System Administration for Beginners

Week 4 Homework

March 1, 2010

Please turn in your homework at the beginning of class, with the assignment title, your name, `inst` login, and the answers with some justification when applicable (A sentence or two is fine).

1. Match the default ports for SSH, FTP, SMTP, HTTPS.

   (a) 80

   (b) 24

   (c) 65535

   (d) 53

   (e) 21

   (f) 443

   (g) 25

   (h) 123

   (i) 22

2. If you owned all the IP addresses that began with 192.168, where the latter two numbers could be a valid number, approximately how many IP addresses do you own?

   (a) 20 000

   (b) 47 500

   (c) 65 000

   (d) 100 000

3. Reverse DNS has to match forward DNS

   (a) True

   (b) False

4. Which of the following is the best way to uniquely identify a computer on the Internet?

   (a) domain name

   (b) IP address

   (c) server name

   (d) A record

5. The most efficient and fastest route between two points on Internet is the shortest path.

   (a) True

   (b) False

6. The number of routers between two Internet points, as reported by `traceroute`, is most related to which of the following properties?

   (a) the speed of the connection between them

   (b) the IP addresses of the two Internet points

   (c) the domain names of the two internet points

   (d) the distance between them

7. Of the following directories, where are you most likely to find the `adduser` command?

   (a) /etc

   (b) /home

   (c) /bin

   (d) /sbin

8. The `root` user can read and write to any user's files.

   (a) True

   (b) False

9. For video streaming, what protocol would you most likely use?

   (a) UDP

   (b) TCP

   (c) STREAM

   (d) P2P

10. If you were designing a new proprietary software that required a new proprietary protocol to speak to a central server (*i.e.*, secret DRM protection), what layer of the OSI model would you be most concerned with?

   (a) Physical

   (b) Transport

   (c) Application

   (d) Communication

   (e) None of the above