

###Review Tests LPIC 2

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201

What command is used to create a list of module dependencies, writing its findings into modules.dep?

depmod

Which is the CIDR netmask /27 in dotted decimal format?

255.255.255.224

Which of the following is true when comparing the ext2 and ext3 filesystems, in normal use? Select the two most appropriate answers.

ext3 is the same as ext2 with added journaling

ext2 is faster than ext3

Is the following statement true or false? The grub shell provides direct interactive access to the grub bootloader.

false

You need to use tcpwrappers so that only address 192.168.1.7 can access all the services. Assuming you've added the appropriate entry to /etc/hosts.allow what would you need to put in /etc/hosts.deny? (or leave blank if you would not use hosts.deny)

ALL:ALL

After creating a new SWAP partition (of the correct type), what is the next step towards making it active?

mkswap

What option needs to be used to allow the ping command to be used against a broadcast address? Enter the option only (do not include the command or any ip addresses).

ping -b

What is the effect of the -p option on the fsck command?

automatically attempt repair of all errors

You are compiling a new kernel. You have a custom .config file from an older version of the kernel.

What command can be used to use the old configuration command for the new kernel version?

make oldconfig

You need to use tcpwrappers so that address 192.168.1.7 can access all the services. What entry should you put in the /etc/hosts.allow file to enable this?

ALL: 192.168.1.7 (whitespace between : and 192)

Which of the following addresses are by default in a class B network? Select all that apply.

128.1.3.7

142.35.12.0

190.3.78.3

191.37.2.10

What file, holding details of module dependencies, is created by the depmod command?

/lib/modules/kernel-version/modules.dep

Issuing the command "chkconfig ntpd on" will enable the ntp daemon in which runlevels?

2, 3, 4 and 5

What information is not normally provided by the modinfo command? Choose all that apply

in use

size

You need to use tcpwrappers so that only address 192.168.1.7 can access all the services. Assuming you've added the appropriate entry to /etc/hosts.allow what would you need to put in /etc/hosts.deny? (or leave blank if you would not use hosts.deny)

ALL: ALL (whitespace between : and ALL)

What is the name of a command to create an initial ramdisk. Give the name of the command only.

mkinitrd or mkinitramfs

After compiling a new kernel which of the following is a valid filename for the compressed kernel?

zImage or bzImage

Which option will cause the modprobe command to load all modules instead of stopping after the first successful loading?

-a

What command can be used to install a single module, a stack of modules, or all modules marked with a specified tag? Enter the command only (no path)

modprobe

According to RFC 1918 a number of address ranges are reserved for private internets. Which of the following addresses are not in the private ranges? Select all that apply.

168.192.3.17 and 192.169.7.12

The reserved ranges are: 10.0.0.0 - 10.255.255.255 (10/8 prefix) 172.16.0.0 - 172.31.255.255 (172.16/12 prefix) 192.168.0.0 - 192.168.255.255 (192.168/16 prefix)

What is the main configuration file for BIND (version 8 or later)? Provide the full path.

/etc/named.conf

Which of the following show the correct syntax for applying an incremental patch?

patch -p1

Which of the following is the correct order for an entry in inittab?

id:runlevels:action:process

You decide to use the logical volume manager (LVM) to manage four 4GB disk drives. After creating the volume group, how would you create a 10GB logical volume called big-app?

lvcreate -l 2560 vg01 -n big-app

What information does the file modules.dep provide?

A list of modules required by each module

Before compiling a new kernel, what needs to be done?

Configure the kernel options

On a system with separate partitions for /, /usr, /var, /tmp, which filesystem[s] can safely be mounted readonly?

/usr

Which of the following is a valid location in the automount configuration, when a Windows share needs to be made available to the system?

//servername/sharename

What script is included with the kernel source to patch a kernel?

patch-kernel

Which command would you use to apply a diff file to an original?

patch < diff-file

One of the IDE hard drives in a server is transferring data very slowly. What command must be run to enable DMA on it?

hdparm -d1 /dev/hda

What command is used to create an ISO9660 filesystem that can be properly accessed from a Windows 95/98 machine?

mkisofs -J -T -r -o backup.iso /home/joe

In order to find all library dependencies of /usr/bin/foo, which of the following statement is true?

Running ldd against /usr/bin/foo will show the required libraries

To make a system backup, the simplest and fastest way is to use the tar command. Select the correct alternative below that shows the three tar parameters that create, list and expand a tar file respectively.

-create -list -extract

A Linux machine freezes during boot. To boot directly to a shell prompt so that editing of files and manual starting of services is possible which command line must be passed to the kernel for the boot process

init=/bin/bash

What is the command to add another IP address to an interface that already has (at least) one IP address?

ifconfig eth0:sub1 192.168.1.2

ifconfig eth0:1 192.168.1.2

What needs to be done to enable 32 bit I/O transfer mode for (E)IDE disks, on a system running a 2.4 series Linux kernel?

The hdparm utility must be used

After configuring a new 2.4 series kernel, all dependencies, such as included files, need to be created. How can this be achieved?

make dep

If the command `arp -f` is run, which file will be read by default?

/etc/ethers

What is the difference between `zImage` and `bzImage` targets when compiling a kernel?

zImage is loaded into low memory, bzImage is loaded into high memory

A DNS server has the IP address 192.168.0.1. Which TWO of the following need to be done on a client machine to use this DNS server?

Add `nameserver 192.168.0.1` to `/etc/resolv.conf`

Ensure that the `dns` service is listed in the `hosts` entry in the `/etc/nsswitch.conf` file

Which of these commands allows you to use shared libraries that are in `/usr/local/lib`?

`ldconfig /usr/local/lib`

After unpacking the source code for a Linux kernel, what is the first `make` command that should be run which will delete any current configuration and all generated files? This command will ensure that no inappropriate files were left in the kernel archive by the maintainer.

make dist clean

Which script, in the `linux/scripts` directory, can be used to add up grades or updated code to the 2.6.xx kernel source code?

patch-kernel

After unpacking source code, what file is used by `configure` to create a final Makefile?

Makefile.in

How can you manually add an entry to your system's ARP cache?

Run `arp -s hostname FF:FF:FF:FF:FF:FF`

Which tool can be used to control the runtime behavior of `udev`?

udevadm

What is the purpose of `udevmonitor`?

Listen to kernel events produced by a `udev` rule and print information to the console

On a Debian based system, which command can be used to stop the `apache2` init script from

running at boot time once the real script has been removed from /etc/init.d/?

update-rc.d apache2 remove

A zone file on the DNS server has been updated. Which of the following commands will tell named to reload its zone files? (Please select TWO correct answers)

rndc reload

killall -HUP named

Which of the following applications utilize the device mapper? (Select TWO correct answers)

EVMS

LVM2

Why has mkinitrd been deprecated in favour of mkinitramfs in 2.6 series kernels? (Select TWO correct answers)

mkinitrd relies on devfs

SATA hard drives are unsupported

To remove the patch patch-2.4.28.tar.bz2 from a kernel source tree, the command that must be used is:

bunzip2 -c ../patch-2.4.28.tar.bz2 | patch -Rp1

A pre-compiled module has been moved to /lib/modules/, but 'modprobe -a ' fails to load it. What needs to be done to enable usage of this module?

depmod must be run

Which of the following commands should be used in a bash script that needs a variable containing the IP address of the eth0 interface? The output for the command ifconfig eth0 is shown below:

eth0 Link encap:Ethernet HWaddr 00:0C:29:CB:FA:30 inet

addr:192.168.246.11 Bcast:192.168.246.255 Mask:255.255.255.0 UP BROADCAST

RUNNING MULTICAST MTU:1500 Metric:1 RX packets:4721 errors:0 dropped:0

overruns:0 frame:0 TX packets:3216 errors:0 dropped:0 overruns:0 carrier:0 collisions:0

txqueuelen:1000 RX bytes:445184 (434.7 Kb) TX bytes:512968 (500.9 Kb) Interrupt:185

Base address:0x1080

```
IP=$(LANG= ifconfig eth0 | grep inet | awk '{ print $2 }' | cut -d: -f2)
```

You have elected to use the automounter and the autofs script. Your /etc/auto.master file contains the following: /home /etc/auto.home /project /etc/auto.project /data yp:data.map If you change the contents of /etc/auto.project to include a new source path what must be done to access the new path?

Nothing Simply access the newly mapped resource

To restore the kernel source to the previous, unpatched, version, which of the following commands could be used?

patch -R

A 2.6.9-ac1 kernel would be

someone's patch to a stable kernel

What command should be used to find out what PCI devices can be seen, without querying the kernel?

lspci -b

Your routing configuration relies on eth0 being a 3com card that requires the 3c59x module. What line must be added to modules configuration file, to ensure that eth0 always uses this module?

alias eth0 3c59x

During which stage of the boot process would this message be seen? Ide0: BM-DMA at 0xff00-0xff07, BIOS settings: hda:DMA, hdb:DMA

Hardware initialization and setup

Which of the following commands can be used to access the content of a ramdisk file (/boot/initrd) used by the kernel at boot time?

cp /boot/initrd /tmp/initrd.gz; gunzip initrd.gz; mount /tmp/initrd /mnt/ -o loop

After changing the default runlevel in the init configuration file, the system boots in a different than the intended runlevel. Where else could be this different runlevel be defined?

In the boot loader configuration file

A BIND server should never answer queries from certain networks or hosts. Which configuration directive could be used for this purpose?

blackhole{...};

What command can be used to view all the entries in the arp cache? Enter the command only with options (do not include the path).

arp -a

Is the following statement true or false? When patching a kernel by more than one minor version, only the latest incremental patch needs to be applied.

false

What file, holding details of module dependencies, is created by the depmod command?

The file is /lib/modules/kernel-version/modules.dep. None of the other files exist.

Which of the following show the correct syntax for applying an incremental patch?

patch -p1

What command is used to create a list of module dependencies, writing its findings into modules.dep?

depmod

What options would be used on the chkconfig command to enable the ntpd daemon at runlevels 3 and 5?

chkconfig --level 35 ntpd on

What command is normally used to create a filesystem for a CD-ROM. Enter the command name only, no options or path.

mkisofs

Issuing the command "chkconfig ntpd off" will disable the ntpd from which runlevels (assuming it is currently on at all runlevels):

all runlevels

What is the name of the Linux command that can be used to turn write caching of the hard disk on or off? Enter the command name only, no options or path.

hdparm

Which of the following addresses are by default in a class B network? Select all that apply.

128.1.3.7

142.35.12.0

190.3.78.3

191.37.2.10

What type of compression is used on a bzImage kernel file?

Gzip. The bz prefix indicates a "big" compressed archive, not a bzip2 archive.

Is the following statement true or false? The grub shell provides direct interactive access to the grub bootloader.

false

To securely use dynamic DNS updates, the use of TSIG is recommended. Which TWO statements about TSIG are true?

TSIG is used only in server configuration

Servers using TSIG must be in sync

Which THREE statements concerning automounter are true?

For each entry in auto.master, a separate automounter daemon is started

Changes to auto.master require automounter to reload its configuration

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What are typical targets in a makefile?

clean, install, uninstall

The Human Interface Device (HID) is being used, which of the following represents a USB mouse connected to the PC?

/dev/input/mice

Select the TWO correct alternatives regarding the kill -9 command:

Its use should be avoided and other alternatives should be tried before it.

Its use can occasionally cause the data loss.

The server has two network cards. The driver for the first card is the module 8139too and the driver for the second card is the module ne2k-pci. How is it possible to ensure that the card using the 8139too driver is detected before the card using the ne2k-pci driver?

modprobe 8139too dev=eth0; modprobe ne2k-pci dev=eth1

Which of these would be the simplest way to configure BIND to return a different version number to queries?

Set version "my version" in BIND's configuration file.

Why shouldn't you use the options -z and -j when using tar with a magnetic tape backup?

In case of damaged tape uncompressed tar archives may allow partial recovery of the backup

In which subdirectory of /proc is information about PC Cards, which are connected and recognized by a 2.6 kernel stored? Please enter the complete path.

/proc/bus/pccard

Which file contains the software RAID configuration? (Please enter the file-name without the path)

raidtab

Which program can be used to adjust the DMA settings of an IDE hard drive? Please enter it without path, parameters or arguments

hdparm

Your newly-compiled kernel cannot find any modules it needs to load. What command was missed when compiling and installing the kernel?

make modules_install

Consider the following /etc/fstab file:

/dev/hda1 swap swap defaults 0 0 /dev/hda2 / ext2defaults 1 1

/dev/hda3 /home ext2 defaults 1 2 none

/proc proc defaults 0 0 /dev/fd0

/media/floppy vfat user,noauto 0 0

What command can an ordinary (non-root) user use to mount a floppy disk in this system? (Please enter the command with all parameters and/or options)

mount /dev/fd0

You want to change the file that contains the message which is used at the login prompt when users log in locally. Please enter the file including the path.

/etc/issue

Which environment variable you have to setup to use shared libraries that are not in the standard

search path?

LD_LIBRARY_PATH

When configuring a new kernel, what file under /usr/src/linux/ contains the configuration?

.config

In which directory is the Linux kernel documentation be found?

/usr/src/linux/Documentation

You need to recover some data from a magnetic tape and it is the second file on the media. The following command is being attempted: `mt -f /dev/nst0 _____` What is the `mt_` operation that will position the tape on the first block of the second file? (Please specify the operation with no other parameters)

ssf 2

Which directory in /dev/disk/ can be used to determine the UUID of a connected hard disk?

by-uuid

What command will search for physical defects on a hard drive and will mark these defects so that they are no longer used? (Please specify the command with no path information)

badblocks

What command will remove the physical volume /dev/sda4 from the volume group /dev/vg0? (Provide the command with options and parameters)

vgreduce /dev/vg0 /dev/sda4

Which directory contains the PCMCIA configuration files?

/etc/pcmcia

You have installed some new libraries, but these are not available to programs and are not listed by `ldconfig -p`. What file should the path to the libraries be added to, before running `ldconfig`?

/etc/ld.so.conf

Which `chkconfig` command will display whether or not the service `ldap` is configured to start in each runlevel? (Provide the command and any options or parameters)

chkconfig --list ldap

On a server running the 2.6.27-11 Linux kernel, which file in the /boot directory contains the kernel configuration parameters?

config-2.6.27-11

Please enter the complete path to the main configuration file for syslogd, which logs system messages on Linux systems?

/etc/syslog.conf

With which command can the reserved blocks count for a file-system be seen? (Please enter only the command without the path or any parameters or options)

tune2fs

For interpreting system rc scripts a shell is most commonly used. Please enter the first line found in such scripts.

#!/bin/sh

What directive can be used in named.conf to restrict zone transfers to the 192.168.1.0/24 network?

allow-transfer { 192.168.1.0/24; };

This program has 3 operating modes: copy-in mode, copy-out mode, and copy-pass mode, and is used to copy files into or out of archives. What program is this? (Please provide the command name only, with no arguments or path.)

cpio

What is the location of the main udev configuration file? (Specify the full path and filename)

/etc/udev/udev.conf

After calling ./configure with its appropriate parameters and no errors, what would be the next command to run?

make all or make

Which site-specific configuration file for the shadow login suite must be modified to log login failures? Please enter the complete path to that file.

/etc/login.defs

Please enter, separated with a space but without paths, the TWO archive programs needed in addition to gzip, to extract files from a .deb file without using the Debian package manager.

ar tar

Because of a bad BIOS LBA translation, a booting system displays an error instead of a LILO prompt. Complete the error message with the error number: L

01

Please enter the command with all parameters and arguments, that could be used by root to list the cron jobs for the user john.

crontab -u john -l

Which command with all parameters and arguments, can be used by root to erase the cron job list for the user fred?

crontab -u fred -r

Messages from programs are not appearing in the user's native language. What environment variable must be set for this to happen?

LANG

When building an RPM package, which rpmbuild option is used to unpack sources and apply patches before proceeding with the next steps?

-bp

Which of the following must be included in the syslogd configuration file, so that ONLY kernel related messages with the priority crit are reported?

kern.=crit

What does the following script do? `#!/bin/bash find / -perm +4000 | mail -s "Daily find output" root`

Emails a report of all suid files to root

A system has one hard disk, configured as master and connected to the primary IDE controller, and one CD writer, configured as slave and connected to the secondary IDE controller. If the system is correctly configured, which device is used to represent the CD writer?

/dev/hdd

A new PCMCIA network card is not functioning correctly. To troubleshoot this, the socket information should be checked. How can this be done? (Choose two.)

cardctl -s

cat /var/lib/pcmcia/stab

Which command displays information about connected USB devices?

cat /proc/bus/usb/devices

What command can be used to configure the baud rate on a serial port?

set serial

What command is used to re-add a partition to a software RAID setup?

taidhotadd

Which TWO of the following sentences are true about this package? Consider the following excerpt from an RPM spec file: Summary: Complete Web authoring system for linux Name: nvu Version: 0.50 Release: 5 Source0: %{name}-%{version}.tar.bz2 Patch0: nvu-freetype2.patch.bz2 Patch1: nvu-mozilla-1.1-system-myspell-dicts.patch.bz2 Patch2: nvu-mozilla-1.7-spellcheck-fulllanguage.patch.bz2 License: MPL/LGPL/GPL Group: Development/Other Url: <http://www.nvu.com> BuildRoot: *%{tmppath}/%{name}-buildroot BuildRequires: libjpeg-devel libpng-devel libIDL-devel BuildRequires: zip tcsch*

BuildRequires: gtk+2-devel >= 2.2.0 Which TWO of the following sentences are true about this package?

The nvu-0.50.tar.bz2 file contains pristine sources for nvu._

Package gtk+2-devel version 2.2.0 or higher needs to be present in the system before this nvu package may be installed.

In some older machines, the Linux kernel defaults to polling for the parallel printer port (/dev/lp0), even if it is capable of interrupt-driven operation (ECP). Which utility enables interrupt-driven operation of the parallel port?

tunelp

To check winbind functionality, you have try: wbinform -u getent passwd What is the next action?

The contents of nsswitch.conf should be verified