Lab 5-1

$March\ 23,\ 2020$

Contents

1	Question 1	2
2	Question 2	2
3	Question 3	2
4	Question 4	2
5	Question 5	2
6	Question 6	2
7	Question 7	2
8	Question 8	3
9	Question 9	3
10	Question 10	3
11	Question 11	3
12	Question 12	3
13	Question 13	3
14	Question 14	4
15	Question 15	4

16 Question 16
17 Question 17
18 Question 18
19 Question 19
20 Question 20
21 Question 21 5
1 Question 1
0x1000D02E
2 Question 2
0x100163CC
3 Question 3
3 Question 35
5
5 4 Question 4
4 Question 4 pics.practicalmalwareanalysis.com
4 Question 4 pics.practicalmalwareanalysis.com 5 Question 5
4 Question 4 pics.practicalmalwareanalysis.com 5 Question 5

10095B34

8 Question 8

A command is appended and then it is executed.

9 Question 9

It is set by the return value of sub_10003695

10 Question 10

sub_100052A2 is called.

11 Question 11

Firstly, a subroutine calls that makes sure the OS platform ID is Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP, or Windows 2000, and the major version is 5. Otherwise, PSLIST is not run

Depending on the parameter to the function, a list of running processes is either written to xinstall.dll or sent over the passed network socket. If a non empty string is passed to the function, the specific function is opened and some additional information is logged or sent over the socket.

12 Question 12

Based on the systemcalls, it probably formats and sends a message over a socket:

- GetSystemDefaultLangID
- malloc/free
- sprintf
- send
- strlen

13 Question 13

It calls 4 API functions at a depth of 1, and ~ 31 with a depth of 2.

14 Question 14

EAX is loaded with the string "[This is CTI]30", then 13 is added, bringing the string to "30". Then atoi is called which converts the string into a number, and it is multiplied by 1000. Thus, the program will sleep for 30 seconds.

15 Question 15

- af = 2
- type = 1
- protocol = 6

16 Question 16

- \bullet af = AF_INET
- type = SOCK_STREAM
- protocol = IPPROTO_TCP

17 Question 17

Yes. We find one occurrence at 0x100061DB. We see a number 0x564D5868 used with the instruction, which corresponds to ASCII "VMXh".

Following the XREFs back to the Install* functions, there appears to also be another VM detection function at loc_10006119.

18 Question 18

We find a strange sequence of bytes that seems to be printable. It could be an encrypted or ciphered string of some sort.

19 Question 19

The script decrypts the string.

20 Question 20

By pressing the A key.

21 Question 21

The script XORs each byte with 0x55, decrypting the string.