

XCTF-Reverse-ExerciseArea-005-writeup

原创

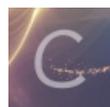
y4ung 于 2019-08-01 08:39:59 发布 4671 收藏 1

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35 篇文章 0 订阅

订阅专栏

0x00 介绍

本题是xctf攻防世界中Reverse的新手第五题。

根据题目描述: 菜鸡拿到了一个被加壳的二进制文件, 可以知道这次的二进制文件被加壳处理了, 因此需要先查壳, 脱壳, 再进行逆向分析找到flag

实验环境: IDA Pro 7.0

0x01 解题过程

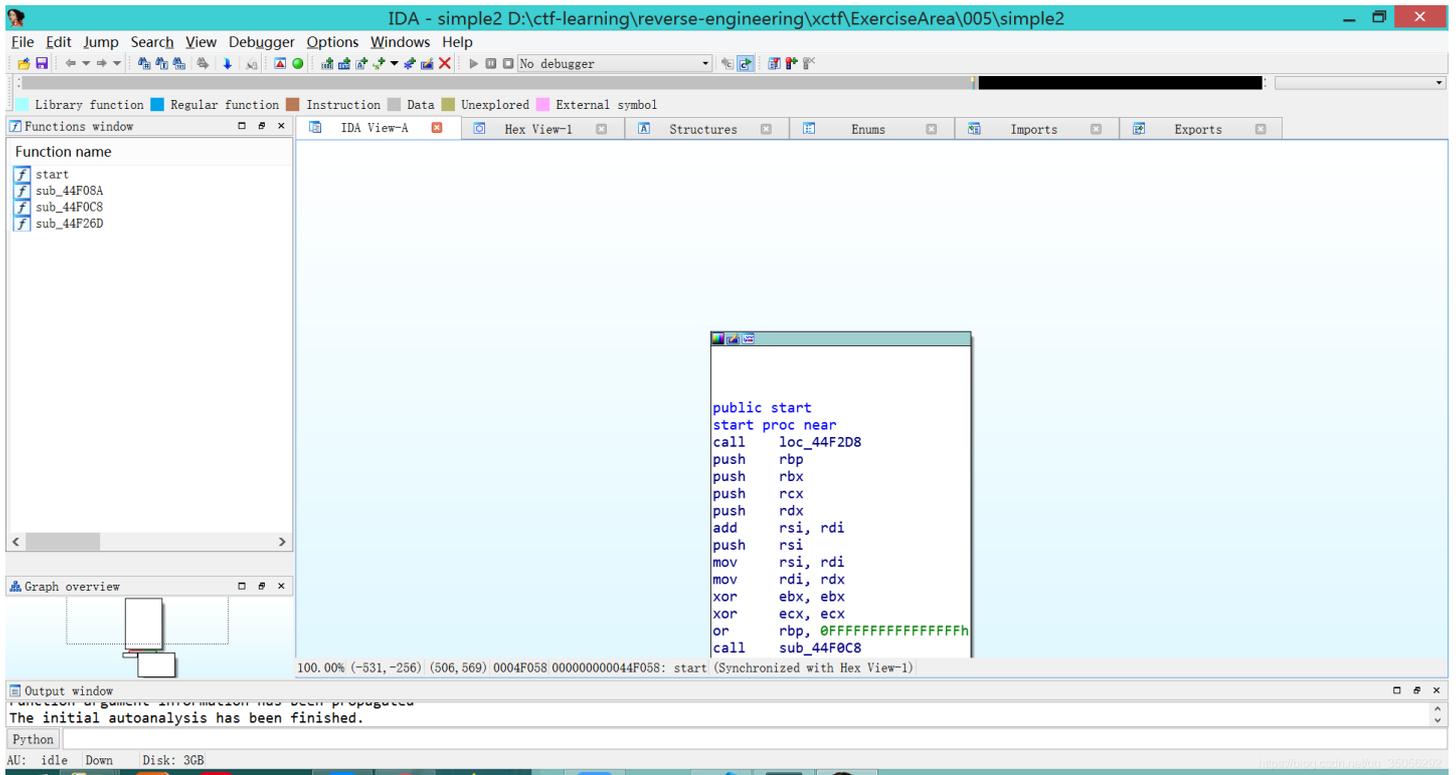
1.1 判断文件类型

在Vscode中安装插件: [hexdump for VSCode](#), 用Vscode打开, 显示文件的十六进制:

```
1 | Offset: 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
2 | 00000000: 7F 45 4C 46 02 01 01 03 00 00 00 00 00 00 00 00
3 | 00000010: 02 00 3E 00 01 00 00 00 58 F0 44 00 00 00 00 00
4 | 00000020: 40 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
5 | 00000030: 00 00 00 00 40 00 38 00 02 00 40 00 00 00 00 00
6 | 00000040: 01 00 00 00 05 00 00 00 00 00 00 00 00 00 00 00
7 | 00000050: 00 00 40 00 00 00 00 00 00 00 40 00 00 00 00 00
8 | 00000060: 6C F8 04 00 00 00 00 00 6C F8 04 00 00 00 00 00
9 | 00000070: 00 00 20 00 00 00 00 00 01 00 00 00 06 00 00 00
10 | 00000080: 28 D4 0C 00 00 00 00 00 28 D4 6C 00 00 00 00 00
11 | 00000090: 28 D4 6C 00 00 00 00 00 00 00 00 00 00 00 00
12 | 000000a0: 00 00 00 00 00 00 00 00 00 00 20 00 00 00 00 00
13 | 000000b0: D4 AD 80 A2 55 50 58 21 1C 08 0D 16 00 00 00 00
14 | 000000c0: A8 ED 0D 00 A8 ED 0D 00 90 01 00 00 91 00 00 00
15 | 000000d0: 08 00 00 00 F7 FB 93 FF 7F 45 4C 46 02 01 01 03
16 | 000000e0: 00 02 00 3E 00 01 0E 90 08 40 1F DF 2F EC DB 40
17 | 000000f0: 2F 68 E5 0D 45 26 38 00 06 0A 21 00 1F 6C 60 BF
18 | 00001000: 1E 57 05 00 01 40 0F 86 96 0C AF 7B 6D 20 00 20
19 | 00001100: 0B 6F 06 06 B8 67 13 D2 B2 9E 2F 0E 6C 1C 5B 70
20 | 00001200: 35 5A F6 76 B0 00 6F 04 07 90 01 2B 0E 40 93 03
21 | 00001300: F9 40 44 00 00 04 ED 36 C4 B6 07 17 DF 20 4F 50
22 | 00001400: 0F 4D C1 FE C9 08 51 E5 74 64 06 00 01 10 60 0F
23 | 00001500: B4 BB 0F 52 6E DF 48 01 00 0F 49 92 84 DB 0D 00
24 | 00001600: 00 00 95 24 FF F6 94 0C 00 67 EC 04 00 08 49 19
25 | 00001700: 00 B5 FB 79 CD 04 00 10 06 01 47 4E 55 0A 00 02
26 | 00001800: B7 D7 9D E7 06 06 20 3F 14 06 03 3F D2 EF EE FF
27 | 00001900: FF FB 1A DB 99 73 39 31 7F C6 8E 2C F9 60 B9 D3
28 | 00001a00: 86 27 42 3C 67 60 A0 6C 77 5F EC BB BD 25 0B 00
29 | 00001b00: 90 14 42 0F 58 2F 00 C2 48 B1 D9 8B 7D 0D 50 2F
30 | 00001c00: D0 16 5F 48 2F C8 0B 19 79 60 68 40 30 6F 17 32
```

可以看到文件的开头有 **ELF**，说明这是一个在Linux下的可执行文件；相应的，如果再文件开头看到 **MZ**，说明是在Windows下的可执行文件；

用IDA打开原始文件simple_2，可以看到识别出来的函数很少，应该就是被加壳了



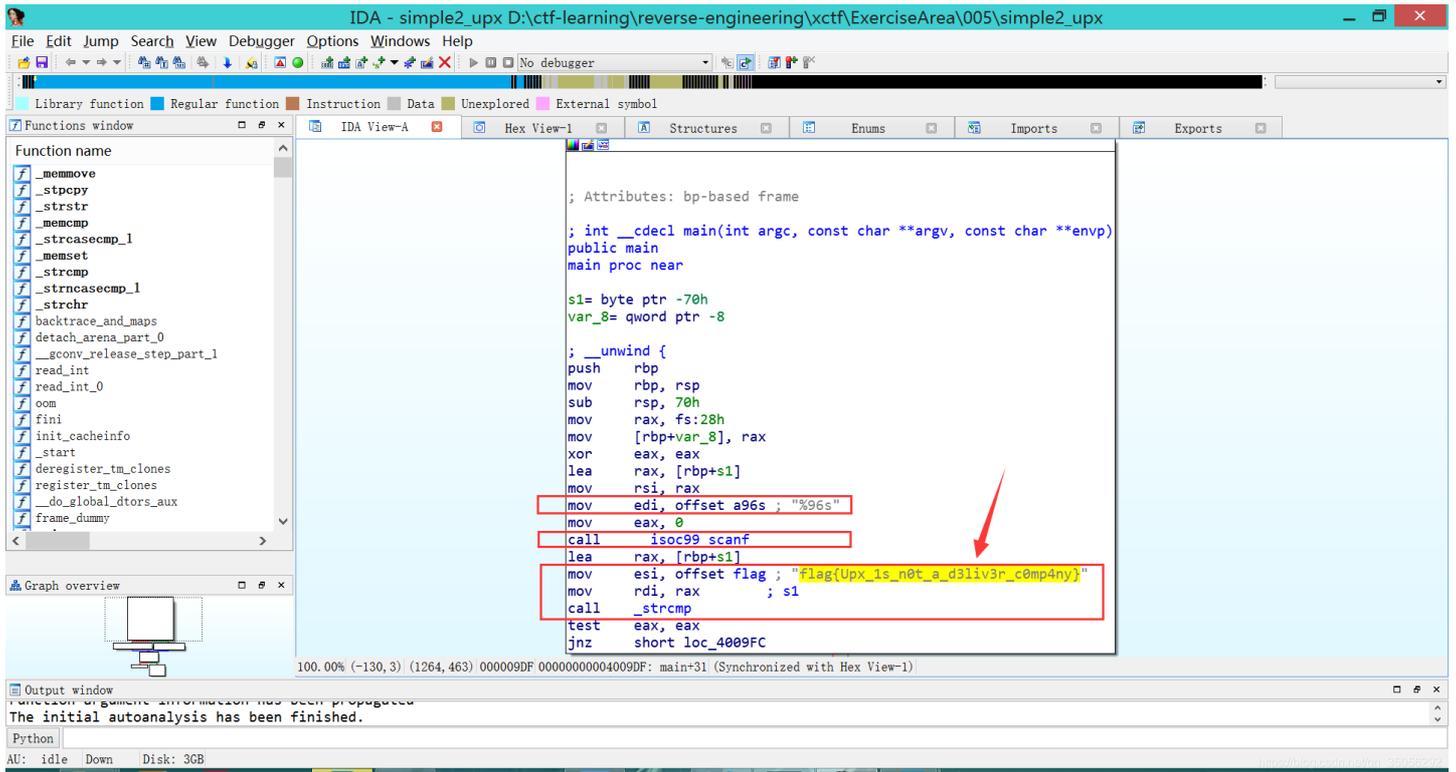
1.2 脱壳

首先应当查壳，可以用PEID查。

在ctf比赛中的pwn大多在Linux下，一般linux下很少有强力的壳，利用upx工具对该二进制文件进行脱壳

```
upx.exe -d D:\ctf-learning\reverse-engineering\xctf\ExerciseArea\005\simple2 -o simple2_upx
```


flag{Upx_1s_n0t_a_d3l1v3r_c0mp4ny}



这题考察的就是查壳和脱壳了，逆向分析这块不是考察重点。