ID: 528764
Sample Name: Halkbank.exe
Cookbook: default.jbs
Time: 18:46:25
Date: 25/11/2021
Version: 34.0.0 Boulder Opal

Table of Contents

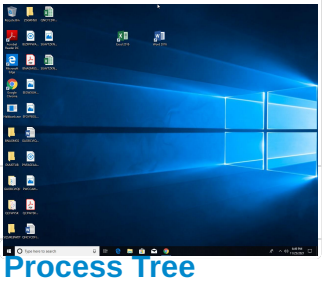
Windows Analysis Report Halkbank.exe

Overview

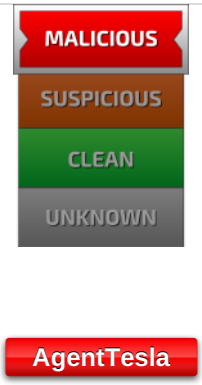
General Information

Sample Name:	Halkbank.exe
Analysis ID:	528764
MD5:	4b230a305cc22a..
SHA1:	208524b096c579..
SHA256:	a22ca2c5d6086e..
Tags:	AgentTesla exe geo Halkbank TUR
Infos:	

Most interesting Screenshot:



Detection

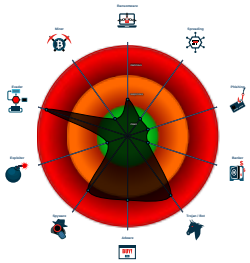


Score:	100
Range:	0 - 100
Whitelisted:	false
Confidence:	100%

Signatures

- Found malware configuration
- Multi AV Scanner detection for subm…
- Yara detected AgentTesla
- Yara detected AntiVM3
- Tries to steal Mail credentials (via fil…
- Sigma detected: Bad Opsec Default…
- Writes to foreign memory regions
- Modifies the hosts file
- Tries to detect sandboxes and other…
- Allocates memory in foreign process…
- .NET source code contains potentia…
- Injects a PE file into a foreign proce…

Classification



Process Tree

- **System is w10x64**
- Halkbank.exe (PID: 6272 cmdline: "C:\Users\user\Desktop\Halkbank.exe" MD5: 4B230A305CC22A04446B397310070D56)
  - RegSvcs.exe (PID: 5972 cmdline: C:\Windows\Microsoft.NET\Framework\v4.0.30319\RegSvcs.exe MD5: 2867A3817C9245F7CF518524DFD18F28)
    - WerFault.exe (PID: 4232 cmdline: C:\Windows\SysWOW64\WerFault.exe -u -p 5972 -s 1476 MD5: 9E2B8ACAD48ECCA55C0230D63623661B)
- **cleanup**

Malware Configuration

Threatname: Agenttesla

```
{
  "Exfil Mode": "SMTP",
  "Username": "info@devmetsan.com.tr",
  "Password": "Murat2019*",
  "Host": "mail.devmetsan.com.tr"
}
```

Yara Overview

Memory Dumps

Source	Rule	Description	Author	Strings
00000018.00000003.513792403.000000000578 0000.00000004.00000001.sdmp	JoeSecurity_AgentTesla_1	Yara detected AgentTesla	Joe Security	
00000005.00000000.493010505.000000000040 2000.00000040.00000001.sdmp	JoeSecurity_AgentTesla_1	Yara detected AgentTesla	Joe Security	
00000005.00000000.493010505.000000000040 2000.00000040.00000001.sdmp	JoeSecurity_AgentTesla_2	Yara detected AgentTesla	Joe Security	
00000001.00000002.289972605.0000000002DA 1000.00000004.00000001.sdmp	JoeSecurity_AntiVM_3	Yara detected AntiVM_3	Joe Security	
00000005.00000002.534823642.0000000002E2 1000.00000004.00000001.sdmp	JoeSecurity_AgentTesla_1	Yara detected AgentTesla	Joe Security	
Click to see the 28 entries				

Unpacked PEs

Source	Rule	Description	Author	Strings
1.2.Halkbank.exe.3e39bb8.3.unpack	JoeSecurity_AgentTesla_1	Yara detected AgentTesla	Joe Security	
1.2.Halkbank.exe.3e39bb8.3.unpack	JoeSecurity_AgentTesla_2	Yara detected AgentTesla	Joe Security	
5.0.RegSvcs.exe.400000.4.unpack	JoeSecurity_AgentTesla_1	Yara detected AgentTesla	Joe Security	
5.0.RegSvcs.exe.400000.4.unpack	JoeSecurity_AgentTesla_2	Yara detected AgentTesla	Joe Security	
1.2.Halkbank.exe.3e04198.2.unpack	JoeSecurity_AgentTesla_1	Yara detected AgentTesla	Joe Security	
Click to see the 20 entries				

Sigma Overview

System Summary:

Sigma detected: Bad Opsec Defaults Sacrificial Processes With Improper Arguments

Sigma detected: Possible Applocker Bypass

Jbx Signature Overview

Click to jump to signature section

AV Detection:

Found malware configuration

Multi AV Scanner detection for submitted file

Spam, unwanted Advertisements and Ransom Demands:

Modifies the hosts file

System Summary:

.NET source code contains very large array initializations

Data Obfuscation:

.NET source code contains potential unpacker

Malware Analysis System Evasion:

Yara detected AntiVM3

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

Queries sensitive network adapter information (via WMI, Win32_NetworkAdapter, often done to detect virtual machines)

Queries sensitive BIOS Information (via WMI, Win32_Bios & Win32_BaseBoard, often done to detect virtual machines)

HIPS / PFW / Operating System Protection Evasion:

Writes to foreign memory regions

Modifies the hosts file

Allocates memory in foreign processes

Injects a PE file into a foreign processes

Lowering of HIPS / PFW / Operating System Security Settings:

Modifies the hosts file

Stealing of Sensitive Information:

Yara detected AgentTesla

Tries to steal Mail credentials (via file / registry access)

Tries to harvest and steal browser information (history, passwords, etc)

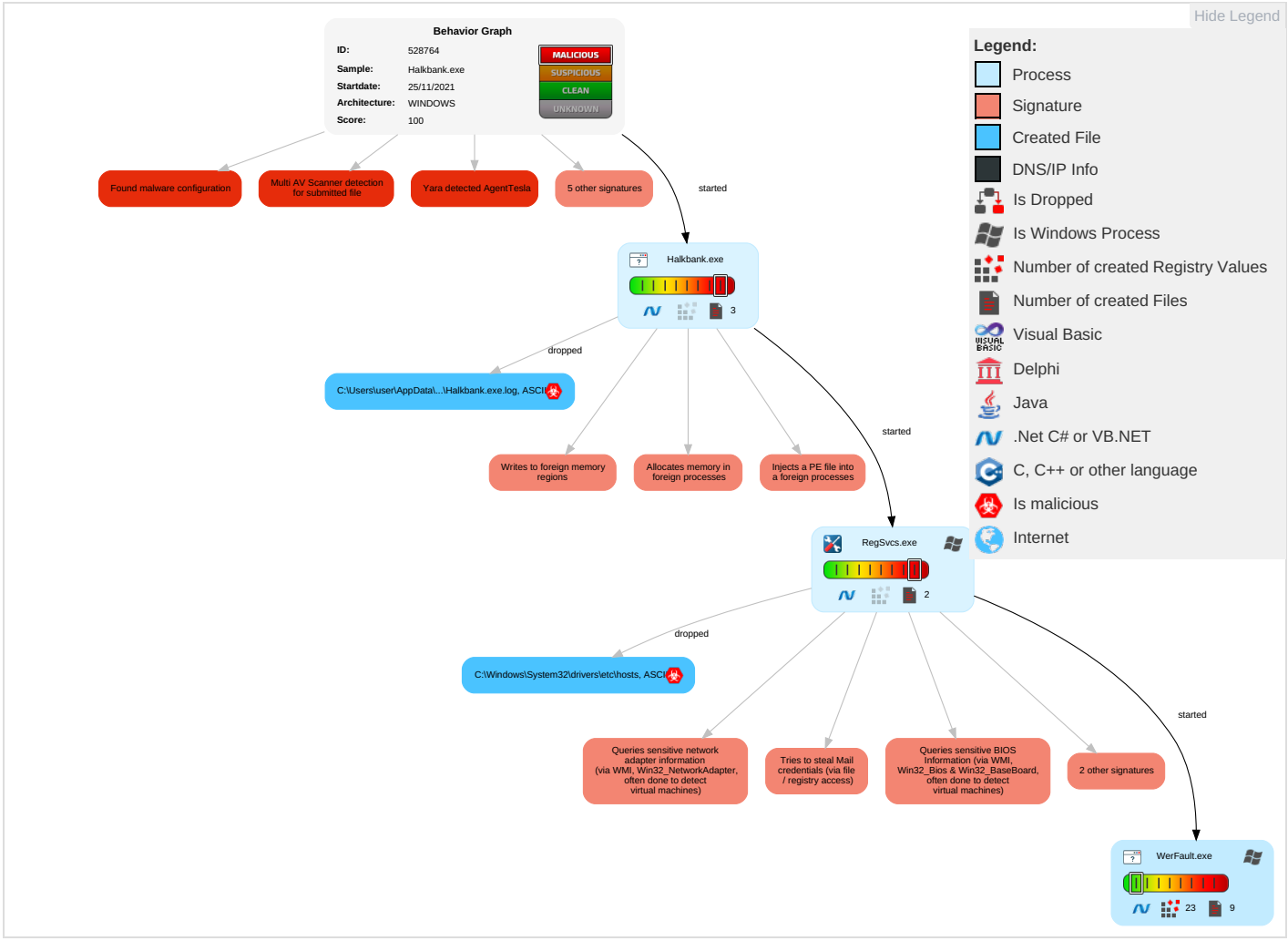
Remote Access Functionality:

Yara detected AgentTesla

Mitre Att&ck Matrix

Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Exfiltration	Command and Control
Valid Accounts	Windows Management Instrumentation 2 1 1	Path Interception	Process Injection 3 1 2	Masquerading 1	OS Credential Dumping 1	Security Software Discovery 2 3 1	Remote Services	Email Collection 1	Exfiltration Over Other Network Medium	Encrypted Channel 1
Default Accounts	Scheduled Task/Job	Boot or Logon Initialization Scripts	Boot or Logon Initialization Scripts	File and Directory Permissions Modification 1	LSASS Memory	Process Discovery 1	Remote Desktop Protocol	Archive Collected Data 1 1	Exfiltration Over Bluetooth	Junk Data
Domain Accounts	At (Linux)	Logon Script (Windows)	Logon Script (Windows)	Disable or Modify Tools 1	Security Account Manager	Virtualization/Sandbox Evasion 1 4 1	SMB/Windows Admin Shares	Data from Local System 1	Automated Exfiltration	Steganograph
Local Accounts	At (Windows)	Logon Script (Mac)	Logon Script (Mac)	Virtualization/Sandbox Evasion 1 4 1	NTDS	Application Window Discovery 1	Distributed Component Object Model	Input Capture	Scheduled Transfer	Protocol Impersonatio
Cloud Accounts	Cron	Network Logon Script	Network Logon Script	Process Injection 3 1 2	LSA Secrets	Remote System Discovery 1	SSH	Keylogging	Data Transfer Size Limits	Fallback Channels
Replication Through Removable Media	Launchd	Rc.common	Rc.common	Deobfuscate/Decode Files or Information 1	Cached Domain Credentials	System Information Discovery 1 1 4	VNC	GUI Input Capture	Exfiltration Over C2 Channel	Multiband Communicati
External Remote Services	Scheduled Task	Startup Items	Startup Items	Obfuscated Files or Information 2	DCSync	Network Sniffing	Windows Remote Management	Web Portal Capture	Exfiltration Over Alternative Protocol	Commonly Used Port
Drive-by Compromise	Command and Scripting Interpreter	Scheduled Task/Job	Scheduled Task/Job	Software Packing 1 3	Proc Filesystem	Network Service Scanning	Shared Webroot	Credential API Hooking	Exfiltration Over Symmetric Encrypted Non-C2 Protocol	Application Layer Protocc

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
Halkbank.exe	20%	Virustotal		Browse

Dropped Files

No Antivirus matches

Unpacked PE Files

Source	Detection	Scanner	Label	Link	Download
5.0.RegSvcs.exe.400000.4.unpack	100%	Avira	TR/Spy.Gen8		Download File
5.0.RegSvcs.exe.400000.1.unpack	100%	Avira	TR/Spy.Gen8		Download File
5.0.RegSvcs.exe.400000.5.unpack	100%	Avira	TR/Spy.Gen8		Download File
5.0.RegSvcs.exe.400000.6.unpack	100%	Avira	TR/Spy.Gen8		Download File
5.0.RegSvcs.exe.400000.2.unpack	100%	Avira	TR/Spy.Gen8		Download File
5.0.RegSvcs.exe.400000.0.unpack	100%	Avira	TR/Spy.Gen8		Download File
5.2.RegSvcs.exe.400000.0.unpack	100%	Avira	TR/Spy.Gen8		Download File
5.0.RegSvcs.exe.400000.3.unpack	100%	Avira	TR/Spy.Gen8		Download File

Domains

No Antivirus matches

URLs

Source	Detection	Scanner	Label	Link
http://127.0.0.1:HTTP/1.1	0%	Avira URL Cloud	safe	
http://DynDns.comDynDNS	0%	URL Reputation	safe	
http://https://www.theonionrouter.com/dist.torproject.org/torbrowser/9.5.3/tor-win32-0.4.3.6.zip%tordir%%ha	0%	URL Reputation	safe	
http://OGxUTf.com	0%	Avira URL Cloud	safe	
http://https://api.ipify.org%GETMozilla/5.0	0%	URL Reputation	safe	
http://https://api.ipify.org%	0%	URL Reputation	safe	
http://https://www.theonionrouter.com/dist.torproject.org/torbrowser/9.5.3/tor-win32-0.4.3.6.zip	0%	URL Reputation	safe	

Domains and IPs

Contacted Domains

No contacted domains info

URLs from Memory and Binaries

Contacted IPs

No contacted IP infos

General Information

Joe Sandbox Version:	34.0.0 Boulder Opal
Analysis ID:	528764
Start date:	25.11.2021
Start time:	18:46:25
Joe Sandbox Product:	CloudBasic
Overall analysis duration:	0h 8m 0s
Hypervisor based Inspection enabled:	false
Report type:	light
Sample file name:	Halkbank.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:	26
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
Detection:	MAL
Classification:	mal100.troj.adwa.spyw.evad.winEXE@4/8@0/0
EGA Information:	Failed
HDC Information:	Failed
HCA Information:	• Successful, ratio: 92% • Number of executed functions: 0 • Number of non-executed functions: 0
Cookbook Comments:	• Adjust boot time • Enable AMSI • Found application associated with file extension: .exe

Warnings:	Show All

Simulations

Behavior and APIs

Time	Type	Description
18:47:18	API Interceptor	2x Sleep call for process: Halkbank.exe modified
18:47:30	API Interceptor	613x Sleep call for process: RegSvcs.exe modified
18:49:14	API Interceptor	1x Sleep call for process: WerFault.exe modified

Joe Sandbox View / Context

IPs

No context

Domains

No context

ASN

No context

JA3 Fingerprints

No context

Dropped Files

No context

Created / dropped Files

C:\ProgramData\Microsoft\Windows\WER\ReportQueue\AppCrash_RegSvcs.exe_6e42c2ecbe67857e042102e8f977834d8ccb729_75d5926b_11ee2609\Report.wer

Process:	C:\Windows\SysWOW64\WerFault.exe
File Type:	Little-endian UTF-16 Unicode text, with CRLF line terminators
Category:	dropped
Size (bytes):	65536
Entropy (8bit):	1.1287522346016217
Encrypted:	false
SSDEEP:	192:I4kGbdHBUZMXaaPXvJCM34/u7sVS274Itx:ftBBUZMXaapP34/u7sVX4Itx
MD5:	CBE3312FDE05A798F5F92170E696AED0
SHA1:	E43A6E8BAB45A674F7FFE5F9A0B9475CDD71FF68
SHA-256:	AD59069D0E0B3B7123C5F4F1D429FEDAF4663EEE1D46F4CA970DD00CF02FA9E7
SHA-512:	8397A797E8D17F69333384CD95BCE0BC3F6E4042FD087AC13BBAF5C7D370C8C4886082396F422A150264A0DC4310A9416803F627272D1FD877B00E63BE3499C4
Malicious:	false
Reputation:	low
Preview:	..V.e.r.s.i.o.n.=.1.....E.v.e.n.t.T.y.p.e.=.C.L.R.2.0.r.3.....E.v.e.n.t.T.i.m.e.=.1.3.2.8.2.3.6.8.5.4.1.9.8.5.9.6.5.1.....R.e.p.o.r.t.T.y.p.e.=.2.....C.o.n.s.e.n.t.=.1.....U.p.l.o.a.d.T.i.m.e.=.1.3.2.8.2.3.6.8.5.5.2.1.2.6.6.0.3.5.....R.e.p.o.r.t.S.t.a.t.u.s.=.5.2.4.3.8.4.....R.e.p.o.r.t.I.d.e.n.t.i.f.i.e.r.=.2.9.0.e.c.b.6.a.-.5.7.8.d.-.4.4.d.9.-.b.e.3.c.-.e.8.9.1.1.c.5.a.8.e.4.7.....I.n.t.e.g.r.a.t.o.r.R.e.p.o.r.t.I.d.e.n.t.i.f.i.e.r.=.7.f.1.9.e.5.b.7.-.8.e.4.5.-.4.5.9.3.-.9.a.4.3.-.5.6.8.4.6.3.6.2.9.7.f.2.....W.o.w.6.4.H.o.s.t.=.3.4.4.0.4.....W.o.w.6.4.G.u.e.s.t.=.3.3.2.....N.s.A.p.p.N.a.m.e.=.R.e.g.S.v.c.s...e.x.e.....O.r.i.g.i.n.a.l.F.i.l.e.n.a.m.e.=.R.e.g.S.v.c.s...e.x.e.....A.p.p.S.e.s.s.i.o.n.G.u.i.d.=.0.0.0.0.1.7.5.4.-.0.0.0.1.-.0.0.1.c.-.8.c.a.f.-.4.0.e.e.6.f.e.2.d.7.0.1.....T.a.r.g.e.t.A.p.p.I.d.=.W.:.0.0.0.0.f.5.1.9.f.e.e.c.4.8.6.d.e.8.7.e.d.7.3.c.b.9.2.d.3.c.a.c.8.0.2.4.0.0.0.0.0.0.0.0.!.0.0.0.0.d.7.b.a.2.a.1.1.1.c.e.d.d.5.b.f.5.2.3.2.2.4.b.3.f.1.c.f.e.5.8.e.e.c.7.c.2.f.d.c.

C:\ProgramData\Microsoft\Windows\WER\Temp\WER819B.tmp.dmp	
Process:	C:\Windows\SysWOW64\WerFault.exe
File Type:	Mini DuMP crash report, 15 streams, Fri Nov 26 02:49:06 2021, 0x1205a4 type
Category:	dropped
Size (bytes):	281542
Entropy (8bit):	3.695343865128418
Encrypted:	false
SSDEEP:	3072:6fwWc+0pa0DuUCgUCVjd+pVyxoHuNGoomu9gIOgF5WFY76A:qJD0paSuTjrpVIoO4B59RpDAm
MD5:	EC0DED637BEA0B9542F877FD855DBD00
SHA1:	16F0A36F2043305A4070CB7B8BD7516317C25D00
SHA-256:	239915962B2EDBB037BA0383BDF68CC477D5870DF2474DD47C7A51F27EEF29CC
SHA-512:	894C3FB8B2C9B24C0B212703A25C52DF8A149D4DE34E399FB5F4E1AABF39A488086C7205F1AF8597A393944DA6F8A17A03068E269B899177711C7EA6303232BC
Malicious:	false
Reputation:	low
Preview:	MDMP..... .....K.a.....D.....,...X.....$....#.....T&...R.....`.....8.....T.....8.....#.....%.....U.....B.....,&... ...GenuineIntelW.....T.....T....J.a.....0.....P.a.c.i.f.i.c. .S.t.a.n.d.a.r.d. .T.i.m.e.....P.a.c.i.f.i.c. .D.a.y.l.i.g.h.t. .T.i.m.e..... .....1.7.1.3.4...1...x.8.6.f.r.e...r.s.4._.r.e.l.e.a.s.e...1.8.0.4.1.0.-.1.8.0.4..... ....

C:\ProgramData\Microsoft\Windows\WER\Temp\WER993B.tmp.WERInternalMetadata.xml	
Process:	C:\Windows\SysWOW64\WerFault.exe
File Type:	XML 1.0 document, Little-endian UTF-16 Unicode text, with CRLF line terminators
Category:	dropped
Size (bytes):	8342
Entropy (8bit):	3.6875708666095264
Encrypted:	false
SSDEEP:	192:Rrl7r3GLNipTjN6vn6YbS69mUgmfZ7SQCprZ89b4wsf4Im:RrlsNipfN6f6Y+69NgmflSu4Dfu
MD5:	2BE17A229E83FB783BCC938FFA8D167A
SHA1:	B8EDF9AF3C5593F09708110BF1F7CFD4BEE1EB5E
SHA-256:	E9E2578A901410941C5EE770855BBEAA19B7E898A7CDD73ED7881C91CA6AFAB9
SHA-512:	18197F047A57325CAA039DA2FA9596347B723D77EF0D5091435C07B95D3684CBF515AA88984B550E4D89891485FEDFE077E366430A8DE0D12BF7DB27B5972842
Malicious:	false
Reputation:	low
Preview:	..<.?.x.m.l. .v.e.r.s.i.o.n.=.".1...0.". .e.n.c.o.d.i.n.g.=.".U.T.F.-.1.6.".?.>.....<.W.E.R.R.e.p.o.r.t.M.e.t.a.d.a.t.a.>.....<.O.S.V.e.r.s.i.o.n.I.n.f.o.r.m.a.t.i.o.n.>.....<.W.i.n.d. o.w.s.N.T.V.e.r.s.i.o.n.>.1.0...0.<./.W.i.n.d.o.w.s.N.T.V.e.r.s.i.o.n.>.....<.B.u.i.l.d.>.1.7.1.3.4.<./.B.u.i.l.d.>.....<.P.r.o.d.u.c.t.>.(.0.x.3.0.).:. .W.i.n.d.o.w.s. .1.0. .P.r.o. <./.P.r.o.d.u.c.t.>.....<.E.d.i.t.i.o.n.>.P.r.o.f.e.s.s.i.o.n.a.l.<./.E.d.i.t.i.o.n.>.....<.B.u.i.l.d.S.t.r.i.n.g.>.1.7.1.3.4...1...a.m.d.6.4.f.r.e...r.s.4._.r.e.l.e.a.s.e...1.8.0.4.1.0.-.1.8.0.4. <./.B.u.i.l.d.S.t.r.i.n.g.>.....<.R.e.v.i.s.i.o.n.>.1.<./.R.e.v.i.s.i.o.n.>.....<.F.l.a.v.o.r.>.M.u.l.t.i.p.r.o.c.e.s.s.o.r. .F.r.e.e.<./.F.l.a.v.o.r.>.....<.A.r.c.h.i.t.e.c.t.u.r.e.>.X.6.4.<./. A.r.c.h.i.t.e.c.t.u.r.e.>.....<.L.C.I.D.>.1.0.3.3.<./.L.C.I.D.>.....<./.O.S.V.e.r.s.i.o.n.I.n.f.o.r.m.a.t.i.o.n.>.....<.P.r.o.c.e.s.s.I.n.f.o.r.m.a.t.i.o.n.>.....<.P.i.d.>.5.9.7.2.<./.P.i. d.>.....

C:\ProgramData\Microsoft\Windows\WER\Temp\WER9D53.tmp.xml	
Process:	C:\Windows\SysWOW64\WerFault.exe
File Type:	XML 1.0 document, ASCII text, with CRLF line terminators
Category:	dropped
Size (bytes):	4719
Entropy (8bit):	4.443555954095162
Encrypted:	false
SSDEEP:	48:cvIwSD8zsBJgtWI9bbWSC8BW8fm8M4JStjJ2FdL+q8vrtjJBP7Zd:uITfTlqSNxJLK1P7Zd
MD5:	07FEB55CAB5BB0BE4C80D94B74914413
SHA1:	E4FC06D252D2EE912D6790061D7D7466E6D9F6A4
SHA-256:	65EFFEECEB743A92E62D4BD52978813579EC8ABEA8E853653F9121E63C0914E6
SHA-512:	D0161DA2C76EB2965DFC32995DC9799848AA6861F7A3C63E9F4819C8383C98F965A879E60632574982C06DD97CD169C26382CDB0C9240C81C69AD45086E1766
Malicious:	false
Reputation:	low
Preview:	<?xml version="1.0" encoding="UTF-8" standalone="yes"?>..<req ver="2">.. <tlm>.. <src>.. <desc>.. <mach>.. <os>.. <arg nm="vermaj" val="10" /> .. <arg nm="vermin" val="0" />.. <arg nm="verbld" val="17134" />.. <arg nm="vercsdbld" val="1" />.. <arg nm="verqfe" val="1" />.. <arg nm="csdbld" val="1" />.. <arg nm="versp" val="0" />.. <arg nm="arch" val="9" />.. <arg nm="lcid" val="1033" />.. <arg nm="geoid" val="244" />.. <arg nm="sku" val="48" />.. <arg nm="domain" val="0" />.. <arg nm="prodsuite" val="256" />.. <arg nm="ntprodtype" val="1" />.. <arg nm="platid" val="2" />.. <arg nm="tmsi" val="1270799" />.. <arg nm="osinsty" val="1" />.. <arg nm="iever" val="11.1.17134.0- 11.0.47" />.. <arg nm="portos" val="0" />.. <arg nm="ram" val="4096" />..

C:\Users\user\AppData\Local\Microsoft\CLR_v4.0_32\UsageLogs\Halkbank.exe.log	
Process:	C:\Users\user\Desktop\Halkbank.exe
File Type:	ASCII text, with CRLF line terminators
Category:	dropped
Size (bytes):	1310

C:\Users\user\AppData\Local\Microsoft\CLR_v4.0_32\UsageLogs\Halkbank.exe.log	
Entropy (8bit):	5.345651901398759
Encrypted:	false
SSDEEP:	24:MLUE4K5E4Ks2E1qE4qXKDE4KhK3VZ9pKhPKIE4oKFKHKoZAE4Kzr7FE47mE4Ko88:MIHK5HKXE1qHiYHKhQnoPtHoxHhAHKz6
MD5:	D918C6A765EDB90D2A227FE23A3FEC98
SHA1:	8BA802AD8D740F114783F0DADC407CBFD2A209B3
SHA-256:	AB0E9F716E31502A4C6786575C5E64DFD9D24AF99056BBE2640A2FA322CFF4D6
SHA-512:	A937ABD8294BB32A612F8B3A376C94111D688379F0A4DB9FAA2FCEB71C25E18D621EEBCFDA5706B71C8473A4F38D8B3C4005D1589B564F9B1C9C441B6D3378 4
Malicious:	**true**
Reputation:	moderate, very likely benign file
Preview:	1,"fusion","GAC",0..1,"WinRT","NotApp",1..2,"System.Windows.Forms, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089",0..3,"System, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089","C:\Windows\assembly\NativeImages_v4.0.30319_32\System\4f0a7eefa3cd3e0ba98b5ebddbbc72e6\System.ni.dll",0..2,"System.Drawing, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b03f5f7f11d50a3a",0..3,"System.Core, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089","C:\Windows\assembly\NativeImages_v4.0.30319_32\System.Core\f1d8480152e0da9a60ad49c6d16a3b6d\System.Core.ni.dll",0..3,"System.Configuration, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b03f5f7f11d50a3a","C:\Windows\assembly\NativeImages_v4.0.30319_32\System.Configuration\8d67d92724ba494b6c7fd089d6f25b48\System.Configuration.ni.dll",0..3,"System.Xml, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089","C:\Windows\assembly\NativeImages_v4.0.30319_32\System.Xml\b219d4630d26b88041b59c21

C:\Windows\System32\drivers\etc\hosts	
Process:	C:\Windows\Microsoft.NET\Framework\v4.0.30319\RegSvcs.exe
File Type:	ASCII text, with CRLF line terminators
Category:	modified
Size (bytes):	835
Entropy (8bit):	4.694294591169137
Encrypted:	false
SSDEEP:	24:QWDZh+ragzMZfuMMs1L/JU5fFCkK8T1rTt8:vDZhyoZWM9rU5fFcP
MD5:	6EB47C1CF858E25486E42440074917F2
SHA1:	6A63F93A95E1AE831C393A97158C526A4FA0FAAE
SHA-256:	9B13A3EA948A1071A81787AAC1930B89E30DF22CE13F8FF751F31B5D83E79FFB
SHA-512:	08437AB32E7E905EB11335E670CDD5D999803390710ED39CBC31A2D3F05868D5D0E5D051CCD7B06A85BB466932F99A220463D27FAC29116D241E8ADAC495FA2
Malicious:	**true**
Reputation:	moderate, very likely benign file
Preview:	# Copyright (c) 1993-2009 Microsoft Corp...#..# This is a sample HOSTS file used by Microsoft TCP/IP for Windows...#..# This file contains the mappings of IP addresses to host names. Each..# entry should be kept on an individual line. The IP address should..# be placed in the first column followed by the corresponding host name...# The IP address and the host name should be separated by at least one..# space...#..# Additionally, comments (such as these) may be inserted on individual..# lines or following the machine name denoted by a '#' symbol...#..# For example:..#..# 102.54.94.97 rhino.acme.com # source server..# 38.25.63.10 x.acme.com # x client host....# localhost name resolution is handled within DNS itself...#.127.0.0.1 localhost..#.::1 localhost....127.0.0.1

C:\Windows\appcompat\Programs\Amcache.hve	
Process:	C:\Windows\SysWOW64\WerFault.exe
File Type:	MS Windows registry file, NT/2000 or above
Category:	dropped
Size (bytes):	1572864
Entropy (8bit):	4.275087234815477
Encrypted:	false
SSDEEP:	12288:gmB3EyobBNXUvI3iljSGbJ/EKkBdEZZw/gmEl/L5rr4VQ0DekhC1n:1B3EyobBNXUvI3CR
MD5:	87287A03FA43FDDFB5B4A61F68CFBE43
SHA1:	D873ADBEC4AE25378CE25667263DABC0D23BB985
SHA-256:	28F8540784933C5D589851F7771A04BB8CCCF0A1F598C5963E38EEC23FDF13CE
SHA-512:	08F68963DA0EA8624E288164EB18CA10E592F376C8E358CC6323F6DFA0B40C7E2B8F7DBCA4E36FABBD4801043B03C8DFB792EC22B416E7AC0BD076E2BD8D85 4E
Malicious:	false
Reputation:	low
Preview:	regfZ...Z...p.\..,..... .....\.A.p.p.C.o.m.p.a.t.\.P.r.o.g.r.a.m.s.\.A.m.c.a.c.h.e...h.v.e...4.....E.4.....E.....5.....E.rmtm...)p..... ....>@.t..... .....

C:\Windows\appcompat\Programs\Amcache.hve.LOG1	
Process:	C:\Windows\SysWOW64\WerFault.exe
File Type:	MS Windows registry file, NT/2000 or above
Category:	dropped
Size (bytes):	24576
Entropy (8bit):	4.033223004973161
Encrypted:	false
SSDEEP:	384:BHWw5Rftx1hPJ4XOsF8nm7kiPBqXRSeq5QMVyi6+/zl4Lk4JZd1DoXzK4Zy7qx:hWGRftx1BJ4XLF8m73BqXYeq5QMVyi6c

C:\Windows\appcompat\Programs\Amcache.hve.LOG1	
MD5:	56239CA132CF0ABCE61F880652AE144E
SHA1:	7FBFB8471D01D801408E207DB47F9C83CBF2DDDE
SHA-256:	6A47BB76E5C14460CA96ED8A5C41B7EA4F32F1514E1840974102B5DC45BEFE55
SHA-512:	F1913AAEA49A071A347DA26FBA3B0F2B67AF229D2AA87586E895A30404D7FADB60CFB978CD4561873117C6E2493DDB60A0CD32DE7D17772420B82954D9DE852C
Malicious:	false
Preview:	regfY...Y...p.\..,..... .....\.A.p.p.C.o.m.p.a.t.\.P.r.o.g.r.a.m.s.\.A.m.c.a.c.h.e...h.v.e...4.....E.4.....E.....5.....E.rmtm...)p..... ....8@.tHvLE.^.....Y.....'I.'...4..N.S.....0..... ..hbin.....p.\..,.....nk,..t.)p..... ....&...{ad79c032-a2ea-f756-e377-72fb9332c3ae}.....nk ..t.)p..... ....Z.....Root.....lf.....Root....nk ..t.)p.....}..... .....*.....DeviceCensus.....vk.....WritePermissionsCheck...

Static File Info

General

File type:	PE32 executable (GUI) Intel 80386 Mono/.Net assembly, for MS Windows
Entropy (8bit):	7.694981249167293
TrID:	• Win32 Executable (generic) Net Framework (10011505/4) 49.80% • Win32 Executable (generic) a (10002005/4) 49.75% • Generic CIL Executable (.NET, Mono, etc.) (73296/58) 0.36% • Windows Screen Saver (13104/52) 0.07% • Generic Win/DOS Executable (2004/3) 0.01%
File name:	Halkbank.exe
File size:	618496
MD5:	4b230a305cc22a04446b397310070d56
SHA1:	208524b096c579b89579febff0b40f752b4e7db4
SHA256:	a22ca2c5d6086e8c6703deb2e345efc08627e7063c447d60babe6edb17503856
SHA512:	c0dcfea90b46ef91463d6ff272e0febd9ee5615bad9f84993458bde3f9f7983fe025747b7a6e306b31884bc57f10040b965d4578900138721b519dcd37da4f95
SSDEEP:	12288:xBzcmhiTUHxuWTFfjCT8VD3feOTfBw31/sWKkTrENa0SixBFmRq:xBomhiloW7D251/sFkTrFRi1Wq
File Content Preview:	MZ.....@.....!..L.!This program cannot be run in DOS mode....$.....PE..L... ..a.....0..d..... .....@.. .....@.....

File Icon

Icon Hash:	00828e8e8686b000

Static PE Info

General

Entrypoint:	0x4982ce
Entrypoint Section:	.text
Digitally signed:	false
Imagebase:	0x400000
Subsystem:	windows gui
Image File Characteristics:	32BIT_MACHINE, EXECUTABLE_IMAGE
DLL Characteristics:	NO_SEH, TERMINAL_SERVER_AWARE, DYNAMIC_BASE, NX_COMPAT
Time Stamp:	0x619EE920 [Thu Nov 25 01:38:40 2021 UTC]
TLS Callbacks:	
CLR (.Net) Version:	v4.0.30319
OS Version Major:	4
OS Version Minor:	0
File Version Major:	4
File Version Minor:	0

General

Subsystem Version Major:	4
Subsystem Version Minor:	0
Import Hash:	f34d5f2d4577ed6d9ceec516c1f5a744

Entrypoint Preview

Data Directories

Sections

Name	Virtual Address	Virtual Size	Raw Size	Xored PE	ZLIB Complexity	File Type	Entropy	Characteristics
.text	0x2000	0x9632c	0x96400	False	0.785222870736	data	7.70769358931	IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_CNT_CODE, IMAGE_SCN_MEM_READ
.rsrc	0x9a000	0x640	0x800	False	0.3408203125	data	3.53068847001	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ
.reloc	0x9c000	0xc	0x200	False	0.044921875	data	0.101910425663	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_DISCARDABLE, IMAGE_SCN_MEM_READ

Resources

Imports

Version Infos

Network Behavior

No network behavior found

Code Manipulations

Statistics

Behavior

Click to jump to process

System Behavior

Analysis Process: Halkbank.exe PID: 6272 Parent PID: 5992

General

Start time:	18:47:17
Start date:	25/11/2021
Path:	C:\Users\user\Desktop\Halkbank.exe
Wow64 process (32bit):	true
Commandline:	"C:\Users\user\Desktop\Halkbank.exe"
Imagebase:	0x9f0000
File size:	618496 bytes
MD5 hash:	4B230A305CC22A04446B397310070D56
Has elevated privileges:	true

Has administrator privileges:	true
Programmed in:	.Net C# or VB.NET
Yara matches:	• Rule: JoeSecurity_AntiVM_3, Description: Yara detected AntiVM_3, Source: 00000001.00000002.289972605.0000000002DA1000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AntiVM_3, Description: Yara detected AntiVM_3, Source: 00000001.00000002.290021625.0000000002DD5000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000001.00000002.290543372.0000000003DA9000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_2, Description: Yara detected AgentTesla, Source: 00000001.00000002.290543372.0000000003DA9000.00000004.00000001.sdmp, Author: Joe Security
Reputation:	low

File Activities

Show Windows behavior

File Created

File Written

File Read

Analysis Process: RegSvcs.exe PID: 5972 Parent PID: 6272

General

Start time:	18:47:19
Start date:	25/11/2021
Path:	C:\Windows\Microsoft.NET\Framework\v4.0.30319\RegSvcs.exe
Wow64 process (32bit):	true
Commandline:	C:\Windows\Microsoft.NET\Framework\v4.0.30319\RegSvcs.exe
Imagebase:	0xab0000
File size:	45152 bytes
MD5 hash:	2867A3817C9245F7CF518524DFD18F28
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	.Net C# or VB.NET

Yara matches:	• Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.493010505.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_2, Description: Yara detected AgentTesla, Source: 00000005.00000000.493010505.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000002.534823642.0000000002E21000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_CredentialStealer, Description: Yara detected Credential Stealer, Source: 00000005.00000002.534823642.0000000002E21000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.287151735.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_2, Description: Yara detected AgentTesla, Source: 00000005.00000000.287151735.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.491312153.0000000002E21000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_CredentialStealer, Description: Yara detected Credential Stealer, Source: 00000005.00000000.491312153.0000000002E21000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.494379610.0000000002ED8000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.287966874.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_2, Description: Yara detected AgentTesla, Source: 00000005.00000000.287966874.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.288288058.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_2, Description: Yara detected AgentTesla, Source: 00000005.00000000.288288058.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.490385199.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_2, Description: Yara detected AgentTesla, Source: 00000005.00000000.490385199.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000002.533288791.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_2, Description: Yara detected AgentTesla, Source: 00000005.00000002.533288791.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.491463925.0000000002ED8000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.287632370.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_2, Description: Yara detected AgentTesla, Source: 00000005.00000000.287632370.0000000000402000.00000040.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000002.535018721.0000000002ED8000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000005.00000000.494208216.0000000002E21000.00000004.00000001.sdmp, Author: Joe Security • Rule: JoeSecurity_CredentialStealer, Description: Yara detected Credential Stealer, Source: 00000005.00000000.494208216.0000000002E21000.00000004.00000001.sdmp, Author: Joe Security
Reputation:	high

File Activities

Show Windows behavior

File Created

File Written

File Read

Analysis Process: WerFault.exe PID: 4232 Parent PID: 5972

General

Start time:	18:48:58
Start date:	25/11/2021
Path:	C:\Windows\SysWOW64\WerFault.exe
Wow64 process (32bit):	true
Commandline:	C:\Windows\SysWOW64\WerFault.exe -u -p 5972 -s 1476
Imagebase:	0xe20000
File size:	434592 bytes
MD5 hash:	9E2B8ACAD48ECCA55C0230D63623661B
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	.Net C# or VB.NET
Yara matches:	• Rule: JoeSecurity_AgentTesla_1, Description: Yara detected AgentTesla, Source: 00000018.00000003.513792403.0000000005780000.00000004.00000001.sdmp, Author: Joe Security
Reputation:	high

File Activities

Show Windows behavior

File Created

File Deleted

File Written

Registry Activities

Show Windows behavior

Key Created

Key Value Created

Disassembly

Code Analysis