

Exam: 117-102

Title : LPI 102 General Linux, Part 2

Ver : 11.01.04

Note:

Section A has 205 questions

Section B has 110 questions.

The total number of questions is 315.

Section A

OUESTION 1

On a default Linux system, what file system type does the dump command act upon?

A. Ext2

B. UFS

C. JFS

D. XFS

E. ReiserFS

Answer: A

QUESTION 2

Your machine has two working NIC's with proper addresses. You want to split your network into two new subnets. What single command will accomplish this?

A. ifconfig

B. route

C. default

D. netstat

E. None of the choices

Answer: A

QUESTION 3

Which file system should never be backed up, and therefore never have to be restored?

A. ufs

B. usr

C. tmp

D. home

E. swap

Answer: E

QUESTION 4

Which directory tree are you the least likely to backup or restore?

- A. /tmp
- B. /var
- C. /proc
- D. /usr
- E. /usr

Answer: C

QUESTION 5

What command will verify the syntax of a hosts allow and hosts deny file combination?

- A. tcpdchk
- B. verify --tcp
- C. ipswitch
- D. tcpdump
- E. tcpdmatch

Answer: A

QUESTION 6

How can you enable onscreen (non-printing) numbers in a vi session?

- A. :set num
- B.:se nu
- C. :set -o number
- D. :set +o num
- E. None of the choices

Answer: B

OUESTION 7

When starting vi with the file nohup.out, which of the following will enable onscreen numbers?

- A. vi +/set num nohup.out
- B. vi +"se nu" nohup.out
- C. vi /+"set number" nohup.out
- D. vi +":set num" nohup.out
- E. echo "set numb" | vi nohup.out

Answer: B

QUESTION 8

What command will set a regular users password to force changing it every 60 days? Choose all that apply.

A. passwd -x 60 user1

- B. chage -M 60 user1
- C. passwd +x 60 user1
- D. useradd -e 60 user1
- E. usermod -f 60 user1

Answer: A, B

QUESTION 9

Which of the following commands will flush all print jobs on all configured queues of the system?

- A. lprm -a all
- B. lprm -all
- C. lprm -a *
- D. lpflush -all

Answer: A

OUESTION 10

Your /etc/passwd file appears to have approximately 1/2 shadow passwords and 1/2 standard unix encrypted passwords. What utility would you most likely run again to fix this?

- A. pwconv
- B. passconvert
- C. useradd -conv
- D. pwhash
- E. passwd -fix

Answer: A

QUESTION 11

Your server has two fully functional NIC's with correct IP configuration. The server is not forwarding traffic between the NIC's. Which command string will set the cards to forward properly?

- A. setparam $1 > \frac{\text{proc/sys/net/ipv4/ip}}{\text{autoconfig}}$
- B. echo 1 > /proc/sys/net/ipv4/ip forward
- C. set \$=1 /proc/sys/net/ipv4/route
- D. cat \$1 > /proc/sys/net/ethernet
- E. vi +/1 /proc/sys/net/unix/max dgram qlen

Answer: B

OUESTION 12

Which of the following are valid commands to affect your system's printing?

- A. lpq
- B. lprm

C. lpstatus D. lpr E. lpio Answer: A, B, D

QUESTION 13

What configuration file is used for settings and conversion parameters for the ftp daemon?

- A. ftpusers
- B. ftpconvert
- C. ftpconversions
- D. in.ftpd
- E. ftpdefaults

Answer: C

QUESTION 14

Which two commands share the same database for retrieving information?

- A. whatis
- B. whereis
- C. apropos
- D. find
- E. man

Answer: A, C

QUESTION 15

What command will show only complete word matches for a search term?

- A. whatis
- B. apropos
- C. locate
- D. find
- E. whereis

Answer: A

QUESTION 16

What command will show partial word matches for a search term?

- A. apropos
- B. locate
- C. whereis
- D. whatis

E. find

Answer: A

QUESTION 17

What command is the functional equivalent of the command "man -k searchterm"?

- A. apropos searchterm
- B. whatis searchterm
- C. locate searchterm
- D. find / -name searchterm
- E. None of the selections

Answer: A

QUESTION 18

What command is the functional equivalent of the command "man -f searchterm"?

- A. whatis searchterm
- B. apropos searchterm
- C. locate searchterm
- D. find / -name searchterm
- E. None of the selections

Answer: A

QUESTION 19

Where can you specify options that affect the booting of the system?

- A. /etc/lilo.conf
- B. boot= prompt
- C. linux:
- D. init 3
- E. init 5

Answer: A, B

OUESTION 20

Which commands will print two copies of the file to the default printer? Choose all that apply.

- A. cat hosts | lpr -#2
- B. lpr -K2 hosts
- C. lpr -P -count 2 hosts
- D. cat hosts > lpr; cat hosts > lpr
- E. for 1 in 2 lpr hosts

Answer: A, B

QUESTION 21

On a default install of a Linux server, regardless of the distribution version, what are the easiest methods to disable telnet, but not uninstall or remove the service? Choose two.

- A. Comment telnet out of the /etc/inetd.conf file
- B. Delete the /etc/rc.d/init.d/telnet file
- C. Rename all SXXtelnet links in the /etc/rc or /etc/rc.d directories
- D. Run "chmod 554 /etc/xinetd.d/telnet"
- E. Nothing, it's not enabled by default

Answer: A, E

QUESTION 22

Which daemon or service can be configured as a non-root user?

- A. cron
- B. ntp
- C. lpr
- D. nmbd
- E. slocate

Answer: A

QUESTION 23

Which of the following options will speed up traceroute for distant network queries?

- A. -n
- В. -р
- C. -0
- D. -t
- E. -q

Answer: A

QUESTION 24

What command could you use to confirm function of a ppp connection before establishing it?

- A. minicom
- B. hyperterminal
- C. setserial
- D. modemset
- E. None of the choices

Answer: A

QUESTION 25

What file on a system contains a list of hosts that can't connect to the machine's services?

- A. /etc/hosts/denial
- B. /etc/hosts.deny
- C. /etc/host.notallow
- D. /etc/inetd.conf
- E. /etc/hosts.not

Answer: B

QUESTION 26

Which of the following IP address ranges are considered private, according to RFC 1918? Choose all that apply.

- A. 10.0.0.0 10.255.255.255
- B. 192.168.0.0 192.168.255.255
- C. 172.16.0.0 172.31.255.255
- D. 191.168.16.0 192.168.31.255
- E. 172.16.0.0 172.16.255.255

Answer: A, B, C

QUESTION 27

Which protocol is used for the majority of the ping command's actions?

- A. ICMP
- B. UDP
- C. TCP
- D. NDP
- E. NCP

Answer: A

QUESTION 28

What modprobe option will cause inactive kernel modules to be unloaded?

- A. autoclean
- B. inactive
- C. remove
- D. timeout
- E. holdoff

Answer: A

QUESTION 29

Select all of the protocols that are supported by the Linux implementation of ppp.

- A. chap
- B. mschap
- C. pap
- D. spap
- E. eap

Answer: A, B, C

QUESTION 30

What command with options will cause the redirection symbol (>) to fail to overwrite the contents of an existing file?

- A. set -o noclobber
- B. set +o nooverwrite
- C. export OVERWRITE=no
- D. alias >='!>'
- E. None of the choices

Answer: A

QUESTION 31

Where can the lilo command install the boot menu and information? Choose all that apply.

- A. Master Boot Record
- B. BIOS
- C. First Sector of a Partition
- D. BootBlk
- E. Boot Prom

Answer: A, C

OUESTION 32

Which of the following is not a valid make command during a kernel recompile?

- A. make dep
- B. make clean
- C. make xconfig
- D. make modules
- E. make gzlilo

Answer: E

QUESTION 33

Which parameters should appear in a valid /etc/printcap file to allow a local printer queue to point to another machine's print queue? Choose two.

- A. rm
- B. rp
- C. remoteip
- D. netprinter
- E. netip

Answer: A, B

QUESTION 34

Which of the following commands will print the file putty on the printer hplaserj? Choose all that apply.

- A. lpr -P hplaserj -F putty
- B. lpr -Phplaserj putty
- C. lpc printer=hplaserj file=putty
- D. lpr -p hplaserj putty
- E. lpr -P hplaserj putty

Answer: B, E

QUESTION 35

Which of the following services would you be least likely to configure to be governed over by the Internet Super Server?

- A. ftp
- B. telnet
- C. ssh
- D. finger
- E. bind

Answer: C

QUESTION 36

What ppp option governs how long an interrupted connection will remain down before it attempts to reconnect?

- A. holddown
- B. holdoff
- C. inactive

D. delay

E. wait

Answer: B

OUESTION 37

What files affect the functioning of TCP Wrappers? Choose Two.

A. /etc/hosts.deny

B. /etc/nsswitch.conf

C. /etc/security/authconfig

D. /etc/default/clients

E. /etc/hosts.allow

Answer: A, E

QUESTION 38

You are not using the WINS service on your network, but need to provide NETBIOS resolution to your hosts. What is the name of the daemon that provides these services on a Linux server?

A. nmbd

B. dns

C. winsd

D. lmhostsd

E. smbd

Answer: A

QUESTION 39

Select from the list below the daemons that are present on a standard Linux server to support routing. Choose all that apply.

A. gated

B. ripd

C. routed

D. ospfd

E. bgpd

Answer: B, C, D, E

QUESTION 40

You are performing an onsite security inspection of division of your company. On an Apache server, you want to determine what files are needed and which can be removed from the /etc/httpd folder. Which of the following are possibly valid Apache configuration files? Choose all that apply.

A. httpd.conf

- B. apached.conf
- C. srm.conf
- D. access.conf
- E. in.http.conf

Answer: A, C, D

QUESTION 41

In order to allow a Win95 host to resolve the name of and map network drives to your Linux server, what services should be running? Choose Two.

- A. nmbd
- B. smbd
- C. named
- D. routed
- E. winsd

Answer: A, B

QUESTION 42

What is the simplest method to connect a Win98 host to a Linux Server? Choose all that apply.

- A. Velcro
- B. Samba
- C. NFS
- D. DNS
- E. WINS

Answer: A, B

OUESTION 43

What files affect the name resolution functionality of a Linux host? Choose Three.

- A. /etc/resolv.conf
- B. /etc/hosts
- C. /etc/default/names
- D. /etc/nsswitch.conf
- E. /etc/inet/hosts

Answer: A, B, D

OUESTION 44

What is true about the root user and NFS?

- A. NFS shares don't allow root access by default
- B. NFS automatically masks out share permissions

- C. NFS automatically maps all root UID's to the local user "rootsquash"
- D. NFS ignores all users with a UID of 0 and a GID of 0
- E. NFS pays no attention whatsoever to security

Answer: A

QUESTION 45

Where are the default settings for the useradd command kept?

- A. /etc/default/useradd
- B. /etc/sysconfig/useradd.cfg
- C. /etc/.useradd
- D. /etc/defaults/useradd
- E. /etc/login.defs

Answer: A

OUESTION 46

What two files acting together make up the login environment for a user on a default install of Linux?

- A. /etc/profile
- B. /etc/bashrc
- C. /etc/.login
- D. ~/.bash profile
- E. /etc/.profile

Answer: A, D

QUESTION 47

What protocol will allow you to keep accurate time on your hosts?

- A. ntp
- B. nntp
- C. ncftp
- D. inn
- E. ntime

Answer: A

OUESTION 48

What will the following line in the /etc/exports file do?

/data snowblower(rw) badhost (ro)

- A. Give snowblower rw access to the data share, deny badhost any access, and allow ro for all other hosts
- B. Give snowblower rw access to the data share, give badhost ro access to share and deny all others

- C. Give snowblower no access to the data share, give badhost rw access and set ro access for all others
- D. Cause a syntax error

Answer: A

QUESTION 49

You've just finished editing a new entry in the /etc/exports file. Which of the following will cause the changes to take effect without interrupting current connected users or rebooting the machine? Choose all that apply.

- A. exportfs -a
- B. /etc/rc.d/init.d/nfs restart
- C. service nfs restart
- D. kill -1 HUP nfs
- E. init 1

Answer: A

QUESTION 50

What system file contains definitions of well known ports, their associated services and protocols?

- A. /etc/services
- B. /etc/sysconfig/network-scripts
- C. /etc/services.conf
- D. /etc/inet/hosts
- E. None of the choices

Answer: A

QUESTION 51

What file should be edited to make the system aware of newly added library files?

- A. /etc/modules.conf
- B. /etc/conf.modules
- C. /etc/ld.so.conf
- D. /etc/ld.so.cache
- E. /etc/LD LIBRARY PATH.conf

Answer: C

QUESTION 52

What is the binary conversion of the IP address 192.168.1.10?

- A. 11000000.10101000.00000001.00001010
- B. 01101010.11000100.10101000.00000001
- C. 00000001.00001010.11000000.10101000

- D. 10101000.00000001.00001010.11000000
- E. None of the choices

Answer: A

OUESTION 53

Your investigation of a system turns up a file that contains the line below:

find /home -iname .rhosts -exec rm -f {} \;

What is the purpose of this script?

- A. To enhance system security
- B. To remove all program error dumps
- C. To remove all temporary files in the user's home directories
- D. To reset the configuration for the rsh and rexec utilities

Answer: A

OUESTION 54

What command will convert your shadow password file to md5 compatible passwords?

- A. passconv
- B. pwconv
- C. mdconv
- D. mdsum
- E. passwd --convert

Answer: B

QUESTION 55

Your machine's IP address used to function, but it's only got the localhost "lo" entry now. What three client-mode commands could you possibly use to get a new DHCP address?

- A. dhcpd
- B. ipconfig
- C. dhclient
- D. pump
- E. dhcpcd

Answer: C, D, E

OUESTION 56

Which two services resolve Netbios names to IP addresses?

- A. WINS
- B. NetbiosSVC
- C. smbd

D. nmbd

E. DNS

Answer: A, D

QUESTION 57

Which daemon allows Linux to share it's file systems and printers with unmodified Windows clients?

- A. X Window
- B. nmbd
- C. smbd
- D. WINS
- E. NFS

Answer: C

QUESTION 58

What configuration files on a Linux Server can be configured to share file systems with clients? Choose Two.

- A. /etc/nmbd
- B. /etc/smbd
- C. /etc/smb/samba.conf
- D. /etc/smb.conf
- E. /etc/samba/smb.conf

Answer: D, E

QUESTION 59

What command is used to monitor connections to the SMB server?

- A. smbclient
- B. testparm
- C. smbstatus
- D. smbstat

Answer: C

QUESTION 60

Which of the following will run a file named myscript every 23 minutes past midnight every two hours?

- A. 23 0-23/2 * * * /myscript
- B. 23 */0-23 * * * /myscript
- C. 23 @2 * * * /myscript
- D. 11 2/0-23 * * * /myscript

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QUESTION 61

Which backup method resets the archive bit? Select all that apply.

- A. Full
- B. Incremental
- C. Differential
- D. Copy
- E. DirTree

Answer: A, B

QUESTION 62

Which backup method will require the minimum tapes to restore?

- A. Full
- B. Incremental
- C. Differential
- D. Copy
- E. DirTree

Answer: A

QUESTION 63

What is the command to map a Windows user ID to a Linux user ID for use with the Samba Server?

- A. smbuser
- B. smbpasswd
- C. smbadduser
- D. useraddsmb
- E. useradd

Answer: C

QUESTION 64

When using the PPP daemon make a connection, what option is set to configure it to use hardware flow control?

- A. crtscts
- B. rsync
- C. nsync
- D. connect

Answer: A

QUESTION 65

When using pppd which authentication protocol is the most secure?

A. clear text

B. PAP

C. CHAP

D. LAP

Answer: C

QUESTION 66

Your DNS server needs to be configured for speed and security. Choose the best answer.

- A. Disable inetd, run named standalone, only allow top on ports 25 and 53
- B. Disable inetd, run named standalone, only allow top on ports 25 and 110
- C. Enable inetd, run named as an inetd service, only allow top on ports 25 and 53
- D. Disable inetd, run named as a standalone on the apache server.

Answer: A

QUESTION 67

Shares can be configured for export via the NFS service by editing what file?

- A. /etc/exports
- B. /etc/export
- C. /etc/exportfs
- D. /etc/nfs/exports

Answer: A

QUESTION 68

A file exists on a server, but has no content. Users cannot submit jobs to an attached printer. Choose the correct file that must be edited to fix this problem.

- A. /etc/hosts
- B. /etc/hosts.allow
- C. /etc/host.deny
- D. /etc/hosts.lpd
- E. /var/spool/hosts.lpd

Answer: D

QUESTION 69

What does "make bzImage" do as opposed to "make zImage"?

- A. makes a bz encrypted kernel
- B. makes a kernel with a better compression ratio
- C. makes a kernel with built in gzip application
- D. nothing

Answer: B

QUESTION 70

In the following output, which is representative of the host performing gateway functions?

Destination	Gateway	Genmask	Flags	Met	ric Re	ef U	se Iface
10.3.3.0	192.168.1.1	255.255.255.255	UGH	0	0	0	eth0
192.168.1.0 *	255.255.255	5.0	U	0	0	0	eth0
192.168.77.0	* 255.255.25	55.0	U	0	0	0	vmnet1
127.0.0.0 * 2	55.0.0.0		U	0	0	0	lo
default 192.1	68.1.1 0.0.0.0)	UG	0	0	0	eth0

- A. The default gateway is on 192.168.77.0 network
- B. The current host is the also the default gateway
- C. Its eth0 interface is incorrectly configured
- D. The 192.168.1.1 is the default gateway

Answer: B

QUESTION 71

Select the files that are associated with TCP Wrappers. Choose all that apply.

- A. /etc/hosts
- B. /etc/hosts.allow
- C. /etc/hosts.deny
- D. /etc/allow.hosts
- E. /etc/allow.deny

Answer: B, C

QUESTION 72

Which file is responsible for configuring the inet daemon?

- A. /etc/inetd.conf
- B. /etc/xinetd.conf
- C. /etc/tcpd.conf
- D. /etc/inet.conf

Answer: A

QUESTION 73

Which option in the /etc/fstab file causes all users IDs to be mapped to the system's anonymous ID

when mounting a NFS mounted file system?

- A. no-root-squash
- B. all-squash
- C. all-id-squash
- D. root-squash

Answer: B

QUESTION 74

Which fstab option governs that all root ID are mapped to anonymous ID when mounting a NFS mounted file system?

- A. no-root-squash
- B. root-squash
- C. all-squash
- D. squash-root

Answer: B

OUESTION 75

What command would load the module msdos.o and all its dependancies?

- A. modinfo -a msdos
- B. Ismod -a msdos
- C. modprobe msdos
- D. insmod -d msdos

Answer: C

OUESTION 76

You have just added new modules to your system. What command would you execute to rebuild the modules.dep file?

- A. depmod --rebuild
- B. update-dependancies
- C. depmod -a
- D. insmod -dependancies

Answer: C

OUESTION 77

Which port is used for DNS

- A. 110
- B. 21

- C. 23
- D. 52
- E. 53

Answer: E

QUESTION 78

Which ports are used for FTP data and control? Choose Two.

- A. 20
- B. 23
- C. 22
- D. 21
- E. 25

Answer: A, D

QUESTION 79

What command would rebuild the ld.so.cache file

- A. ldd
- B. ldconfig
- C. ld.so.cache -rebuild
- D. ld

Answer: B

OUESTION 80

On a debian system which of the following would build a boot disk

- A. mkboot /dev/floppy
- B. makeboot --device /dev/fd0 2.4.18-12
- C. mkboot --device /dev/fd0 2.4.18-12
- D. mkboot/boot/vmlinux-2.4.18-12
- E. mkbootdisk /boot/vmlinux-2.4.18-12

Answer: D

QUESTION 81

What configuration file and directive will alter your apache server IP and or port that it listens to?

- A. Port
- B. IPAddress
- C. Listen
- D. MinSpareServers

Answer: C
QUESTION 82 What Apache directive must you change when using inetd to control your Apache server?
A. ServerType B. ServerInetd C. InetServer D. StartServer E. ServerMethod
Answer: A
QUESTION 83 Which Apache Directive specifies the location of the HTTP documents?
A. RootDocument B. ServerRoot C. DocumentRoot D. RootServer E. DocPath
Answer: C
QUESTION 84 What command can be used to shut down the Apache server gracefully
A. apacheshut B. apachectl C. apachestop D. apachestart
Answer: B
QUESTION 85 What is the recommended setting for StartServers in a medium sized Apache installation?
A. 5 B. 10 C. 15

D. 20

Answer: B

OUESTION 86

Your server logfile shows repeated connections to TCP port 143, What service is being accessed?

A. smtp

B. imap

C. pop3

D. pop2

E. nmbd

Answer: B

QUESTION 87

To learn more about the management or ownership of a website, what's the best utility to use?

A. tracert

B. traceroute

C. whois

D. ping

E. telnet

Answer: C

QUESTION 88

You have a Linux system routing 3 networks through 3 separate NICs and are having trouble with your IP forwarding. What file would you check to ensure that IP forwarding is enabled?

A. /etc/defaultrouter

B. /proc/net/tcp

C. /proc/sys/net/ipv4/ip forward

D. /var/log/messages

Answer: C

OUESTION 89

What command would cause a print job to be printed next regardless of its current position in the queue.

A. lpc topq

B. lpc -t

C. lpq -t

D. lpc move

E. lpq --next

Answer: A

Which two files are responsible for allowing users to execute cron jobs?

QUESTION 90

A. /etc/cron.allow
B. /var/spool/cron.allow
C. /var/spool/cron.allow
D. /etc/cron.deny
Answer: A, D
QUESTION 91
What file must you create in your home directory in order to enable mail forwarding?
Aredirect
Bforward
Cplan
Dmail
E. None of the choices
Answer: B
QUESTION 92
What command will tell you which groups you belong to?
Answer: groups
QUESTION 93
The correct crontab entry in the minutes column to create a command in cron that runs every two minutes would be
Answer: */2
QUESTION 94
What is a filesystem type the dump utility can work with?
Answer: ext2
QUESTION 95
What one filesystem should you never restore (and therefore not backup):
Answer: swap
QUESTION 96
You use the public NTP server time.nist.gov to make sure your system clock is accurate before using it
to adjust your hardware clock.

Actualtests.com - The Power of Knowing

Complete the following command to accomplish this:

time.nist.gov
Answer: server
QUESTION 97 To slave your NTP daemon to an external source, you need to modify the variable in your /etc/ntp.conf file.
Answer:
QUESTION 98 NTP is used to synchronize the system with a central system resource.
Answer: clock
QUESTION 99 Which of the following IP networks does RFC1918 reserve for use on private intranets? (Choose two)
A. 10.0.0.0 B. 224.0.0.0 C. 199.14.0.0 D. 172.152.0.0 E. 192.168.0.0
Answer: A, E
QUESTION 100 The is used by the local host to determine which hosts are on the local subnet, and which hosts are on remote networks.
A. DNS B. ARP C. gateway D. netmask E. routing protocol
Answer: D
QUESTION 101 Which protocol is used by ping?
A. TCP B. UDP C. SMB D. ICMP E. OSPF

A newer	D
Answer	IJ

QUESTION 102

What is the command most often used for configuring network interfaces?

Answer: ifconfig

QUESTION 103

On a system using shadowed passwords, the correct permissions for /etc/passwd are _____- and the correct permission for /etc/shadow are _____-

- A. -rw-r----, -r-----
- B. -rw-r--r--, -r--r--
- C. -rw-r--r-, -r-----
- D. -rw-r--rw-, -r----r--
- E. -rw-----, -r-----

Answer: C

OUESTION 104

Identify the statement that would create a default route using a gateway of 192.168.1.1

- A. netstat-add default gw
- B. route default 192.168.1.1
- C. ip route default 192.168.1.1
- D. route add default gw 192.168.1.1
- E. ifconfig default gw 192.168.1.1 eth0

Answer: D

QUESTION 105

If you suspect that a gateway machine on your network has failed but you are unsure which machine, which command will help locate the problem?

- A. ps
- B. netstat
- C. nsloopup
- D. ifconfig
- E. traceroute

Answer: E

QUESTION 106

According to the PPP HOWTO which piece of software could help you test a modem?

- A. chat
- B. dhcpd
- C. minicom
- D. Hylafax
- E. netconfig

Answer: C

OUESTION 107

Suppose that the command netstat-a hangs for a long time without producing output.

You might suspect:

- A. A problem with NFS
- B. A problem with DNS.
- C. A problem with NIS.
- D. A problem with routing.
- E. That the netstat daemon has crashed.

Answer: E

OUESTION 108

You build and configured a bastion host to act as a router between two internal networks. Both eth0 and eth1 can see hosts on their respective networks, but the hosts on each network cannot see any hosts on the other network. After verifying that the hosts have the correct gateway route, you decide the bastion host does not have IP forwarding turned on.

To check this cat the file /proc/sys/net/ipv4/ to ensure it has a 1.

Answer: ip forward

QUESTION 109

When using /etc/ppp/peers/* files, which of the following is true:

- A. The /etc/ppp/options should be empty.
- B. Any user can run pppd from the command line.
- C. The dial-on-demand option cannot be used.
- D. You must use chap authentication.

Answer: A

OUESTION 110

You want a secure and fast DNS server that must also be quickly accessible remotely.

You should:

- A. Reject all udp packets.
- B. Reject all icmp packets.
- C. Reject all icmp untrusted-host packets.

- D. Disable inetd, run ssh and named as standalone daemons.
- E. Use topwrappers to only allow connections to ports 22 and 53.

Answer: D, E

QUESTION 111

To disable telnet service on a system, which action should you take?

- A. Put NONE in /etc/telnet.allow
- B. Remove the appropriate telnet init script.
- C. Put a line 'ALL:ALL' in /etc/hosts.deny
- D. Comment the telnet entry in /etc/inittab
- E. Comment the telnet entry in /etc/inetd.conf

Answer: E

QUESTION 112

In what file are the mail aliases kept for Sendmail? (Provide the complete path)

- A. /etc/aliases
- B. /etc/mailaliases
- C. /etc/sendmail.aliases
- D. /etc/sendmail/aliases
- E. /var/spool/mail/aliases

Answer: A

OUESTION 113

What directory be default contains the delivered mail for each user?

- A. ~/mail/
- B. /usr/mail/
- C. /var/mail/
- D. /var/mail/spool/
- E. /var/spool/mail/

Answer: E

QUESTION 114

Of the ways listed, which is the best way to temporarily suspend a user's ability to interactively login?

- A. Changing the user's UID.
- B. Changing the user's password.
- C. Changing the user's shell to /bin/false.
- D. Removing the user's entry in /etc/passwd.
- E. Placing the command logout in the user's profile.

Answer: C

QUESTION 115

How many spare server processes are required by Apache for the typical, low-to-moderate volume website?

A. 1

B. 50

C. 10

D. 200

Answer: C

QUESTION 116

Which of the following files typically are used to configure Apache? (Choose two)

A. srm.conf

B. www.conf

C. http.boot

D. httpd.conf

E. apache.conf

Answer: A, D

QUESTION 117

What file contains a list of directories for an NFS daemon to server to other systems? (Provide the complete answer)

Answer: /etc/exports

QUESTION 118

What are reverse DNS entries used for?

- A. Reverse DNS enable diagnostic commands like traceroute to work.
- B. Reverse DNS gives you information about the owner of the DNS entry.
- C. Reverse DNS provides the hostname for a particular numeric IP address.
- D. Reverse DNS provides geographical information about the DNS net location.

Answer: C

OUESTION 119

You decide to use xinetd instead of inetd.

What must be done in order to properly configure xinetd?

A. You must create a new configuration file for xinetd.

- B. You must add xinetd to /etc/services.
- C. You must add xinetd support to your tepwrappers configuration files.
- D. Nothing, xinetd uses the same configuration files as inetd.

Answer: D

QUESTION 120

To avoid spammers using your mail server to relay their messages, you need to . .

- A. Disable the relay control in /etc/aliases
- B. Set up a ruleset for this in /etc/sendmail.cf
- C. Set up relay control in your DNS's MX record.
- D. Recompile sendmail with the -NORELAY flag.

Answer: B

QUESTION 121

You have a standard Apache web server installation and want to make it respond to requests on port 8088. To do this, what configuration file do you need to change?

- A. None. This is the default port.
- B. /etc/httpd/apache.conf
- C. /etc/httpd/ports.conf
- D. /etc/httpd/httpd.conf
- E. /etc/httpd/access.conf

Answer: D

OUESTION 122

This is a line from the file /etc/export:

/product Certkiller (rw)

What does it mean?

- A. Only user Certkiller may access the filesystem /product when it is NFS mounted.
- B. This computer will mount the filesystem /product on Certkiller via NFS.
- C. The filesystem /product is exported for NFS mount to computer Certkiller .
- D. All NFS access to /product will use suid Certkiller.

Answer: C

OUESTION 123

These lines are taken from /etc/smb.conf:

workgroup = group1

guest account = nobody

What else is needed for this to work?

- A. nobody must be a valid group on the server.
- B. nobody must be a user name listed in /etc/passwd.
- C. group1 must be a valid group on the server.
- D. workgroup must be a valid group on the server.

Answer: B

QUESTION 124

What file determines the DNS servers used by your computer?

- A. /etc/hosts
- B. /etc/named.conf
- C. /etc/nsswitch.conf
- D. /etc/resolv.conf

Answer: D

OUESTION 125

In what file do you change default shell variables for all users?

- A. /etc/bashrc
- B. /etc/profile
- C. ~/.bash_profile
- D. /etc/skel/.bashrc
- E. /etc/skel/.bash profile

Answer: A

OUESTION 126

This is the file /etc/named.boot from the computer named tellus with IP address 128.66.12.10.

directory /etc

secondary Certkiller .com 128.66.12. Certkiller .com.hosts

secondary 66.128.IN-ADDR.ARPA 128.66.12.5 128.66.rev primary 0.0.127.IN-ADDR.ARPA named.local named.ca

From this file, you know that:

- A. tellus is the primary DNS server for domain Certkiller .com.
- B. There is a secondary DNS server for domain Certkiller .com at the IP address 128.66.12.5.
- C. tellus is a secondary DNS server for domain Certkiller .com and it downloads the domain data from the server at IP address 128.66.12.5.
- D. The server at IP address 128.66.12.5 is allowed to download domain and reverse lookup data from tellus.

Answer: B

QUESTION 127

The files /etc/hosts.allow, /etc/hosts.deny and /etc/nologin all exist on your computer, and the sshd daemon is running.

What will happen when users try to connect with ssh?

- A. Only connections from computers specified in /etc/hosts.allow will be allowed to log in.
- B. Only root will be allowed to log in.
- C. All users not specified in /etc/hosts.deny will be allowed to log in.
- D. No user will be allowed to log in.

Answer: B

OUESTION 128

The file /etc/ssh host key should be:

- A. world-readable
- B. readable to group sys
- C. readable to root only
- D. readable by all SSH users

Answer: D

QUESTION 129

You've just rebooted your server. Users complain that the server is refusing secure connections.

Which of the following is most likely causing this problem?

- A. The clients are not resolving the server name properly.
- B. sshd is not configured to start in the default runlevel.
- C. sshd is using tcpwrappers for security.
- D. The public keys have been corrupted on the server.
- E. The users need to restart their ssh-agent.

Answer: B

QUESTION 130

To increase system security, it is often desirable to run daemons for system services with non-root user ids.

Which one of the following services can be run as a non-root user?

- A. inetd
- B. named
- C. rlogind
- D. crond
- E. telnetd

Answer: D

QUESTION 131

You want to change the aging information in the /etc/shadow file.

What is the best utility to use to do this?

A. vi

B. emacs

C. usermod

D. modinfo

E. chage

Answer: E

QUESTION 132

You've been reviewing your security checklist and one of the items calls for reviewing the /etc/passwd file. You cat the file and notice that, while most users have an x in the second column, a few have a 14 character string in the second column.

What action, if any, should you take?

- A. No action. The users with an x have their accounts locked.
- B. Run pwconv to convert the unix passwords to shadow passwords.
- C. Use the passwd program to give the users with the hashed passwords new passwords.
- D. Use the passwd program to give the users with the x new passwords.
- E. No action. Linux knows how to handle the situation and allow user logins.

Answer: B

OUESTION 133

You've decided to convert from standard shadow passwords to MD5 passwords. You make the appropriate changes to the /etc/pam.d/ files.

What do you do next?

- A. Nothing, the passwords will be changed as users login and out.
- B. Nothing, users will be automatically prompted to change their passwords at the next login.
- C. You need to manually change all the passwords using the passwd program.
- D. Delete and recreate all the users.
- E. Change the /etc/pam.d files back because shadow passwords and MD5 passwords are incompatible.

Answer: C

OUESTION 134

If you need to view per-user disk space usage on a filesystem, the _____ command can provide that information if the kernel is built to support it.

Answer: du

QUESTION 135

What well-known service binds port 25 and is it required on all hosts?

- A. SNMP and it should be turned off if not needed.
- B. SMTP and it is a required service.
- C. SMTP and it is only required on MX hosts.
- D. SLPD and it is required if you run LDAP services.
- E. SSHD and it is required for secure logins.

Answer: C

OUESTION 136

How many cron fields are there for specifying the time to execute a cron job?

- A. 1
- B. 3
- C. 4
- D. 5
- E. 6

Answer: D

QUESTION 137

What command will unload a kernel module?

- A. rmmod
- B. unmod
- C. delmod
- D. modprobe
- E. unloadmod

Answer: A

QUESTION 138

When preparing to compile a new kernel, which of the following commands can be used to create the configuration file?

- A. make config
- B. make kernel
- C. ./configure
- D. make kernelconfig
- E. [Kernel Source Path]/Configure

Answer: A

QUESTION 139

Which of the following could be used to load kernel modules for a 2.4.x kernel?

- A. vi/proc/modules
- B. rmmod
- C. kmod
- D. depmod

Answer: D

OUESTION 140

You have just recompiled a new kernel and rebooted your system with the new kernel. Unfortunately you are getting "Can't locate module" error messages.

Which of the following is most likely to be the source of the problem?

- A. You copied the modules to the wrong directory.
- B. You did not configure modular support into the kernel.
- C. You did not run depmod after installing the modules.
- D. You dud not install the modules.

Answer: B

QUESTION 141

Some loadable kernel modules accept options at load time. This can be used to set interrupt or IO addresses, for example.

The place to set these options is?

- A. /etc/conf.modules
- B. /etc/lilo.conf
- C. /boot/System.map
- D. /etc/sysconfig
- E. /boot/module-info

Answer: E

QUESTION 142

Which command will display messages from the kernel that were output during the normal bootup sequence?

Answer: dmesg

OUESTION 143

You are having some trouble with a disk partition and you need to do maintenance on this partition but your users home directories are on it and several are logged in.

Which command would disconnect the users and allow you to safely execute maintenance tasks?

- A. telinit 1
- B. shutdown -r now
- C. killall -9 inetd
- D. /bin/netstop --maint
- E. /etc/rc.d/init.d/network stop

Answer: E

QUESTION 144

You need to change the default runlevel.

Which file do you need to edit? (Write the full path including the filename)

Answer: ./etc/inittab

QUESTION 145

Which of the following commands can be used to view kernel messages?

- A. less dmesg
- B. less /var/log/boot.log
- C. cat /proc/kernel |less
- D. cat /proc/dmesg

Answer: B

QUESTION 146

What program do you use to suspend a printer queue?

- A. lpr
- B. lpq
- C. lpc
- D. lpd
- E. lprm

Answer: C

QUESTION 147

Which crontab entry could be used to set the system time at regular intervals?

- A. 10 * * * date \$d\$t\$24
- B. 10 * * * settime \$d\$t\$24
- C. 10 * * * date<ntpl.digex.net
- D. 10 * * * /usr/sbin/runcron date <ntpl.digex.net
- E. 10 * * * /usr/sbin/ntpdate ntp1.digex.net> /dev/null2>&1

Answer: E

OUESTION 148

What would the following command do? cat hosts | lpr -#2

- A. Print the file hosts on the default printer two times.
- B. Categorize hosts and print the categorization as job #2.
- C. Output the file hosts to the line printer and assign it to the second printer queue.
- D. Print the hosts file to STDOUT and assign the current print job to printer tray number 2.

Answer: A

QUESTION 149

The hosts.lpd file provides:

- A. A list of network printer IP addresses.
- B. A listening of printers available on the local network.
- C. A listening of computers that have printer (lpd) daemons running.
- D. A listening of hosts allowed to use printers on the local machine.
- E. A list of hosts on the local network that are not allowed access to printers attached to the local machine.

Answer: D

QUESTION 150

Assume that on your system, there are man pages for both the command crontab and the configuration file for crontab.

What command would you use to access the man page for the crontab configuration file?

Answer: man crontab

OUESTION 151

You need to find all references in your system documentation to the word "copy".

Which of the following will best accomplish this task?

- A. man copy
- B. which copy
- C. locate copy
- D. apropos copy
- E. grep "copy" /usr/man/*

Answer: D

OUESTION 152

The main collection of Linux usenet newsgroups are found in which usenet hierarchy?

A. sys.linux

- B. comp.linux
- C. comp.os.linux
- D. comp.sys.linux
- E. comp.opsys.linux

Answer: C

QUESTION 153

What Internet based organization is primarily responsible for hosting and distributing the various Linux HOWTOs? (NOT the URL)

Answer: the linux documentation project

QUESTION 154

What file is displayed BEFORE users log in for users who log in to the machine locally?

- A. /etc/issue
- B. /etc/issue.net
- C /etc/motd
- D. /etc/local.banner

Answer: A

QUESTION 155

You want to find the man pages for utilities and tools related to PPP, but you don't know the name of the specific commands.

How can you get a list of man pages that contain information about PPP?

- A. whatis ppp
- B. man ppp
- C. apropos ppp
- D. mandb ppp

Answer: C

QUESTION 156

Which two files in a user's home directory are used to customize the bash environment?

- A. bash and .bashrc
- B. bashrc and-bash conf
- C. bashrc and bashprofile
- D. .bashrc and .bash profile
- E. bash.conf and .bash profile

Answer: D

OUESTION 157

What is considered the normal exit value of a process?

Answer: 0 (or Zero)

QUESTION 158

You just installed a new system, but before you create any new users you want to ensure they have a subdirectory bin/ in their home directory. To ensure this directory is automatically created each time you add a new user, in what subdirectory should you create the directory?

Answer: /etc/skel

OUESTION 159

What BASH environment variable will prevent you from overwriting a file with a ">" or ">>"?

A. set-o safe

B. set-o noglob

C. set-o noclobber

D. set-o append

E. set-o nooverwrite

Answer: C

QUESTION 160

You added /usr/local/bin to your PATH environment variable. Next you executed the command make, which calls gcc. This failed because gcc couldn't find the executable in /usr/local/bin that it needed.

To fix this, you should execute:

PATH allowable

Answer: export

QUESTION 161

Which of the following files has the correct permissions?

A. -rw--w-- 1 root root 369 Dec 22 22:38 /etc/shadow

B. -rwxrw-rw- 1 root root 369 Dec 22 22:38 /etc/shadow

C. -rw-r--r-- 1 root root 369 Dec 22 22:38 /etc/shadow

D. -rw----- 1 root root 369 Dec 22 22:38 /ect/shadow

Answer: D

QUESTION 162

You have a user whose account you want to disable but not remove.

What should you do?

- A. Edit /etc/gshadow and just remove his name.
- B. Edit /etc/passwd and change all numbers to 0.
- C. Edit /etc/shadow file and remove the last field.
- D. Edit /etc/passwd and insert an * after the first :.
- E. Edit /etc/group file and put a # sign in front of his name.

Answer: D

OUESTION 163

What is the purpose of the bash built-in export command?

- A. To allow disks to be mounted remotely.
- B. To run a command as a process in a sub-shell.
- C. To make the command history available to sub-shells.
- D. To setup environment variables for applications.
- E. To share NFS partitions for use by other systems on the network.

Answer: D

QUESTION 164

To correct crontab entry to execute the script chklog once per hour between 3 p.m. and 5 p.m. on Monday and Thursday each week is:

A. 0 3,4,5 * * 2,5 chklog

B. 0 3,4,5 * * 1,4 chklog

C. 0 15,16;17 * * 1,4 chklog

D. 0 15,16,17 1,4 * * chklog

E. * 15,16,17 * * 1,4 chklog

Answer: D

QUESTION 165

You want to make sure all Bash users, when they login, get access to a new program in /opt/bin (not currently in their PATH). To ensure this you would put the command: PATH=\$PATH:/opt/bin; export PATH in what file?

Answer: /etc/profile

QUESTION 166

You are working in a graphical environment and trying to configure PPP, but are having problems. You know that PPP uses the local2 facility for logging. To better watch what's going on, you decide to open an Xconsole session and sent all local2 messages there.

How should you configure /etc/syslog.conf to show you all messages sent from PPP?

A. local2.* /dev/console

B. local2.* /dev/xconsole

C. *.local2 /dev/xconsole

D * local2 *

Answer: A

OUESTION 167

Which of the following correctly describe the relationship between depmod and modprobe?

- A. depmod creates a dependency file for use by modprobe
- B. modprobe creates a dependency file for use by depmod
- C. they have no relationship
- D. they can replace each other

Answer: A

Explanation: Depmod creates a "Makefile"-like dependency file, based on the symbols it finds in the set of modules mentioned on the command line or from the directories specified in the configuration file. This dependency file is later used by modprobe to automatically load the correct module or stack of modules.

OUESTION 168

The normal use of depmod is to include which of the following lines in one of the files in /etc/rc.d so the correct module dependencies will be available after booting the system?

- A. /sbin/depmod -a
- B. /sbin/depmod -p
- C. /sbin/depmod -r
- D. /sbin/depmod -c

Answer: A

Explanation: As described by http://www.oreillynet.com/linux/cmd/d/depmod.html, depmod creates a dependency file for the modules given on the command line. This dependency file can be used by modprobe to automatically load the relevant modules. The normal use of depmod is to include the line /sbin/depmod -a in one of the files in /etc/rc.d so the correct module dependencies will be available after booting the system.

OUESTION 169

What command option of depmod allows you to print a list of all unresolved symbols?

- A. -e
- B. -1
- C. -i
- D. -a

Answer: A

Explanation: As described by http://www.oreillynet.com/linux/cmd/d/depmod.html, depmod creates a dependency file for the modules given on the command line. -e: Print a list of all unresolved symbols.

OUESTION 170

Which of the following commands loads the module file into the kernel and changes any symbols that are defined on the command line?

- A. insmod
- B. depmod
- C. modprobe
- D. setmod

Answer: A

Explanation: As described by http://www.oreillynet.com/linux/cmd/i/insmod.html, insmod is a system administration command. Load the module file into the kernel, changing any symbols that are defined on the command line. If the module file is named file.o or file.mod, the module will be named file.

OUESTION 171

What option of the insmod command can you use to force the loading of module even if problems are encountered?

- A.-f
- B. -F
- C. -u
- D. -r

Answer: A

Explanation: As described by http://www.oreillynet.com/linux/cmd/i/insmod.html, insmod is a system administration command. -f: Force loading of module, even if some problems are encountered.

OUESTION 172

Which of the following commands installs a loadable module in the running kernel?

- A. insmod
- B. depmod
- C. modprobe
- D. setmod

Answer: A

Explanation: insmod installs a loadable module in the running kernel. It tries to link a module into the running kernel by resolving all symbols from the kernel's exported symbol table.

QUESTION 173

insmod tries to link a module into the running kernel by resolving all symbols obtained from:

- A. the kernel's exported symbol table.
- B. the kernel's internal pointer base.
- C. the user command argument list.
- D. None of the choices

Answer: A

Explanation: insmod installs a loadable module in the running kernel. It tries to link a module into the running kernel by resolving all symbols from the kernel's exported symbol table.

QUESTION 174

With insmod, the paths listed in /etc/modules.conf override the paths defined in MODPATH.

A. true

B. false

Answer: A

Explanation: If the module file name is given without directories or extension, insmod will search for the module in some common default directories. The environment variable MODPATH can be used to override this default. If a module configuration file such as /etc/modules.conf exists, it will override the paths defined in MODPATH.

QUESTION 175

Lsmod shows information about:

- A. all loaded modules.
- B. all updatable modules.
- C. all non-updatable modules.
- D. all unloaded modules.

Answer: A

Explanation: Lsmod shows information about all loaded modules. The format is name, size, use count, list of referring modules. The information displayed is identical to that available from /proc/modules.

OUESTION 176

Lsmod shows information in which of the following formats?

A. name, size, use count, list of referring modules

- B. name, use count, list of referring modules, size
- C. name, size, list of referring modules, use count
- D None of the choices

Answer: A

Lsmod shows information about all loaded modules. The format is name, size, use count, list of referring modules. The information displayed is identical to that available from /proc/modules.

OUESTION 177

The information displayed by Ismod is identical to that available from:

- A. /proc/modules.
- B. /proc/depmod.
- C. /proc/ls.
- D. /proc/lsmod.

Answer: A

Lsmod shows information about all loaded modules. The format is name, size, use count, list of referring modules. The information displayed is identical to that available from /proc/modules.

OUESTION 178

What command should you use to unload loadable modules from the running kernel?

- A. rmmod
- B. remove -mod
- C. delmod
- D. unload module

Answer: A

Rmmod unloads loadable modules from the running kernel. Rmmod tries to unload a set of modules from the kernel, with the restriction that they are not in use and that they are not referred to by other modules. If more than one module is named on the command line, the modules will be removed simultansously. This supports unloading of stacked modules.

QUESTION 179

What command option of rmmod specifies that all outputs be sent to syslog?

- A. -a
- B. -i
- C. -s
- D. -d

Answer: C

Rmmod unloads loadable modules from the running kernel. -s: Output everything to syslog(3) instead of the terminal.

QUESTION 180

What utility examines the object file module_file associated with a kernel module and displays any information that it can glean?

- A. modinfo
- B. modprobe
- C. insmod
- D. depmod

Answer: A

The modinfo utility examines the object file module_file associated with a kernel module and displays any information that it can glean.

QUESTION 181

What command option of modinfo can display its version number?

- A. -V
- B. -i
- C. -I
- D. -A

Answer: A

Display the version of modinfo .The modinfo utility examines the object file module_file associated with a kernel module and displays any information that it can glean. -V , --version: Display the version of modinfo .

OUESTION 182

What option of modprobe specifies the loading of all matching modules instead of stopping after the first successful loading?

- A. -a
- B. -f
- C. -c
- D. -e

Answer: A

-a, --all: Load all matching modules instead of stopping after the first successful loading.

OUESTION 183

What option of modprobe allows you to set 'autoclean' on the loaded modules?

- A. -k
- B. -d
- C. -c
- D. -e

Answer: A

-k, --autoclean: Set 'autoclean' on loaded modules. Used by the kernel when it calls on modprobe to satisfy a missing feature (supplied as a module). The -q option is implied by -k. These options will automatically be sent to insmod.

OUESTION 184

Modprobe can be used to load (choose all that apply):

A. a single module

B. a stack of dependent modules

C. all modules that are marked with a specified tag

D. None of the choices

Answer: A,B,C

Modprobe is used to load a single module, a stack of dependent modules, or all modules that are marked with a specified tag.

QUESTION 185

Modprobe will automatically load all base modules needed in the module stack as described by its dependency file. What file is this?

A. modules.dep

B. modprobe.dep

C. module.dep

D. modep.dep

Answer: A

Modprobe will automatically load all base modules needed in a module stack, as described by the dependency file modules.dep. If the loading of one of these modules fails, the whole current stack of modules loaded in the current session will be unloaded automatically.

QUESTION 186

Which of the following regarding user account configuration is true (choose all that apply):

A. username is case-sensitive

B. password is case-sensitive

C. username is case-insensitive

D. password is case-insensitive

Answer: A.B

Please note that everything should be entered in lowercase, except for the full name of the user which can be entered in a "pleasing format" (eg. Joe Smith) and the password. Case is sensitive, so inform your user(s) they must use identical case when entering their username and password.

OUESTION 187

GNU Make determines which pieces of a large program need to be recompiled and issues the

commands to recompile them when necessary.

A. true

B. false

Answer: A

GNU Make is a program that determines which pieces of a large program need to be recompiled and issues the commands to recompile them, when necessary.

OUESTION 188

Which of the following correctly describe a Monolithic Kernel (choose all that apply):

- A. it is built into one single binary.
- B. it is loaded completely into memory at boot time.
- C. it pre-dates micro-kernel architecture by at least ten years.
- D. None of the choices

Answer: A,B,C

Have everything they need in that binary.

Are loaded completely into memory at boot time.

Pre-date micro-kernel architecture by at least ten years.

QUESTION 189

Which of the following correctly describe a Micro-kernel Architecture (choose all that apply):

- A. it has an extremely small core.
- B. only its small core remains in memory at all times.
- C. its device drivers are loaded as-needed.
- D None of the choices

Answer: A,B,C

Micro-kernel Architectures:

Have an extremely small core.

Only the small core remains in memory at all times.

Device drivers and other additional items are loaded as-needed.

QUESTION 190

Rate this comment: Linux by and large is monolithic.

A. true

B. false

Answer: A

Is Linux Purely Monolithic?

Linux by and large is monolithic. However, Linux permits modules, a system whereby certain parts of the

kernel may be loaded at runtime. Linux modules are reminiscent of micro-kernel architectures, but Linux really remains basically a monolithic architecture.

QUESTION 191

Which of the following brings up a user friendly GUI interface (choose all that apply):

- A. make xconfig
- B. make menuconfig
- C. make config
- D. make compile

Answer: A,B

The "make xconfig" or "make menuconfig" brings up a user friendly GUI interface. And "make config" brings up command-line console mode interface. You can load the configuration file from /usr/src/linux/.config (dot config file. Note the dot before config).

QUESTION 192

Which bootloader can lie to Windows and make Windows believe that it's installed on the first partition even if it's not?

- A. GRUB
- B. XLoad
- C. LILO
- D. FILO

Answer: A

GRUB differs from bootloaders such as LILO in that it can lie to Windows and make Windows believe that it's installed on the first partition even if it's not. So you can keep your current Linux system where it is and install Windows on the side.

OUESTION 193

If your new kernel does not behave normally after a routine kernel upgrade, chances are that you forgot to before compiling the new kernel.

- A. make clean
- B. make shot
- C. make clear
- D. make remove

Answer: A

If your new kernel does really weird things after a routine kernel upgrade, chances are you forgot to make clean before compiling the new kernel. Symptoms can be anything from your system outright crashing, strange I/O problems, to crummy performance. Make sure you do a make dep, too.

QUESTION 194

You can find out how much memory the kernel is using by taking the total amount of memory in your

machine and subtracting from it the amount of:

- A. "total mem" in /proc/meminfo
- B. "total mem" in /proc/memused
- C. "total mem" in /proc/memcurrent
- D. None of the choices

Answer: A

You can find out how much memory the kernel is using by taking the total amount of memory in your machine and subtracting from it the amount of ``total mem" in /proc/meminfo or the output of the command `free'.

OUESTION 195

Which of the following insures that all of the dependencies, such as the include files, are in place?

- A. make dep
- B. make clean
- C. make dep
- D. make install

Answer: A

When the configure script ends, it also tells you to 'make dep' and (possibly) 'clean'. So, do the 'make dep'. This insures that all of the dependencies, such the include files, are in place. It does not take long, unless your computer is fairly slow to begin with. For older versions of the kernel, when finished, you should do a 'make clean'. This removes all of the object files and some other things that an old version leaves behind. In any case, do not forget this step before attempting to recompile a kernel.

OUESTION 196

Which of the following removes all of the object files and some other things that an old version leaves behind?

- A. make dep
- B. make clean
- C. make dep
- D. make install

Answer: B

When the configure script ends, it also tells you to 'make dep' and (possibly) 'clean'. So, do the 'make dep'. This insures that all of the dependencies, such the include files, are in place. It does not take long, unless your computer is fairly slow to begin with. For older versions of the kernel, when finished, you should do a 'make clean'. This removes all of the object files and some other things that an old version leaves behind. In any case, do not forget this step before attempting to recompile a kernel.

OUESTION 197

What command will compile the Linux kernel and leave a file in arch/i386/boot called bzImage?

- A. make bzImage
- B. make compile
- C. make Image
- D. make bzdisk

Answer: A

After depending and cleaning, you may now `make bzImage' or `make bzdisk' (this is the part that takes a long time.). `make bzImage' will compile the kernel, and leave a file in arch/i386/boot called `bzImage' (among other things). This is the new compressed kernel. `make bzdisk' does the same thing, but also places the new bzImage on a floppy disk which you hopefully put in drive ``A:". `bzdisk' is fairly handy for testing new kernels; if it bombs (or just doesn't work right), just remove the floppy and boot with your old kernel. It can also be a handy way to boot if you accidentally remove your kernel (or something equally as dreadful).

QUESTION 198

What command will compile the Linux kernel and leave a file called bzImage in the floppy disk?

- A. make bzImage
- B. make compile
- C. make Image
- D. make bzdisk

Answer: D

After depending and cleaning, you may now `make bzImage' or `make bzdisk' (this is the part that takes a long time.). `make bzImage' will compile the kernel, and leave a file in arch/i386/boot called `bzImage' (among other things). This is the new compressed kernel. `make bzdisk' does the same thing, but also places the new bzImage on a floppy disk which you hopefully put in drive ``A:". `bzdisk' is fairly handy for testing new kernels; if it bombs (or just doesn't work right), just remove the floppy and boot with your old kernel. It can also be a handy way to boot if you accidentally remove your kernel (or something equally as dreadful).

OUESTION 199

Which of the following commands will attempt to configure the kernel from an old configuration file and run through the make config process for you?

- A. make oldconfig
- B. make newconfig
- C. make clean
- D. None of the choices

Answer: A

Make oldconfig' will attempt to configure the kernel from an old configuration file; it will run through the 'make config' process for you. If you haven't ever compiled a kernel before or don't have an old config file, then you probably shouldn't do this, as you will most likely want to change the default configuration.

OUESTION 200

Incremental upgrades of the kernel are distributed as:

- A. patches.
- B fixes
- C. hotfixes.
- D. service packs.

Answer: A

Incremental upgrades of the kernel are distributed as patches. For example, if you have version 1.1.45, and you notice that there's a 'patch46.gz' out there for it, it means you can upgrade to version 1.1.46 through application of the patch. You might want to make a backup of the source tree first ('make clean' and then 'cd /usr/src; tar zcvf old-tree.tar.gz linux' will make a compressed tar archive for you.).

QUESTION 201

Loadable kernel modules can (choose all that apply):

- A. save memory
- B. ease configuration
- C. include filesystems
- D. include ethernet card drivers

Answer: A,B,C,D

Loadable kernel modules can save memory and ease configuration. The scope of modules has grown to include filesystems, ethernet card drivers, tape drivers, printer drivers, and more.

QUESTION 202

The command "make config" requires bash.

- A. true
- B. false

Answer: A

The command `make config' while in /usr/src/linux starts a configure script which asks you many questions. It requires bash, so verify that bash is /bin/bash, /bin/sh, or \$BASH.

QUESTION 203

Upgrading a kernel involves which of the following tasks (choose all that apply):

- A. configuring the desired modules
- B. compiling the kernel and modules
- C. installing the kernel image
- D. conducting a system reboot

Answer: A,B,C,D

Upgrading the kernel involves configuring desired modules, compiling the kernel and modules, and finally installing the kernel image. This is followed by a system reboot (with fingers crossed!) to load the new kernel. All of this is documented in the ``README" file which comes with each kernel package. Further

information can be found in the ``Documentation/" subdirectory. A particularly helpful file there is ``Configure.help" which contains detailed information on the available kernel compile options and modules.

QUESTION 203

Rate this advice: In order to use the latest kernel, it is necessary to first upgrade to the newest utilities and libraries.

A. True

B. False

Answer: A

In order to use the latest kernel, it is first necessary to upgrade to the newest utilities and libraries.

QUESTION 204

Rate this comment: The "root" account has no security restrictions imposed upon it.

A. True

B. False

Answer: A

When using this account it is crucial to be as careful as possible. The "root" account has no security restrictions imposed upon it. This means it is easy to perform administrative duties without hassle. However, the system assumes you know what you are doing, and will do exactly what you request -- no questions asked. Therefore it is easy, with a mistyped command, to wipe out crucial system files.

QUESTION 205

To create a user account, keep in mind that the username is at most characters long.

A. 6

B. 8

C. 12

D. 18

Answer: B

Please note that everything should be entered in lowercase, except for the full name of the user which can be entered in a "pleasing format" (eg. Joe Smith) and the password. Case is sensitive, so inform your user(s) they must use identical case when entering their username and password.

Section B

QUESTION 1

What is the name of the Kernel configuration file? Type just the filename.

Answer: config

QUESTION 2

What command with options and arguments will display the mail servers for lpi.org?

Answer: dig lpi.org mx

Alternative correct answer: dig lpi.org MX

OUESTION 3

Type the full path and name of the file whose global read bit you would change to deny normal users the ability to get useful information from the who and w commands.

Answer: /var/run/utmp

OUESTION 4

What file would you edit to make the current user's vi session options always take effect? Type the full path and filename.

Answer: /.exrc

OUESTION 5

You boot a freshly installed system loaded with all the defaults, xdm loads and crashes, and the system halts. How can you force the system to multi-user text mode with networking from the LILO: or boot: prompt?

Answer: linux 3

QUESTION 6

What command with options will find all files on your system that have either the SUID or GUID bits set? Type the exact command with options to accomplish this.

Answer: find / -perm +6000

QUESTION 7

What is the file that contains the settings and conversion parameters for the ftp server? Type in the name of the file only.

Answer: ftpconversions

QUESTION 8

What is the preferred documentation tool of the FSF? Type in the name of the tool only.

Answer: info

OUESTION 9

What file or utility is used by normal users to configure the cron daemon? Type in the name of the tool only.

Answer: crontab

QUESTION 10

What file with full path is used to set the location to query for hostname resolution outside of the local system?

Answer: /etc/resolv.conf

OUESTION 11

To stop immediately a DDOS attack from 10.1.1.128, what can you do? Type the command with the necessary options and arguments.

Answer: route add 10.1.1.128 lo

OUESTION 12

With a Class C address, and a subnet mask of 255.255.255.0, how many host addresses are assignable?

Answer: 254

OUESTION 13

What command will most effectively track a network path problem?

Answer: traceroute

QUESTION 14

What command will load groups of modules into the kernel as needed?

Answer: modprobe

OUESTION 15

Which local system networking file binds a hostname to an IP address? Type the full path and name of the file.

Answer: /etc/hosts

OUESTION 16

What program will determine basic connectivity to a remote host? Type just the name of the program.

Answer: ping

OUESTION 17

What file on a remote host should be configured to allow your host to print to it's already functioning printers? Type the full path and name of the file.

Answer: /etc/hosts.lpd

QUESTION 18

What file contains a list of shared directories on a Linux/Unix system? Type the full path and name of the file.

Answer: /etc/exports

QUESTION 19

To find the port used by a particular known service, you would look in what file? Type the full path and name of the file.

Answer: /etc/services

OUESTION 20

What command will flush all jobs on all print queues on a Linux system that uses the LPD daemon? Type the command with any options and arguments.

Answer: lprm -a all

QUESTION 21

Your IP address is 1.2.3.3. Which command would add a default gateway using the network 1.2.3.4?

Answer: route add default gw 1.2.3.4

OUESTION 22

What command would help you test if your ppp connection was functional? Type just the command name.

Answer: minicom

OUESTION 23

Where are command line aliases defined for a user? Type the full path and name of the file for the currently logged in user.

Answer: /.bashrc

QUESTION 24

What file do you configure to make changes to your smbd and nmbd daemons? Type the full path and name of the file.

Answer: /etc/smb.conf Alternative correct answer: /etc/samba/smb.conf

OUESTION 25

After modifying /etc/exports, what must be done to make the modifications available to users? Type the command with any options and arguments.

Answer: exportfs -a

QUESTION 26

To produce a compiled kernel with slightly better than standard compression, type the command with and any options and arguments to accomplish just the compilation.

Answer: make bzImage

OUESTION 27

What command will insert a single "!" symbol in from of the encrypted password in the system's shadow file? Type the command with any options and arguments.

Answer: usermod -L

passwd -1

QUESTION 28

What is the exact, case-sensitive option that governs flow-control for the ppp daemon?

Answer: crtscts

OUESTION 29

What file is used to deny hosts access to a system's printers? Type the filename including full path.

Answer: /etc/hosts.lpd

QUESTION 30

What command with switches allows you to set the defaults for the useradd command? Type the command with any options and arguments.

Answer: useradd -D

QUESTION 31

What file is used in recent apache distributions to configure the service? Type the full path and name of the file.

Answer: /etc/httpd.conf Alternative correct answer: /etc/httpd/httpd.conf

QUESTION 32

What commands with any options, will cause sendmail to recognize newly added aliases while it's running?

Answer: sendmail -bi Alternative correct answer:

newaliases

OUESTION 33

In what file can you configure your name server resolution queries to use the localhost first? Type the full path and name of the file.

Answer: /etc/nsswitch.conf

QUESTION 34

When you execute the "ls" command, you suspect an alias is set for the command, how can you just execute the command? Type the exact string that will accomplish this.

Answer: \ls

OUESTION 35

In what directory does undelivered remote mail get stored in? Type the full path and name of the file.

Answer: /var/spool/mqueue

OUESTION 36

Which utility is used to create or update the modules.dep file? Type the command only.

Answer: depmod

OUESTION 37

What command can you use to determine the users connected to a Linux ftp server? Type just the command to accomplish this.

Answer: ftpwho

QUESTION 38

What file is used to define a list of users that may NOT login to via the ftp daemon? Type just the name of the file.

Answer: ftpusers

OUESTION 39

To change your Ethernet interface eth0 to the IP address 10.4.4.100 with a default class C subnet mask, type the full command string to accomplish this.

Answer: ifconfig eth0 10.4.4.100 netmask 255.255.255.0

QUESTION 40

You are running a Red Hat machine. You have added a 2nd NIC to your machine and rebooted it. The card is detected in the BIOS but is not configured along with the eth0 interface upon network start. A file must be created to allow this interface to function. Type the full path and name of the file.

Answer: /etc/sysconfig/network-scripts/ifcfg-eth1

OUESTION 41

Undelivered mail for local system users is stored in what directory? Type the full path of the directory.

Answer: /var/spool/mail/username

OUESTION 42

What section of the Man pages are system administration commands in? Type the numeral of the section.

Answer: 8

OUESTION 43

What section of the Man pages are system files mentioned in? Type the numeral of the section.

Answer: 5

QUESTION 44

What command will display the active connections and Unix domain sockets for a running Linux machine with networking configured? Type just the command to accomplish this.

Answer: netstat

QUESTION 45

Converting from the inetd to xinetd services requires populating entries in what file, including the full path and name?

Answer: /etc/xinetd.conf

QUESTION 46

You have a job schedueled to run at 16:30 using the AT schedueler.

When you type atg it displays the following information

[root@localhost root]# atq

2 2003-03-14 16:00 a root

[root@localhost root]#

Type in the command to remove only this job.

Answer: atrm 2

QUESTION 47

What command will show pending jobs that will be executed once on a given date and time? Type just the command to accomplish this.

Answer: atq

OUESTION 48

The last command functionality needs what log file to be present to operate properly? Type the full path and name of the file.

Answer: /var/log/wtmp

QUESTION 49

Where should you put the .pinerc file so that all new users get it as part of their initial creation? Type the full path of the directory.

Answer: /etc/skel

QUESTION 50

What command with options will show you the contents with associated pathnames of an archive file named archive.tar.gz? The file must not be unpacked with the command string. Type the full command string to accomplish this.

Answer: tar -tzvf archive.tar.gz Alternative correct answers: tar tzvf archive.tar.gz tar zxvf archive.tar.gz

QUESTION 51

On a Red Hat system, with a single floppy drive and a returned output from the uname command of 2.4.20-12, what exact command string will create a customized boot disk for this system? Type the full command string to accomplish this.

Answer: mkbootdisk --device /dev/fd0 2.4.20-12

OUESTION 52

On a Debian-based system, what command will create a boot disk on the first floppy if your kernel image is named "vmlinux-2.4.18-4"? Type the full command string to accomplish this.

Answer: mkboot vmlinux-2.4.18-4

Alternative correct answer: mkboot/boot/vmlinux-2.4.18-4

OUESTION 53

You need to view the hardware address and IP address information for all of your configured and

active interfaces. Type the simplest command string that will accomplish this.

Answer: ifconfig

OUESTION 54

What command will most effectively send a list of certain files from a directory to the tar or cpio command? Type just the command name.

Answer: ls

cat

QUESTION 55

On your system exists a file that is described as a map file that is used to update the MBR or first sector of the partition with the appropriate booting information. Type the full path and name of the file.

Answer: /etc/lilo.conf

QUESTION 56

In the /etc/resolv.conf file are entries that describe where DNS queries can resolve names to IP addresses. Given a DNS server with an IP address of 192.168.33.254, type the exact entry that should appear in this file.

Answer: nameserver 192.168.33.254

QUESTION 57

Your IP address is 170.35.13.28 and your network mask is 255.255.255.192. What host IP address is NOT a part of your local subnet?

A. 170.35.13.33

B. 170.35.13.88

C. 170.35.13.62

D. 170.35.13.55

Type in just the letter of the answer.

Answer: B

Alternative correct answer: b

OUESTION 58

Type in the simplest command to display the previous and current run level?

Answer: runlevel

OUESTION 59

When booting your system, you believe you saw an error message go by too quickly to see. Type in the command that will show the last system bootup messages.

Answer: dmesg

QUESTION 60

You are in run level 5 and wish to change to run level 1. Type in the simplest command to do this?

Answer: init 1

Alternative correct answers:

init s init S

QUESTION 61

The dmesg command outputs information from which file, inlcude full path?

Answer: /var/log/dmesg

QUESTION 62

Which process has a PID of 1. Type in the process name?

Answer: init

QUESTION 63

What is the name of the file and location that governs what run level is to be booted to on startup. Give full path and file name

Answer: /etc/inittab

OUESTION 64

You wish to list out in text all the daemons running and stopped on your system for all run levels. Type in the simplest command

Answer: chkconfig --list

OUESTION 65

You wish to change the daemons that start at a run level 3. Type in the command that would give a text menu based application to set the daemons for this runlevel

Answer: ntsysv --level 3

OUESTION 66

You wish to add the user king to the system including his home directory. Type in the simplest command to do this including switches

Answer: useradd -m king

OUESTION 67

You wish to remove the user stef from the system, including his home directories. Type in the simplest command to do this?

Answer: userdel -r stef

OUESTION 68

User rick has been suspended from your company and you wish to lock his account to stop anyone using it. Type in the simplest command to do this.

Answer: usermod rick -L

Alternative correct answer: passwd -l rick

QUESTION 69

User king has been exiled to the marketing department who has a group name mktg. You now wish to change the primary group for the user king to the mktg group. Type in the simplest command to do this?

Answer: usermod -g mktg king

OUESTION 70

Your user matt has forgotten his passwd and you wish to reset it. Type in the command line to change his password. You are currently logged in as root.

Answer: passwd matt

OUESTION 71

What is the full path and file name of the file that contains the configuration files for system logging? Type in full path and file name.

Answer: /etc/syslog.conf

OUESTION 72

You wish to list the contents of your crontab. Type in the simplest command to do this.

Answer: crontab -1

QUESTION 73

You wish to make changes to your crontab entry. Type in the simplest command to make this change?

Answer: crontab -e

QUESTION 74

You wish to archive and compress all the files in your home directory starting with the word projects into a file called myprojects.tar.gz. You are currently in your home directory. Type in the command

that would do this?

Answer: tar -czf myprojects.tar.gz projects*

Alternative correct answers:

tar czf myprojects.tar.gz projects*
tar zcf myprojects.tar.gz projects*

QUESTION 75

You have a tarball called myprojects.tar.gz and you wish to view the permissions and ownership of its contents without unpacking it. Type in the simplest command to do this.

Answer: tar -tzvf myprojects.tar.gz

Alternative correct answers: tar tvzf myprojects.tar.gz tar zvtf myprojects.tar.gz tar ztvf myprojects.tar.gz

QUESTION 76

Type in the command to list your current kernel version, including any switches.

Answer: uname -a

Alternative correct answer: uname -r

OUESTION 77

You wish to install the module fat.o into the kernel. Type in the simplest command to do this. Assume there are no dependancies for this module.

Answer: insmod fat

QUESTION 78

You wish to remove a module from the kernel called fat. Type in the simplest command to do this. Assume this module has no dependancies.

Answer: rmmod fat

OUESTION 79

Type in the simplest command to list all loaded modules?

Answer: Ismod

OUESTION 80

You wish to get infomation on a module called msdos.o. Type in the simplest command that would list all information including author and description for the module.

Answer: modinfo msdos

OUESTION 81

You have a module called msdos.o which has a dependancy on fat.o. What single command will load msdos.o and its dependant fat.o module in one command line?

Answer: modprobe msdos

OUESTION 82

Type in the simplest command, including any switchs, to rebuild the modules.dep file after you have made changes to the modules.conf file.

Answer: depmod -a

OUESTION 83

You are using X and wish to build a new kernel. What X tool would you use to build the .config file. Type in just the command, not switches.

Answer: make xconfig

QUESTION 84

You have made changes to your /etc/lilo.conf file. Type in the simplest command that will reload the configuration to the MBR.

Answer: lilo

OUESTION 85

Type in the command to compile a kernel image with normal compression.

Answer: make zImage

QUESTION 86

Type the command to check the syntax and contents of the smb.conf file.

Answer: testparm

QUESTION 87

Type in the command to monitor connections to Samba.

Answer: smbstatus

OUESTION 88

Type in the name and full path to the network configuration file that defines the search order for name resolution.

Answer: /etc/nsswitch.conf

QUESTION 89

Type in the name of the file including path of the static host name to IP address configuration file.

Answer: /etc/hosts

OUESTION 90

Type in the name and full path to the config file that contains the IP address of DNS servers for hostname resolution.

Answer: /etc/resolv.conf

QUESTION 91

You need to access the site for HOWTO's, Guides and mini HOWTO's. Type in the full URL as it would appear in any browser, including the protocol.

Answer: http://www.linuxdoc.org

Alternative correct answer: http://www.tldp.org

OUESTION 92

Type in the command that is equivalent to man -k.

Answer: apropos

QUESTION 93

Type in the command that is equivalent to man -f.

Answer: whatis

OUESTION 94

You wish to restart the network daemon on a Redhat Server. Type in the command and any arguments that to accomplish this without using any absolutes pathnames.

Answer: service network restart

QUESTION 95

You wish to restart both Samba daemons. Type in the command and any arguments that to accomplish this without using any absolutes pathnames.

Answer: service smb restart

OUESTION 96

Type in the file and full path to the configuration file for the Sytem logging daemons.

Answer: /etc/syslog.conf

OUESTION 97

You have just downloaded an application called rdesktop from the internet. The file downloaded is named rdesktop tar.gz.

Type in the simplest command to decompress and untar this file into the current directory.

Answer: tar -zxf rdesktop.tar.gz

Alternative correct answer: tar zxf rdesktop.tar.gz

QUESTION 98

Type in the full path and name of the global environment and startup program configuration file. This file typically contains the PATH, umask and ulimit system wide settings.

Answer: /etc/profile

QUESTION 99

A user wishes to modify his Environment variable PATH, WHat file should you tell him to edit in his home directory. Give filename only, no path.

Answer: .bash profile

OUESTION 100

Type in the name of the samba daemon that is responsible for WINS names resolution

Answer: nmbd

OUESTION 101

Type in the name of the samba daemon that is responsible for printer and file sharing?

Answer: smbd

OUESTION 102

Type in the name of the file including full path that holds contains a daily message viewed by users when they log in?

Answer: /etc/motd

OUESTION 103

Type in the name of file and full path to the file that holds a message for remote users about possible system outages.

Answer: /etc/issues.net

OUESTION 104

You wish to change you network settings permanently using a text/graphical tool. Type in the command to start this tool?

Answer: netconfig

QUESTION 105

What is the command to check the syntax of your /etc/inetd.conf?

Answer: tcpdchk

QUESTION 106

What command would be used to check the gpgp signature on a downloaded source file? Type just the name of the command.

Answer: gpg

QUESTION 107

What command was typed in to produce the output shown below. The entries shown are the full output of the command, less the actual command.

Type the command and the options to reproduce similar output.

USER	PID %CPU %MEM VSZ RSS	TTY STAT START TIME COMMAND
root	394 0.0 0.0 1200 444 tty1 S 0	1:05 0:00 /sbin/getty 38400 tty1
root	396 0.0 0.0 1200 444 tty3 S 0	1:05 0:00 /sbin/getty 38400 tty3
root	397 0.0 0.0 1200 444 tty4 S 0	1:05 0:00 /sbin/getty 38400 tty4
root	398 0.0 0.0 1200 444 tty5 S 0	1:05 0:00 /sbin/getty 38400 tty5
root	399 0.0 0.0 1200 444 tty6 S 0	1:05 0:00 /sbin/getty 38400 tty6
root	423 0.0 0.0 1200 444 tty2 S 0	1:06 0:00 /sbin/getty 38400 tty2
root	426 0.2 0.3 2880 1964	1:07 0:00 -bash
	pts/0	11.07 0.00 -0asii

Answer: ps -au

QUESTION 108

You wish to execute the ls command but it appears to be aliased. What is the easiest way of execute the original ls command without the alias?

Answer: \ls

QUESTION 109

You are using insmod. You do not want to use the default configuration file /etc/modules.conf. What environment variable should you modify:

Answer: MODULECONF

Explanation: The environment variable MODULECONF can also be used to select a different

configuration file from the default /etc/modules.conf (or /etc/conf.modules (deprecated)). This environment variable will override all the definitions above.

QUESTION 110

If the module file name is given without directories or extension, insmod will search for the module in some common default directories. What environment variable can be used to override this:

Answer: MODPATH

Explanation: If the module file name is given without directories or extension, insmod will search for the module in some common default directories. The environment variable MODPATH can be used to override this default. If a module configuration file such as /etc/modules.conf exists, it will override the paths defined in MODPATH.