to the entire process such as program instructions, global data and working directory, and schedulable entities, which include program counters and stacks. A thread is an entity within a process that consists of the schedulable part of the process.

A `fork()` duplicates all the threads of a process. The problem with this is that `fork()` in a process where threads work with external resources may corrupt those resources (e.g., writing duplicate records to a file) because neither thread may know that the `fork()` has occurred.

When a new perl thread is created, all the data associated with the current thread is copied to the new thread, and is subsequently private to that new thread! This is similar in feel to what happens when a UNIX process forks, except that in this case, the data is just copied to a different part of memory within the same process rather than a real fork taking place.

A `fork()` induces a parent-child relationship between two processes. Thread creation induces a peer relationship between all the threads of a process.

You want to create a compressed backup of the users' home directories. What utility should you use?

`Tar -czf kk.tar.gz /home/username`
If we want to extract
the command is `tar -xzf kk.tar.gz`

What is the difference between an argument and an option/switch?

A linux/unix syntax format is as follows

command option argument

example: `ls -a /boot`
here `ls` command, `-a` is option, `/boot` is argument

option specifies the command how to run
argument specifies the command on what to run

How does the boot process[init levels] work on Linux? How is it different from Solaris?

When an x86 computer is booted, the processor looks at the end of the system memory for the BIOS (Basic Input/Output System) and runs it. The BIOS program is written into

permanent read-only memory and is always available for use. The BIOS provides the lowest level interface to peripheral devices and controls the first step of the boot process.

The BIOS tests the system, looks for and checks peripherals, and then looks for a drive to use to boot the system. Usually it checks the floppy drive (or CD-ROM drive on many newer systems) for bootable media, if present, and then it looks to the hard drive. The order of the drives used for booting is usually controlled by a particular BIOS setting on the system. Once Linux is installed on the hard drive of a system, the BIOS looks for a Master Boot Record (MBR) starting at the first sector on the first hard drive, loads its contents into memory, then passes control to it.

This MBR contains instructions on how to load the GRUB (or LILO) boot-loader, using a pre-selected operating system. The MBR then loads the boot-loader, which takes over the process (if the boot-loader is installed in the MBR). In the default Red Hat Linux configuration, GRUB uses the settings in the MBR to display boot options in a menu. Once GRUB has received the correct instructions for the operating system to start, either from its command line or configuration file, it finds the necessary boot file and hands off control of the machine to that operating system.

1. The system BIOS checks the system and launches the first stage boot loader on the MBR of the primary hard disk.
2. The First stage boot loader loads itself into memory and launches the second stage boot loader from the /boot/ partition.
3. The second stage boot loader loads the kernel into memory, which in turn loads any necessary modules and mounts the root partition read-only.
4. The kernel transfers control of the boot process to the /sbin/init program.
5. The /sbin/init program loads all services and user-space

tools, and mounts all partitions listed in /etc/fstab.

6. The user is presented with a login screen for the freshly booted Linux system.

What are the main differences between RHEL4 & RHEL5?

XEN, YUM and improved SELinux
all the features updated with better options
Better GUI support than RHEL4
YUM over RPM package management
IPTables and SELinux for more secure environment
ext2 & ext3 file system
In RHEL 4 SELinux Block only 13 services, But on RHEL 5
SELinux Block 80 services

What text filter can you use to display a binary file in octal numbers?

hexdump file1 > file2

tell me some of the Linux HotKeys do you know?

alt+f1 for application menu
ctrl+l to clear screen
alt+f2 to open run application window
alt+f3 for find
alt+f4 to close application
alt+f9 to minimise window
Ctrl-Alt-D Show desktop
Ctrl-Alt-Backspace Restart XWindows

What file should you examine to determine the defined runlevels for your system?

/etc/inittab

id:X:initdefault

where X=runlevel (ex.0 to 6)

0 = system poweroff

1 = single user mode

2 = multiuser mode without network and X window
3 = multiuser mode with network without X window
4 = unused
5 = X11 (multiuser mode with network and X window)
6 = reboot

What is the name and path of the main system log?

/var/log/messages system log messages can be seen here
/var/log/dmesg Kernel boot log messages can view

There are Three centralized loggin demons

- 1)syslogd
- 2)klogd
- 3)auditd

klogd:- collect log file created by the Kernel

syslogd:- Collect log file created by the system

auditd:- Collect log file created by the SELinux

After collecting the log system store logs on different location

/var/log/dmesg:- Created at boot time, by kernel

/var/log/messages:- standard system error message,

/var/log/secure:- authentication related log

/var/log/maillog:- Mail related log

/var/log/audit/audit.log:-Selinux related log

We can redirect the log by configuring

/etc/sysconfig/syslog

/etc/syslog.conf

what is the difference between semaphore, mutex & spinlock?

Kernel Locking Techniques

Semaphores in Linux are sleeping locks. Because they cause a task to sleep on contention, instead of spin, they are used in situations where the lock-held time may be long.

Conversely, since they have the overhead of putting a task to sleep and subsequently waking it up, they should not be used where the lock-held time is short. Since they sleep, however, they can be used to synchronize user contexts

whereas spinlocks cannot. In other words, it is safe to block while holding a semaphore.

A "mutex" (or "mutual exclusion lock") is a signal that two or more asynchronous processes can use to reserve a shared resource for exclusive use. The first process that obtains ownership of the "mutex" also obtains ownership of the shared resource. Other processes must wait for the first process to release its ownership of the "mutex" before they may attempt to obtain it.

The most common locking primitive in the kernel is the spinlock. The spinlock is a very simple single-holder lock. If a process attempts to acquire a spinlock and it is unavailable, the process will keep trying (spinning) until it can acquire the lock. This simplicity creates a small and fast lock.

What are seven fields in the /etc/passwd file.

1. Username: It is used when user logs in. It should be between 1 and 32 characters in length.
 2. Password: An x character indicates that encrypted password is stored in /etc/shadow file.
 3. User ID (UID): Each user must be assigned a user ID (UID). UID 0 (zero) is reserved for root and UIDs 1-99 are reserved for other predefined accounts. Further UID 100-999 are reserved by system for administrative and system accounts/groups.
 4. Group ID (GID): The primary group ID (stored in /etc/group file)
 5. User ID Info: The comment field. It allows you to add extra information about the users such as user's full name, phone number etc. This field is used by finger command.
 6. Home directory: The absolute path to the directory the user will be in when they log in. If this directory does not exist then user's directory becomes /
 7. Command/shell: The absolute path of a command or shell (/bin/bash). Typically, this is a shell. Please note that it does not have to be a shell.
-

1. Q. How do you list files in a directory?

- A. ls - list directory contents
- ls -l (-l use a long listing format)

2. Q. How do you list all files in a directory, including the hidden files?

- A. ls -a (-a, do not hide entries starting with .)

3. Q. How do you find out all processes that are currently running?

A. ps -f (-f does full-format listing.)

4. Q. How do you find out the processes that are currently running or a particular user?

A. ps -au Myname (-u by effective user ID (supports names)) (a - all users)

5. Q. How do you kill a process?

A. kill -9 8 (process_id 8) or kill -9 %7 (job number 7)

kill -9 -1 (Kill all processes you can kill.)

killall - kill processes by name most (useful - killall java)

6. Q. What would you use to view contents of the file?

A. less filename

cat filename

pg filename

pr filename

more filename

most useful is command: tail file_name - you can see the end of the log file.

7. Q. What would you use to edit contents of the file?

A. vi screen editor or jedit, nedit or ex line editor

8. Q. What would you use to view contents of a large error log file?

A. tail -10 file_name (last 10 rows)

9. Q. How do you log in to a remote Unix box?

A. Using telnet server_name or ssh -l (ssh - OpenSSH SSH client (remote login program))

10.Q. How do you get help on a UNIX terminal?

A. man command_name

info command_name (more information)

11.Q. How do you list contents of a directory including all of its subdirectories, providing full details and sorted by modification time?

A. ls -lac

-a all entries

-c by time

12.Q. How do you create a symbolic link to a file (give some reasons of doing so)?

A. ln ./file1 Link_name

Links create pointers to the actual files, without duplicating the contents of

the files. That is, a link is a way of providing another name to the same file.

There are two types of links to a file: Hard link, Symbolic (or soft) link;

13.Q. What is a filesystem?

A. Sum of all directories called file system.

A file system is the primary means of file storage in UNIX.

File systems are made of inodes and superblocks.

14.Q. How do you get its usage (a filesystem)?

A. By storing and manipulate files.

15.Q. How do you check the sizes of all users home directories (one command)?

A. du -s

df

The du command summarizes disk usage by directory. It recurses through all subdirectories and shows disk usage by each subdirectory with a final total at the end.

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Mary has recently gotten married and wants to change her username from mstone to mknight. Which of the following commands should you run to accomplish this? Choose one: a. usermod -l mknight mstone b. usermod -l mstone mknight c. usermod -u mknight mstone d. usermod -u mstone mknight

After bob leaves the company you issue the command userdel bob. Although his entry in the /etc/passwd file has been deleted, his home directory is still there. What command could you have used to make sure that his home directory was also deleted? Choose one: a. userdel -m bob b. userdel -u bob c. userdel -l bob d. userdel -r bob

All groups are defined in the /etc/group file. Each entry contains four fields in the following order. Choose one: a. groupname, password, GID, member list b. GID, groupname, password, member list c. groupname, GID, password, member list d. GID, member list, groupname, password

You need to create a new group called sales with Bob, Mary and Joe as members. Which of the following would accomplish this? Choose one: a. Add the following line to the /etc/group file: sales:44:bob,mary,joe b. Issue the command groupadd sales. c. Issue the command groupadd -a sales bob,mary,joe d. Add the following line to the /etc/group file: sales::44:bob,mary,joe

What command is used to remove the password assigned to a group?

You changed the GID of the sales group by editing the /etc/group file. All of the members can change to the group without any problem except for Joe. He cannot even login to the system. What is the problem? Choose one: a. Joe forgot the password for the group. b. You need to add Joe to the group again. c. Joe had the original GID specified as his default group in the /etc/passwd file. d. You need to delete Joe's account and recreate it.

You need to delete the group dataproject. Which two of the following tasks should you do first before deleting the group? A. Check the /etc/passwd file to make sure no one has this group as his default group. B. Change the members of the dataproject group to another group besides users. C. Make sure that the members listed in the /etc/group file are given new login names. D. Verify that no file or directory has this group listed as its owner. Choose one: a. A and C b. A and D c. B and C d. B and D

When you look at the /etc/group file you see the group kmem listed. Since it does not own any files and no one is using it as a default group, can you delete this group?

When looking at the /etc/passwd file, you notice that all the password fields contain 'x'. What does this mean? Choose one: a. That the password is encrypted. b. That you are using shadow passwords. c. That all passwords are blank. d. That all passwords have expired.

In order to improve your system's security you decide to implement shadow passwords. What command should you use?

What file contains the default environment variables when using the bash shell? Choose one: a. ~/.profile b. /bash c. /etc/profile d. ~/bash

You have created a subdirectory of your home directory containing your scripts. Since you use the bash shell, what file would you edit to put this directory on your path? Choose one: a. ~/.profile b. /etc/profile c. /etc/bash d. ~/.bash

Which of the following interprets your actions when typing at the command line for the operating system? Choose One a. Utility b. Application c. Shell d. Command

What can you type at a command line to determine which shell you are using?

You want to enter a series of commands from the command-line. What would be the quickest way to do this? Choose One a. Press enter after entering each command and its arguments b. Put them in a script and execute the script c. Separate each command with a semi-colon (;) and press enter after the last command d. Separate each command with a / and press enter after the last command

You are entering a long, complex command line and you reach the right side of your screen before you have finished typing. You want to finish typing the necessary commands but have the display wrap around to the left. Which of the following key combinations would achieve this? Choose One a. Esc, /, Enter b. /, Enter c. ctrl-d, enter d. esc, /, ctrl-d

After typing in a new command and pressing enter, you receive an error message indicating incorrect syntax. This error message originated from.. Choose one a. The shell b. The operating system c. The command d. The kernel

When typing at the command line, the default editor is the _____ library.

You typed the following at the command line ls -al /home/ hadden. What key strokes would you enter to remove the space between the '/' and 'hadden' without having to retype the entire line? Choose one a. Ctrl-B, Del b. Esc-b, Del c. Esc-Del, Del d. Ctrl-b, Del

You would like to temporarily change your command line editor to be vi. What command should you type to change it?

After experimenting with vi as your command line editor, you decide that you want to have vi your default editor every time you log in. What would be the appropriate way to do this? Choose one a. Change the /etc/inputrc file b. Change the /etc/profile file c. Change the ~/.inputrc file d. Change the ~/.profile file

You have to type your name and title frequently throughout the day and would like to decrease the number of key strokes you use to type this. Which one of your configuration files would you edit to bind this information to one of the function keys?

In your present working directory, you have the files maryletter memo1 MyTelephoneandAddressBook What is the fewest number of keys you can type to open the file MyTelephoneandAddressBook with vi? Choose one a. 6 b. 28 c. 25 d. 4

A variable that you can name and assign a value to is called a _____ variable.

You have installed a new application but when you type in the command to start it you get the error message Command not found. What do you need to do to fix this problem? Choose one a. Add the directory containing the application to your path b. Specify the directory's name whenever you run the application c. Verify that the execute permission has been applied to the command. d. Give everyone read, write and execute permission to the application's directory.

You telnet into several of your servers simultaneously. During the day, you sometimes get confused as to which telnet session is connected to which server. Which of the following commands in your .profile file would make it obvious to which server you are attached? Choose one a. PS1='h: \w' b. PS1='s: \W' c. PS1='!: \t' d. PS1='a: \n'

Which of the following environment variables determines your working directory at the completion of a successful login? Choose one a. HOME b. BASH_ENV c. PWD d. BLENDERDIR

Every time you attempt to delete a file using the rm utility, the operating system prompts you for confirmation. You know that this is not the customary behavior for the rm command. What is wrong? Choose one a. rm has been aliased as rm -i b. The version of rm installed on your system is incorrect. c. This is the normal behavior of the newest version of rm. d. There is an incorrect link on your system.

You are running out of space in your home directory. While looking for files to delete or compress you find a large file called .bash_history and delete it. A few days later, it is back and as large as before. What do you need to do to ensure that its size is smaller? Choose one a. Set the HISTFILESIZE variable to a smaller number. b. Set the HISTSIZE to a smaller number. c. Set the NOHISTFILE variable to true. d. Set the HISTAPPEND variable to true.

In order to display the last five commands you have entered using the history command, you would type _____.

In order to display the last five commands you have entered using the fc command, you would type _____.

You previously ran the find command to locate a particular file. You want to run that command again. What would be the quickest way to do this? Choose one a. fc -l find fc n b. history -l find history n c. Retype the command d. fc -n find

Using command substitution, how would you display the value of the present working directory? Choose one a. echo \$(pwd) b. echo pwd c. \$pwd d. pwd | echo

You need to search the entire directory structure to locate a specific file. How could you do this and still be able to run other commands while the find command is still searching for your file? Choose one

a. find / -name filename & b. find / -name filename c. bg find / -name filename d. &find / -name filename &

In order to create a file called DirContents containing the contents of the /etc directory you would type _____.

What would be displayed as the result of issuing the command ps ef? Choose one a. A listing of the user's running processes formatted as a tree. b. A listing of the stopped processes c. A listing of all the running processes formatted as a tree. d. A listing of all system processes formatted as a tree.

What utility can you use to show a dynamic listing of running processes? _____

The top utility can be used to change the priority of a running process? Another utility that can also be used to change priority is _____?

What key combination can you press to suspend a running job and place it in the background?

You issue the command jobs and receive the following output: [1]- Stopped (tty output) pine [2]+ Stopped (tty output) MyScript How would you bring the MyScript process to the foreground? Choose one: a. fg %2 b. ctrl-c c. fg MyScript d. ctrl-z

You enter the command cat MyFile | sort > DirList & and the operating system displays [4] 3499 What does this mean? Choose one a. This is job number 4 and the PID of the sort command is 3499. b. This is job number 4 and the PID of the job is 3499. c. This is job number 3499 and the PID of the cat command is 4. d. This is job number 4 and the PID of the cat command is 3499.

You attempt to log out but receive an error message that you cannot. When you issue the jobs command, you see a process that is running in the background. How can you fix this so that you can logout? Choose one a. Issue the kill command with the PID of each running command of the pipeline as an argument. b. Issue the kill command with the job number as an argument. c. Issue the kill command with the PID of the last command as an argument. d. Issue the kill command without any arguments.

You have been given the job of administering a new server. It houses a database used by the sales people. This information is changed frequently and is not duplicated anywhere else. What should you do to ensure that this information is not lost? Choose one a. Create a backup strategy that includes backing up this information at least daily. b. Prepare a proposal to purchase a backup server c. Recommend that the server be made part of a cluster. d. Install an additional hard drive in the server.

When planning your backup strategy you need to consider how often you will perform a backup, how much time the backup takes and what media you will use. What other factor must you consider when planning your backup strategy? _____

Many factors are taken into account when planning a backup strategy. The one most important one is how often does the file _____.

Which one of the following factors does not play a role in choosing the type of backup media to use? Choose one: a. How frequently a file changes b. How long you need to retain the backup c. How much data needs to be backed up d. How frequently the backed up data needs to be accessed

When you only back up one partition, this is called a _____ backup. Choose one a. Differential b. Full c. Partial d. Copy

When you back up only the files that have changed since the last backup, this is called a _____ backup. Choose one a. Partial b. Differential c. Full d. Copy

The easiest, most basic form of backing up a file is to _____ it to another location.

When is the most important time to restore a file from your backup? Choose one a. On a regular

scheduled basis to verify that the data is available. b. When the system crashes. c. When a user inadvertently loses a file. d. When your boss asks to see how restoring a file works.

As a system administrator

, you are instructed to backup all the users' home directories. Which of the following commands would accomplish this? Choose one a. tar rf usersbkup home/* b. tar cf usersbkup home/* c. tar cbf usersbkup home/* d. tar rvf usersbkup home/*

What is wrong with the following command? tar cvfb / /dev/tape 20 Choose one a. You cannot use the c option with the b option. b. The correct line should be tar -cvfb / /dev/tape20. c. The arguments are not in the same order as the corresponding modifiers. d. The files to be backed up have not been specified.

You need to view the contents of the tarfile called MyBackup.tar. What command would you use?

After creating a backup of the users' home directories called backup.cpio you are asked to restore a file called memo.ben. What command should you type?

You want to create a compressed backup of the users' home directories so you issue the command gzip /home/* backup.gz but it fails. The reason that it failed is that gzip will only compress one _____ at a time.

You want to create a compressed backup of the users' home directories. What utility should you use?

You routinely compress old log files. You now need to examine a log from two months ago. In order to view its contents without first having to decompress it, use the _____ utility.

Which two utilities can you use to set up a job to run at a specified time? Choose one: a. at and crond b. atrun and crontab c. at and crontab d. atd and crond

You have written a script called usrs to parse the passwd file and create a list of usernames. You want to have this run at 5 am tomorrow so you can see the results when you get to work. Which of the following commands will work? Choose one: a. at 5:00 wed usrs b. at 5:00 wed -b usrs c. at 5:00 wed -l usrs d. at 5:00 wed -d usrs

Several of your users have been scheduling large at jobs to run during peak load times. How can you prevent anyone from scheduling an at job? Choose one: a. delete the file /etc/at.deny b. create an empty file called /etc/at.deny c. create two empty files: /etc/at.deny and /etc/at.allow file d. create an empty file called /etc/at.allow

How can you determine who has scheduled at jobs? Choose one: a. at -l b. at -q c. at -d d. atwho

When defining a cronjob, there are five fields used to specify when the job will run. What are these fields and what is the correct order? Choose one: a. minute, hour, day of week, day of month, month b. minute, hour, month, day of month, day of week c. minute, hour, day of month, month, day of week d. hour, minute, day of month, month, day of week

You have entered the following cronjob. When will it run? 15 * * * 1,3,5 myscript Choose one: a. at 15 minutes after every hour on the 1st, 3rd and 5th of each month. b. at 1:15 am, 3:15 am, and 5:15 am every day c. at 3:00 pm on the 1st, 3rd, and 5th of each month d. at 15 minutes after every hour every Monday, Wednesday, and Friday

As the system administrator you need to review Bob's cronjobs. What command would you use?

Choose one: a. crontab -lu bob b. crontab -u bob c. crontab -l d. cronq -lu bob

In order to schedule a cronjob, the first task is to create a text file containing the jobs to be run along

with the time they are to run. Which of the following commands will run the script MyScript every day at 11:45 pm? Choose one: a. * 23 45 * * MyScript b. 23 45 * * * MyScript c. 45 23 * * * MyScript d. * * * 23 45 MyScript

Which daemon must be running in order to have any scheduled jobs run as scheduled? Choose one: a. crond b. atd c. atrun d. crontab

You want to ensure that your system is not overloaded with users running multiple scheduled jobs. A policy has been established that only the system administrators can create any scheduled jobs. It is your job to implement this policy. How are you going to do this? Choose one: a. create an empty file called /etc/cron.deny b. create a file called /etc/cron.allow which contains the names of those allowed to schedule jobs. c. create a file called /etc/cron.deny containing all regular usernames. d. create two empty files called /etc/cron.allow and /etc/cron.deny

You notice that your server load is exceptionally high during the hours of 10 am to 2 noon. When investigating the cause, you suspect that it may be a cron job scheduled by one of your users. What command can you use to determine if your suspicions are correct? Choose one: a. crontab -u b. crond -u c. crontab -l d. crond -l

One of your users, Bob, has created a script to reindex his database. Now he has it scheduled to run every day at 10:30 am. What command should you use to delete this job. Choose one: a. crontab -ru bob b. crontab -u bob c. crontab -du bob d. crontab -lu bob

What daemon is responsible for tracking events on your system?

What is the name and path of the default configuration file used by the syslogd daemon?

You have made changes to the /etc/syslog.conf file. Which of the following commands will cause these changes to be implemented without having to reboot your computer? Choose one: a. kill SIGHINT `cat /var/run/syslogd.pid` b. kill SIGHUP `cat /var/run/syslogd.pid` c. kill SIGHUP syslogd d. kill SIGHINT syslogd

Which of the following lines in your /etc/syslog.conf file will cause all critical messages to be logged to the file /var/log/critmessages? Choose one: a. *.=crit /var/log/critmessages b. *crit /var/log/critmessages c. *=crit /var/log/critmessages d. *.crit /var/log/critmessages

You wish to have all mail messages except those of type info to the /var/log/mailmessages file. Which of the following lines in your /etc/syslogd.conf file would accomplish this? Choose one: a. mail.*;mail!=info /var/log/mailmessages b. mail.=info /var/log/mailmessages c. mail.*;mail.info /var/log/mailmessages d. mail.*;mail.!info /var/log/mailmessages

What is the name and path of the main system log?

Which log contains information on currently logged in users? Choose one: a. /var/log/utmp b. /var/log/wtmp c. /var/log/lastlog d. /var/log/messages

You have been assigned the task of determining if there are any user accounts defined on your system that have not been used during the last three months. Which log file should you examine to determine this information? Choose one: a. /var/log/wtmp b. /var/log/lastlog c. /var/log/utmp d. /var/log/messages

You have been told to configure a method of rotating log files on your system. Which of the following factors do you not need to consider? Choose one: a. date and time of messages b. log size c. frequency of rotation d. amount of available disk space

What utility can you use to automate rotation of logs?

You wish to rotate all your logs weekly except for the /var/log/wtmp log which you wish to rotate monthly. How could you accomplish this. Choose one: a. Assign a global option to rotate all logs weekly and a local option to rotate the /var/log/wtmp log monthly. b. Assign a local option to rotate all logs weekly and a global option to rotate the /var/log/wtmp log monthly. c. Move the /var/log/wtmp log to a different directory. Run logrotate against the new location. d. Configure logrotate to not rotate the /var/log/wtmp log. Rotate it manually every month.

You have configured logrotate to rotate your logs weekly and keep them for eight weeks. You are running out of disk space. What should you do? Choose one: a. Quit using logrotate and manually save old logs to another location. b. Reconfigure logrotate to only save logs for four weeks. c. Configure logrotate to save old files to another location. d. Use the prerotate command to run a script to move the older logs to another location.

What command can you use to review boot messages?

What file defines the levels of messages written to system log files?

What account is created when you install Linux?

While logged on as a regular user, your boss calls up and wants you to create a new user account immediately. How can you do this without first having to close your work, log off and logon as root? Choose one: a. Issue the command rootlog. b. Issue the command su and type exit when finished. c. Issue the command su and type logoff when finished. d. Issue the command logon root and type exit when finished.

Which file defines all users on your system? Choose one: a. /etc/passwd b. /etc/users c. /etc/password d. /etc/user.conf

There are seven fields in the /etc/passwd file. Which of the following lists all the fields in the correct order? Choose one: a. username, UID, GID, home directory, command, comment b. username, UID, GID, comment, home directory, command c. UID, username, GID, home directory, comment, command d. username, UID, group name, GID, home directory, comment

Which of the following user names is invalid? Choose one: a. Theresa Hadden b. thadden c. TheresaH d. T.H.

In order to prevent a user from logging in, you can add a(n) _____ at the beginning of the password field.

The beginning user identifier is defined in the _____ file.

Which field is used to define the user's default shell?

Bob Armstrong, who has a username of boba, calls to tell you he forgot his password. What command should you use to reset his command?

Your company has implemented a policy that users' passwords must be reset every ninety days. Since you have over 100 users you created a file with each username and the new password. How are you going to change the old passwords to the new ones? Choose one: a. Use the chpasswd command along with the name of the file containing the new passwords. b. Use the passwd command with the -f option and the name of the file containing the new passwords. c. Open the /etc/passwd file in a text editor and manually change each password. d. Use the passwd command with the -u option.

Top Linux Admin Interview Questions asked in TOP IT industries

Hey Guys, AFRAID of interviews

DONT Worry prepare the following questions before Interview. I have managed to prepare some questions sets. Practice this and i'm sure you would crack a L1/L2/L3 Linux Administrator Job Easily. All the questions are taken from the top IT brands interviews.

Linux Admin Interview Questions and Answers, Linux Administration questions, Linux Networking questions, MYSQL questions, bash, postfix questions, sendmail questions, ftp server questions

Questions BANK 01

You attempt to use shadow passwords but are unsuccessful. What characteristic of the /etc/passwd file may cause this? Choose one:

- a. The login command is missing.
- b. The username is too long.
- c. The password field is blank.
- d. The password field is prefaced by an asterick.

You create a new user account by adding the following line to your /etc/passwd file.

bobm:baddog:501:501:Bob Morris:/home/bobm:/bin/bash Bob calls you and tells you that he cannot logon. You verify that he is using the correct username and password. What is the problem? Choose one:

- a. The UID and GID cannot be identical.
- b. You cannot have spaces in the line unless they are surrounded with double quotes.
- c. You cannot directly enter the password; rather you have to use the passwd command to assign a password to the user.
- d. The username is too short, it must be at least six characters long.

Which of the following tasks is not necessary when creating a new user by editing the /etc/passwd file? Choose one:

- a. Create a link from the user's home directory to the shell the user will use.
- b. Create the user's home directory
- c. Use the passwd command to assign a password to the account.
- d. Add the user to the specified group.

You create a new user by adding the following line to the /etc/passwd file bobm::501:501:Bob Morris:/home/bobm:/bin/bash You then create the user's home directory and use the passwd command to set his password. However, the user calls you and says that he cannot log on. What is the problem? Choose one:

- a. The user did not change his password.
- b. bobm does not have permission to /home/bobm.

- c. The user did not type his username in all caps.
- d. You cannot leave the password field blank when creating a new user.

When using useradd to create a new user account, which of the following tasks is not done automatically. Choose one:

- a. Assign a UID.
- b. Assign a default shell.
- c. Create the user's home directory.
- d. Define the user's home directory.

You issue the following command useradd -m bobm But the user cannot logon. What is the problem? Choose one:

- a. You need to assign a password to bobm's account using the passwd command.
- b. You need to create bobm's home directory and set the appropriate permissions.
- c. You need to edit the /etc/passwd file and assign a shell for bobm's account.
- d. The username must be at least five characters long.

You have created special configuration files that you want copied to each user's home directories when creating new user accounts. You copy the files to /etc/skel. Which of the following commands will make this happen? Choose one:

- a. useradd -m username
- b. useradd -mk username
- c. useradd -k username
- d. useradd -Dk username

Mary has recently gotten married and wants to change her username from mstone to mknight. Which of the following commands should you run to accomplish this? Choose one:

- a. usermod -l mknight mstone
- b. usermod -l mstone mknight
- c. usermod -u mknight mstone
- d. usermod -u mstone mknight

After bob leaves the company you issue the command userdel bob. Although his entry in the /etc/passwd file has been deleted, his home directory is still there. What command could you have used to make sure that his home directory was also deleted? Choose one:

- a. userdel -m bob
- b. userdel -u bob
- c. userdel -l bob
- d. userdel -r bob

All groups are defined in the /etc/group file. Each entry contains four fields in the following order. Choose one:

- a. groupname, password, GID, member list
- b. GID, groupname, password, member list
- c. groupname, GID, password, member list
- d. GID, member list, groupname, password

You need to create a new group called sales with Bob, Mary and Joe as members. Which of the following would accomplish this? Choose one:

- a. Add the following line to the /etc/group file: sales:44:bob,mary,joe
- b. Issue the command groupadd sales.
- c. Issue the command groupadd -a sales bob,mary,joe
- d. Add the following line to the /etc/group file: sales::44:bob,mary,joe

Linux Admin Interview Questions and Answers

Questions consists of Linux Admin Interview Questions and Answers, Linux Administration questions, Linux Networking questions, MYSQL questions, bash, postfix questions, sendmail questions, ftp server questions

Questions BANK 06

What command can you use to review boot messages?

What file defines the levels of messages written to system log files?

What account is created when you install Linux?

While logged on as a regular user, your boss calls up and wants you to create a new user account immediately. How can you do this without first having to close your work, log off and logon as root?

Choose one:

- a. Issue the command rootlog.
- b. Issue the command su and type exit when finished.
- c. Issue the command su and type logoff when finished.
- d. Issue the command logon root and type exit when finished.

Which file defines all users on your system? Choose one:

- a. /etc/passwd
- b. /etc/users
- c. /etc/password
- d. /etc/user.conf

There are seven fields in the /etc/passwd file. Which of the following lists all the fields in the correct order? Choose one:

- a. username, UID, GID, home directory, command, comment
- b. username, UID, GID, comment, home directory, command
- c. UID, username, GID, home directory, comment, command
- d. username, UID, group name, GID, home directory, comment

Which of the following user names is invalid? Choose one:

- a. Theresa Hadden
- b. thadden
- c. TheresaH
- d. T.H.

In order to prevent a user from logging in, you can add a(n) _____ at the beginning of the password field.

The beginning user identifier is defined in the _____ file.

Which field is used to define the user's default shell?

Bob Armstrong, who has a username of boba, calls to tell you he forgot his password. What command should you use to reset his command?

Your company has implemented a policy that users' passwords must be reset every ninety days.

Since you have over 100 users you created a file with each username and the new password. How are

you going to change the old passwords to the new ones? Choose one:

- a. Use the chpasswd command along with the name of the file containing the new passwords.
- b. Use the passwd command with the -f option and the name of the file containing the new passwords.
- c. Open the /etc/passwd file in a text editor and manually change each password.
- d. Use the passwd command with the -u option.

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-

+ Top Linux Admin Interview Questions and answers asked in TOP IT industries : Question Bank 05 By [Ashwin](#) 06 March 2010 at 1:00 am and have [No Comments](#)

Linux Admin Interview Questions and Answers

Questions consists of Linux Admin Interview Questions and Answers, Linux Administration questions, Linux Networking questions, MYSQL questions, bash, postfix questions, sendmail questions, ftp server questions

Questions BANK 05

As the system administrator you need to review Bob's cronjobs. What command would you use?

Choose one:

- a. crontab -lu bob
- b. crontab -u bob
- c. crontab -l
- d. crong -lu bob

In order to schedule a cronjob, the first task is to create a text file containing the jobs to be run along with the time they are to run. Which of the following commands will run the script MyScript every day at 11:45 pm? Choose one:

- a. * 23 45 * * MyScript
- b. 23 45 * * * MyScript
- c. 45 23 * * * MyScript
- d. * * * 23 45 MyScript

Which daemon must be running in order to have any scheduled jobs run as scheduled? Choose one:

- a. crond
- b. atd
- c. atrun
- d. crontab

You want to ensure that your system is not overloaded with users running multiple scheduled jobs. A policy has been established that only the system administrators can create any scheduled jobs. It is your job to implement this policy. How are you going to do this? Choose one:

- a. create an empty file called /etc/cron.deny
- b. create a file called /etc/cron.allow which contains the names of those allowed to schedule jobs.
- c. create a file called /etc/cron.deny containing all regular usernames.
- d. create two empty files called /etc/cron.allow and /etc/cron.deny

You notice that your server load is exceptionally high during the hours of 10 am to 2 noon. When investigating the cause, you suspect that it may be a cron job scheduled by one of your users. What command can you use to determine if your suspicions are correct? Choose one:

- a. crontab -u
- b. crond -u
- c. crontab -l
- d. crond -l

One of your users, Bob, has created a script to reindex his database. Now he has it scheduled to run every day at 10:30 am. What command should you use to delete this job. Choose one:

- a. crontab -ru bob
- b. crontab -u bob
- c. crontab -du bob
- d. crontab -lu bob

What daemon is responsible for tracking events on your system?

What is the name and path of the default configuration file used by the syslogd daemon?

You have made changes to the /etc/syslog.conf file. Which of the following commands will cause these changes to be implemented without having to reboot your computer? Choose one:

- a. kill SIGHINT `cat /var/run/syslogd.pid`
- b. kill SIGHUP `cat /var/run/syslogd.pid`
- c. kill SIGHUP syslogd
- d. kill SIGHINT syslogd

Which of the following lines in your /etc/syslog.conf file will cause all critical messages to be logged to the file /var/log/critmessages? Choose one:

- a. *.=crit /var/log/critmessages
- b. *crit /var/log/critmessages
- c. *=crit /var/log/critmessages
- d. *.crit /var/log/critmessages

You wish to have all mail messages except those of type info to the /var/log/mailmessages file.

Which of the following lines in your /etc/syslogd.conf file would accomplish this? Choose one:

- a. mail.*;mail!=info /var/log/mailmessages
- b. mail.*;mail.=info /var/log/mailmessages
- c. mail.*;mail.info /var/log/mailmessages
- d. mail.*;mail.!info /var/log/mailmessages

What is the name and path of the main system log?

Which log contains information on currently logged in users? Choose one:

- a. /var/log/utmp
- b. /var/log/wtmp
- c. /var/log/lastlog

d. /var/log/messages

You have been assigned the task of determining if there are any user accounts defined on your system that have not been used during the last three months. Which log file should you examine to determine this information? Choose one:

- a. /var/log/wtmp
- b. /var/log/lastlog
- c. /var/log/utmp
- d. /var/log/messages

You have been told to configure a method of rotating log files on your system. Which of the following factors do you not need to consider? Choose one:

- a. date and time of messages
- b. log size
- c. frequency of rotation
- d. amount of available disk space

What utility can you use to automate rotation of logs?

You wish to rotate all your logs weekly except for the /var/log/wtmp log which you wish to rotate monthly. How could you accomplish this. Choose one:

- a. Assign a global option to rotate all logs weekly and a local option to rotate the /var/log/wtmp log monthly.
- b. Assign a local option to rotate all logs weekly and a global option to rotate the /var/log/wtmp log monthly.
- c. Move the /var/log/wtmp log to a different directory. Run logrotate against the new location.
- d. Configure logrotate to not rotate the /var/log/wtmp log. Rotate it manually every month.

You have configured logrotate to rotate your logs weekly and keep them for eight weeks. You are running out of disk space. What should you do? Choose one:

- a. Quit using logrotate and manually save old logs to another location.
- b. Reconfigure logrotate to only save logs for four weeks.
- c. Configure logrotate to save old files to another location.
- d. Use the prerotate command to run a script to move the older logs to another location.

[+ Top Linux Admin Interview Questions and answers asked in TOP IT industries : Question Bank 04](#) By [Ashwin](#) 05 March 2010 at 6:15 pm and have [4 Comments](#)

Linux Admin Interview Questions and Answers

All Linux Administration questions, Linux Networking questions, MYSQL questions, bash, postfix questions, sendmail questions, ftp server questions

Questions BANK 04

You enter the command cat MyFile | sort > DirList & and the operating system displays [4] 3499 What does this mean? Choose one

- a. This is job number 4 and the PID of the sort command is 3499.

- b. This is job number 4 and the PID of the job is 3499.
- c. This is job number 3499 and the PID of the cat command is 4.
- d. This is job number 4 and the PID of the cat command is 3499.

You attempt to log out but receive an error message that you cannot. When you issue the jobs command, you see a process that is running in the background. How can you fix this so that you can logout? Choose one

- a. Issue the kill command with the PID of each running command of the pipeline as an argument.
- b. Issue the kill command with the job number as an argument.
- c. Issue the kill command with the PID of the last command as an argument.
- d. Issue the kill command without any arguments.

You have been given the job of administering a new server. It houses a database used by the sales people. This information is changed frequently and is not duplicated anywhere else. What should you do to ensure that this information is not lost? Choose one

- a. Create a backup strategy that includes backing up this information at least daily.
- b. Prepare a proposal to purchase a backup server
- c. Recommend that the server be made part of a cluster.
- d. Install an additional hard drive in the server.

When planning your backup strategy you need to consider how often you will perform a backup, how much time the backup takes and what media you will use. What other factor must you consider when planning your backup strategy? _____

Many factors are taken into account when planning a backup strategy. The one most important one is how often does the file _____.

Which one of the following factors does not play a role in choosing the type of backup media to use? Choose one:

- a. How frequently a file changes
- b. How long you need to retain the backup
- c. How much data needs to be backed up
- d. How frequently the backed up data needs to be accessed

When you only back up one partition, this is called a _____ backup. Choose one

- a. Differential
- b. Full
- c. Partial
- d. Copy

When you back up only the files that have changed since the last backup, this is called a _____ backup. Choose one

- a. Partial
- b. Differential
- c. Full
- d. Copy

The easiest, most basic form of backing up a file is to _____ it to another location.

When is the most important time to restore a file from your backup? Choose one

- a. On a regular scheduled basis to verify that the data is available.

- b. When the system crashes.
- c. When a user inadvertently loses a file.
- d. When your boss asks to see how restoring a file works.

As a system administrator, you are instructed to backup all the users' home directories. Which of the following commands would accomplish this? Choose one

- a. tar rf usersbkup home/*
- b. tar cf usersbkup home/*
- c. tar cbf usersbkup home/*
- d. tar rvf usersbkup home/*

What is wrong with the following command? tar cvfb / /dev/tape 20 Choose one

- a. You cannot use the c option with the b option.
- b. The correct line should be tar -cvfb / /dev/tape20.
- c. The arguments are not in the same order as the corresponding modifiers.
- d. The files to be backed up have not been specified.

You need to view the contents of the tarfile called MyBackup.tar. What command would you use?

After creating a backup of the users' home directories called backup.cpio you are asked to restore a file called memo.ben. What command should you type?

You want to create a compressed backup of the users' home directories so you issue the command gzip /home/* backup.gz but it fails. The reason that it failed is that gzip will only compress one _____ at a time.

You want to create a compressed backup of the users' home directories. What utility should you use?

You routinely compress old log files. You now need to examine a log from two months ago. In order to view its contents without first having to decompress it, use the _____ utility.

+ Top Linux Admin Interview Questions asked in TOP IT industries : Question Bank 3 By [Ashwin](#) 05 March 2010 at 3:20 pm and have [No Comments](#)

Linux Admin Interview Questions and Answers

Questions consists of Linux Admin Interview Questions and Answers, Linux Administration questions, Linux Networking questions, MYSQL questions, bash, postfix questions, sendmail questions, ftp server questions

Questions BANK 03

When typing at the command line, the default editor is the _____ library.

You typed the following at the command line ls -al /home/ hadden. What key strokes would you enter to remove the space between the '/' and 'hadden' without having to retype the entire line?

Choose one

- a. Ctrl-B, Del
- b. Esc-b, Del
- c. Esc-Del, Del
- d. Ctrl-b, Del

You would like to temporarily change your command line editor to be vi. What command should you type to change it?

After experimenting with vi as your command line editor, you decide that you want to have vi your default editor every time you log in. What would be the appropriate way to do this? Choose one

- a. Change the /etc/inputrc file
- b. Change the /etc/profile file
- c. Change the ~/.inputrc file
- d. Change the ~/.profile file

You have to type your name and title frequently throughout the day and would like to decrease the number of key strokes you use to type this. Which one of your configuration files would you edit to bind this information to one of the function keys?

In your present working directory, you have the files maryletter memo1

MyTelephoneandAddressBook What is the fewest number of keys you can type to open the file

MyTelephoneandAddressBook with vi? Choose one

- a. 6
- b. 28
- c. 25
- d. 4

A variable that you can name and assign a value to is called a _____ variable.

You have installed a new application but when you type in the command to start it you get the error message Command not found. What do you need to do to fix this problem? Choose one

- a. Add the directory containing the application to your path
- b. Specify the directory's name whenever you run the application
- c. Verify that the execute permission has been applied to the command.
- d. Give everyone read, write and execute permission to the application's directory.

You telnet into several of your servers simultaneously. During the day, you sometimes get confused as to which telnet session is connected to which server. Which of the following commands in your .profile file would make it obvious to which server you are attached? Choose one

- a. PS1='\h: \w'
- b. PS1='\s: \W'
- c. PS1='\!: \t'
- d. PS1='\a: \n'

Which of the following environment variables determines your working directory at the completion of a successful login? Choose one

- a. HOME
- b. BASH_ENV
- c. PWD
- d. BLENDERDIR

Every time you attempt to delete a file using the rm utility, the operating system prompts you for confirmation. You know that this is not the customary behavior for the rm command. What is wrong?

Choose one

- a. rm has been aliased as rm -i
- b. The version of rm installed on your system is incorrect.
- c. This is the normal behavior of the newest version of rm.
- d. There is an incorrect link on your system.

You are running out of space in your home directory. While looking for files to delete or compress you find a large file called .bash_history and delete it. A few days later, it is back and as large as before. What do you need to do to ensure that its size is smaller? Choose one

- a. Set the HISTFILESIZE variable to a smaller number.
- b. Set the HISTSIZE to a smaller number.
- c. Set the NOHISTFILE variable to true.
- d. Set the HISTAPPEND variable to true.

In order to display the last five commands you have entered using the history command, you would type _____.

In order to display the last five commands you have entered using the fc command, you would type _____.

You previously ran the find command to locate a particular file. You want to run that command again. What would be the quickest way to do this? Choose one

- a. fc -l find fc n
- b. history -l find history n
- c. Retype the command
- d. fc -n find

Using command substitution, how would you display the value of the present working directory?

Choose one

- a. echo \$(pwd)
- b. echo pwd
- c. \$pwd
- d. pwd | echo

You need to search the entire directory structure to locate a specific file. How could you do this and still be able to run other commands while the find command is still searching for your file? Choose one

- a. find / -name filename &
- b. find / -name filename
- c. bg find / -name filename
- d. &find / -name filename &

In order to create a file called DirContents containing the contents of the /etc directory you would type _____.

What would be displayed as the result of issuing the command ps ef? Choose one

- a. A listing of the user's running processes formatted as a tree.
- b. A listing of the stopped processes

- c. A listing of all the running processes formatted as a tree.
- d. A listing of all system processes formatted as a tree.

What utility can you use to show a dynamic listing of running processes? _____

The top utility can be used to change the priority of a running process? Another utility that can also be used to change priority is _____?

What key combination can you press to suspend a running job and place it in the background?

You issue the command jobs and receive the following output: [1]- Stopped (tty output) pine [2]+ Stopped (tty output) MyScript How would you bring the MyScript process to the foreground? Choose one:

- a. fg %2
- b. ctrl-c
- c. fg MyScript
- d. ctrl-z

+ Top Linux Admin Interview Questions asked in TOP IT industries By [Ashwin](#) 05 March 2010 at 2:54 pm and have [3 Comments](#)

Hey Guys, AFRAID of interviews

DONT Worry prepare the following questions before Interview. I have managed to prepare some questions sets. Practice this and i'm sure you would crack a L1/L2/L3 Linux Administrator Job Easily. All the questions are taken from the top IT brands interviews.

Linux Admin Interview Questions and Answers, Linux Administration questions, Linux Networking questions, MYSQL questions, bash, postfix questions, sendmail questions, ftp server questions

Questions BANK 01

You attempt to use shadow passwords but are unsuccessful. What characteristic of the /etc/passwd file may cause this? Choose one:

- a. The login command is missing.
- b. The username is too long.
- c. The password field is blank.
- d. The password field is prefaced by an asterick.

You create a new user account by adding the following line to your /etc/passwd file.

bobm:baddog:501:501:Bob Morris:/home/bobm:/bin/bash Bob calls you and tells you that he cannot logon. You verify that he is using the correct username and password. What is the problem? Choose one:

- a. The UID and GID cannot be identical.
- b. You cannot have spaces in the line unless they are surrounded with double quotes.
- c. You cannot directly enter the password; rather you have to use the passwd command to assign a password to the user.
- d. The username is too short, it must be at least six characters long.

Which of the following tasks is not necessary when creating a new user by editing the /etc/passwd file? Choose one:

a. Create a link from the user's home directory to the shell the user will use.

b. Create the user's home directory

c. Use the passwd command to assign a password to the account.

d. Add the user to the specified group.

You create a new user by adding the following line to the /etc/passwd file bobm::501:501:Bob Morris:/home/bobm:/bin/bash You then create the user's home directory and use the passwd command to set his password. However, the user calls you and says that he cannot log on. What is the problem? Choose one:

a. The user did not change his password.

b. bobm does not have permission to /home/bobm.

c. The user did not type his username in all caps.

d. You cannot leave the password field blank when creating a new user.

When using useradd to create a new user account, which of the following tasks is not done automatically. Choose one:

a. Assign a UID.

b. Assign a default shell.

c. Create the user's home directory.

d. Define the user's home directory.

You issue the following command useradd -m bobm But the user cannot logon. What is the problem? Choose one:

a. You need to assign a password to bobm's account using the passwd command.

b. You need to create bobm's home directory and set the appropriate permissions.

c. You need to edit the /etc/passwd file and assign a shell for bobm's account.

d. The username must be at least five characters long.

You have created special configuration files that you want copied to each user's home directories when creating new user accounts. You copy the files to /etc/skel. Which of the following commands will make this happen? Choose one:

a. useradd -m username

b. useradd -mk username

c. useradd -k username

d. useradd -Dk username

Mary has recently gotten married and wants to change her username from mstone to mknight.

Which of the following commands should you run to accomplish this? Choose one:

a. usermod -l mknight mstone

b. usermod -l mstone mknight

c. usermod -u mknight mstone

d. usermod -u mstone mknight

After bob leaves the company you issue the command userdel bob. Although his entry in the /etc/passwd file has been deleted, his home directory is still there. What command could you have used to make sure that his home directory was also deleted? Choose one:

a. userdel -m bob

b. userdel -u bob

c. userdel -l bob

d. userdel -r bob

All groups are defined in the /etc/group file. Each entry contains four fields in the following order.

Choose one:

- a. groupname, password, GID, member list
- b. GID, groupname, password, member list
- c. groupname, GID, password, member list
- d. GID, member list, groupname, password

You need to create a new group called sales with Bob, Mary and Joe as members. Which of the following would accomplish this? Choose one:

- a. Add the following line to the /etc/group file: sales:44:bob,mary,joe
- b. Issue the command groupadd sales.
- c. Issue the command groupadd -a sales bob,mary,joe
- d. Add the following line to the /etc/group file: sales::44:bob,mary,joe

Linux admin interview questions

By [admin](#) | March 4, 2005

1. How do you take a single line of input from the user in a shell script?
2. Write a script to convert all DOS style backslashes to UNIX style slashes in a list of files.
3. Write a regular expression (or sed script) to replace all occurrences of the letter 'f', followed by any number of characters, followed by the letter 'a', followed by one or more numeric characters, followed by the letter 'n', and replace what's found with the string "UNIX".
4. Write a script to list all the differences between two directories.
5. Write a program in any language you choose, to reverse a file.
6. What are the fields of the password file?
7. What does a plus at the beginning of a line in the password file signify?
8. Using the man pages, find the correct ioctl to send console output to an arbitrary pty.
9. What is an MX record?
10. What is the prom command on a Sun that shows the SCSI devices?
11. What is the factory default SCSI target for /dev/sd0?
12. Where is that value controlled?
13. What happens to a child process that dies and has no parent process to wait for it and what's bad about this?
14. What's wrong with sendmail? What would you fix?
15. What command do you run to check file system consistency?
16. What's wrong with running shutdown on a network?
17. What can be wrong with setuid scripts?
18. What value does spawn return?
19. Write a script to send mail from three other machines on the network to root at the machine you're on. Use a 'here doc', but include in the mail message the name of the machine the mail is sent from and the disk utilization statistics on each machine?
20. Why can't root just cd to someone's home directory and run a program called a.out sitting there by typing "a.out", and why is this good?
21. What is the difference between UDP and TCP?
22. What is DNS?
23. What does nslookup do?
24. How do you create a swapfile?
25. How would you check the route table on a workstation/server?
26. How do you find which ypmaster you are bound to?
27. How do you fix a problem where a printer will cutoff anything over 1MB?
28. What is the largest file system size in solaris? SunOS?
29. What are the different RAID levels?

