ID: 879536
Sample Name: APT41.exe
Cookbook: default.jbs
Time: 04:57:21
Date: 01/06/2023
Version: 37.1.0 Beryl

Table of Contents

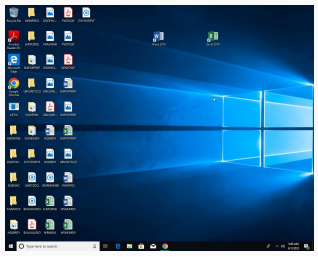
Windows Analysis Report

APT41.exe

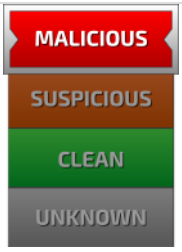
Overview

General Information

Sample Name:	APT41.exe
Analysis ID:	879536
MD5:	8d7e99642aa6…
SHA1:	982d7429dc4a…
SHA256:	d5c26fede4fd8…
Tags:	exe
Infos:	



Detection



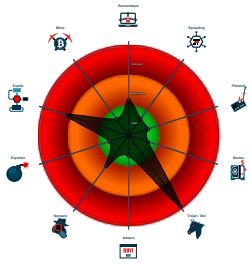
Nanocore

Score:	100
Range:	0 - 100
Whitelisted:	false
Confidence:	100%

Signatures

- Found malware configuration
- Multi AV Scanner detection for subm…
- Malicious sample detected (through…
- Sigma detected: NanoCore
- Detected Nanocore Rat
- Antivirus / Scanner detection for sub…
- Sigma detected: Scheduled temp fil…
- Antivirus detection for URL or domain
- Antivirus detection for dropped file
- Multi AV Scanner detection for drop…
- Yara detected Nanocore RAT
- Connects to many ports of the same…

Classification



Process Tree

- **System is w10x64**
- APT41.exe (PID: 5720 cmdline: C:\Users\user\Desktop\APT41.exe MD5: 8D7E99642AA67C34D7CE487C3E9E2F6E)
  - schtasks.exe (PID: 6848 cmdline: schtasks.exe" /create /f /tn "DHCP Monitor" /xml "C:\Users\user\AppData\Local\Temp\tmpD2D4.tmp MD5: 15FF7D8324231381BAD48A052F85DF04)
    - conhost.exe (PID: 6844 cmdline: C:\Windows\system32\conhost.exe 0xffffffff -ForceV1 MD5: EA777DEEA782E8B4D7C7C33BBF8A4496)
  - schtasks.exe (PID: 6952 cmdline: schtasks.exe" /create /f /tn "DHCP Monitor Task" /xml "C:\Users\user\AppData\Local\Temp\tmpD40E.tmp MD5: 15FF7D8324231381BAD48A052F85DF04)
    - conhost.exe (PID: 6960 cmdline: C:\Windows\system32\conhost.exe 0xffffffff -ForceV1 MD5: EA777DEEA782E8B4D7C7C33BBF8A4496)
- APT41.exe (PID: 7048 cmdline: C:\Users\user\Desktop\APT41.exe 0 MD5: 8D7E99642AA67C34D7CE487C3E9E2F6E)
- dhcpmon.exe (PID: 7036 cmdline: "C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe" 0 MD5: 8D7E99642AA67C34D7CE487C3E9E2F6E)
- dhcpmon.exe (PID: 6652 cmdline: "C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe" MD5: 8D7E99642AA67C34D7CE487C3E9E2F6E)
- **cleanup**

Malware Threat Intel

Provided by malpedia

Name	Description	Attribution	Blogpost URLs	Link
Nanocore RAT, NanoCore	Nanocore is a Remote Access Tool used to steal credentials and to spy on cameras. It as been used for a while by numerous criminal actors as well as by nation state threat actors.	• APT33 • The Gorgon Group	http://https://assets.virustotal.com/reports/2021trends.pdfhttps://blog.360totalsecurity.com/en/bay world-event-cyber-attack-against-foreign-trade-industry/https://blog.360totalsecurity.com/en/vendetta-new-threat-actor-from-europe/https://blog.checkpoint.com/security/march-2023s-most-wanted-malware-new-emotet-campaign-bypasses-microsoft-blocks-to-distribute-malicious-onenote-files/https://blog.morphisec.com/syk-crypter-discord	http://https://malpedia.caad.fkie.fraunhofer.de/details/win.nanocore

Malware Configuration

Threatname: NanoCore


```
{
  "Version": "1.2.2.0",
  "Mutex": "da713b3d-9c11-47aa-829c-406f7753",
  "Group": "Default",
  "Domain1": "229.ip.ply.gg",
  "Domain2": "127.0.0.1",
  "Port": 38741,
  "KeyboardLogging": "Enable",
  "RunOnStartup": "Enable",
  "RequestElevation": "Enable",
  "BypassUAC": "Enable",
  "ClearZoneIdentifier": "Enable",
  "ClearAccessControl": "Enable",
  "SetCriticalProcess": "Enable",
  "PreventSystemSleep": "Enable",
  "ActivateAwayMode": "Disable",
  "EnableDebugMode": "Disable",
  "RunDelay": 0,
  "ConnectDelay": 4000,
  "RestartDelay": 5000,
  "TimeoutInterval": 5000,
  "KeepAliveTimeout": 30000,
  "MutexTimeout": 5000,
  "LanTimeout": 2500,
  "WanTimeout": 8000,
  "BufferSize": "ffff0000",
  "MaxPacketSize": "0000a000",
  "GCThreshold": "0000a000",
  "UseCustomDNS": "Enable",
  "PrimaryDNSServer": "8.8.8.8",
  "BackupDNSServer": "8.8.4.4",
  "BypassUserAccountControlData": "<?xml version=\"1.0\" encoding=\"UTF-16\"?>\r\n<Task version=\"1.2\" xmlns=\"http://schemas.microsoft.com/windows/2004/02/mit/task\">\r\n
<RegistrationInfo />\r\n  <Triggers />\r\n  <Principals>\r\n    <Principal id=\"Author\">\r\n      <LogonType>InteractiveToken</LogonType>\r\n
<RunLevel>HighestAvailable</RunLevel>\r\n    </Principal>\r\n  </Principals>\r\n  <Settings>\r\n    <MultipleInstancesPolicy>Parallel</MultipleInstancesPolicy>\r\n
<DisallowStartIfOnBatteries>false</DisallowStartIfOnBatteries>\r\n    <StopIfGoingOnBatteries>false</StopIfGoingOnBatteries>\r\n
<AllowHardTerminate>true</AllowHardTerminate>\r\n    <StartWhenAvailable>false</StartWhenAvailable>\r\n    <RunOnlyIfNetworkAvailable>false</RunOnlyIfNetworkAvailable>\r\n
<IdleSettings>\r\n      <StopOnIdleEnd>false</StopOnIdleEnd>\r\n      <RestartOnIdle>false</RestartOnIdle>\r\n    </IdleSettings>\r\n
<AllowStartOnDemand>true</AllowStartOnDemand>\r\n    <Enabled>true</Enabled>\r\n    <Hidden>false</Hidden>\r\n    <RunOnlyIfIdle>false</RunOnlyIfIdle>\r\n
<WakeToRun>false</WakeToRun>\r\n    <ExecutionTimeLimit>PT0S</ExecutionTimeLimit>\r\n    <Priority>4</Priority>\r\n  </Settings>\r\n  <Actions Context=\"Author\">\r\n
<Exec>\r\n      <Command>\"#EXECUTABLEPATH\"</Command>\r\n      <Arguments>$(Arg0)</Arguments>\r\n    </Exec>\r\n  </Actions>\r\n</Task"
}
```


Yara Signatures

Initial Sample

Source	Rule	Description	Author	Strings
APT41.exe	Nanocore_RAT_Gen_2	Detetcs the Nanocore RAT	Florian Roth (Nextron Systems)	• 0x1018d:$x1: NanoCore.ClientPluginHost • 0x101ca:$x2: IClientNetworkHost • 0x13cfd:$x3: #=qjgz7ljmpp0J7FvL9dmi8ctJILdgtcbw8JYUc6GC8MeJ9B11Crfg2Djxcf0p8PZGe
APT41.exe	Nanocore_RAT_Feb18_1	Detects Nanocore RAT	Florian Roth (Nextron Systems)	• 0xff05:$x1: NanoCore Client.exe • 0x1018d:$x2: NanoCore.ClientPluginHost • 0x117c6:$s1: PluginCommand • 0x117ba:$s2: FileCommand • 0x1266b:$s3: PipeExists • 0x18422:$s4: PipeCreated • 0x101b7:$s5: IClientLoggingHost
APT41.exe	JoeSecurity_Nanocore	Yara detected Nanocore RAT	Joe Security	

Source	Rule	Description	Author	Strings
APT41.exe	MALWARE_Win_NanoCore	Detects NanoCore	ditekSHen	0xfef5:$x1: NanoCore Client 0xff05:$x1: NanoCore Client 0x1014d:$x2: NanoCore.ClientPlugin 0x1018d:$x3: NanoCore.ClientPluginHost 0x10142:$i1: IClientApp 0x10163:$i2: IClientData 0x1016f:$i3: IClientNetwork 0x1017e:$i4: IClientAppHost 0x101a7:$i5: IClientDataHost 0x101b7:$i6: IClientLoggingHost 0x101ca:$i7: IClientNetworkHost 0x101dd:$i8: IClientUIHost 0x101eb:$i9: IClientNameObjectCollection 0x10207:$i10: IClientReadOnlyNameObjectCollection 0xff54:$s1: ClientPlugin 0x10156:$s1: ClientPlugin 0x1064a:$s2: EndPoint 0x10653:$s3: IPAddress 0x1065d:$s4: IPEndPoint 0x12093:$s6: get_ClientSettings 0x12637:$s7: get_Connected
APT41.exe	NanoCore	unknown	Kevin Breen <kevin@techanarchy.net>	0xfef5:$a: NanoCore 0xff05:$a: NanoCore 0x10139:$a: NanoCore 0x1014d:$a: NanoCore 0x1018d:$a: NanoCore 0xff54:$b: ClientPlugin 0x10156:$b: ClientPlugin 0x10196:$b: ClientPlugin 0x1007b:$c: ProjectData 0x10a82:$d: DESCrypto 0x1844e:$e: KeepAlive 0x1643c:$g: LogClientMessage 0x12637:$i: get_Connected 0x10db8:$j: #=q 0x10de8:$j: #=q 0x10e04:$j: #=q 0x10e34:$j: #=q 0x10e50:$j: #=q 0x10e6c:$j: #=q 0x10e9c:$j: #=q 0x10eb8:$j: #=q
Click to see the 1 entries				

Dropped Files

Source	Rule	Description	Author	Strings
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	Nanocore_RAT_Gen_2	Detetcs the Nanocore RAT	Florian Roth (Nextron Systems)	0x1018d:$x1: NanoCore.ClientPluginHost 0x101ca:$x2: IClientNetworkHost 0x13cfd:$x3: #=qjgz7ljmpp0J7FvL9dmi8ctJILdgtcbw8JYUc6GC8MeJ9B11Crfg2Djxcf0p8PZGe
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	Nanocore_RAT_Feb18_1	Detects Nanocore RAT	Florian Roth (Nextron Systems)	0xff05:$x1: NanoCore Client.exe 0x1018d:$x2: NanoCore.ClientPluginHost 0x117c6:$s1: PluginCommand 0x117ba:$s2: FileCommand 0x1266b:$s3: PipeExists 0x18422:$s4: PipeCreated 0x101b7:$s5: IClientLoggingHost
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	JoeSecurity_Nanocore	Yara detected Nanocore RAT	Joe Security	
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	MALWARE_Win_NanoCore	Detects NanoCore	ditekSHen	0xfef5:$x1: NanoCore Client 0xff05:$x1: NanoCore Client 0x1014d:$x2: NanoCore.ClientPlugin 0x1018d:$x3: NanoCore.ClientPluginHost 0x10142:$i1: IClientApp 0x10163:$i2: IClientData 0x1016f:$i3: IClientNetwork 0x1017e:$i4: IClientAppHost 0x101a7:$i5: IClientDataHost 0x101b7:$i6: IClientLoggingHost 0x101ca:$i7: IClientNetworkHost 0x101dd:$i8: IClientUIHost 0x101eb:$i9: IClientNameObjectCollection 0x10207:$i10: IClientReadOnlyNameObjectCollection 0xff54:$s1: ClientPlugin 0x10156:$s1: ClientPlugin 0x1064a:$s2: EndPoint 0x10653:$s3: IPAddress 0x1065d:$s4: IPEndPoint 0x12093:$s6: get_ClientSettings 0x12637:$s7: get_Connected

Source	Rule	Description	Author	Strings
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	NanoCore	unknown	Kevin Breen <kevin@techanarchy.net>	• 0xfef5:$a: NanoCore • 0xff05:$a: NanoCore • 0x10139:$a: NanoCore • 0x1014d:$a: NanoCore • 0x1018d:$a: NanoCore • 0xff54:$b: ClientPlugin • 0x10156:$b: ClientPlugin • 0x10196:$b: ClientPlugin • 0x1007b:$c: ProjectData • 0x10a82:$d: DESCrypto • 0x1844e:$e: KeepAlive • 0x1643c:$g: LogClientMessage • 0x12637:$i: get_Connected • 0x10db8:$j: #=q • 0x10de8:$j: #=q • 0x10e04:$j: #=q • 0x10e34:$j: #=q • 0x10e50:$j: #=q • 0x10e6c:$j: #=q • 0x10e9c:$j: #=q • 0x10eb8:$j: #=q
Click to see the 1 entries				

Memory Dumps

Source	Rule	Description	Author	Strings
00000000.00000002.746083635.0000000005300000.00000004.08000000.00040000.00000000.sdmp	Nanocore_RAT_Gen_2	Detetcs the Nanocore RAT	Florian Roth (Nextron Systems)	• 0xe75:$x1: NanoCore.ClientPluginHost • 0xe8f:$x2: IClientNetworkHost
00000000.00000002.746083635.0000000005300000.00000004.08000000.00040000.00000000.sdmp	Nanocore_RAT_Feb18_1	Detects Nanocore RAT	Florian Roth (Nextron Systems)	• 0xe75:$x2: NanoCore.ClientPluginHost • 0x1261:$s3: PipeExists • 0x1136:$s4: PipeCreated • 0xeb0:$s5: IClientLoggingHost
00000000.00000002.746083635.0000000005300000.00000004.08000000.00040000.00000000.sdmp	MALWARE_Win_NanoCore	Detects NanoCore	ditekSHen	• 0xe38:$x2: NanoCore.ClientPlugin • 0xe75:$x3: NanoCore.ClientPluginHost • 0xe5a:$i1: IClientApp • 0xe4e:$i2: IClientData • 0xe29:$i3: IClientNetwork • 0xec3:$i4: IClientAppHost • 0xe65:$i5: IClientDataHost • 0xeb0:$i6: IClientLoggingHost • 0xe8f:$i7: IClientNetworkHost • 0xea2:$i8: IClientUIHost • 0xed2:$i9: IClientNameObjectCollection • 0xef7:$i10: IClientReadOnlyNameObjectCollection • 0xe41:$s1: ClientPlugin • 0x177c:$s1: ClientPlugin • 0x1789:$s1: ClientPlugin • 0x11f9:$s6: get_ClientSettings • 0x1249:$s7: get_Connected
00000000.00000002.746083635.0000000005300000.00000004.08000000.00040000.00000000.sdmp	Windows_Trojan_Nanocore_d8c4e3c5	unknown	unknown	• 0xe75:$a1: NanoCore.ClientPluginHost • 0xe38:$a2: NanoCore.ClientPlugin • 0x120c:$b1: get_BuilderSettings • 0xec3:$b4: IClientAppHost • 0x127d:$b6: AddHostEntry • 0x12ec:$b7: LogClientException • 0x1261:$b8: PipeExists • 0xeb0:$b9: IClientLoggingHost
00000005.00000002.494145417.00000000046A1000.00000004.00000800.00020000.00000000.sdmp	JoeSecurity_Nanocore	Yara detected Nanocore RAT	Joe Security	
Click to see the 28 entries				

Unpacked PEs

Source	Rule	Description	Author	Strings
0.2.APT41.exe.5ba4629.6.raw.unpack	Nanocore_RAT_Gen_2	Detetcs the Nanocore RAT	Florian Roth (Nextron Systems)	• 0xb184:$x1: NanoCore.ClientPluginHost • 0xb1b1:$x2: IClientNetworkHost
0.2.APT41.exe.5ba4629.6.raw.unpack	Nanocore_RAT_Feb18_1	Detects Nanocore RAT	Florian Roth (Nextron Systems)	• 0xb184:$x2: NanoCore.ClientPluginHost • 0xc25f:$s4: PipeCreated • 0xb19e:$s5: IClientLoggingHost
0.2.APT41.exe.5ba4629.6.raw.unpack	JoeSecurity_Nanocore	Yara detected Nanocore RAT	Joe Security	

Source	Rule	Description	Author	Strings
0.2.APT41.exe.5ba4629.6.raw.unpack	MALWARE_Win_NanoCore	Detects NanoCore	ditekSHen	• 0xb14f:$x2: NanoCore.ClientPlugin • 0xb184:$x3: NanoCore.ClientPluginHost • 0xb143:$i2: IClientData • 0xb165:$i3: IClientNetwork • 0xb174:$i5: IClientDataHost • 0xb19e:$i6: IClientLoggingHost • 0xb1b1:$i7: IClientNetworkHost • 0xb1c4:$i8: IClientUIHost • 0xb1d2:$i9: IClientNameObjectCollection • 0xb1ee:$i10: IClientReadOnlyNameObjectCollection • 0xaf41:$s1: ClientPlugin • 0xb158:$s1: ClientPlugin • 0x10179:$s6: get_ClientSettings
0.2.APT41.exe.5ba4629.6.raw.unpack	Windows_Trojan_Nanocore_d8c4e3c5	unknown	unknown	• 0xb184:$a1: NanoCore.ClientPluginHost • 0xb14f:$a2: NanoCore.ClientPlugin • 0x100ca:$b1: get_BuilderSettings • 0x10039:$b7: LogClientException • 0xb19e:$b9: IClientLoggingHost
Click to see the 53 entries				

Sigma Signatures

AV Detection

Sigma detected: NanoCore

E-Banking Fraud

Sigma detected: NanoCore

Persistence and Installation Behavior

Sigma detected: Scheduled temp file as task from temp location

Stealing of Sensitive Information

Sigma detected: NanoCore

Remote Access Functionality

Sigma detected: NanoCore

Snort Signatures

No Snort rule has matched

Joe Sandbox Signatures

AV Detection

Found malware configuration

Multi AV Scanner detection for submitted file

Antivirus / Scanner detection for submitted sample

Antivirus detection for URL or domain

Antivirus detection for dropped file

Multi AV Scanner detection for dropped file

Yara detected Nanocore RAT

Machine Learning detection for sample

Machine Learning detection for dropped file

Networking

Connects to many ports of the same IP (likely port scanning)

C2 URLs / IPs found in malware configuration

E-Banking Fraud

Yara detected Nanocore RAT

Operating System Destruction

Protects its processes via BreakOnTermination flag

System Summary

Malicious sample detected (through community Yara rule)

Data Obfuscation

.NET source code contains potential unpacker

Boot Survival

Uses schtasks.exe or at.exe to add and modify task schedules

Hooking and other Techniques for Hiding and Protection

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

Stealing of Sensitive Information

Yara detected Nanocore RAT

Remote Access Functionality

Detected Nanocore Rat

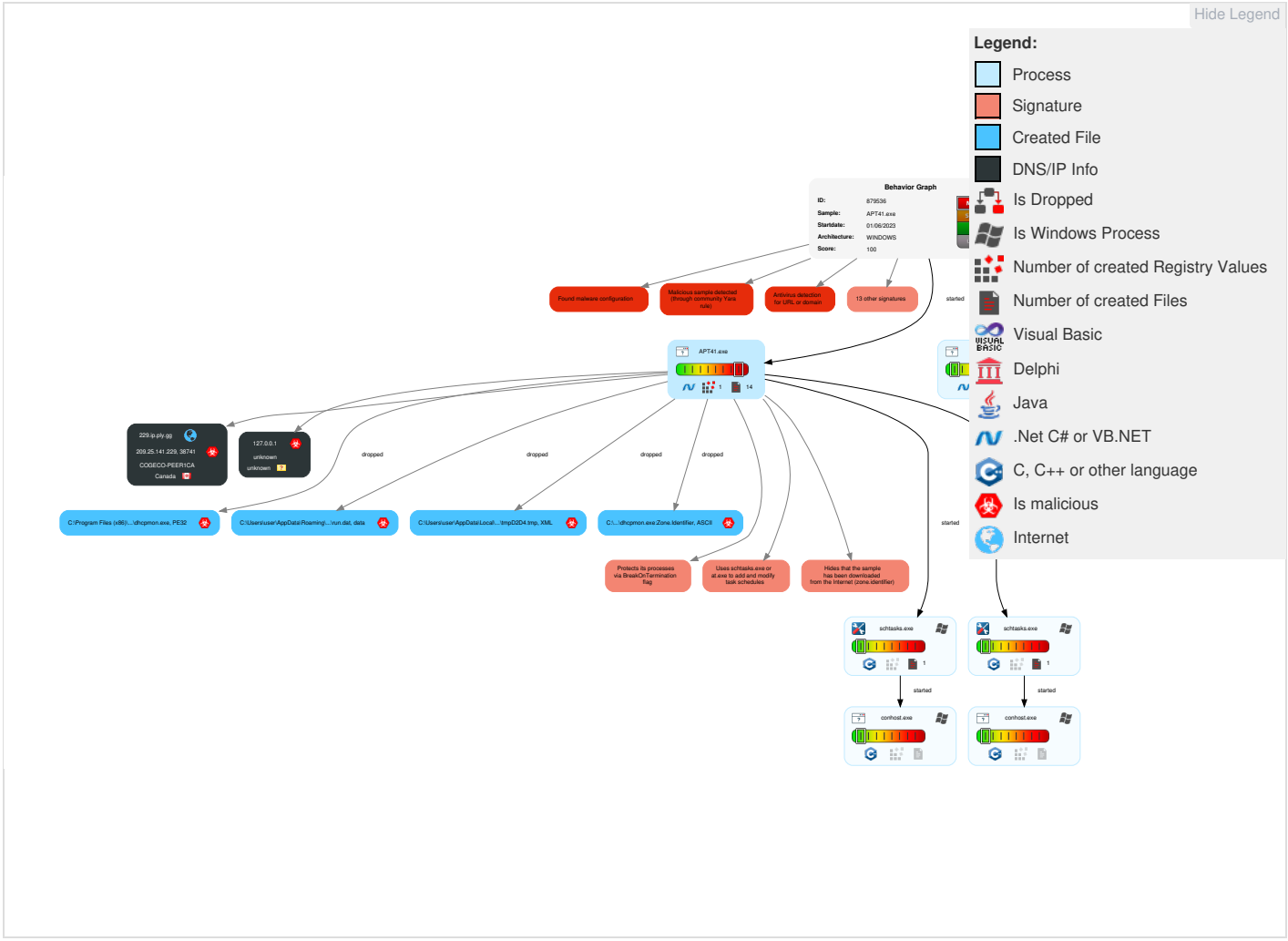
Yara detected Nanocore RAT

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	1 Scheduled Task/Job	1 Scheduled Task/Job	1 Access Token Manipulation	2 Masquerading	2 1 Input Capture	1 1 Security Software Discovery	Remote Services	2 1 Input Capture	Exfiltration Over Other Network Medium	1 Encrypted Channel	Eavesdrop on Insecure Network Communication	Remotely Track Device Without Authorization	Modify System Partition

Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Exfiltration	Command and Control	Network Effects	Remote Service Effects	Impact
Default Accounts	Scheduled Task/Job	Boot or Logon Initialization Scripts	1 2 Process Injection	1 Disable or Modify Tools	LSASS Memory	2 Process Discovery	Remote Desktop Protocol	1 1 Archive Collected Data	Exfiltration Over Bluetooth	1 Non-Standard Port	Exploit SS7 to Redirect Phone Calls/SMS	Remotely Wipe Data Without Authorization	Device Lockout
Domain Accounts	At (Linux)	Logon Script (Windows)	1 Scheduled Task/Job	2 1 Virtualization/Sandbox Evasion	Security Account Manager	2 1 Virtualization/Sandbox Evasion	SMB/Windows Admin Shares	Data from Network Shared Drive	Automated Exfiltration	1 Remote Access Software	Exploit SS7 to Track Device Location	Obtain Device Cloud Backups	Delete Device Data
Local Accounts	At (Windows)	Logon Script (Mac)	Logon Script (Mac)	1 Access Token Manipulation	NTDS	1 Application Window Discovery	Distributed Component Object Model	Input Capture	Scheduled Transfer	1 Non-Application Layer Protocol	SIM Card Swap		Carrier Billing Fraud
Cloud Accounts	Cron	Network Logon Script	Network Logon Script	1 2 Process Injection	LSA Secrets	3 System Information Discovery	SSH	Keylogging	Data Transfer Size Limits	1 1 Application Layer Protocol	Manipulate Device Communication		Manipulate App Store Rankings or Ratings
Replication Through Removable Media	Launchd	Rc.common	Rc.common	1 Deobfuscate/Decode Files or Information	Cached Domain Credentials	System Owner/User Discovery	VNC	GUI Input Capture	Exfiltration Over C2 Channel	Multiband Communication	Jamming or Denial of Service		Abuse Accessibility Features
External Remote Services	Scheduled Task	Startup Items	Startup Items	1 Hidden Files and Directories	DCSync	Network Sniffing	Windows Remote Management	Web Portal Capture	Exfiltration Over Alternative Protocol	Commonly Used Port	Rogue Wi-Fi Access Points		Data Encrypted for Impact
Drive-by Compromise	Command and Scripting Interpreter	Scheduled Task/Job	Scheduled Task/Job	1 Obfuscated Files or Information	Proc Filesystem	Network Service Scanning	Shared Webroot	Credential API Hooking	Exfiltration Over Symmetric Encrypted Non-C2 Protocol	Application Layer Protocol	Downgrade to Insecure Protocols		Generate Fraudulent Advertising Revenue
Exploit Public-Facing Application	PowerShell	At (Linux)	At (Linux)	1 1 Software Packing	/etc/passwd and /etc/shadow	System Network Connections Discovery	Software Deployment Tools	Data Staged	Exfiltration Over Asymmetric Encrypted Non-C2 Protocol	Web Protocols	Rogue Cellular Base Station		Data Destruction

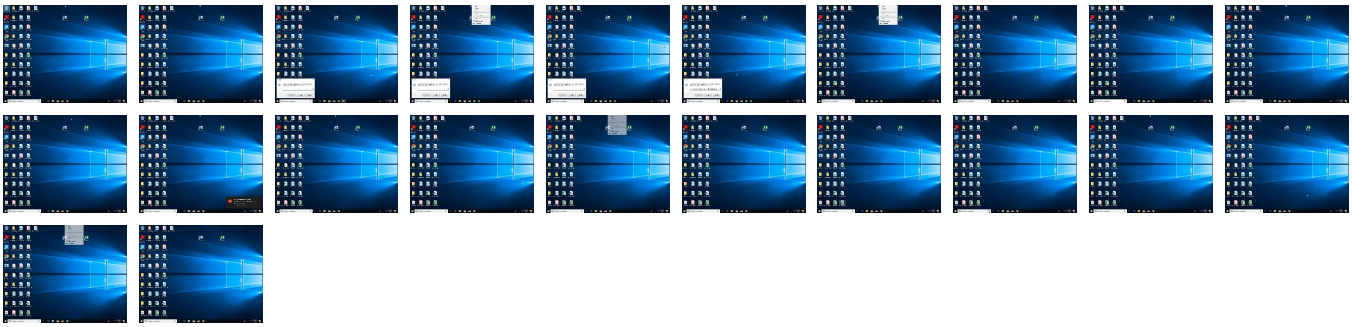
Behavior Graph



Screenshots

Thumbnails

This section contains all screenshots as thumbnails, including those not shown in the slideshow.



Antivirus, Machine Learning and Genetic Malware Detection

Initial Sample

Source	Detection	Scanner	Label	Link
APT41.exe	95%	ReversingLabs	ByteCode-MSIL.Backdoor.NanoCore	
APT41.exe	87%	Virustotal		Browse
APT41.exe	100%	Avira	TR/Dropper.MSIL.Gen7	
APT41.exe	100%	Joe Sandbox ML		

Dropped Files

Source	Detection	Scanner	Label	Link
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	100%	Avira	TR/Dropper.MSIL.Gen7	
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	100%	Joe Sandbox ML		
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	95%	ReversingLabs	ByteCode-MSIL.Backdoor.NanoCore	

Unpacked PE Files

No Antivirus matches

Domains

No Antivirus matches

URLs

Source	Detection	Scanner	Label	Link
229.ip.ply.gg	100%	Avira URL Cloud	malware	
127.0.0.1	0%	Avira URL Cloud	safe	

Domains and IPs

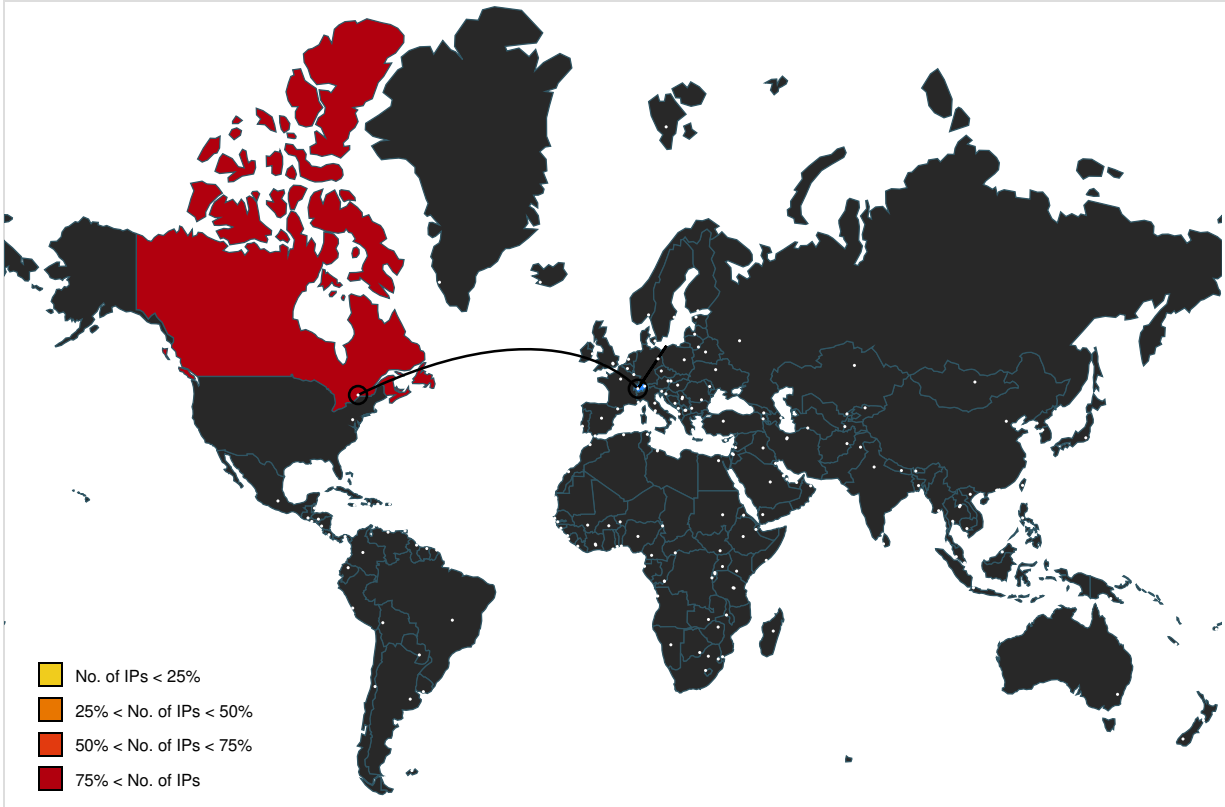
Contacted Domains

Name	IP	Active	Malicious	Antivirus Detection	Reputation
229.ip.ply.gg	209.25.141.229	true	true		unknown

Contacted URLs

Name	Malicious	Antivirus Detection	Reputation
229.ip.ply.gg	true	• Avira URL Cloud: malware	unknown
127.0.0.1	true	• Avira URL Cloud: safe	unknown

World Map of Contacted IPs



Public IPs

IP	Domain	Country	Flag	ASN	ASN Name	Malicious
209.25.141.229	229.ip.ply.gg	Canada		13768	COGECO-PEER1CA	true

Private

IP
127.0.0.1

General Information

Joe Sandbox Version:	37.1.0 Beryl
Analysis ID:	879536
Start date and time:	2023-06-01 04:57:21 +02:00
Joe Sandbox Product:	CloudBasic
Overall analysis duration:	0h 8m 56s
Hypervisor based Inspection enabled:	false
Report type:	light
Cookbook file name:	default.jbs
Analysis system description:	Windows 10 64 bit v1803 with Office Professional Plus 2016, Chrome 104, IE 11, Adobe Reader DC 19, Java 8 Update 211
Number of analysed new started processes analysed:	9
Number of new started drivers analysed:	0
Number of existing processes analysed:	0
Number of existing drivers analysed:	0
Number of injected processes analysed:	0
Technologies:	• HCA enabled • EGA enabled • HDC enabled • AMSI enabled
Analysis Mode:	default
Analysis stop reason:	Timeout
Sample file name:	APT41.exe
Detection:	MAL
Classification:	mal100.troj.evad.winEXE@10/8@6/2
EGA Information:	• Successful, ratio: 100%
HDC Information:	Failed
HCA Information:	• Successful, ratio: 100% • Number of executed functions: 0 • Number of non-executed functions: 0
Cookbook Comments:	• Found application associated with file extension: .exe

Warnings

- Exclude process from analysis (whitelisted): WMIADAP.exe
- Not all processes where analyzed, report is missing behavior information

Simulations

Behavior and APIs

Time	Type	Description
04:58:18	API Interceptor	938x Sleep call for process: APT41.exe modified
04:58:19	Task Scheduler	Run new task: DHCP Monitor path: "C:\Users\user\Desktop\APT41.exe" s>$(Arg0)
04:58:19	Task Scheduler	Run new task: DHCP Monitor Task path: "C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe" s>$(Arg0)
04:58:22	Autostart	Run: HKLM\Software\Microsoft\Windows\CurrentVersion\Run DHCP Monitor C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe

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:\Program Files (x86)\DHCP Monitor\dhcpmon.exe

Process:	C:\Users\user\Desktop\APT41.exe
File Type:	PE32 executable (GUI) Intel 80386 Mono/.Net assembly, for MS Windows
Category:	dropped
Size (bytes):	207872
Entropy (8bit):	7.448758015927114
Encrypted:	false
SSDEEP:	6144:MLV6Bta6dtJmakIM5cc0kTgdXi6Wv7zoE3:MLV6Btpmkjc1cXNYA2
MD5:	8D7E99642AA67C34D7CE487C3E9E2F6E
SHA1:	982D7429DC4A01F227CBDDEC9FBAC53C851EC285
SHA-256:	D5C26FEDE4FD8F7AB92EE8CE0D15EBFA1EB5AC125C56E0B295990CA8CF901264
SHA-512:	9087CE11D3107E17408CA081657CA3CB8475E523AE5BEB16854B088F9DFF8EF5CC3E5BDA7A8290E2A3822AD86F8E9136772E3AAAAAF7EFB7F9AB5375256BD38B
Malicious:	**true**
Yara Hits:	• Rule: Nanocore_RAT_Gen_2, Description: Detetcs the Nanocore RAT, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: Florian Roth (Nextron Systems) • Rule: Nanocore_RAT_Feb18_1, Description: Detects Nanocore RAT, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: Florian Roth (Nextron Systems) • Rule: JoeSecurity_Nanocore, Description: Yara detected Nanocore RAT, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: Joe Security • Rule: MALWARE_Win_NanoCore, Description: Detects NanoCore, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: ditekSHen • Rule: NanoCore, Description: unknown, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: Kevin Breen <kevin@techanarchy.net> • Rule: Windows_Trojan_Nanocore_d8c4e3c5, Description: unknown, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: unknown
Antivirus:	• Antivirus: Avira, Detection: 100% • Antivirus: Joe Sandbox ML, Detection: 100% • Antivirus: ReversingLabs, Detection: 95%
Reputation:	low
Preview:	MZ.....@.....!..L.!This program cannot be run in DOS mode....$.....PE..L....'.T.....b..... .....@.. ....8...W.... ..._..... ....H.....text..... ....`.reloc.....@..B.rsrc...._... ...`.....@..@.....t.....H.....T.....0..Q.....o5.....*.o6....-.&.....3+..+.... ....3.....1..... 2.... ....3.... .....*.*....0..E.....s7....-(&s8....-&&s9....,$&s:.....s;.....*.....+.....+.....+.....0.....~....o<...*..0.....~....o=...*..0.....~....o>...*..0.....~....o?...*..0.....~....o@...*..0.....-.&(A...*&+...0..$..... ~B.....-.(...+.-.&+..B...+.~B...*.0.....-.&(A...*&+...0..

C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe:Zone.Identifier

Process:	C:\Users\user\Desktop\APT41.exe
File Type:	ASCII text, with CRLF line terminators
Category:	dropped
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**
Preview:	[ZoneTransfer]....ZoneId=0

C:\Users\user\AppData\Local\Microsoft\CLR_v2.0_32\UsageLogs\APT41.exe.log

Process:	C:\Users\user\Desktop\APT41.exe
File Type:	ASCII text, with CRLF line terminators
Category:	dropped
Size (bytes):	525
Entropy (8bit):	5.2874233355119316
Encrypted:	false
SSDEEP:	12:Q3LaJU20NaL10U29hJ5g1B0U2ukyrFk70Ug+9Yz9tv:MLF20NaL329hJ5g522rWz2T
MD5:	61CCF53571C9ABA6511D696CB0D32E45
SHA1:	A13A42A20EC14942F52DB20FB16A0A520F8183CE
SHA-256:	3459BDF6C0B7F9D43649ADAAF19BA8D5D133BCBE5EF80CF4B7000DC91E10903B
SHA-512:	90E180D9A681F82C010C326456AC88EBB89256CC769E900BFB4B2DF92E69CA69726863B45DFE4627FC1EE8C281F2AF86A6A1E2EF1710094CCD3F4E092872F06
Malicious:	**true**
Preview:	1,"fusion","GAC",0..3,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System\1ffc437de59fb69ba2b865ffdc98ffd1\System.ni.dll",0..3,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System.Drawing\54d944b3ca0ea1188d700fbd8089726b\System.Drawing.ni.dll",0..3,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System.Windows.Forms\bd8d59c984c9f5f2695f64341115cdf0\System.Windows.Forms.ni.dll",0..3,"C:\Windows\assembly\NativeImages_v2.0.50727_32\Microsoft.VisualBas#\cd7c74fce2a0eab72cd25cbe4bb61614\Microsoft.VisualBasic.ni.dll",0..

C:\Users\user\AppData\Local\Microsoft\CLR_v2.0_32\UsageLogs\dhcpmon.exe.log

Process:	C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe
File Type:	ASCII text, with CRLF line terminators
Category:	dropped
Size (bytes):	525
Entropy (8bit):	5.2874233355119316
Encrypted:	false
SSDEEP:	12:Q3LaJU20NaL10U29hJ5g1B0U2ukyrFk70Ug+9Yz9tv:MLF20NaL329hJ5g522rWz2T
MD5:	61CCF53571C9ABA6511D696CB0D32E45
SHA1:	A13A42A20EC14942F52DB20FB16A0A520F8183CE
SHA-256:	3459BDF6C0B7F9D43649ADAAF19BA8D5D133BCBE5EF80CF4B7000DC91E10903B
SHA-512:	90E180D9A681F82C010C326456AC88EBB89256CC769E900BFB4B2DF92E69CA69726863B45DFE4627FC1EE8C281F2AF86A6A1E2EF1710094CCD3F4E092872F06
Malicious:	false
Preview:	1,"fusion","GAC",0..3,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System\1ffc437de59fb69ba2b865ffdc98ffd1\System.ni.dll",0..3,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System.Drawing\54d944b3ca0ea1188d700fbd8089726b\System.Drawing.ni.dll",0..3,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System.Windows.Forms\bd8d59c984c9f5f2695f64341115cdf0\System.Windows.Forms.ni.dll",0..3,"C:\Windows\assembly\NativeImages_v2.0.50727_32\Microsoft.VisualBas#\cd7c74fce2a0eab72cd25cbe4bb61614\Microsoft.VisualBasic.ni.dll",0..

C:\Users\user\AppData\Local\Temp\tmpD2D4.tmp

Process:	C:\Users\user\Desktop\APT41.exe
File Type:	XML 1.0 document, ASCII text, with CRLF line terminators
Category:	dropped
Size (bytes):	1298
Entropy (8bit):	5.093030604511417
Encrypted:	false
SSDEEP:	24:2dH4+S/4oL600QlMhEMjn5pwjVLUYODOLG9RJh7h8gK0VbIxtn:cbk4oL600QydbQxIYODOLedq3+Ij
MD5:	30BB9418DC79F43FC34CD141AB070195
SHA1:	91F1A1FE3647F9A4C4ABB800216AB9CEBD14E2CF
SHA-256:	819568B0F1E4F37F71C5CCC90E87D5244EC45F0779B8FA3D763F84DFE0A7D9A5
SHA-512:	ABF90BAAF0C926502CBDFBDD4B6F224495DE48A00D86E7863DAE0CDC78F7DF1201A1DAF32ABE716EC44722A7C7EBBE57D3764F03E875F517295D5A29F76FE145
Malicious:	**true**
Preview:	<?xml version="1.0" encoding="UTF-16"?>..<Task version="1.2" xmlns="http://schemas.microsoft.com/windows/2004/02/mit/task">.. <RegistrationInfo />.. <Triggers />.. <Principals>.. <Principal id="Author">.. <LogonType>InteractiveToken</LogonType>.. <RunLevel>HighestAvailable</RunLevel>.. </Principal>.. </Principals>.. <Settings>.. <MultipleInstancesPolicy>Parallel</MultipleInstancesPolicy>.. <DisallowStartIfOnBatteries>false</DisallowStartIfOnBatteries>.. <StopIfGoingOnBatteries>false</StopIfGoingOnBatteries>.. <AllowHardTerminate>true</AllowHardTerminate>.. <StartWhenAvailable>false</StartWhenAvailable>.. <RunOnlyIfNetworkAvailable>false</RunOnlyIfNetworkAvailable>.. <IdleSettings>.. <StopOnIdleEnd>false</StopOnIdleEnd>.. <RestartOnIdle>false</RestartOnIdle>.. </IdleSettings>.. <AllowStartOnDemand>true</AllowStartOnDemand>.. <Enabled>true</Enabled>.. <Hidden>false</Hidden>.. <RunOnlyIfIdle>false</RunOnlyIfIdle>.. <Wak

C:\Users\user\AppData\Local\Temp\tmpD40E.tmp

Process:	C:\Users\user\Desktop\APT41.exe
File Type:	XML 1.0 document, ASCII text, with CRLF line terminators
Category:	modified

Size (bytes):	1310
Entropy (8bit):	5.109425792877704
Encrypted:	false
SSDEEP:	24:2dH4+S/4oL600QlMhEMjn5pwjVLUYODOLG9RJh7h8gK0R3xtn:cbk4oL600QydbQxIYODOLedq3S3j
MD5:	5C2F41CFC6F988C859DA7D727AC2B62A
SHA1:	68999C85FC7E37BAB9216E0099836D40D4545C1C
SHA-256:	98B6E66B6C2173B9B91FC97FE51805340EFDE978B695453742EBAB631018398B
SHA-512:	B5DA5DA378D038AFBF8A7738E47921ED39F9B726E2CAA2993D915D9291A3322F94EFE8CCA6E7AD678A670DB19926B22B20E5028460FCC89CEA7F6635E755734
Malicious:	false
Preview:	<?xml version="1.0" encoding="UTF-16"?>..<Task version="1.2" xmlns="http://schemas.microsoft.com/windows/2004/02/mit/task">.. <RegistrationInfo />.. <Triggers />.. <Principals>.. <Principal id="Author">.. <LogonType>InteractiveToken</LogonType>.. <RunLevel>HighestAvailable</RunLevel>.. </Principal>.. </Principals>.. <Settings>.. <MultipleInstancesPolicy>Parallel</MultipleInstancesPolicy>.. <DisallowStartIfOnBatteries>false</DisallowStartIfOnBatteries>.. <StopIfGoingOnBatteries>false</StopIfGoingOnBatteries>.. <AllowHardTerminate>true</AllowHardTerminate>.. <StartWhenAvailable>false</StartWhenAvailable>.. <RunOnlyIfNetworkAvailable>false</RunOnlyIfNetworkAvailable>.. <IdleSettings>.. <StopOnIdleEnd>false</StopOnIdleEnd>.. <RestartOnIdle>false</RestartOnIdle>.. </IdleSettings>.. <AllowStartOnDemand>true</AllowStartOnDemand>.. <Enabled>true</Enabled>.. <Hidden>false</Hidden>.. <RunOnlyIfIdle>false</RunOnlyIfIdle>.. <Wak

C:\Users\user\AppData\Roaming\D06ED635-68F6-4E9A-955C-4899F5F57B9A\run.dat

Process:	C:\Users\user\Desktop\APT41.exe
File Type:	data
Category:	dropped
Size (bytes):	8
Entropy (8bit):	3.0
Encrypted:	false
SSDEEP:	3:wt:wt
MD5:	1730557FFAE3B4C601053B8A21855355
SHA1:	73B7D962273E068D45FD62A105B9091EBB718DD3
SHA-256:	8DE524D123D21D69D5CE036E1C691E71FD95B8EA9499949FA2F740D8299F8DCD
SHA-512:	F3409F598B8B0D1C024944CD309B60A1A5FD7EEB9B90A3D29217F0F0F803FB0B5A67673426155A1AAADE1611F775491FD1078ADFC7D852D0EC55D9614C376F7
Malicious:	**true**
Preview:	...}.b.H

C:\Users\user\AppData\Roaming\D06ED635-68F6-4E9A-955C-4899F5F57B9A\task.dat

Process:	C:\Users\user\Desktop\APT41.exe
File Type:	ASCII text, with no line terminators
Category:	dropped
Size (bytes):	35
Entropy (8bit):	4.0891009610430595
Encrypted:	false
SSDEEP:	3:oNN2+Wk1hA:oNN2Rk1W
MD5:	6833B515A438255268ADF934A2EB21E3
SHA1:	1A8EB7B21FF103EB606A9EE7746FFC4A6E9A4CFE
SHA-256:	D85588430A2F93A98C7A86C75821A6E7B299D62C03AF875E940407BBBAFEDAD3
SHA-512:	2027570DE01313BECFD42F521BB6AC5B82CA057626DC1E0191C8E55830272C50E29F093D507EFFF9AA7BA53CBD2353829A966F9368A6B368CA1EB9378FB076B0
Malicious:	false
Preview:	C:\Users\user\Desktop\APT41.exe

Static File Info

General

File type:	PE32 executable (GUI) Intel 80386 Mono/.Net assembly, for MS Windows
Entropy (8bit):	7.448758015927114
TrID:	• Win32 Executable (generic) Net Framework (10011505/4) 49.83% • Win32 Executable (generic) a (10002005/4) 49.78% • Generic CIL Executable (.NET, Mono, etc.) (73296/58) 0.36% • Generic Win/DOS Executable (2004/3) 0.01% • DOS Executable Generic (2002/1) 0.01%
File name:	APT41.exe

File size:	207872
MD5:	8d7e99642aa67c34d7ce487c3e9e2f6e
SHA1:	982d7429dc4a01f227cbddec9fbac53c851ec285
SHA256:	d5c26fede4fd8f7ab92ee8ce0d15ebfa1eb5ac125c56e0b295990ca8cf901264
SHA512:	9087ce11d3107e17408ca081657ca3cb8475e523ae5beb16854b088f9dff8ef5cc3e5bda7a8290e2a3822ad86f8e9136772e3aaaaaf7efb7f9ab5375256bd38b
SSDEEP:	6144:MLV6Bta6dtJmakIM5cc0kTgdXi6Wv7zoE3:MLV6Btpmkjc1cXNYA2
TLSH:	8E14C01677A84A2FE2DE86B9A1221213937CC2E3D8C3F7DE18D415B78B267E546071D3
File Content Preview:	MZ.....................@..!..L.!This program cannot be run in DOS mode....$.......PE..L....'.T.....................b........... ....@.. ....

File Icon

Icon Hash:	90cececece8e8eb0

Static PE Info

General

Entrypoint:	0x41e792
Entrypoint Section:	.text
Digitally signed:	false
Imagebase:	0x400000
Subsystem:	windows gui
Image File Characteristics:	EXECUTABLE_IMAGE, LINE_NUMS_STRIPPED, LOCAL_SYMS_STRIPPED, 32BIT_MACHINE
DLL Characteristics:	
Time Stamp:	0x54E927A1 [Sun Feb 22 00:49:37 2015 UTC]
TLS Callbacks:	
CLR (.Net) Version:	
OS Version Major:	4
OS Version Minor:	0
File Version Major:	4
File Version Minor:	0
Subsystem Version Major:	4
Subsystem Version Minor:	0
Import Hash:	f34d5f2d4577ed6d9ceec516c1f5a744

Entrypoint Preview

Instruction
jmp dword ptr [00402000h]
add byte ptr [eax], al
add byte ptr [eax], al
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Data Directories

Name	Virtual Address	Virtual Size	Is in Section
IMAGE_DIRECTORY_ENTRY_EXPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_IMPORT	0x1e738	0x57	.text
IMAGE_DIRECTORY_ENTRY_RESOURCE	0x22000	0x15fc0	.rsrc
IMAGE_DIRECTORY_ENTRY_EXCEPTION	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_SECURITY	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_BASERELOC	0x20000	0xc	.reloc
IMAGE_DIRECTORY_ENTRY_DEBUG	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_COPYRIGHT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_GLOBALPTR	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_TLS	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_LOAD_CONFIG	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_BOUND_IMPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_IAT	0x2000	0x8	.text
IMAGE_DIRECTORY_ENTRY_DELAY_IMPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_COM_DESCRIPTOR	0x2008	0x48	.text
IMAGE_DIRECTORY_ENTRY_RESERVED	0x0	0x0	

Sections

Name	Virtual Address	Virtual Size	Raw Size	Xored PE	ZLIB Complexity	File Type	Entropy	Characteristics
.text	0x2000	0x1c798	0x1c800	False	0.5945124040570176	data	6.598064825901739	IMAGE_SCN_CNT_CODE, IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_MEM_READ
.reloc	0x20000	0xc	0x200	False	0.044921875	data	0.10191042566270775	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_DISCARDABLE, IMAGE_SCN_MEM_READ
.rsrc	0x22000	0x15fc0	0x16000	False	1.0002108487215908	data	7.9979105956016925	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ

Resources

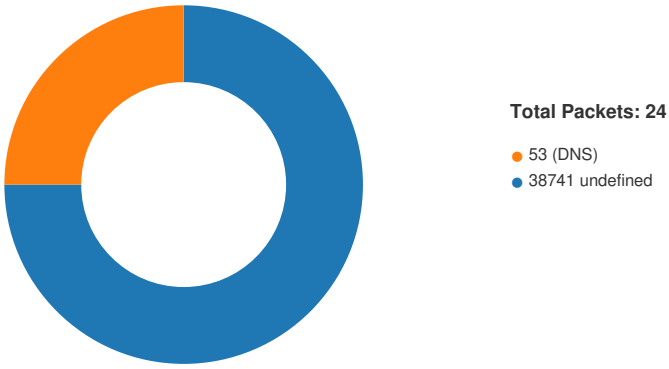
Name	RVA	Size	Type	Language	Country
RT_RCDATA	0x22058	0x15f68	data		

Imports

DLL	Import
mscoree.dll	_CorExeMain

Network Behavior

Network Port Distribution



TCP Packets

Timestamp	Source Port	Dest Port	Source IP	Dest IP
Jun 1, 2023 04:58:20.306613922 CEST	49708	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:58:23.318392038 CEST	49708	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:58:29.318769932 CEST	49708	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:58:42.551537991 CEST	49709	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:58:45.554409027 CEST	49709	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:58:51.554959059 CEST	49709	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:59:04.656292915 CEST	49710	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:59:07.658693075 CEST	49710	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:59:13.674741030 CEST	49710	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:59:40.615257978 CEST	49714	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:59:43.630482912 CEST	49714	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 04:59:49.630945921 CEST	49714	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 05:00:00.820796967 CEST	49715	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 05:00:03.819655895 CEST	49715	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 05:00:09.820143938 CEST	49715	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 05:00:19.173841953 CEST	49716	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 05:00:22.180622101 CEST	49716	38741	192.168.2.6	209.25.141.229
Jun 1, 2023 05:00:28.181190968 CEST	49716	38741	192.168.2.6	209.25.141.229

UDP Packets

Timestamp	Source Port	Dest Port	Source IP	Dest IP
Jun 1, 2023 04:58:20.224781036 CEST	59504	53	192.168.2.6	8.8.8.8
Jun 1, 2023 04:58:20.287636995 CEST	53	59504	8.8.8.8	192.168.2.6
Jun 1, 2023 04:58:42.496186972 CEST	65198	53	192.168.2.6	8.8.8.8
Jun 1, 2023 04:58:42.532200098 CEST	53	65198	8.8.8.8	192.168.2.6
Jun 1, 2023 04:59:04.441343069 CEST	62910	53	192.168.2.6	8.8.8.8
Jun 1, 2023 04:59:04.498231888 CEST	53	62910	8.8.8.8	192.168.2.6
Jun 1, 2023 04:59:40.555295944 CEST	63863	53	192.168.2.6	8.8.8.8
Jun 1, 2023 04:59:40.609772921 CEST	53	63863	8.8.8.8	192.168.2.6
Jun 1, 2023 05:00:00.794025898 CEST	63229	53	192.168.2.6	8.8.8.8
Jun 1, 2023 05:00:00.814260960 CEST	53	63229	8.8.8.8	192.168.2.6
Jun 1, 2023 05:00:19.152018070 CEST	62538	53	192.168.2.6	8.8.8.8
Jun 1, 2023 05:00:19.172300100 CEST	53	62538	8.8.8.8	192.168.2.6

DNS Queries

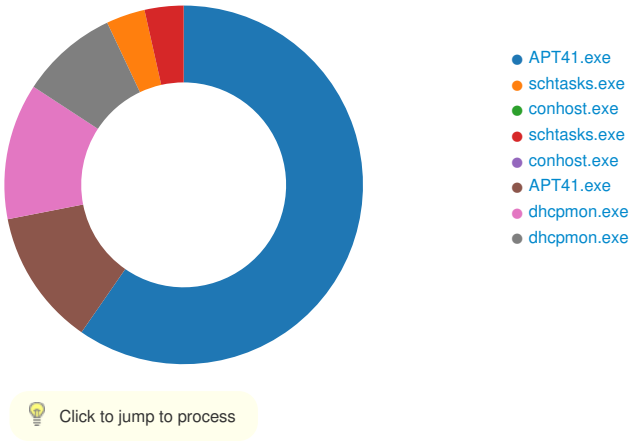
Timestamp	Source IP	Dest IP	Trans ID	OP Code	Name	Type	Class	DNS over HTTPS
Jun 1, 2023 04:58:20.224781036 CEST	192.168.2.6	8.8.8.8	0x1173	Standard query (0)	229.ip.ply.gg	A (IP address)	IN (0x0001)	false
Jun 1, 2023 04:58:42.496186972 CEST	192.168.2.6	8.8.8.8	0x82e5	Standard query (0)	229.ip.ply.gg	A (IP address)	IN (0x0001)	false
Jun 1, 2023 04:59:04.441343069 CEST	192.168.2.6	8.8.8.8	0x197	Standard query (0)	229.ip.ply.gg	A (IP address)	IN (0x0001)	false
Jun 1, 2023 04:59:40.555295944 CEST	192.168.2.6	8.8.8.8	0xbff	Standard query (0)	229.ip.ply.gg	A (IP address)	IN (0x0001)	false
Jun 1, 2023 05:00:00.794025898 CEST	192.168.2.6	8.8.8.8	0xdd27	Standard query (0)	229.ip.ply.gg	A (IP address)	IN (0x0001)	false
Jun 1, 2023 05:00:19.152018070 CEST	192.168.2.6	8.8.8.8	0x4c8f	Standard query (0)	229.ip.ply.gg	A (IP address)	IN (0x0001)	false

DNS Answers

Timestamp	Source IP	Dest IP	Trans ID	Reply Code	Name	CName	Address	Type	Class	DNS over HTTPS
Jun 1, 2023 04:58:20.287636995 CEST	8.8.8.8	192.168.2.6	0x1173	No error (0)	229.ip.ply.gg		209.25.141.229	A (IP address)	IN (0x0001)	false
Jun 1, 2023 04:58:42.532200098 CEST	8.8.8.8	192.168.2.6	0x82e5	No error (0)	229.ip.ply.gg		209.25.141.229	A (IP address)	IN (0x0001)	false
Jun 1, 2023 04:59:04.498231888 CEST	8.8.8.8	192.168.2.6	0x197	No error (0)	229.ip.ply.gg		209.25.141.229	A (IP address)	IN (0x0001)	false
Jun 1, 2023 04:59:40.609772921 CEST	8.8.8.8	192.168.2.6	0xbff	No error (0)	229.ip.ply.gg		209.25.141.229	A (IP address)	IN (0x0001)	false
Jun 1, 2023 05:00:00.814260960 CEST	8.8.8.8	192.168.2.6	0xdd27	No error (0)	229.ip.ply.gg		209.25.141.229	A (IP address)	IN (0x0001)	false
Jun 1, 2023 05:00:19.172300100 CEST	8.8.8.8	192.168.2.6	0x4c8f	No error (0)	229.ip.ply.gg		209.25.141.229	A (IP address)	IN (0x0001)	false

Statistics

Behavior



System Behavior

Analysis Process: APT41.exe PID: **5720**, Parent PID: **3452**

General

Target ID:	0
Start time:	04:58:17
Start date:	01/06/2023
Path:	C:\Users\user\Desktop\APT41.exe
Wow64 process (32bit):	true
Commandline:	C:\Users\user\Desktop\APT41.exe
Imagebase:	0x8a0000
File size:	207872 bytes
MD5 hash:	8D7E99642AA67C34D7CE487C3E9E2F6E
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	.Net C# or VB.NET
Yara matches:	• Rule: Nanocore_RAT_Gen_2, Description: Detetcs the Nanocore RAT, Source: 00000000.00000002.746083635.0000000005300000.00000004.08000000.00040000.00000000.sdmp, Author: Florian Roth (Nextron Systems) • Rule: Nanocore_RAT_Feb18_1, Description: Detects Nanocore RAT, Source: 00000000.00000002.746083635.0000000005300000.00000004.08000000.00040000.00000000.sdmp, Author: Florian Roth (Nextron Systems) • Rule: MALWARE_Win_NanoCore, Description: Detects NanoCore, Source: 00000000.00000002.746083635.0000000005300000.00000004.08000000.00040000.00000000.sdmp, Author: ditekSHen • Rule: Windows_Trojan_Nanocore_d8c4e3c5, Description: unknown, Source: 00000000.00000002.746083635.0000000005300000.00000004.08000000.00040000.00000000.sdmp, Author: unknown • Rule: Nanocore_RAT_Gen_2, Description: Detetcs the Nanocore RAT, Source: 00000000.00000002.746564446.0000000005BA0000.00000004.08000000.00040000.00000000.sdmp, Author: Florian Roth (Nextron Systems) • Rule: Nanocore_RAT_Feb18_1, Description: Detects Nanocore RAT, Source: 00000000.00000002.746564446.0000000005BA0000.00000004.08000000.00040000.00000000.sdmp, Author: Florian Roth (Nextron Systems) • Rule: JoeSecurity_Nanocore, Description: Yara detected Nanocore RAT, Source: 00000000.00000002.746564446.0000000005BA0000.00000004.08000000.00040000.00000000.sdmp, Author: Joe Security • Rule: MALWARE_Win_NanoCore, Description: Detects NanoCore, Source: 00000000.00000002.746564446.0000000005BA0000.00000004.08000000.00040000.00000000.sdmp, Author: ditekSHen • Rule: Windows_Trojan_Nanocore_d8c4e3c5, Description: unknown, Source: 00000000.00000002.746564446.0000000005BA0000.00000004.08000000.00040000.00000000.sdmp, Author: unknown • Rule: Nanocore_RAT_Gen_2, Description: Detetcs the Nanocore RAT, Source: 00000000.00000000.474083187.00000000008A2000.00000002.00000001.01000000.00000003.sdmp, Author: Florian Roth (Nextron Systems) • Rule: JoeSecurity_Nanocore, Description: Yara detected Nanocore RAT, Source: 00000000.00000000.474083187.00000000008A2000.00000002.00000001.01000000.00000003.sdmp, Author: Joe Security • Rule: NanoCore, Description: unknown, Source: 00000000.00000000.474083187.00000000008A2000.00000002.00000001.01000000.00000003.sdmp, Author: Kevin Breen <kevin@techanarchy.net> • Rule: Windows_Trojan_Nanocore_d8c4e3c5, Description: unknown, Source: 00000000.00000000.474083187.00000000008A2000.00000002.00000001.01000000.00000003.sdmp, Author: unknown • Rule: Windows_Trojan_Nanocore_d8c4e3c5, Description: unknown, Source: 00000000.00000002.741167059.0000000002E61000.00000004.00000800.00020000.00000000.sdmp, Author: unknown
Reputation:	low

File Activities

File Created

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol
C:\Users\user	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown
C:\Users\user\AppData\Roaming	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown
C:\Users\user\AppData\Roaming\D06ED635-68F6-4E9A-955C-4899F5F57B9A	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	success or wait	1	51B0D15	CreateDirectoryW
C:\Users\user\AppData\Roaming\D06ED635-68F6-4E9A-955C-4899F5F57B9A\run.dat	read attributes | synchronize | generic write	device	synchronous io non alert | non directory file | open no recall	success or wait	1	51B0E0F	CreateFileW
C:\Program Files (x86)\DHCP Monitor	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	success or wait	1	51B0D15	CreateDirectoryW

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	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	51B1094	CopyFileW
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe\:Zone.Identifier:$DATA	read data or list directory | synchronize | generic write	device	sequential only | synchronous io non alert	success or wait	1	51B1094	CopyFileW
C:\Users\user\AppData\Local\Temp\tmpD2D4.tmp	read attributes | synchronize | generic read	device	synchronous io non alert | non directory file	success or wait	1	51B1290	GetTempFileNameW
C:\Users\user\AppData\Roaming\D06ED635-68F6-4E9A-955C-4899F5F57B9A\task.dat	read attributes | synchronize | generic write	device	sequential only | synchronous io non alert | non directory file | open no recall	success or wait	1	51B0E0F	CreateFileW
C:\Users\user\AppData\Local\Temp\tmpD40E.tmp	read attributes | synchronize | generic read	device	synchronous io non alert | non directory file	success or wait	1	51B1290	GetTempFileNameW
C:\Users\user\AppData\Roaming\D06ED635-68F6-4E9A-955C-4899F5F57B9A\Logs	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	success or wait	1	51B0D15	CreateDirectoryW
C:\Users\user\AppData\Roaming\D06ED635-68F6-4E9A-955C-4899F5F57B9A\Logs\user	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	success or wait	1	51B0D15	CreateDirectoryW
C:\Users\user	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown
C:\Users\user\AppData\Roaming	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown

File Deleted

File Path	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Local\Temp\tmpD2D4.tmp	success or wait	1	136BF0E	DeleteFileW
C:\Users\user\AppData\Local\Temp\tmpD40E.tmp	success or wait	1	136BF0E	DeleteFileW
C:\Users\user\Desktop\APT41.exe:Zone.Identifier	success or wait	1	51B1625	DeleteFileA

File Written

File Path	Offset	Length	Value	Ascii	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Roaming\D06ED635-68F6-4E9A-955C-4899F5F57B9A\run.dat	0	8	fd 1d 10 7d fd 62 fd 48	}bH	success or wait	1	51B0FC7	WriteFile

File Path	Offset	Length	Value	Ascii	Completion	Count	Source Address	Symbol
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	0	131072	4d 5a fd 00 03 00 00 00 04 00 00 00 fd fd 00 00 fd 00 00 00 00 00 00 00 40 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 fd 00 00 00 0e 1f fd 0e 00 fd 09 fd 21 fd 01 4c fd 21 54 68 69 73 20 70 72 6f 67 72 61 6d 20 63 61 6e 6e 6f 74 20 62 65 20 72 75 6e 20 69 6e 20 44 4f 53 20 6d 6f 64 65 2e 0d 0d 0a 24 00 00 00 00 00 00 00 50 45 00 00 4c 01 03 00 fd 27 fd 54 00 00 00 00 00 00 00 00 fd 00 0e 01 0b 01 06 00 00 fd 01 00 00 62 01 00 00 00 00 00 fd fd 01 00 00 20 00 00 00 00 02 00 00 00 40 00 00 20 00 00 00 02 00 00 04 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00 00 fd 03 00 00 02 00 00 00 00 00 00 02 00 00 00 00 00 10 00 00 10 00 00 00 00 10 00 00 10 00 00 00 00 00 00 10 00 00 00 00 00 00 00 00 00 00	MZ@!L!This program cannot be run in DOS mode.$PEL'Tb @	success or wait	2	51B1094	CopyFileW
C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe:Zone.Identifier	0	26	5b 5a 6f 6e 65 54 72 61 6e 73 66 65 72 5d 0d 0a 0d 0a 5a 6f 6e 65 49 64 3d 30	[ZoneTransfer]ZoneId=0	success or wait	1	51B1094	CopyFileW
C:\Users\user\AppData\Local\Temp\tmpD2D4.tmp	0	1298	3c 3f 78 6d 6c 20 76 65 72 73 69 6f 6e 3d 22 31 2e 30 22 20 65 6e 63 6f 64 69 6e 67 3d 22 55 54 46 2d 31 36 22 3f 3e 0d 0a 3c 54 61 73 6b 20 76 65 72 73 69 6f 6e 3d 22 31 2e 32 22 20 78 6d 6c 6e 73 3d 22 68 74 74 70 3a 2f 2f 73 63 68 65 6d 61 73 2e 6d 69 63 72 6f 73 6f 66 74 2e 63 6f 6d 2f 77 69 6e 64 6f 77 73 2f 32 30 30 34 2f 30 32 2f 6d 69 74 2f 74 61 73 6b 22 3e 0d 0a 20 20 3c 52 65 67 69 73 74 72 61 74 69 6f 6e 49 6e 66 6f 20 2f 3e 0d 0a 20 20 3c 54 72 69 67 67 65 72 73 20 2f 3e 0d 0a 20 20 3c 50 72 69 6e 63 69 70 61 6c 73 3e 0d 0a 20 20 20 20 3c 50 72 69 6e 63 69 70 61 6c 20 69 64 3d 22 41 75 74 68 6f 72 22 3e 0d 0a 20 20 20 20 20 20 3c 4c 6f 67 6f 6e 54 79 70 65 3e 49 6e 74 65 72 61 63 74 69 76 65 54 6f 6b 65 6e 3c 2f 4c 6f 67 6f 6e 54 79 70 65 3e	<?xml version="1.0" encoding="UTF-16"?> <Task version="1.2" xmlns="http://schemas.microsoft.com/windows/2004/02/mit/task"> <RegistrationInfo /> <Triggers /> <Principals> <Principal id="Author"> <LogonType>InteractiveToken</LogonType>	success or wait	1	51B0FC7	WriteFile
C:\Users\user\AppData\Roaming\D06ED635-68F6-4E9A-955C-4899F5F57B9A\task.dat	0	35	43 3a 5c 55 73 65 72 73 5c 65 6e 67 69 6e 65 65 72 5c 44 65 73 6b 74 6f 70 5c 41 50 54 34 31 2e 65 78 65	C:\Users\user\Desktop\APT41.exe	success or wait	1	51B0FC7	WriteFile

File Path	Offset	Length	Value	Ascii	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Local\Temp\tmpD40E.tmp	0	1310	3c 3f 78 6d 6c 20 76 65 72 73 69 6f 6e 3d 22 31 2e 30 22 20 65 6e 63 6f 64 69 6e 67 3d 22 55 54 46 2d 31 36 22 3f 3e 0d 0a 3c 54 61 73 6b 20 76 65 72 73 69 6f 6e 3d 22 31 2e 32 22 20 78 6d 6c 6e 73 3d 22 68 74 74 70 3a 2f 2f 73 63 68 65 6d 61 73 2e 6d 69 63 72 6f 73 6f 66 74 2e 63 6f 6d 2f 77 69 6e 64 6f 77 73 2f 32 30 30 34 2f 30 32 2f 6d 69 74 2f 74 61 73 6b 22 3e 0d 0a 20 20 3c 52 65 67 69 73 74 72 61 74 69 6f 6e 49 6e 66 6f 20 2f 3e 0d 0a 20 20 3c 54 72 69 67 67 65 72 73 20 2f 3e 0d 0a 20 20 3c 50 72 69 6e 63 69 70 61 6c 73 3e 0d 0a 20 20 20 20 3c 50 72 69 6e 63 69 70 61 6c 20 69 64 3d 22 41 75 74 68 6f 72 22 3e 0d 0a 20 20 20 20 20 20 3c 4c 6f 67 6f 6e 54 79 70 65 3e 49 6e 74 65 72 61 63 74 69 76 65 54 6f 6b 65 6e 3c 2f 4c 6f 67 6f 6e 54 79 70 65 3e	<?xml version="1.0" encoding="UTF-16"?> <Task version="1.2" xmlns="http://schemas.microsoft.com/windows/2004/02/mit/task"> <RegistrationInfo /> <Triggers /> <Principals> <Principal id="Author"> <LogonType>InteractiveToken</LogonType>	success or wait	1	51B0FC7	WriteFile

File Read

File Path	Offset	Length	Completion	Count	Source Address	Symbol
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	4095	success or wait	1	6CB15544	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	6304	success or wait	3	6CB15544	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	4095	success or wait	1	6CB18738	ReadFile
C:\Windows\assembly\GAC_32\mscorlib\2.0.0.0__b77a5c561934e089\mscorlib.dll	unknown	4096	success or wait	1	6CBBBF06	unknown
C:\Windows\assembly\GAC_32\mscorlib\2.0.0.0__b77a5c561934e089\mscorlib.dll	unknown	512	success or wait	1	6CBBBF06	unknown
C:\Users\user\Desktop\APT41.exe	unknown	4096	success or wait	1	6CBBBF06	unknown
C:\Users\user\Desktop\APT41.exe	unknown	512	success or wait	1	6CBBBF06	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	4095	success or wait	1	6CB15544	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	8175	end of file	1	6CB15544	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	4096	end of file	1	51B0FC7	ReadFile

Registry Activities

Key Value Created

Key Path	Name	Type	Data	Completion	Count	Source Address	Symbol
HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Microsoft\Windows\CurrentVersion\Run	DHCP Monitor	unicode	C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe	success or wait	1	51B1186	RegSetValueExW

Analysis Process: schtasks.exe PID: **6848**, Parent PID: **5720**

General

Target ID:	1
Start time:	04:58:18
Start date:	01/06/2023
Path:	C:\Windows\SysWOW64\schtasks.exe
Wow64 process (32bit):	true

Commandline:	schtasks.exe" /create /f /tn "DHCP Monitor" /xml "C:\Users\user\AppData\Local\Temp\tmpD2D4.tmp
Imagebase:	0xfe0000
File size:	185856 bytes
MD5 hash:	15FF7D8324231381BAD48A052F85DF04
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	high

File Activities

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol

File Read

File Path	Offset	Length	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Local\Temp\tmpD2D4.tmp	unknown	2	success or wait	1	FEAB22	ReadFile
C:\Users\user\AppData\Local\Temp\tmpD2D4.tmp	unknown	1299	success or wait	1	FEABD9	ReadFile

Analysis Process: conhost.exe PID: **6844**, Parent PID: **6848**

General

Target ID:	2
Start time:	04:58:18
Start date:	01/06/2023
Path:	C:\Windows\System32\conhost.exe
Wow64 process (32bit):	false
Commandline:	C:\Windows\system32\conhost.exe 0xffffffff -ForceV1
Imagebase:	0x7ff6da640000
File size:	625664 bytes
MD5 hash:	EA777DEEA782E8B4D7C7C33BBF8A4496
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	high

Analysis Process: schtasks.exe PID: **6952**, Parent PID: **5720**

General

Target ID:	3
Start time:	04:58:18
Start date:	01/06/2023
Path:	C:\Windows\SysWOW64\schtasks.exe
Wow64 process (32bit):	true
Commandline:	schtasks.exe" /create /f /tn "DHCP Monitor Task" /xml "C:\Users\user\AppData\Local\Temp\tmpD40E.tmp
Imagebase:	0xfe0000
File size:	185856 bytes
MD5 hash:	15FF7D8324231381BAD48A052F85DF04
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	high

File Activities

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol

File Read

File Path	Offset	Length	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Local\Temp\tmpD40E.tmp	unknown	2	success or wait	1	FEAB22	ReadFile
C:\Users\user\AppData\Local\Temp\tmpD40E.tmp	unknown	1311	success or wait	1	FEABD9	ReadFile

Analysis Process: conhost.exe PID: **6960**, Parent PID: **6952**

General

Target ID:	4
Start time:	04:58:18
Start date:	01/06/2023
Path:	C:\Windows\System32\conhost.exe
Wow64 process (32bit):	false
Commandline:	C:\Windows\system32\conhost.exe 0xffffffff -ForceV1
Imagebase:	0x7ff6da640000
File size:	625664 bytes
MD5 hash:	EA777DEEA782E8B4D7C7C33BBF8A4496
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	high

Analysis Process: APT41.exe PID: **7048**, Parent PID: **1064**

General

Target ID:	5
Start time:	04:58:19
Start date:	01/06/2023
Path:	C:\Users\user\Desktop\APT41.exe
Wow64 process (32bit):	true
Commandline:	C:\Users\user\Desktop\APT41.exe 0
Imagebase:	0xff0000
File size:	207872 bytes
MD5 hash:	8D7E99642AA67C34D7CE487C3E9E2F6E
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	.Net C# or VB.NET
Yara matches:	• Rule: JoeSecurity_Nanocore, Description: Yara detected Nanocore RAT, Source: 00000005.00000002.494145417.00000000046A1000.00000004.00000800.00020000.00000000.sdmp, Author: Joe Security • Rule: NanoCore, Description: unknown, Source: 00000005.00000002.494145417.00000000046A1000.00000004.00000800.00020000.00000000.sdmp, Author: Kevin Breen <kevin@techanarchy.net> • Rule: Windows_Trojan_Nanocore_d8c4e3c5, Description: unknown, Source: 00000005.00000002.494145417.00000000046A1000.00000004.00000800.00020000.00000000.sdmp, Author: unknown • Rule: JoeSecurity_Nanocore, Description: Yara detected Nanocore RAT, Source: 00000005.00000002.494059305.00000000036A1000.00000004.00000800.00020000.00000000.sdmp, Author: Joe Security • Rule: NanoCore, Description: unknown, Source: 00000005.00000002.494059305.00000000036A1000.00000004.00000800.00020000.00000000.sdmp, Author: Kevin Breen <kevin@techanarchy.net> • Rule: Windows_Trojan_Nanocore_d8c4e3c5, Description: unknown, Source: 00000005.00000002.494059305.00000000036A1000.00000004.00000800.00020000.00000000.sdmp, Author: unknown
Reputation:	low

File Activities

File Created

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol
C:\Users\user	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Roaming	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown
C:\Users\user\AppData\Local\Microsoft\CLR_v2.0_32\UsageLogs\APT41.exe.log	read attributes | synchronize | generic write	device	synchronous io non alert | non directory file	success or wait	1	6CAD34A7	CreateFileW

File Written

File Path	Offset	Length	Value	Ascii	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Local\Microsoft\CLR_v2.0_32\UsageLogs\APT41.exe.log	0	525	31 2c 22 66 75 73 69 6f 6e 22 2c 22 47 41 43 22 2c 30 0d 0a 33 2c 22 43 3a 5c 57 69 6e 64 6f 77 73 5c 61 73 73 65 6d 62 6c 79 5c 4e 61 74 69 76 65 49 6d 61 67 65 73 5f 76 32 2e 30 2e 35 30 37 32 37 5f 33 32 5c 53 79 73 74 65 6d 5c 31 66 66 63 34 33 37 64 65 35 39 66 62 36 39 62 61 32 62 38 36 35 66 66 64 63 39 38 66 66 64 31 5c 53 79 73 74 65 6d 2e 6e 69 2e 64 6c 6c 22 2c 30 0d 0a 33 2c 22 43 3a 5c 57 69 6e 64 6f 77 73 5c 61 73 73 65 6d 62 6c 79 5c 4e 61 74 69 76 65 49 6d 61 67 65 73 5f 76 32 2e 30 2e 35 30 37 32 37 5f 33 32 5c 53 79 73 74 65 6d 2e 44 72 61 77 69 6e 67 5c 35 34 64 39 34 34 62 33 63 61 30 65 61 31 31 38 38 64 37 30 30 66 62 64 38 30 38 39 37 32 36 62 5c 53 79 73 74 65 6d 2e 44 72 61 77 69 6e 67 2e 6e 69 2e 64 6c 6c 22 2c 30 0d 0a 33 2c 22	1,"fusion","GAC",03,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System\1ffc437de59fb69ba2b865ffdc98ffd1\System.ni.dll",03,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System.Drawing\54d944b3ca0ea1188d700fbd8089726b\System.Drawing.ni.dll",03,"	success or wait	1	6CDBA33A	WriteFile

File Read

File Path	Offset	Length	Completion	Count	Source Address	Symbol
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	4095	success or wait	1	6CB15544	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	6304	success or wait	3	6CB15544	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	4095	success or wait	1	6CB18738	ReadFile

Analysis Process: dhcpmon.exe PID: **7036**, Parent PID: **1064**

General

Target ID:	6
Start time:	04:58:19
Start date:	01/06/2023
Path:	C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe
Wow64 process (32bit):	true
Commandline:	"C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe" 0
Imagebase:	0xb70000
File size:	207872 bytes
MD5 hash:	8D7E99642AA67C34D7CE487C3E9E2F6E
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	.Net C# or VB.NET

Yara matches:	• Rule: JoeSecurity_Nanocore, Description: Yara detected Nanocore RAT, Source: 00000006.00000002.494528588.00000000031F1000.00000004.00000800.00020000.00000000.sdmp, Author: Joe Security • Rule: NanoCore, Description: unknown, Source: 00000006.00000002.494528588.00000000031F1000.00000004.00000800.00020000.00000000.sdmp, Author: Kevin Breen <kevin@techanarchy.net> • Rule: Windows_Trojan_Nanocore_d8c4e3c5, Description: unknown, Source: 00000006.00000002.494528588.00000000031F1000.00000004.00000800.00020000.00000000.sdmp, Author: unknown • Rule: Nanocore_RAT_Gen_2, Description: Detetcs the Nanocore RAT, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: Florian Roth (Nextron Systems) • Rule: Nanocore_RAT_Feb18_1, Description: Detects Nanocore RAT, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: Florian Roth (Nextron Systems) • Rule: JoeSecurity_Nanocore, Description: Yara detected Nanocore RAT, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: Joe Security • Rule: MALWARE_Win_NanoCore, Description: Detects NanoCore, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: ditekSHen • Rule: NanoCore, Description: unknown, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: Kevin Breen <kevin@techanarchy.net> • Rule: Windows_Trojan_Nanocore_d8c4e3c5, Description: unknown, Source: C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe, Author: unknown
Antivirus matches:	• Detection: 100%, Avira • Detection: 100%, Joe Sandbox ML • Detection: 95%, ReversingLabs
Reputation:	low

File Activities

File Created

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol
C:\Users\user	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown
C:\Users\user\AppData\Roaming	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown
C:\Users\user\AppData\Local\Microsoft\CLR_v2.0_32\UsageLogs\dhcpmon.exe.log	read attributes | synchronize | generic write	device	synchronous io non alert | non directory file	success or wait	1	6CAD34A7	CreateFileW

File Written

File Path	Offset	Length	Value	Ascii	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Local\Microsoft\CLR_v2.0_32\UsageLogs\dhcpmon.exe.log	0	525	31 2c 22 66 75 73 69 6f 6e 22 2c 22 47 41 43 22 2c 30 0d 0a 33 2c 22 43 3a 5c 57 69 6e 64 6f 77 73 5c 61 73 73 65 6d 62 6c 79 5c 4e 61 74 69 76 65 49 6d 61 67 65 73 5f 76 32 2e 30 2e 35 30 37 32 37 5f 33 32 5c 53 79 73 74 65 6d 5c 31 66 66 63 34 33 37 64 65 35 39 66 62 36 39 62 61 32 62 38 36 35 66 66 64 63 39 38 66 66 64 31 5c 53 79 73 74 65 6d 2e 6e 69 2e 64 6c 6c 22 2c 30 0d 0a 33 2c 22 43 3a 5c 57 69 6e 64 6f 77 73 5c 61 73 73 65 6d 62 6c 79 5c 4e 61 74 69 76 65 49 6d 61 67 65 73 5f 76 32 2e 30 2e 35 30 37 32 37 5f 33 32 5c 53 79 73 74 65 6d 2e 44 72 61 77 69 6e 67 5c 35 34 64 39 34 34 62 33 63 61 30 65 61 31 31 38 38 64 37 30 30 66 62 64 38 30 38 39 37 32 36 62 5c 53 79 73 74 65 6d 2e 44 72 61 77 69 6e 67 2e 6e 69 2e 64 6c 6c 22 2c 30 0d 0a 33 2c 22	1,"fusion","GAC",03,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System\1ffc437de59fb69ba2b865ffdc98ffd1\System.ni.dll",03,"C:\Windows\assembly\NativeImages_v2.0.50727_32\System.Drawing\54d944b3ca0ea1188d700fbd8089726b\System.Drawing.ni.dll",03,"	success or wait	1	6CDBA33A	WriteFile

File Read

File Path	Offset	Length	Completion	Count	Source Address	Symbol
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	4095	success or wait	1	6CB15544	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config	unknown	6304	success or wait	3	6CB15544	unknown

File Path	Offset	Length	Completion	Count	Source Address	Symbol
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine .config	unknown	4095	success or wait	1	6CB18738	ReadFile

Analysis Process: dhcpmon.exe PID: **6652**, Parent PID: **3452**

General

Target ID:	7
Start time:	04:58:30
Start date:	01/06/2023
Path:	C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe
Wow64 process (32bit):	true
Commandline:	"C:\Program Files (x86)\DHCP Monitor\dhcpmon.exe"
Imagebase:	0x330000
File size:	207872 bytes
MD5 hash:	8D7E99642AA67C34D7CE487C3E9E2F6E
Has elevated privileges:	false
Has administrator privileges:	false
Programmed in:	.Net C# or VB.NET
Reputation:	low

File Activities

File Created

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol
C:\Users\user	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown
C:\Users\user\AppData\Roaming	read data or list directory | synchronize	device	directory file | synchronous io non alert | open for backup ident | open reparse point	object name collision	1	6CAE60AC	unknown

File Read

File Path	Offset	Length	Completion	Count	Source Address	Symbol
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine .config	unknown	4095	success or wait	1	6CB15544	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine .config	unknown	6304	success or wait	3	6CB15544	unknown
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine .config	unknown	4095	success or wait	1	6CB18738	ReadFile

Disassembly

No disassembly