

What is Wireshark used for?

What is the difference between switches and hubs?

What is the difference between switches and routers?

What is a subnet mask?

Can you have several logical addresses against one physical address on your computer?

What is NFS used for?

You are a Product Manager and you want to share a certain folder, called ProjectX, with your team members with whom you share a defined user group on a UNIX system. These files are management-level sensitive documents that the entire group needs to work on the project. As such, you want to share them in such a way that the group has read-only access to the files, and everyone else has no access.

Using the numeric representation of permissions, write a command that will allow you to perform this operation on the ProjectX directory that resides in /org/projects/ProjectX

Describe the 7 (or 5 in the book) network layers.

What are 3 of the advantages of using the sudo command?

Why do servers belong in a data center?

Why is it a good idea to put some partitions (such as /var, /home, and swap) on a separate drive from other data files and programs? What about /tmp? Give specific reasons for each of the filesystems listed.

When logged in as root, why is it important to use the full path of programs you run?

What are the components of a URL address? Why isn't the port address of the service requested normally not included in the URL?

Explain the four components of the e-mail system

What programs might a typical email message pass through as one unix/linux user emails another and what do they do?

Name at least 4 Top-Level Domains in the U.S. and what they are used for; Name at least 3 types of records found in a zone file and what they are for.

With NFS, what is typically used to prevent users with root access on a client from gaining access to any file? How does it work?

If an FBI agent shows up at your office claiming he needs access to private information pertaining to an employee at your company what is the very first action that you should take?

Suppose you are being hired to provide backup services for a third party. What are the important details that need to be included in the contract?

List two reasons why backups are essential.

What are some important factors to consider when scheduling maintenance?

What DNS method can be used to load balance a web server?

What is the difference between TCP and UDP, and explain where one might be more appropriate than the other?

What are some of the security problems associated with NFS and how can these issues be avoided?

Why is it best to disable root access for SSH login?

Why is it better to use SSH instead of Telnet to remotely login to your system?

What does ***kill -9 pid*** and ***kill -1 pid*** do?

Look at this example DNS Zone File <http://www.zytrax.com/books/dns/ch6/mydomain.html>

What is the difference between A and CNAME

What goes in ***/etc/resolv.conf***?

What ports are HTTP and HTTPS accessed on?

Where would you check to see an error about a web page on your web server?

What is the purpose of SELinux?

Why use a firewall?

What do you need to do to a firewall to allow access to a web server running HTTP and HTTPS?

Compare rsync to sftp

What should you include in the documentation about your servers?

What kind of security should you have in place for your network in terms of both physical, electronic, and system policies.

Evaluation questions

- What did you like best about this course?
- What should be changed when the course is next taught?
- What was, to you, the most significant thing you learned through this course?

How do you get into your system, if you forgot your password (and the root password)?

Why is it useful to have log files?

What does NAT allow you to do for a network?

What is the purpose of ARP?

What is the purpose of DHCP?

Compare for a mail system: User Agent, Mail Transfer Agent, Delivery Agent, Access Agent

What is the purpose of a mail forward?

What prevents one user from reading another user's files?

Why use LVM for your disk management?

Compare IMAP, POP3, SMTP