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tp0 system d'exploitation

exo4

1/le programme infini arrete avec un signal 2 SIGINT

2/le programme infini arrete avec un signal 9 SIGKILL

3/assassin arrete infini avec un signal 2 SIGINT

4/le SIGINT est pour les interruptions, le SIGKILL est pour forcer le problem a arreter

note secondaire: j'ai utilise echo \$? pour savoir les signaux executés, le resultat est 128 + numero de signal

```
infini.c
1 #include <stdio.h>
2 #include <unistd.h>
3 #include <stdlib.h>
4 #include <sys/wait.h>
5 #include <stdbool.h>
6 #include <signal.h>
7
8 void hello(int sig){
9     printf("Hello ! I am here \n");
10    fflush(stdout);
11 }
12
13 int main(){
14     signal(SIGINT, hello);
15
16     while(true){
17
18     }
19     return 0;
20 }
21
22 /**
23 1/rien a passé, le signal associé est signal 2, program stopped
24 2/SIGKILL 9 | killed and program stopped
25 3/infini stops with signal
26 4/the process stops
27 */
28 */

assassin.c
1 #include <stdio.h>
2 #include <unistd.h>
3 #include <stdlib.h>
4 #include <sys/wait.h>
5 #include <sys/types.h>
6 #include <signal.h>
7
8 int main(){
9
10     int pid;
11     scanf("%d", &pid);
12     kill(pid, SIGINT);
13     printf("processus tué");
14
15 }
```

Terminal 21:05 12 آذوی

```
crow@nest: ~/uni/rsd-s1/sys/tp0
crow@nest:~/uni/rsd-s1/sys/tp0$ ./infini
^C
crow@nest:~/uni/rsd-s1/sys/tp0$ echo $?
130
crow@nest:~/uni/rsd-s1/sys/tp0$ ./infini
Killed
crow@nest:~/uni/rsd-s1/sys/tp0$ kill -l
1) SIGHUP   2) SIGINT   3) SIGQUIT   4) SIGILL   5) SIGTRAP
6) SIGABRT   7) SIGBUS   8) SIGFPE   9) SIGKILL   10) SIGUSR1
11) SIGSEGV   12) SIGUSR2   13) SIGPIPE   14) SIGALRM   15) SIGTERM
16) SIGSTKFLT   17) SIGCHLD   18) SIGCONT   19) SIGSTOP   20) SIGTSTP
21) SIGTTIN   22) SIGTTOU   23) SIGURG   24) SIGXCPU   25) SIGXFSZ
26) SIGVTALRM   27) SIGPROF   28) SIGWINCH   29) SIGIO   30) SIGPWR
31) SIGSYS   34) SIGRTMIN   35) SIGRTMIN+1   36) SIGRTMIN+2   37) SIGRTMIN+3
38) SIGRTMIN+4   39) SIGRTMIN+5   40) SIGRTMIN+6   41) SIGRTMIN+7   42) SIGRTMIN+8
43) SIGRTMIN+9   44) SIGRTMIN+10   45) SIGRTMIN+11   46) SIGRTMIN+12   47) SIGRTMIN+13
48) SIGRTMIN+14   49) SIGRTMIN+15   50) SIGRTMAX-14   51) SIGRTMAX-13   52) SIGRTMAX-12
53) SIGRTMAX-11   54) SIGRTMAX-10   55) SIGRTMAX-9   56) SIGRTMAX-8   57) SIGRTMAX-7
58) SIGRTMAX-6   59) SIGRTMAX-5   60) SIGRTMAX-4   61) SIGRTMAX-3   62) SIGRTMAX-2
63) SIGRTMAX-1   64) SIGRTMAX
crow@nest:~/uni/rsd-s1/sys/tp0$ ./infini
Killed
crow@nest:~/uni/rsd-s1/sys/tp0$ echo $?
137
crow@nest:~/uni/rsd-s1/sys/tp0$
```

Terminal 21:06 12 آذوی

```
crow@nest: ~/uni/rsd-s1/sys/tp0
crow@nest:~/uni/rsd-s1/sys/tp0$ ps aux
8426 ? 00:00:01 kworker/u9:2-rtw_tx_wq
8587 ? 00:00:00 kworker/u8:1-events_power_efficient
8590 ? 00:00:00 kworker/u8:3-events_unbound
8605 ? 00:00:00 kworker/0:1-events
8612 ? 00:00:09 nautilus
8640 ? 00:00:00 kworker/2:0-mm_percpu_wq
9739 ? 00:00:13 code
9743 ? 00:00:00 code
9744 ? 00:00:00 code
9746 ? 00:00:00 code
9761 ? 00:00:00 chrome_crashpad
9780 ? 00:00:25 code
9791 ? 00:00:01 code
9819 ? 00:01:25 code
10085 ? 00:00:09 code
10448 ? 00:00:01 code
10460 ? 00:00:33 code
10534 ? 00:00:11 cpptools
10545 ? 00:00:00 kworker/1:1-events
10594 ? 00:00:00 cpptools-srv
10660 ? 00:00:00 kworker/u9:3-rtw_tx_wq
10682 ? 00:00:02 code
10708 ? 00:00:00 cpptools-srv
10716 pts/0 00:00:00 bash
11000 ? 00:00:00 kworker/u8:0-events_power_efficient
11067 ? 00:00:03 gnome-terminal-
11085 pts/1 00:00:00 bash
11350 ? 00:00:00 kworker/3:1-i915-unordered
11375 ? 00:00:00 Web Content
11419 ? 00:00:00 kworker/u9:0-i915_flip
11459 pts/2 00:00:00 bash
11693 ? 00:00:00 kworker/1:0-events
11737 pts/1 00:00:06 infini
11738 pts/2 00:00:00 ps
crow@nest:~/uni/rsd-s1/sys/tp0$ kill -9 11737
crow@nest:~/uni/rsd-s1/sys/tp0$
```

```
Terminal 21:14 12 أكتوبر 62%
crow@nest: ~/uni/rsd-s1/sys/tp0
crow@nest: ~/uni/rsd-s1/sys/tp0

9780 ? 00:00:45 code
9791 ? 00:00:01 code
9819 ? 00:02:29 code
10085 ? 00:00:11 code
10448 ? 00:00:01 code
10460 ? 00:00:47 code
10534 ? 00:00:18 cptools
10666 ? 00:00:00 kworker/u9:3-rtw_tx_wq
10682 ? 00:00:03 code
10708 ? 00:00:00 cptools-srv
10716 pts/0 00:00:00 bash
11000 ? 00:00:00 kworker/u8:0-events_unbound
11067 ? 00:00:06 gnome-terminal-
11085 pts/1 00:00:00 bash
11350 ? 00:00:01 kworker/3:1-i915-unordered
11375 ? 00:00:00 Web Content
11419 ? 00:00:00 kworker/u9:0-rtw_tx_wq
11459 pts/2 00:00:00 bash
11739 ? 00:00:00 kworker/3:0-i915-unordered
11740 ? 00:00:00 kworker/0:0-events
11742 ? 00:00:00 kworker/u9:1-i915_flip
11791 ? 00:00:00 kworker/u8:2-flush-259:0
11886 ? 00:00:00 kworker/1:1-events
11813 ? 00:00:00 kworker/2:1-events
11847 ? 00:00:00 kworker/0:2-mm_percpu_wq
11996 ? 00:00:00 kworker/3:2-i915-unordered
12002 ? 00:00:00 kworker/u9:2-rtw_tx_wq
12063 ? 00:00:00 kworker/u8:1-events_power_efficient
12064 ? 00:00:00 code
12090 ? 00:00:00 cptools-srv
12115 pts/1 00:00:28 infini
12122 ? 00:00:00 kworker/1:0-events
12123 pts/2 00:00:00 ps
crow@nest:~/uni/rsd-s1/sys/tp0$ ./assassin
12115
processus tué crow@nest:~/uni/rsd-s1/sys/tp0$
```

```
Terminal 21:15 12 أكتوبر 62%
crow@nest: ~/uni/rsd-s1/sys/tp0
crow@nest: ~/uni/rsd-s1/sys/tp0

crow@nest:~/uni/rsd-s1/sys/tp0$ ./infini
crow@nest:~/uni/rsd-s1/sys/tp0$ echo $?
130
crow@nest:~/uni/rsd-s1/sys/tp0$
```

The screenshot shows a terminal window with two tabs open. The left tab has the title 'Terminal' and contains the following text:

```
crow@nest: ~/uni/rsd-s1/sys/tp0
crow@nest:~/uni/rsd-s1/sys/tp0$ gcc infini.c -o infini
crow@nest:~/uni/rsd-s1/sys/tp0$ ./infini
^CHello ! I am Here
Hello ! I am Here
```

The right tab has the title 'crow@nest: ~/uni/rsd-s1/sys/tp0' and is currently empty.