

JoeSandbox Cloud BASIC



ID: 678602

Sample Name: 04ZQ5etz9i.exe

Cookbook: default.jbs

Time: 09:36:11

Date: 04/08/2022

Version: 35.0.0 Citrine

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Windows Analysis Report

04ZQ5etz9i.exe

Overview

General Information

Sample Name:

04ZQ5etz9i.exe

Analysis ID:

678602

MD5:

785d9d53c4b721...

SHA1:

751b17ab9fae89...

SHA256:

6716b20272e1b5...

Tags:

ArkeiStealer exe

Infos:

Detection

MALICIOUS

SUSPICIOUS

CLEAN

UNKNOWN

SmokeLoader

Score:

100

Range:

0 - 100

Whitelisted:

false

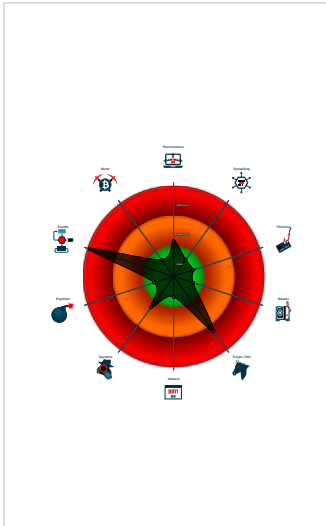
Confidence:

100%

Signatures

- Benign windows process drops PE f...
- Malicious sample detected (through...
- Yara detected SmokeLoader
- System process connects to network...
- Antivirus detection for URL or domain
- Maps a DLL or memory area into an...
- Tries to detect sandboxes and other...
- Machine Learning detection for sam...
- Injects a PE file into a foreign proce...
- Checks for kernel code integrity (NtQ...
- Contains functionality to inject code...
- Deletes itself after installation

Classification



Process Tree

- System is w10x64
- 04ZQ5etz9i.exe (PID: 1888 cmdline: "C:\Users\user\Desktop\04ZQ5etz9i.exe" MD5: 785D9D53C4B721385E9E5F51A4846791)
 - 04ZQ5etz9i.exe (PID: 3908 cmdline: "C:\Users\user\Desktop\04ZQ5etz9i.exe" MD5: 785D9D53C4B721385E9E5F51A4846791)
 - explorer.exe (PID: 3616 cmdline: C:\Windows\Explorer.EXE MD5: AD5296B280E8F522A8A897C96BAB0E1D)
- jtdteff (PID: 5348 cmdline: C:\Users\user\AppData\Roaming\jtdteff MD5: 785D9D53C4B721385E9E5F51A4846791)
 - jtdteff (PID: 388 cmdline: C:\Users\user\AppData\Roaming\jtdteff MD5: 785D9D53C4B721385E9E5F51A4846791)
- cleanup

Malware Configuration

Threatname: SmokeLoader

```
{
  "C2 list": [
    "http://host-file-host6.com/",
    "http://host-host-file8.com/"
  ]
}
```

Yara Signatures

Memory Dumps

Source	Rule	Description	Author	Strings
00000015.00000002.369606256.0000000000580000.00000004.000000800.00020000.00000000.sdmp	JoeSecurity_SmokeLoader_2	Yara detected SmokeLoader	Joe Security	
00000015.00000002.369606256.0000000000580000.00000004.000000800.00020000.00000000.sdmp	Windows_Trojan_SmokeLoader_4e31426e	unknown	unknown	0x6f4:\$a: 5B 81 EB 34 10 00 00 6A 30 58 64 8B 00 8B 40 0C 8B 40 1C 8B 40 08 89 85 C0

Source	Rule	Description	Author	Strings
00000001.00000002.315316799.00000000005A1000.00000004.10000000.00040000.00000000.sdmp	JoeSecurity_SmokeLoader_2	Yara detected SmokeLoader	Joe Security	
00000001.00000002.315316799.00000000005A1000.00000004.10000000.00040000.00000000.sdmp	Windows_Trojan_SmokeLoader_4e31426e	unknown	unknown	0x2f4:\$a: 5B 81 EB 34 10 00 00 6A 30 58 64 8B 00 8B 40 0C 8B 40 1C 8B 40 08 89 85 C0
00000014.00000002.357473381.0000000000766000.00000040.00000020.00020000.00000000.sdmp	Windows_Trojan_RedLineStealer_ed346e4c	unknown	unknown	0x506e:\$a: 55 8B EC 8B 45 14 56 57 8B 7D 08 33 F6 89 47 0C 39 75 10 76 15 8B
Click to see the 7 entries				

Unpacked PEs

Source	Rule	Description	Author	Strings
0.2.04ZQ5etz9i.exe.4815a0.1.raw.unpack	JoeSecurity_SmokeLoader_2	Yara detected SmokeLoader	Joe Security	
1.0.04ZQ5etz9i.exe.400000.4.unpack	JoeSecurity_SmokeLoader_2	Yara detected SmokeLoader	Joe Security	
1.0.04ZQ5etz9i.exe.400000.6.unpack	JoeSecurity_SmokeLoader_2	Yara detected SmokeLoader	Joe Security	
1.0.04ZQ5etz9i.exe.400000.5.unpack	JoeSecurity_SmokeLoader_2	Yara detected SmokeLoader	Joe Security	
1.2.04ZQ5etz9i.exe.400000.0.unpack	JoeSecurity_SmokeLoader_2	Yara detected SmokeLoader	Joe Security	
Click to see the 2 entries				

Sigma Signatures

 No Sigma rule has matched

Snort Signatures

 No Snort rule has matched

Joe Sandbox Signatures

AV Detection



Antivirus detection for URL or domain
Machine Learning detection for sample
Machine Learning detection for dropped file

Networking



System process connects to network (likely due to code injection or exploit)
C2 URLs / IPs found in malware configuration

Key, Mouse, Clipboard, Microphone and Screen Capturing



Yara detected SmokeLoader

System Summary



Hooking and other Techniques for Hiding and Protection



Deletes itself after installation

Hides that the sample has been downloaded from the Internet (zone.identifier)

Malware Analysis System Evasion



Tries to detect sandboxes and other dynamic analysis tools (process name or module or function)

Checks if the current machine is a virtual machine (disk enumeration)

Anti Debugging



Checks for kernel code integrity (NtQuerySystemInformation(CodeIntegrityInformation))

HIPS / PFW / Operating System Protection Evasion



Benign windows process drops PE files

System process connects to network (likely due to code injection or exploit)

Maps a DLL or memory area into another process

Injects a PE file into a foreign processes

Contains functionality to inject code into remote processes

Creates a thread in another existing process (thread injection)

Stealing of Sensitive Information



Yara detected SmokeLoader

Remote Access Functionality



Yara detected SmokeLoader

Mitre Att&ck Matrix

Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Exfiltration	Command and Control	Network Effects	Remote Service Effects	Impact
Valid Accounts	2 Command and Scripting Interpreter	1 DLL Side-Loading	5 1 3 Process Injection	1 1 Masquerading	1 Input Capture	1 System Time Discovery	Remote Services	1 Input Capture	Exfiltration Over Other Network Medium	1 Encrypted Channel	Eavesdrop on Insecure Network Communication	Remotely Track Device Without Authorization	Modify System Partition
Default Accounts	2 Native API	Boot or Logon Initialization Scripts	1 DLL Side-Loading	1 2 Virtualization/Sandbox Evasion	LSASS Memory	3 3 1 Security Software Discovery	Remote Desktop Protocol	1 Archive Collected Data	Exfiltration Over Bluetooth	2 Non-Application Layer Protocol	Exploit SS7 to Redirect Phone Calls/SMS	Remotely Wipe Data Without Authorization	Device Lockout
Domain Accounts	1 Exploitation for Client Execution	Logon Script (Windows)	Logon Script (Windows)	5 1 3 Process Injection	Security Account Manager	1 2 Virtualization/Sandbox Evasion	SMB/Windows Admin Shares	Data from Network Shared Drive	Automated Exfiltration	1 1 2 Application Layer Protocol	Exploit SS7 to Track Device Location	Obtain Device Cloud Backups	Delete Device Data
Local Accounts	At (Windows)	Logon Script (Mac)	Logon Script (Mac)	1 Deobfuscate/Decode Files or Information	NTDS	3 Process Discovery	Distributed Component Object Model	Input Capture	Scheduled Transfer	Protocol Impersonation	SIM Card Swap		Carrier Billing Fraud
Cloud Accounts	Cron	Network Logon Script	Network Logon Script	1 Hidden Files and Directories	LSA Secrets	1 Application Window Discovery	SSH	Keylogging	Data Transfer Size Limits	Fallback Channels	Manipulate Device Communication		Manipulate App Store Rankings or Ratings



Antivirus, Machine Learning and Genetic Malware Detection

Initial Sample

Source	Detection	Scanner	Label	Link
04ZQ5etz9i.exe	100%	Joe Sandbox ML		

Dropped Files

Source	Detection	Scanner	Label	Link
C:\Users\user\AppData\Roaming\jtdteff	100%	Joe Sandbox ML		

Unpacked PE Files

Source	Detection	Scanner	Label	Link	Download
1.0.04ZQ5etz9i.exe.400000.0.unpack	100%	Avira	HEUR/AGEN.12 28923		Download File

Source	Detection	Scanner	Label	Link	Download
1.0.04ZQ5etz9i.exe.400000.4.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File
1.0.04ZQ5etz9i.exe.400000.2.unpack	100%	Avira	HEUR/AGEN.12 28923		Download File
21.0.jtdteff.400000.6.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File
21.0.jtdteff.400000.4.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File
1.0.04ZQ5etz9i.exe.400000.6.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File
1.0.04ZQ5etz9i.exe.400000.5.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File
1.2.04ZQ5etz9i.exe.400000.0.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File
1.0.04ZQ5etz9i.exe.400000.1.unpack	100%	Avira	HEUR/AGEN.12 28923		Download File
1.0.04ZQ5etz9i.exe.400000.3.unpack	100%	Avira	HEUR/AGEN.12 28923		Download File
0.2.04ZQ5etz9i.exe.4815a0.1.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File
20.2.jtdteff.6f15a0.1.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File
21.2.jtdteff.400000.0.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File
21.0.jtdteff.400000.5.unpack	100%	Avira	TR/Crypt.XPAC K.Gen		Download File

Domains

No Antivirus matches

URLs

Source	Detection	Scanner	Label	Link
http://host-file-host6.com/	0%	URL Reputation	safe	
http://host-host-file8.com/	100%	URL Reputation	malware	

Domains and IPs

Contacted Domains					
Name	IP	Active	Malicious	Antivirus Detection	Reputation
host-file-host6.com	34.118.39.10	true	true		unknown
host-host-file8.com	unknown	unknown	true		unknown

Contacted URLs

Name	Malicious	Antivirus Detection	Reputation
http://host-file-host6.com/	true	URL Reputation: safe	unknown
http://host-host-file8.com/	true	URL Reputation: malware	unknown

World Map of Contacted IPs



Public IPs

IP	Domain	Country	Flag	ASN	ASN Name	Malicious
34.118.39.10	host-file-host6.com	United States		139070	GOOGLE-AS-APGoogleAsiaPteLtd SG	true

General Information

Joe Sandbox Version:	35.0.0 Citrine
Analysis ID:	678602
Start date and time: 04/08/202209:36:11	2022-08-04 09:36:11 +02:00
Joe Sandbox Product:	CloudBasic
Overall analysis duration:	0h 7m 22s
Hypervisor based Inspection enabled:	false
Report type:	light
Sample file name:	04ZQ5etz9i.exe
Cookbook file name:	default.jbs
Analysis system description:	Windows 10 64 bit v1803 with Office Professional Plus 2016, Chrome 85, IE 11, Adobe Reader DC 19, Java 8 Update 211
Number of analysed new started processes analysed:	30
Number of new started drivers analysed:	0
Number of existing processes analysed:	0
Number of existing drivers analysed:	0
Number of injected processes analysed:	1
Technologies:	• HCA enabled • EGA enabled • HDC enabled • AMSI enabled
Analysis Mode:	default
Analysis stop reason:	Timeout
Detection:	MAL
Classification:	mal100.troj.evad.winEXE@6/2@4/1
EGA Information:	• Successful, ratio: 100%
HDC Information:	• Successful, ratio: 83.7% (good quality ratio 78.1%) • Quality average: 74.7% • Quality standard deviation: 30.8%

HCA Information:	• Successful, ratio: 99% • Number of executed functions: 0 • Number of non-executed functions: 0
Cookbook Comments:	• Found application associated with file extension: .exe • Adjust boot time • Enable AMSI

Warnings

- Behavior information exceeds normal sizes, reducing to normal. Report will have missing behavior information.
- Exclude process from analysis (whitelisted): MpCmdRun.exe, BackgroundTransferHost.exe, backgroundTaskHost.exe, SgrmBroker.exe, conhost.exe, svchost.exe, wuapihost.exe
- Excluded domains from analysis (whitelisted): ris.api.iris.microsoft.com , fs.microsoft.com , store-images.s-microsoft.com, login.live.com, sls.update.microsoft.com, ctdl.windowsupdate.com, displaycatalog.mp.microsoft.com, img-prod-cms-rt-microsoft-com.akamaized.net, arc.msn.com
- Not all processes where analyzed, report is missing behavior information

Simulations

Behavior and APIs

Time	Type	Description
09:38:08	Task Scheduler	Run new task: Firefox Default Browser Agent 14075C06E1FEED28 path: C:\Users\user\AppData\Roaming\jtdteff

Joe Sandbox View / Context

IPs

No context

Domains

No context

ASNs

No context

JA3 Fingerprints

No context

Dropped Files

No context

Created / dropped Files

C:\Users\user\AppData\Roaming\jtdteff

Process:	C:\Windows\explorer.exe
File Type:	PE32 executable (GUI) Intel 80386, for MS Windows
Category:	dropped
Size (bytes):	346624
Entropy (8bit):	6.355322829319774
Encrypted:	false
SSDEEP:	6144:kbielRAT0GZkAMOHG/HBCssiXE8du+9W0U:kmeHkKZOHGfBCsG29W
MD5:	785D9D53C4B721385E9E5F51A4846791
SHA1:	751B17AB9FAE896ED414F42DACD885BD75A83F46
SHA-256:	6716B20272E1B5EC3A6D86F9144AF69E1615EFDAB035E130B654757B36E8B84F

SHA-512:	C96CF6B70332FBFB0F0E55674843082A1AF5F88447D0E8FAA7351CF59B54080139F91745DAE07558C168802690628D86D0CEFEC97B50F3F0A05F6792BE923581
Malicious:	true
Antivirus:	Antivirus: Joe Sandbox ML, Detection: 100%
Reputation:	low
Preview:	MZ.....@.....!..L.!This program cannot be run in DOS mode...\$......u...1.,1.,1.,/2,&.,/\$,...,%,4.,1,.../3,0../6,0.,Rich1,..... ..PE..L....r#.....".....@...@.....0.....T.....<.....@..... ..text...Z ".....".data.....@.....&.....@.....cuheb.....4.....@.....rilez.....6.....@.....kibu.....:.....@.....viti.....>.....@....rsrc.....@.....@...@.....

C:\Users\user\AppData\Roaming\jtdteff:Zone.Identifier 	
Process:	C:\Windows\explorer.exe
File Type:	ASCII text, with CRLF line terminators
Category:	modified
Size (bytes):	26
Entropy (8bit):	3.95006375643621
Encrypted:	false
SSDEEP:	3:ggPYV:rPYV
MD5:	187F488E27DB4AF347237FE461A079AD
SHA1:	6693BA299EC1881249D59262276A0D2CB21F8E64
SHA-256:	255A65D30841AB4082BD9D0EEA79D49C5EE88F56136157D8D6156AEF11C12309
SHA-512:	89879F237C0C051EBE784D0690657A6827A312A82735DA42DAD5F744D734FC545BEC9642C19D14C05B2F01FF53BC731530C92F7327BB7DC9CDE1B60FB21CD64E
Malicious:	true
Reputation:	high, very likely benign file
Preview:	[ZoneTransfer]....ZoneId=0

Static File Info	
General	
File type:	PE32 executable (GUI) Intel 80386, for MS Windows
Entropy (8bit):	6.355322829319774
TrID:	- Win32 Executable (generic) a (10002005/4) 99.83% - Windows Screen Saver (13104/52) 0.13% - Generic Win/DOS Executable (2004/3) 0.02% - DOS Executable Generic (2002/1) 0.02% - Autodesk FLIC Image File (extensions: flc, fli, cel) (7/3) 0.00%
File name:	04ZQ5etz9i.exe
File size:	346624
MD5:	785d9d53c4b721385e9e5f51a4846791
SHA1:	751b17ab9fae896ed414f42dacd885bd75a83f46
SHA256:	6716b20272e1b5ec3a6d86f9144af69e1615efdb035e130b654757b36e8b84f
SHA512:	c96cf6b70332fbfb0f0e55674843082a1af5f88447d0e8faa7351cf59b54080139f91745dae07558c168802690628d86d0cefec97b50f3f0a05f6792be923581
SSDEEP:	6144:kbieLRAT0GZkAMOHG/HBCssiXE8du+9W0U:kmehKkZOHGfBCsG29W
TLSH:	0574AE40BBA0D43DE1F312F4B97A83A8B52D7EA15B7410CB52D62AEE56346E0EC75307
File Content Preview:	MZ.....@.....!..L.!This program cannot be run in DOS mode...\$......u...1.,1.,1.,/2,&.,/\$,...,%,4.,1,.../3,0../6,0.,Rich1,.....PE..L....r#.....".

File Icon	
	
Icon Hash:	aedaae9ecea62aa2

Static PE Info	
General	
Entrypoint:	0x40b2a0
Entrypoint Section:	.text
Digitally signed:	false

Instruction
lea eax, dword ptr [ebp-60h]
push eax
call dword ptr [004011D0h]
mov dword ptr [ebp-04h], FFFFFFFEh
jmp 00007FE788C5EA38h
mov eax, 00000001h
ret
mov esp, dword ptr [ebp-18h]
mov dword ptr [ebp-78h], 000000FFh
mov dword ptr [ebp-04h], FFFFFFFEh
mov eax, dword ptr [ebp-78h]
jmp 00007FE788C5EB68h
mov dword ptr [ebp-04h], FFFFFFFEh
call 00007FE788C5EBA4h
mov dword ptr [ebp-6Ch], eax
push 00000001h
call 00007FE788C6A3EAh
add esp, 04h
test eax, eax
jne 00007FE788C5EA1Ch
push 0000001Ch
call 00007FE788C5EB5Ch
add esp, 04h
call 00007FE788C66EF4h
test eax, eax
jne 00007FE788C5EA1Ch
push 00000010h

Rich Headers	
Programming Language:	• [ASM] VS2008 build 21022 • [C] VS2008 build 21022 • [IMP] VS2005 build 50727 • [C++] VS2008 build 21022 • [RES] VS2008 build 21022 • [LNK] VS2008 build 21022

Data Directories			
Name	Virtual Address	Virtual Size	Is in Section
IMAGE_DIRECTORY_ENTRY_EXPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_IMPORT	0x32004	0x3c	.text
IMAGE_DIRECTORY_ENTRY_RESOURCE	0x52000	0x108d0	.rsrc
IMAGE_DIRECTORY_ENTRY_EXCEPTION	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_SECURITY	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_BASERELOC	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_DEBUG	0x1310	0x1c	.text
IMAGE_DIRECTORY_ENTRY_COPYRIGHT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_GLOBALPTR	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_TLS	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_LOAD_CONFIG	0x8f18	0x40	.text
IMAGE_DIRECTORY_ENTRY_BOUND_IMPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_IAT	0x1000	0x2bc	.text
IMAGE_DIRECTORY_ENTRY_DELAY_IMPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_COM_DESCRIPTOR	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_RESERVED	0x0	0x0	

Sections								
Name	Virtual Address	Virtual Size	Raw Size	Xored PE	ZLIB Complexity	File Type	Entropy	Characteristics
.text	0x1000	0x3205a	0x32200	False	0.3747418562967581	data	5.747276658789658	IMAGE_SCN_CNT_CODE, IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_MEM_READ

Name	Virtual Address	Virtual Size	Raw Size	Xored PE	ZLIB Complexity	File Type	Entropy	Characteristics
.data	0x34000	0x19d88	0x10e00	False	0.9295717592592593	data	7.777144287546035	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE
.cuheb	0x4e000	0x5	0x200	False	0.02734375	data	0.0	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE
.rilez	0x4f000	0x400	0x400	False	0.0166015625	data	0.0	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE
.kibu	0x50000	0x400	0x400	False	0.0166015625	data	0.0	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE
.vitid	0x51000	0x96	0x200	False	0.02734375	data	0.0	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE
.rsrc	0x52000	0x108d0	0x10a00	False	0.5496211231203008	data	5.486118535451178	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ

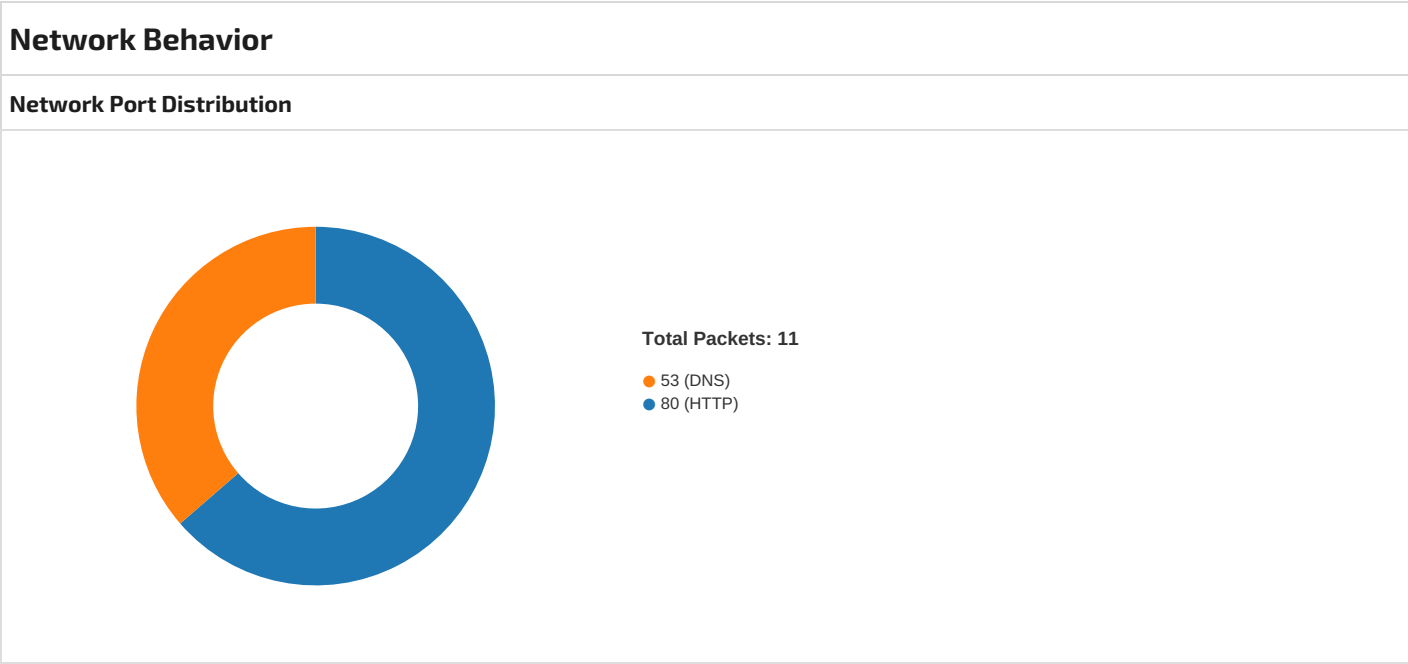
Resources					
Name	RVA	Size	Type	Language	Country
RT_ICON	0x52630	0x6c8	data	Korean	North Korea
RT_ICON	0x52630	0x6c8	data	Korean	South Korea
RT_ICON	0x52cf8	0x568	GLS_BINARY_LSB_FIRST	Korean	North Korea
RT_ICON	0x52cf8	0x568	GLS_BINARY_LSB_FIRST	Korean	South Korea
RT_ICON	0x53260	0x10a8	data	Korean	North Korea
RT_ICON	0x53260	0x10a8	data	Korean	South Korea
RT_ICON	0x54308	0x988	dBase III DBT, version number 0, next free block index 40	Korean	North Korea
RT_ICON	0x54308	0x988	dBase III DBT, version number 0, next free block index 40	Korean	South Korea
RT_ICON	0x54c90	0x468	GLS_BINARY_LSB_FIRST	Korean	North Korea
RT_ICON	0x54c90	0x468	GLS_BINARY_LSB_FIRST	Korean	South Korea
RT_ICON	0x55148	0x8a8	dBase III DBT, version number 0, next free block index 40, 1st item "\251\317"	Korean	North Korea
RT_ICON	0x55148	0x8a8	dBase III DBT, version number 0, next free block index 40, 1st item "\251\317"	Korean	South Korea
RT_ICON	0x559f0	0x6c8	dBase III DBT, version number 0, next free block index 40, 1st item "\251\317"	Korean	North Korea
RT_ICON	0x559f0	0x6c8	dBase III DBT, version number 0, next free block index 40, 1st item "\251\317"	Korean	South Korea
RT_ICON	0x560b8	0x568	GLS_BINARY_LSB_FIRST	Korean	North Korea
RT_ICON	0x560b8	0x568	GLS_BINARY_LSB_FIRST	Korean	South Korea
RT_ICON	0x56620	0x10a8	data	Korean	North Korea
RT_ICON	0x56620	0x10a8	data	Korean	South Korea
RT_ICON	0x576c8	0x988	data	Korean	North Korea
RT_ICON	0x576c8	0x988	data	Korean	South Korea
RT_ICON	0x58050	0x468	GLS_BINARY_LSB_FIRST	Korean	North Korea
RT_ICON	0x58050	0x468	GLS_BINARY_LSB_FIRST	Korean	South Korea
RT_ICON	0x58518	0x25a8	data	Korean	North Korea
RT_ICON	0x58518	0x25a8	data	Korean	South Korea
RT_ICON	0x5aac0	0x10a8	data	Korean	North Korea
RT_ICON	0x5aac0	0x10a8	data	Korean	South Korea
RT_ICON	0x5bb90	0xea8	data	Korean	North Korea
RT_ICON	0x5bb90	0xea8	data	Korean	South Korea
RT_ICON	0x5ca38	0x8a8	dBase IV DBT of @.DBF, block length 1024, next free block index 40, next free block 8305227, next used block 8370799	Korean	North Korea
RT_ICON	0x5ca38	0x8a8	dBase IV DBT of @.DBF, block length 1024, next free block index 40, next free block 8305227, next used block 8370799	Korean	South Korea
RT_ICON	0x5d2e0	0x6c8	data	Korean	North Korea
RT_ICON	0x5d2e0	0x6c8	data	Korean	South Korea

Name	RVA	Size	Type	Language	Country
RT_ICON	0x5d9a8	0x568	GLS_BINARY_LSB_FIRST	Korean	North Korea
RT_ICON	0x5d9a8	0x568	GLS_BINARY_LSB_FIRST	Korean	South Korea
RT_ICON	0x5df10	0x25a8	data	Korean	North Korea
RT_ICON	0x5df10	0x25a8	data	Korean	South Korea
RT_ICON	0x604b8	0x10a8	data	Korean	North Korea
RT_ICON	0x604b8	0x10a8	data	Korean	South Korea
RT_ICON	0x61560	0x988	data	Korean	North Korea
RT_ICON	0x61560	0x988	data	Korean	South Korea
RT_ICON	0x61ee8	0x468	GLS_BINARY_LSB_FIRST	Korean	North Korea
RT_ICON	0x61ee8	0x468	GLS_BINARY_LSB_FIRST	Korean	South Korea
RT_STRING	0x625d8	0xac	data	Korean	North Korea
RT_STRING	0x625d8	0xac	data	Korean	South Korea
RT_STRING	0x62688	0x246	data	Korean	North Korea
RT_STRING	0x62688	0x246	data	Korean	South Korea
RT_ACCELERATOR	0x62438	0x60	data	Korean	North Korea
RT_ACCELERATOR	0x62438	0x60	data	Korean	South Korea
RT_ACCELERATOR	0x623c8	0x70	data	Korean	North Korea
RT_ACCELERATOR	0x623c8	0x70	data	Korean	South Korea
RT_GROUP_ICON	0x5bb68	0x22	data	Korean	North Korea
RT_GROUP_ICON	0x5bb68	0x22	data	Korean	South Korea
RT_GROUP_ICON	0x584b8	0x5a	data	Korean	North Korea
RT_GROUP_ICON	0x584b8	0x5a	data	Korean	South Korea
RT_GROUP_ICON	0x62350	0x76	data	Korean	North Korea
RT_GROUP_ICON	0x62350	0x76	data	Korean	South Korea
RT_GROUP_ICON	0x550f8	0x4c	data	Korean	North Korea
RT_GROUP_ICON	0x550f8	0x4c	data	Korean	South Korea
RT_VERSION	0x62498	0x13c	data	Korean	North Korea
RT_VERSION	0x62498	0x13c	data	Korean	South Korea

Imports	
DLL	Import
KERNEL32.dll	IstrcatA, LocalSize, VerifyVersionInfoA, VerifyVersionInfoW, WriteConsoleInputW, EnumDateFormatsW, FindNextFileW, CopyFileExA, DnsHostnameToComputerNameW, ReadConsoleOutputCharacterW, SetConsoleActiveScreenBuffer, LockFile, GetProfileSectionW, QueryDosDeviceW, IsSystemResumeAutomatic, GetProcessPriorityBoost, GetDriveTypeW, GlobalGetAtomNameA, IstrlenA, FindNextVolumeMountPointW, TlsGetValue, SizeofResource, WriteConsoleInputA, GetConsoleTitleA, GetComputerNameExW, OpenEventA, CallNamedPipeW, GetModuleHandleW, GetSystemDirectoryA, SetCurrentDirectoryA, BuildCommDCBAndTimeoutsA, GetProcAddress, LoadLibraryA, MoveFileWithProgressW, GetCommandLineW, InterlockedExchange, GetConsoleTitleW, CopyFileW, CreateActCtxA, FormatMessageW, LeaveCriticalSection, FindNextVolumeW, GetOverlappedResult, CreateNamedPipeW, GetSystemDefaultLangID, GetConsoleAliasesLengthW, WriteProfileSectionW, AddAtomA, InterlockedIncrement, HeapSize, _hwrite, InterlockedExchangeAdd, GetStartupInfoW, CreateMailslotA, IsDBCSLeadByte, GetSystemWow64DirectoryW, GetLastError, GetPrivateProfileIntA, GetConsoleAliasExesLengthW, DebugBreak, SetLastError, LoadLibraryW, GetComputerNameA, VirtualAlloc, GetOEMCP, IstrcpyA, GetConsoleAliasW, GetDiskFreeSpaceExW, TerminateProcess, EnumResourceLanguagesA, GetCPInfoExW, SetConsoleWindowInfo, GlobalGetAtomNameW, WriteConsoleA, EnumSystemLocalesA, FileTimeToSystemTime, ResetEvent, LockFileEx, MoveFileA, CreateMutexA, FindResourceW, SetCommState, InterlockedCompareExchange, ConvertThreadToFiber, GetConsoleFontSize, LocalAlloc, IstrcpyW, HeapLock, GetFileAttributesA, SetCalendarInfoW, GetSystemWindowsDirectoryW, GetConsoleAliasesW, EnumDateFormatsExW, GetComputerNameW, GetPrivateProfileStructW, OpenWaitableTimerA, EnumResourceNamesW, FillConsoleOutputCharacterA, GetFullPathNameW, GetThreadPriority, MapUserPhysicalPages, WriteConsoleOutputCharacterA, OpenJobObjectA, CreateFileW, BuildCommDCBAndTimeoutsW, SetCalendarInfoA, GetFileInformationByHandle, GetDefaultCommConfigW, InterlockedDecrement, Sleep, InitializeCriticalSection, DeleteCriticalSection, EnterCriticalSection, RaiseException, RtlUnwind, GetCommandLineA, GetStartupInfoA, HeapValidate, IsBadReadPtr, UnhandledExceptionFilter, SetUnhandledExceptionFilter, GetModuleFileNameW, GetCurrentProcess, IsDebuggerPresent, GetModuleHandleA, TlsAlloc, TlsSetValue, GetCurrentThreadId, TlsFree, SetFilePointer, SetHandleCount, GetStdHandle, GetFileType, QueryPerformanceCounter, GetTickCount, GetCurrentProcessId, GetSystemTimeAsFileTime, ExitProcess, GetModuleFileNameA, FreeEnvironmentStringsA, GetEnvironmentStrings, FreeEnvironmentStringsW, WideCharToMultiByte, GetEnvironmentStringsW, HeapDestroy, HeapCreate, HeapFree, VirtualFree, WriteFile, HeapAlloc, HeapReAlloc, GetACP, GetCPInfo, IsValidCodePage, FlushFileBuffers, GetConsoleCP, GetConsoleMode, OutputDebugStringA, WriteConsoleW, OutputDebugStringW, InitializeCriticalSectionAndSpinCount, SetStdHandle, MultiByteToWideChar, LCMapStringA, LCMapStringW, GetStringTypeA, GetStringTypeW, GetLocaleInfoA, GetConsoleOutputCP, CloseHandle, CreateFileA
USER32.dll	CharUpperA, GetCursorInfo

Possible Origin		
Language of compilation system	Country where language is spoken	Map

Language of compilation system	Country where language is spoken	Map
Korean	North Korea	
Korean	South Korea	



TCP Packets				
Timestamp	Source Port	Dest Port	Source IP	Dest IP
Aug 4, 2022 09:38:07.691579103 CEST	49768	80	192.168.2.4	34.118.39.10
Aug 4, 2022 09:38:07.728035927 CEST	80	49768	34.118.39.10	192.168.2.4
Aug 4, 2022 09:38:07.728180885 CEST	49768	80	192.168.2.4	34.118.39.10
Aug 4, 2022 09:38:07.728344917 CEST	49768	80	192.168.2.4	34.118.39.10
Aug 4, 2022 09:38:07.728353024 CEST	49768	80	192.168.2.4	34.118.39.10
Aug 4, 2022 09:38:07.764966965 CEST	80	49768	34.118.39.10	192.168.2.4
Aug 4, 2022 09:38:07.858201027 CEST	80	49768	34.118.39.10	192.168.2.4
Aug 4, 2022 09:38:08.059257984 CEST	49768	80	192.168.2.4	34.118.39.10
Aug 4, 2022 09:38:37.858741045 CEST	80	49768	34.118.39.10	192.168.2.4
Aug 4, 2022 09:38:37.858876944 CEST	49768	80	192.168.2.4	34.118.39.10
Aug 4, 2022 09:38:37.858978033 CEST	49768	80	192.168.2.4	34.118.39.10
Aug 4, 2022 09:38:37.895512104 CEST	80	49768	34.118.39.10	192.168.2.4

UDP Packets				
Timestamp	Source Port	Dest Port	Source IP	Dest IP
Aug 4, 2022 09:38:07.363244057 CEST	64277	53	192.168.2.4	8.8.8.8
Aug 4, 2022 09:38:07.655704975 CEST	53	64277	8.8.8.8	192.168.2.4
Aug 4, 2022 09:38:07.868459940 CEST	56076	53	192.168.2.4	8.8.8.8
Aug 4, 2022 09:38:08.871870041 CEST	56076	53	192.168.2.4	8.8.8.8
Aug 4, 2022 09:38:09.872922897 CEST	56076	53	192.168.2.4	8.8.8.8
Aug 4, 2022 09:38:11.895647049 CEST	53	56076	8.8.8.8	192.168.2.4

Timestamp	Source Port	Dest Port	Source IP	Dest IP
Aug 4, 2022 09:38:12.898232937 CEST	53	56076	8.8.8.8	192.168.2.4
Aug 4, 2022 09:38:14.069996119 CEST	53	56076	8.8.8.8	192.168.2.4

ICMP Packets						
Timestamp	Source IP	Dest IP	Checksum	Code	Type	
Aug 4, 2022 09:38:12.898369074 CEST	192.168.2.4	8.8.8.8	cff7	(Port unreachable)	Destination Unreachable	
Aug 4, 2022 09:38:14.070182085 CEST	192.168.2.4	8.8.8.8	cff7	(Port unreachable)	Destination Unreachable	

DNS Queries							
Timestamp	Source IP	Dest IP	Trans ID	OP Code	Name	Type	Class
Aug 4, 2022 09:38:07.363244057 CEST	192.168.2.4	8.8.8.8	0xb1b8	Standard query (0)	host-file-host6.com	A (IP address)	IN (0x0001)
Aug 4, 2022 09:38:07.868459940 CEST	192.168.2.4	8.8.8.8	0x8843	Standard query (0)	host-host-file8.com	A (IP address)	IN (0x0001)
Aug 4, 2022 09:38:08.871870041 CEST	192.168.2.4	8.8.8.8	0x8843	Standard query (0)	host-host-file8.com	A (IP address)	IN (0x0001)
Aug 4, 2022 09:38:09.872922897 CEST	192.168.2.4	8.8.8.8	0x8843	Standard query (0)	host-host-file8.com	A (IP address)	IN (0x0001)

DNS Answers									
Timestamp	Source IP	Dest IP	Trans ID	Reply Code	Name	CName	Address	Type	Class
Aug 4, 2022 09:38:07.655704975 CEST	8.8.8.8	192.168.2.4	0xb1b8	No error (0)	host-file-host6.com		34.118.39.10	A (IP address)	IN (0x0001)
Aug 4, 2022 09:38:11.895647049 CEST	8.8.8.8	192.168.2.4	0x8843	Server failure (2)	host-host-file8.com	none	none	A (IP address)	IN (0x0001)
Aug 4, 2022 09:38:12.898232937 CEST	8.8.8.8	192.168.2.4	0x8843	Server failure (2)	host-host-file8.com	none	none	A (IP address)	IN (0x0001)
Aug 4, 2022 09:38:14.069996119 CEST	8.8.8.8	192.168.2.4	0x8843	Server failure (2)	host-host-file8.com	none	none	A (IP address)	IN (0x0001)

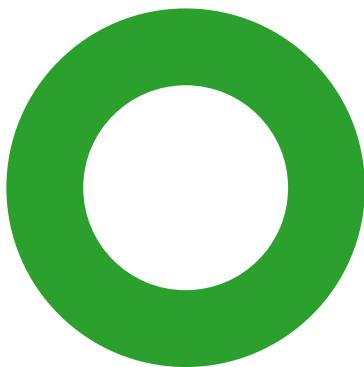
HTTP Request Dependency Graph									
- nwvsnnm.org - host-file-host6.com									

HTTP Packets					
Session ID	Source IP	Source Port	Destination IP	Destination Port	Process
0	192.168.2.4	49768	34.118.39.10	80	C:\Windows\explorer.exe

Timestamp	kBytes transferred	Direction	Data
Aug 4, 2022 09:38:07.728344917 CEST	1155	OUT	POST / HTTP/1.1 Connection: Keep-Alive Content-Type: application/x-www-form-urlencoded Accept: */* Referer: http://nwvsnnm.org/ User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; Trident/7.0; rv:11.0) like Gecko Content-Length: 247 Host: host-file-host6.com
Aug 4, 2022 09:38:07.858201027 CEST	1155	IN	HTTP/1.1 200 OK server: nginx/1.20.1 date: Thu, 04 Aug 2022 07:38:07 GMT content-type: text/html; charset=UTF-8 transfer-encoding: chunked Data Raw: 46 0d 0a 59 6f 75 72 20 49 50 20 62 6c 6f 63 6b 65 64 0d 0a 30 0d 0a 0d 0a Data Ascii: FYour IP blocked0

Statistics

Behavior



- 04ZQ5etz9i.exe
- 04ZQ5etz9i.exe
- explorer.exe
- jtdteff
- jtdteff



Click to jump to process

System Behavior

Analysis Process: 04ZQ5etz9i.exe PID: 1888, Parent PID: 6016

General

Target ID:	0
Start time:	09:37:12
Start date:	04/08/2022
Path:	C:\Users\user\Desktop\04ZQ5etz9i.exe
Wow64 process (32bit):	true
Commandline:	"C:\Users\user\Desktop\04ZQ5etz9i.exe"
Imagebase:	0x400000
File size:	346624 bytes
MD5 hash:	785D9D53C4B721385E9E5F51A4846791
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Yara matches:	Rule: Windows_Trojan_RedLineStealer_ed346e4c, Description: unknown, Source: 00000000.00000002.235932667.00000000006B6000.00000040.00000020.00020000.00000000.sdmp, Author: unknown
Reputation:	low

Analysis Process: 04ZQ5etz9i.exe PID: 3908, Parent PID: 1888

General

Target ID:	1
Start time:	09:37:14
Start date:	04/08/2022
Path:	C:\Users\user\Desktop\04ZQ5etz9i.exe
Wow64 process (32bit):	true
Commandline:	"C:\Users\user\Desktop\04ZQ5etz9i.exe"
Imagebase:	0x400000
File size:	346624 bytes
MD5 hash:	785D9D53C4B721385E9E5F51A4846791
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language

Yara matches:	• Rule: JoeSecurity_SmokeLoader_2, Description: Yara detected SmokeLoader, Source: 00000001.00000002.315316799.00000000005A1000.00000004.10000000.00040000.00000000.sdmp, Author: Joe Security • Rule: Windows_Trojan_SmokeLoader_4e31426e, Description: unknown, Source: 00000001.00000002.315316799.00000000005A1000.00000004.10000000.00040000.00000000.sdmp, Author: unknown • Rule: JoeSecurity_SmokeLoader_2, Description: Yara detected SmokeLoader, Source: 00000001.00000002.315100572.00000000004F0000.00000004.00000800.00020000.00000000.sdmp, Author: Joe Security • Rule: Windows_Trojan_SmokeLoader_4e31426e, Description: unknown, Source: 00000001.00000002.315100572.00000000004F0000.00000004.00000800.00020000.00000000.sdmp, Author: unknown
Reputation:	low

Analysis Process: explorer.exe PID: 3616, Parent PID: 3908

General

Target ID:	5
Start time:	09:37:21
Start date:	04/08/2022
Path:	C:\Windows\explorer.exe
Wow64 process (32bit):	false
Commandline:	C:\Windows\Explorer.EXE
Imagebase:	0x7ff6f3b00000
File size:	3933184 bytes
MD5 hash:	AD5296B280E8F522A8A897C96BAB0E1D
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Yara matches:	• Rule: JoeSecurity_SmokeLoader_2, Description: Yara detected SmokeLoader, Source: 00000005.00000000.288381644.00000000024D1000.00000020.80000000.00040000.00000000.sdmp, Author: Joe Security • Rule: Windows_Trojan_SmokeLoader_4e31426e, Description: unknown, Source: 00000005.00000000.288381644.00000000024D1000.00000020.80000000.00040000.00000000.sdmp, Author: unknown
Reputation:	high

File Activities

File Created

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Roaming\jtdteff	read data or list directory read attributes delete write dac synchronize generic read generic write	device	sequential only non directory file	success or wait	1	24D1F42	CopyFileW
C:\Users\user\AppData\Roaming\jtdteff\Zone.Identifier:\$DATA	read data or list directory synchronize generic write	device	sequential only synchronous io non alert	success or wait	1	24D1F42	CopyFileW

File Deleted

File Path	Completion	Count	Source Address	Symbol
C:\Users\user\Desktop\04ZQ5etz9i.exe	success or wait	1	24D1F53	DeleteFileW
C:\Users\user\AppData\Roaming\jtdteff\Zone.Identifier	success or wait	1	24D1F9E	DeleteFileW

File Written

File Path	Offset	Length	Value	Ascii	Completion	Count	Source Address	Symbol
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File size:	346624 bytes
MD5 hash:	785D9D53C4B721385E9E5F51A4846791
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Yara matches:	• Rule: JoeSecurity_SmokeLoader_2, Description: Yara detected SmokeLoader, Source: 00000015.00000002.369606256.0000000000580000.00000004.00000800.00020000.00000000.sdmp, Author: Joe Security • Rule: Windows_Trojan_SmokeLoader_4e31426e, Description: unknown, Source: 00000015.00000002.369606256.0000000000580000.00000004.00000800.00020000.00000000.sdmp, Author: unknown • Rule: JoeSecurity_SmokeLoader_2, Description: Yara detected SmokeLoader, Source: 00000015.00000002.369783218.0000000002091000.00000004.10000000.00040000.00000000.sdmp, Author: Joe Security • Rule: Windows_Trojan_SmokeLoader_4e31426e, Description: unknown, Source: 00000015.00000002.369783218.0000000002091000.00000004.10000000.00040000.00000000.sdmp, Author: unknown
Reputation:	low

Disassembly

 No disassembly