

Net def final



False Firewalls can protect against employees copying confidential data from within the network. True/False

False Software firewalls are usually more scalable than hardware firewalls. True/False

False Stateless packet filtering keeps a record of connections that a host computer has made with other computers. True/False

False Generally, connections to instant-messaging ports are harmless and should be allowed. True/False

False Since ICMP messages use authentication, man-in-the-middle attacks cannot be successful. True/False

False A dual-homed host has a single NIC with two MAC addresses. True/False

True A screened host has a router as part of the configuration. True/False

False Reverse firewalls allow all incoming traffic except what the ACLs are configured to deny. True/False

False Proxy servers take action based only on IP header information. True/False

False The TCP normalization feature forwards abnormal packets to an administrator for further inspection. True/False

True Another name for a VPN connection is tunnel. True/False

True Hardware VPNs create a gateway-to-gateway VPN. True/False

False Standards and protocols used in VPNs are in their infancy and seldom used. True/False

True IPsec has become the standard set of protocols for VPN security. True/False

False If you use Windows RRAS for your VPN, you will need a third-party RADIUS server if you want to use RADIUS for authentication. True/False

False The term Internet and World Wide Web are different terms that mean the same thing. True/False

True Computers on the Internet are identified primarily by their IP address. True/False

True SQL injection attacks are isolated to custom applications, so administrators can prevent them. True/False

True The objective of a phishing attack is to entice e-mail recipients to click a bogus link where personal information can be stolen. True/False

False Windows Basic Authentication requires that users enter a username and password and the password is transmitted using a hashing algorithm. True/False

C. firewall appliance The Cisco PIX line of products is best described as which of the following? A. software firewall B. PC with firewall installed C. firewall appliance D. VPN gateway

B. not dependent on a conventional OS Which of the following is an advantage of hardware firewalls? A. not scalable compared to software firewalls B. not dependent on a conventional OS C. less expensive than software firewalls D. easy to patch

C. data patterns Which of the following is NOT a criteria typically used by stateless packet filters to determine whether or not to block packets. A. IP address B. ports C. data patterns D. TCP flags

D. proxy server What should a company concerned about protecting its data warehouses and employee privacy might consider installing on the network perimeter to prevent direct connections between the internal network and the Internet? A. router B. filtering C. ICMP monitor D. proxy server

C. NAT Which element of a rule base conceals internal names and IP addresses from users outside the network? A. tracking B. filtering C. NAT D. QoS

B. employees can use instant-messaging only with external network users Which of the following is NOT among the common guidelines that should be reflected in the rule base to implement an organization's security policy? A. only authenticated traffic can access the internal network B. employees can use instant-messaging only with external network users C. the public can access the company Web servers D. employees can have restricted internet access

A. 30 rules What is a suggested maximum size of a rule base? A. 30 rules B. 300 rules C. 10 rules D. 100 rules

- C. 80, 443 Which two ports should packet-filtering rules address when establishing rules for Web access? A. 143, 80 B. 25, 110 C. 80, 443 D. 423, 88
- B. DNS What service uses UDP port 53? A. SMTP B. DNS C. ICMP D. TFTP
- C. TCP 21 control, TCP 20 data What are the two standard ports used by FTP along with their function? A. UDP 23 control, TCP 20 data B. UDP 20 data, TCP 21 control C. TCP 21 control, TCP 20 data D. TCP 23 data, TCP 21 control
- A. Teredo tunneling Which of the following is a method for supporting IPv6 on IPv4 networks until IPv6 is universally adopted? A. Teredo tunneling B. ICMPv6 encapsulation C. IPsec tunneling D. SMTP/S tunneling
- D. load-balancing software Which of the following is best described as software that prioritizes and schedules requests and then distributes them to servers based on each server's current load and processing power. A. server pooling software B. traffic distribution filter C. priority server farm D. load-balancing software
- C. DDoS In what type of attack are zombies usually put to use? A. buffer overrun B. virus C. DDoS D. spoofing
- D. reverse firewall What should you consider installing if you want to inspect packets as they leave the network? A. security workstation B. RIP router C. filtering proxy D. reverse firewall
- A. screened subnet DMZ Which type of firewall configuration protects public servers by isolating them from the internal network? A. screened subnet DMZ B. dual-homed host C. screening router D. reverse firewall

B. proxy server Which type of security device can speed up Web page retrieval and shield hosts on the internal network? A. caching firewall B. proxy server C. caching-only DNS server D. DMZ intermediary

C. may require client configuration Which of the following is a disadvantage of using a proxy server? A. shields internal host IP addresses B. slows Web page access C. may require client configuration D. can't filter based on packet content

B. a computer on the perimeter network that is highly protected Which of the following best describes a bastion host? A. a host with two or more network interfaces B. a computer on the perimeter network that is highly protected C. a computer running a standard OS that also has a proxy software installed D. a computer running only embedded firmware

B. they are not routable on the Internet Which of the following is true about private IP addresses? A. they are assigned by the IANA B. they are not routable on the Internet C. they are targeted by attackers D. NAT was designed to conserve them

B. port address translation Which type of translation should you use if you need 50 computers in the corporate network to be able to access the Internet using a single public IP address? A. one-to-one NAT B. port address translation C. one-to-many NAT D. DMZ proxy translation

D. authentication server Which of the following is NOT an essential element of a VPN? A. VPN server B. tunnel C. VPN client D. authentication server

C. have more security vulnerabilities than software VPNs Which of the following is NOT true about a hardware VPN? A. should be the first choice for fast-growing networks B. can handle more traffic than software VPNs C. have more security vulnerabilities than software VPNs D. create a gateway-to-gateway VPN

D. encapsulation Which activity performed by VPNs encloses a packet within another packet? A. address translation B. encryption C. authentication D. encapsulation

C. SSL Which VPN protocol leverages Web-based applications? A. PPTP B. L2TP C. SSL D. IPsec

B. L2TP Which VPN protocol uses UDP port 1701 and does not provide confidentiality and authentication? A. IPsec B. L2TP C. PPTP D. SSL

C. IPsec Which VPN protocol works at Layer 3 and can encrypt the entire TCP/IP packet? A. PPTP B. L2TP C. IPsec D. SSL

C. IPsec driver Which IPsec component is software that handles the tasks of encrypting, authenticating, decrypting and checking packets? A. ISAKMP B. IKE C. IPsec driver D. Oakley protocol

D. adds a hashed message authentication code Which of the following is an improvement of TLS over SSL? A. requires less processing power B. uses a single hashing algorithm for all the data C. uses only asymmetric encryption D. adds a hashed message authentication code

B. VPN quarantine What was created to address the problem of remote clients not meeting an organization's VPN security standards? A. split tunneling B. VPN quarantine C. IPsec filters D. GRE isolation

B. it was established in the mid-1960s Which of the following is true about the Internet? A. it is the same as the World Wide Web B. it was established in the mid-1960s C. it was developed by a network of banks and businesses D. it was originally built on an extended star topology

C. NAP Which of the following is a highly secure public facility in which backbones have interconnected data lines and routers that exchange routing and traffic data? A. ISP B. POP C. NAP D. NSF

C. anycast addressing What feature of the 13 DNS root servers enables any group of servers to act as a root server? A. multicast addressing B. broadcast addressing C. anycast addressing D. unicast addressing

D. SQL injection What type of attack involves plaintext scripting that affects databases? A. phishing B. ActiveX control C. Java applet D. SQL injection

B. phishing What type of attack displays false information masquerading as legitimate data? A. Java applet B. phishing C. buffer overflow D. SQL injection

C. use standard naming conventions Which of the following is NOT a step you should take to prevent attackers from exploiting SQL security holes? A. limit table access B. use stored procedures C. use standard naming conventions D. place the database server in a DMZ

B. pharming Which variation on phishing modifies the user's host file to redirect traffic? A. spear phishing B. pharming C. DNS phishing D. hijacking

A. primary What type of DNS server is authoritative for a specific domain? A. primary B. secondary C. read-only D. initial

B. updating a secondary DNS server What is a zone transfer? A. the movement of e-mail from one domain to another B. updating a secondary DNS server C. backing up an SQL data file D. copying host file data to another system

D. split-DNS architecture What type of DNS configuration prevents internal zone information from being stored on an Internet-accessible server? A. read-only zone B. anti-phishing DNS C. caching DNS zone D. split-DNS architecture

C. use the default standard Web page error messages Which of the following is NOT a recommended security setting for Apache Web servers? A. harden the underlying OS B. create Web groups C. use the default standard Web page error messages D. disable HTTP traces

perimeter A firewall can consist of all devices positioned on the network _____.

rule ACLs filter packets by using a _____ base to determine whether to allow a packet to pass.

handshake The ACK flag is normally sent at the end of the three-way _____ to indicate that a connection is established.

filterA primary objective of a rule base is to _____ communications based on complex rules.

DMZThe rule base should permit access to public servers in the _____ and enable users to access the Internet.

screeningA _____ router determines whether to allow or deny packets based on their source and destination IP addresses.

hostIn a screened _____ setup, a router is added between the host and the Internet to carry out IP packet filtering.

publiclyA DMZ is a subnet of _____ accessible servers placed outside the internal network.

hardenYou can _____ a bastion host by removing unnecessary accounts and services.

endpointsNetwork gateways are _____ of the VPN connection.

ExchangeThe Internet Key _____ protocol enables computers to make an SA.

XORTLS splits the input data in half and recombines it using a(n) _____ function.

NAPsThe internet tier system starts with a backbone network connected via _____ to regional Internet service providers.

Routers_____ direct network traffic to its destination on the Internet using tables and protocols.

spoofing The lack of authentication for computers on the Internet make IP _____ possible, which is change in the IP addresses in the headers of malicious packets.

cacheDNS _____ poisoning steers unsuspecting victims to a server of the attacker's choice instead of the intended Web site.

Botnets _____ are networks of zombie computers that magnify the scope and intensity of an attack.

stack A critical buffer component is the function _____ and buffer overflows are usually aimed at this component.

Java A _____ applet is a small program sometimes used as embedded code in Web pages.

DNSSEC The goal of _____ is to provide authentication of DNS data and ensure integrity of DNS data.

proxy servers software that forwards network packets and caches Web pages to speed up network performance

socket the end point of a computer-to-computer connection defined by an IP address and port address

cleanup rule a packet-filtering rule that comes last in a rule base and covers any packets that have not been covered by preceding rules

firewall appliance hardware devices with firewall functionality

stateless packet filters simple filters that determine whether to allow or block packets based on information in protocol headers

rule base the collection of rules that filter traffic at an interface of a firewall

many-to-one NAT a process that uses the source and destination TCP and UDP port addresses to map traffic between internal and external hosts

one-to-one NAT the process of mapping one internal IP address to one external IP address

dual-homed host a computer configured with more than one network interface

screened host a host in which one interface is connected to an internal network and the other interface is connected to a router to an untrusted network

load-balancing software software that prioritizes and schedules requests and then distributes them to servers in a server cluster based on each server's current load and processing power

screening router a router placed between an untrusted network and an internal network

IKE a form of key exchange used to encrypt and decrypt data as it passes through a VPN tunnel

Kerberos an IETF standard for secure authentication of requests for resource access

ESPA an IPsec protocol that encrypts the header and data components of TCP/IP packets

SSL a protocol developed by Netscape Communications Corporation as a way of enabling Web servers and browsers to exchange encrypted information

IPsec a set of standard procedures that the IETF developed for enabling secure communication on the Internet

GRE a nonproprietary tunneling protocol that can encapsulate a variety of Network layer protocols

anycast addressing a network addressing scheme that allows DNS services to be decentralized among a group of servers, regardless of their location

split brain DNS architecture a network architecture that uses a single DNS domain with a DNS server on the organization's DNZ for Internet services and a DNS server on the internal network for service to internal hosts