

## Assignment 02

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QUESTION	ANSWERS
1	B
2	B
3	D
4	A
5	A
6	D
7	D
8	C
9	A
10	C
11	C
12	B
13	B
14	D
15	A
16	useradd alice
17	id alice
18	su alice11
19	whoami
20	mkdir prelab2
21	pwd
22	touch testfile
23	chown user2 testfile
24	chmod 764 testfile
25	rm -rf prelab2 testfile
26	unmask 022

27 unmask 077  
28 void and void

29 setreuid  
#ifdef \_POSIX\_SAVED\_IDS  
status = seteuid (ruid);  
#else  
status = setreuid (euid, ruid);  
#endif  
if (status < 0) {  
fprintf (stderr, "Couldn't set uid.\n");  
exit (status);  
}

30 Saves the uid, euid, and (mostly critically and specified in the website) sets the euid back to the uid for safety.

31 Just one:  
stream=fopen(SCORES\_FILE,"a");

32 a

33 d

34 Yes because it is 6 characters which is before the "exponential wall" takes off

35 Since the hashed values are salted, he will have to try every hash with every salt which would take a long time. Pre-computation is out since he can't store all hashes with all salts. However, for each individual password of interest, there is only one salt and SHA-1 is fast, enabling him to crack any medium strength or weaker passwords.

36 .

A ) K)j9h8g7

B) !234QwerAsdfZxcv

C) wingardiumleviosa = 149270665.544 seconds

Wi\*ngardiumleviosa = 4950714077204901.56 seconds

D ) pseudopseudohypoparathyroidism

E ) 123456789aA\*

f) infosec-5380-001

37 . B

38 . D

39 . log tcp any any - > 156.118.76.54.23 (msg : tftelnet packettf)

40. !

41 . nmap -o < ip address of target host > OR nmap -A < ip address of target host >

42 . C

43. Netwoek-based(NIPS), Wireless ( WIPS) , Network behavior analysis(NBA), Host-based(HIPS)

44.C

45. B

46. E

47

a. ps -U root

b. kill 1234 or Kill- 9

c lsof -l tcp

netsat -inet -tcp OR netstat -at

d. And / -perms -2000 print

e. kill -HUP <pid>

f . /etc/init.d/xinetd restart or kill -HUP<pid of xinetd>

48. \$ PATH is set to a list of directories where commands (binaries) can be found and is searched each time a command is executed.

tf/usr/bin:/usr/sbin:/usr/local/bin

49. c

50. A or B

51. B

52. D

53. in /etc/hosts.deny:

ALL:ALL

In/etc/hosts.allow:

telnet : 192.168.1.10

sshd : 192.168.12.1, 192.168.1.10

54. A

55.

Int\_if=txl0tf

Tcp\_services=tf{22,113}tf

Icmp\_types=tfechoqtf

Comp3=tf192.168.0.3tf

objecBve:Helps with Make the ruleset as simply and easy to maintain as possible.

Rule : set block-policy return

ObjecBve:None. This sets the block policy to return.

Rule : set logininterface egress

objecBve: Log Qlter staBscBcs on the external interface

Rule : set skip on lo

objectBve: None, but it is a best practice to not alter on the loopback interface.

Rule : anchor fw-proxy/\*fw

objectBve: Helps with the make the ruleset as simple and easy to maintain as possible.

Dynamically insert rules.

Rule : pass in quick on \$int\_if net proto tcp to any port Wp divert-to 127.0.0.1 port 8021

objectBve: None . Diverts FTP connections to the FTP proxy on this host, port 8021.

Rule: match out on egress inet from !(egress:network ) to any nat-to(egress:0)

objectBve:None. It sets up the NAT.

Rule : block in log

objectBve: Use a default deny rule set, and Log rule set on the external interface.

Rule : pass out quick

objectBve : Helps with make the ruleset as simple and easy to maintain as possible.

Egress traffic is allowed out without further rules.

Rule : anti-spoof quick for { lo \$int\_if }

objectBve: None. Blocks spoofed IPs(loopback and internal IPs from the external interface).

objectBve: Log rule set on the external interface

Rule : pass in on egress inet proto tcp from any to egress port \$ tcp\_services

objectBve: Allow the following incoming traffic to the Firewall from the internet:

SSH(TCP port 22): this will be used for external maintenance of the Firewall machine.

Auth/Ident (TCP port 113) : used by some services such as SMTP and IRC.

Rule : pass in on egress inet proto tcp to(egress) port 80 rdr-to \$comp3

objectBve: Redirect TCP port 80 connections attempts which are attempts to access a web server to computer COMP3. Also, permit TCP port 80 traffic destined for COMP3 through the Firewall.

Rule : pass in inet proto icmp all icmp-type \$icmp\_types

objectBve: Allow the following incoming traffic to the Firewall from the internet:

ICMP Echo Requests: the ICMP packet type used by ping(8).

Rule : pass in on \$int\_if

objectBve: None. Passes internal traffic without restrictions.