

# 117-202: LPI Linux Level 2

1

All of the following commands can be used to determine open TCP ports on localhost **EXCEPT**:

(Please select the ONE BEST choice.)

- A. lsof
- B. netstat
- C. nmap
- D. fuser
- E. ifconfig

2

You want to assign IP addresses from a Class C network to your numerous bootp clients. What would you add to dhcpd.conf?

(Please select the ONE BEST choice.)

- A. bootp-dynamic 192.168.0.0/24;
- B. range dynamic bootp 192.168.0.2 192.168.0.255;
- C. range dynamic-bootp 192.168.0.2 192.168.0.255;
- D. assign range 192.168.0.0/24 bootp;
- E. bootp { range: 192.168.0.0/24; }

3

Internal users of your company's website complain that at peak time they can connect to your server only with extreme difficulty and often receive a timeout error. You find however that the system load is negligible, plenty of extra memory and bandwidth are available, no hardware or line problem is involved and that no errors are logged. What is the most likely cause of this issue?

(Please select the ONE BEST choice.)

- A. The value of the "MinSpareServers" parameter is too low.
- B. The value of the "MaxClients" parameter is too low.
- C. The value of the "MaxRequestsPerChild" parameter is too low.
- D. The value of the "MaxKeepAliveRequests" parameter is too low.
- E. The value of the "StartServers" parameter is too low.

4

IP address resolution should be handled by DNS, NIS, and the local `/etc/hosts` file (in that order). If any of the services returns an `address not found` message the search should halt. Which of the following entries in `/etc/nsswitch.conf` would achieve this configuration?

(Please select the ONE BEST choice.)

- A. `hosts: dns nis files`
- B. `hosts: dns [NOTFOUND=continue] nis [NOTFOUND=continue] files`
- C. `hosts: dns [RETURN] nis [RETURN] files`
- D. `hosts: dns [NOTFOUND=return] nis [NOTFOUND=return] files`
- E. `hosts: dns [CONTINUE] nis [CONTINUE] files`

5

Complete the following `ipchains` invocation so that "ICMP unreachable" messages will be sent back to anyone trying to connect to the telnet service listening on port 23

```
ipchains -A input --dport 23 -p tcp -j _____
```

(Please type your answer in the text field below.)

6

You have implemented your firewall rules, and the firewall can connect to the outside, but no one behind the firewall can connect to the Internet. What might the problem be?

(Please select the ONE BEST choice.)

- A. The users are clueless, show them how it's done.
- B. The OUTPUT chain policy is DENY, it must be ACCEPT or no outgoing traffic will leave the host.
- C. IP forwarding is turned off in `/proc/sys/net/ipv4`.
- D. The firewall can connect to the Internet, so systems behind it are OK. The problem must be elsewhere.

7

What is the most important reason why an administrator should not enable telnet on a secured system?

(Please select the ONE BEST choice.)

- A. Telnet is inherently insecure due to the number of known exploits against it.
- B. It is possible to get passwords by sniffing traffic.
- C. Telnet is insecure and does no security checking of users allowed to login or password expiry checks.
- D. Telnet exposes the secured system to port scanning attempts.

8

You've installed a PAM-aware restricted service and installed the appropriate `/etc/pam.d/<service>` file, but you can't authenticate. What's the best place to look for problems?

(Please select the ONE BEST choice.)

- A. Reinstall `libpam` and reboot; the library isn't being seen.
- B. Remove `/etc/pam.d/<service>`, change the `/etc/pam.d/other` modules entries from `pam_deny.o` to `pam_accept.o` and try again.
- C. Change all controls to optional and try again.
- D. Look for clues in the log file where `auth` and `authpriv` messages are logged.

9

A specific mail archive application, which prefilters with `procmail`, must support a custom header. If a user has a "X-No-Archive: yes" line in his header, the message should be sent to `/dev/null`. Complete the following rule to implement this feature.

```
:0
```

---

```
/dev/null
```

(Please select the ONE BEST choice.)

- A. `MATCH="X-NO-ARCHIVE:.*YES"`
- B. `/X-No-Archive:\ yes/`
- C. `^x-no-archive: yes`
- D. `X-No-Archive:\ yes`
- E. `* ^x-no-archive: yes`

10

Several users complain that when checking their email or telnetting to your server they have to wait up to 60 seconds before getting their email or being presented with a login screen. However, immediately successive attempts at the same operation succeed normally - only to suffer again from the same problem after some time. What is causing this behavior?

(Please select the ONE BEST choice.)

- A. The DNS server used by the clients is not properly resolving the server name to an IP address.
- B. The routing table on the server contains multiple routes to the clients' machines.
- C. The server is timing-out while trying to resolve the clients' IP addresses to names.
- D. A router along the way is dropping packets in transit.
- E. Another machine on the server's network is using the same IP address.

11

When setting up an alias in Sendmail that forwards mail messages to a host in a different domain, what is the syntax of the `/etc/aliases` entry?

(Please select the ONE BEST choice.)

- A. `bob@domain.com : robert@newdomain.com`
- B. `bob : domain.com : robert@newdomain.com`
- C. `bob: robert@newdomain.com`
- D. `bob:redirect:robert@newdomain.com`
- E. `bob robert@newdomain.com`

12

Using `wu-ftpd`, you have setup an anonymous FTP server to allow access only to files under `/var/ftp`. You want to share out your current `/etc/mntab` file so users can see what filesystems are mounted on your system at any given time. You make a symbolic link from `/etc/mntab` to `/var/ftp/pub/mounted_filesystems`. During testing, you find that when logged in as a normal user, the file is accessible but when logged in anonymously, the file can NOT be read. Why might this happen?

(Please select the ONE BEST choice.)

- A. The symbolic link points to an absolute path.
- B. The permissions on the symbolic link are wrong.
- C. The FTP server will not allow files owned by root to be accessed.
- D. The FTP server needs write access to the `/etc` directory so it can update the access time on the file.
- E. The timestamp on `/etc/mntab` is wrong.

13

In a PAM configuration file, a sufficient control allows access:

(Please select the ONE BEST choice.)

- A. Immediately on success, if no previous required or requisite control failed.
- B. Immediately on success, regardless of other controls.
- C. After waiting if all other controls return success.
- D. Immediately, but only if the user is root.

14

Given the CIDR mask `/29`, the equivalent subnet mask in dotted quad format would be `255.255.255.____`.

(Please type your answer in the text field below.)