

FBLA 2015 - Network Design

1) The _____ command can be used by potential hackers to find if an IP address is reachable. If a hacker finds a computer, they can try a port scan to detect and attack services on that computer.

SNAP

PING

ARP

IPCONFIG

2) Network _____ is an important area of network measurement, which deals with monitoring the health of various links in a network using end-to-end probes sent by agents located at vantage points in the network/Internet.

Reliability

Tomography

Security

Topography

3) _____ includes the methods, systems, algorithms, and tools to monitor the routing posture of networks. Incorrect routing or routing issues cause undesirable performance degradation or downtime.

Protocol support

Auditing

Network design

Route analytics

4) In _____ encryption schemes, the encryption key is published for anyone to use and encrypt messages.

symmetric-key

message

public-key

substitution

5) _____ and encryption must be applied at message creation to avoid tampering.

Logs

Authentication

Hashing

Digital signature

6) When a computer program runs, it will do what it's programmed to do, even if it's programmed to be:

circular

harmful

helpful

encrypted

7) _____ is an application protocol for accessing and maintaining distributed directory information services over an Internet Protocol Network.

DNS

DHCP

LDAP

ARP

8) _____ is a type of access control defined by the Trusted Computer System Evaluation Criteria[1] as a means of restricting access to objects based on the identity of subjects and/or groups to which they belong.

- ACLD
- DACL
- SHACL
- RACL

9) _____ is a physical or logical subnetwork that contains and exposes an organization's external-facing services to a larger and untrusted network, usually the Internet.

- TCP
- STP
- UDP
- DMZ

10) _____ is the arrangement of the various elements (links, nodes, etc.) of a computer network.

- Network science
- Transponding
- Network topology
- Network security

11) _____ detail(s) how risks made by changes to the network can be reduced.

- Test strategies
- Recovery plans
- Disaster mitigation
- Backup strategies

12) Combining and testing resources on to the network is known as:

- research
- testing
- planning
- integration

13) _____ is the average rate of successful message delivery over a communication channel.

- Voltage
- Capacity
- Throughput
- Bandwidth

14) Many new networking devices offer support for IPv6. While not used extensively today, which one of the following problems does IPv6 solve?

- overly complex router configuration tables
- server clustering inefficiencies
- lack of Internet protocol addresses
- 10BaseT network collisions

15) _____ works in Windows by limiting application software to standard user privileges until an administrator authorizes an increase or elevation.

DLL

ACL

UAC

File permission

16) _____ is a type of computer security vulnerability typically found in web applications.

Spam

A virus

A worm

Cross site scripting

17) The network _____ is designed to allow shared file and printer access among multiple computers in a network.

throughput

operating system

peer

protocol

18) The importance of audit event logging has increased with recent new United States and worldwide legislation mandating corporate and enterprise _____ requirements.

virtualization

spamming

computing

auditing

19) _____ can severely limit an intrusion detection system's effectiveness.

Noise

TCP

Data

Packets

20) Proper security requires a _____ to allow authorized users access from the outside and inside.

hub

bridge

firewall and proxy

switch

21) Microsoft's proprietary directory service built using LDAP, Kerberos, and DNS is known as _____ Directory.

Active

Lightweight

Domain

Replication

22) _____ is a protocol specification for exchanging structured information in the implementation of Web Services in computer networks.

SOAP

JavaScript

Flash

Java

23) The simple file transfer protocol generally used for automated transfer of configuration or boot files between machines in a local environment is known as:

SMTP

FTP

SFTP

TFTP

24) A network can be characterized by its physical capacity or its organizational purpose. Use of the network, including user _____ and access rights, differs accordingly.

naming

authorization

password

emails

25) Copper Ethernet cable has a maximum transmission distance of around _____ meters.

10

10000

1000

100

26) In schools and hospitals it is recommended to use _____ rated cabling.

Plenum

Distance

Rotunda

Parabellum

27) When using a particular combination of motherboard chipset, CPU, and wireless network adapter laptops received the _____ branding.

Pentium

Centrino

Celeron

Cupertino

28) You notice during baseline testing that there is a spike of network traffic every day from 2:00 p.m. to 2:45 p.m. To determine the cause of the spike, you employ a(n):

load balancer

ethernet equalizer

protocol analyzer

multiplexer

- 29) _____ is a business analysis perspective that describes social and technical resources within and between businesses.
Logistics
Resource delivery
Social interaction
Value network
- 30) When two or more machines transmit at the same time on a network this is known as a:
fault
collision
audit
meter
- 31) _____ is a network administration command-line tool available for many computer operating systems for querying DNS.
NTP
NSLOOKUP
BOOTP
POP3
- 32) One tool to scan your network is:
Nmap
Sntp
Pop3
Ntp
- 33) _____ network cabling is jacketed with a fire-retardant plastic jacket.
All
Plenum
STP
Non-plenum
- 34) When testing a network segment you realize you cannot ping other hosts on the same network segment. What should you do first?
reboot the gateway
see if there is a link light on the network adapter
see if your machine is configured with an address on the same network
reboot the computer
- 35) _____ can be used for computer system management and security auditing as well as generalized informational, analysis, and debugging messages
Apache
SMB
ProFTP
Syslog
- 36) To view the cache of MAC addresses on the Windows computer you are logged on to, issue the _____ command.
Arp -a

Darpa
Ifconfig
Ipconfig

37) Occasionally a system as a whole is said to have _____ access control as a way of saying that the system lacks mandatory access control.

Undefined
No
Optional
Discretionary

38) What command will show the IP routing tables on Windows?

Route print
Ipconfig /routes
Nbtstat
Arp -r

39) If no forwarders are configured on a machine and you want to still look up domains not contained within a DNS server's cache, you can use:

pointer records
scavenging
root hints
immediate transfer

40) What type of web filter has the best chance to not interrupt traffic flow during a reboot?

IIS
Portmap
Transparent Proxy
Inline filter

41) Using the OSI model for network troubleshooting, start at the _____ layer and work your way up.

data link
physical
transport
application

42) A _____ is an information repository that provides a means for information to be collected, organized, shared, searched, and utilized.

system component
knowledge base
troubleshooter
log

43) Windows ____ is not designed to be the primary operating system on a computer, but is instead used as a standalone pre-installation environment and as an integral component of other setup and recovery technologies.

CE
XP

PE
NT

44) What command will remove an assigned IP address 10.10.10.1 from the given interface (eth0) in Linux?

ip addr rm 10.10.10.1/16 dev eth1
ip addr rm 10.10.10.1/16 dev eth0
ip addr del 10.10.10.10/16 dev eth0
ip addr del 10.10.10.1/16 dev eth0

45) While accessing a file on a network share you get a message that you cannot open the file, this is a result of:

rights
objects
permissions
profiles

46) When performing a network install of an operating system, make sure to include the ____ drivers in the installation image.

RAM
graphics adapter
CPU
NIC

47) To display the current state of the routing table, use the ____ command in EXEC mode on a Cisco router.

show ip route
show table
route
show BGP route

48) The best way to push network configuration settings across the network to a large number of computers at boot time is by using the ____ protocol.

NTP
DHCP
SNMP
DNS

49) An Ethernet ____ cable is a type of Ethernet cable used to directly connect together computing devices operating at the same OSI layer.

rollover
straight-through
crossover
x-out

50) Permissions should always be applied to a:

computer
foreign entity
user account
group

51) If you have two WAN connections, it would be appropriate to configure one for:
Sntp
ftp
web traffic
Failover

52) _____ is a commonly used network testing tool that can create TCP and UDP data streams and measure the throughput of a network that is carrying them.
Ifconfig
Iperf
Ip
Ipconfig

53) _____ a tool to measure bandwidth and response times between two hosts using Internet Control Message Protocol (ICMP) echo request/echo reply mechanism.
Ipconfig
Ip
BWPing
Ifconfig

54) _____ software enables a single framework for implementing IT policies, procedures, and systems management across highly distributed collections of computers, servers, workstations, laptops, or mobile devices.
Spiceworks
Avaya
Kaseya
Alcatel-Lucent

55) _____ is a feature of the Microsoft Windows NT family of operating systems that control the working environment of user accounts and computer accounts.
DNS
Group Policy
DHCP
LDAP

56) _____ is a free user interface that works with core libraries to handle the installation and removal of software on the Debian GNU/Linux distribution and its variants.
YUM
APT
Portage
Group Policy

57) _____ is an open source computer system monitoring, network monitoring and infrastructure monitoring software application that offers monitoring and alerting services for servers, switches, applications, and services.
Nagios
Apache

Yum
Orion

58) _____ is an advanced tool that displays detailed information about significant events on your computer. It can be helpful when troubleshooting problems and errors with Windows and other programs.

MMC
Event Viewer
Active Directory
IIS

59) _____ is an extensible common presentation service for management applications which is included in the Windows operating systems.

Apt
MMC
Portage
Psexec

60) _____ is a computer security project that provides information about security vulnerabilities and aids in penetration testing and IDS signature development.

Computrain
Banshee
AVRectify
Metasploit

61) With Windows Disk quotas, you can set quota limits on individual users, or you can have limits apply equally to all non-administrative users.

Unfortunately, you can't set limits on:

an RDP connection
individual accounts
groups of users
hard drives directory

62) On a UNIX system, the read permission grants the ability to read a file. When set for a directory, this permission grants the ability to read the names of _____ in the directory.

WAN Links
ACLs
users
files

63) On a UNIX system, the write permission grants the ability to _____ a file. When set for a directory, this permission grants the ability to modify entries in the directory.

write to
read
assign permission to
modify

64) One characteristic of a good network is that it will be:

very expensive
composed of a single brand
reliable
hard to manage

65) _____ is used on a Microsoft Windows Domain Controller to take the Active Directory on that machine offline for maintenance.
Directory Services Restore Mode
DHCP
DNS
Windows Backup

66) _____ allows for automatic configuration of network properties.
SMTP
SNMP
NTP
DHCP

67) If you have a very small network, _____ files may be preferred to DNS.
NTLM
HOSTA
LMHOSTS
HOSTS

68) _____ provides a standard network protocol for remote printing as well as for managing print jobs, media size, resolution, and so forth.
NTP
SMTP
SLP
IPP

69) To implement SSL, you must use a:
bridge
switch
certificate
router

70) With DNS, root hints are provided by _____ root servers.
130
13000
13
1330

71) Should a DNS server not have a name cached, it can be configured to use a _____ to find the information.
clone
caching server
forwarder
router

72) Third generation firewalls also are known as _____ filters.
stateful
MAC
application
packet

73) As of 2013, the most popular WWW server was:
nginx
GWS
IIS
Apache

74) _____ is a Unix based web hosting control panel that provides a graphical interface and automation tools designed to simplify the process of hosting a website.
Perl
cPanel
BIND
MySQL

75) A _____ file is a directory-level configuration file supported by several web servers that allows for decentralized management of web server configuration.
.htaccess
.www
.webconfig
.config

76) The ability to restore a machine from scratch also is called _____ recovery.
bare metal
easy
incremental
safe

77) For services to continue uninterrupted during a crisis is known as:
guidelines
recovery
planning
continuity

78) The _____ method incremental backup backs up only the blocks within the file that changed. This requires a higher level of integration between the sender and receiver.
byte level incremental
block level incremental
synthetic
differential

79) A _____ is a dedicated network that provides access to consolidated, block

level data storage.
network attached storage
driver
storage area network
network interface controller

80) _____ is a computer network technology that encapsulates Fibre Channel frames over Ethernet networks.
ATA over Ethernet
iFCP
HyperSCSI
Fibre Channel over Ethernet

81) A(n) _____ file is a file that is composed of one or more computer files along with metadata.
Archive
GZ
Zip
7z

82) After testing procedures have been completed, an initial _____ of the plan is performed by conducting a structured walk-through test.
recording
planning
coding
dry-run

83) In Windows 7, System _____ can return your PC's system files and programs to a time when everything was working fine, potentially preventing hours of troubleshooting headaches. It won't affect your documents, pictures, or other data.
Repair
Image Recovery
Memory Diagnostic
Restore

84) The software utility _____ is a time-based job scheduler in Unix-like computer operating systems.
Anachron
Crontab
Chron
Cron

85) _____ is a technology included in Microsoft Windows that allows taking manual or automatic backup copies or snapshots of data, even if it has a lock, on a specific volume at a specific point in time over regular intervals.
Backup and restore
System repair
Shadow copy
Cron

86) Also known as the let-through voltage, _____ specifies what spike voltage will cause the protective components inside a surge protector to divert unwanted energy from the protected line.

- varistor
- response time
- Joules rating
- clamping voltage

87) Surge protectors don't operate instantaneously; a slight delay exists. The longer the _____, the longer the connected equipment will be exposed to the surge.

- clamping voltage
- flow clamping
- Joules rating
- response time

88) The foundation of business _____ are the standards, program development, and supporting policies.

- policies
- continuity
- software
- hardware

89) The primary purpose of a _____ is to recover data after its loss, be it by data deletion or corruption.

- hard drive
- recovery policy
- floppy drive
- backup

90) The _____ UPS offers only the most basic features, providing surge protection and battery backup.

- Modular
- Online/double-conversion
- Line-interactive
- Offline/standby

91) _____ is suitable for purposes where error checking and correction is either not necessary or performed in the application, avoiding the overhead of such processing at the network interface level.

- TCP
- NTP
- UDP
- FTP

92) If you remove DHCP from a server, either make sure it is configured on another server or that the clients:

- are all Windows clients
- are running Linux
- have Google Chrome installed
- have static ip addresses configured

93) VPNs provide security by the use of tunneling _____ and through security procedures such as encryption.

- hardware
- companies
- protocols
- user accounts

94) Network _____ consist of connections between network cards, protocols, and services.

- protocols
- drivers
- hardware
- bindings

95) A client connects to the _____ server, requesting some service, such as a file, connection, web page, or other resource available from a different server and the proxy server evaluates the request as a way to simplify and control its complexity.

- VPN
- tunnel
- VLAN
- proxy

96) On Unix-like systems, the list of authorized public keys for secure shell is stored in the home directory of the user that is allowed to log in remotely, in the file:

- ~/.ssh/authorized_keys
- ~/.etc/authorized_keys
- ~/etc/authorized_keys
- ~/ssh/authorized_keys

97) _____ is a set of algorithms in machine learning that attempt to learn in multiple levels, corresponding to different levels of abstraction.

- Deep learning
- Google Fabric
- Watson
- Big blue

98) In computer networking, a single layer-2 network may be partitioned to create multiple distinct broadcast domains, which are mutually isolated so that packets can only pass between them via one or more routers; such a domain is referred to as a:

- VPN
- VLAN
- WINSOCK
- SOCKS

99) The term _____ is commonly used in contexts that assume that every object has an owner that controls the permissions to access the object, probably

because many systems do implement these using the concept of an owner.

SUPERPAC

MAC

PAC

DAC

100) _____ is a link-state routing protocol for Internet Protocol networks which uses a link state routing algorithm and falls into the group of interior routing protocols.

RIP

OSPF

BGP

EIGRP