MALICIOUS

Classifications: Downloader | Injector

Threat Names: SmokeLoader | Mal/Generic-S | Mal/HTMLGen-A

Verdict Reason: -

Sample Type	**Windows Exe (x86-32)**
File Name	**8362e0f91ae3379c73422bbca7bac493.virus.exe**
ID	#3276928
MD5	8362e0f91ae3379c73422bbca7bac493
SHA1	ec761f77bbe9900aed7ffa0a9303dc6801a9effb
SHA256	adfea20237be615461c44fea423d6043fc74bf1c5303ee33fcecd8acd201291e
File Size	287.50 KB
Report Created	2022-01-14 03:20 (UTC+1)
Target Environment	win10_64_th2_en_mso2016 | exe

OVERVIEW

VMRay Threat Identifiers (18 rules, 23 matches)

Score	Category	Operation	Count	Classification
5/5	YARA	Malicious content matched by YARA rules	3	Downloader
	• Rule "SmokeLoader" from ruleset "Malware" has matched on a memory dump for (process #2) 8362e0f91ae3379c73422bbca7bac493.virus.exe. • Rule "SmokeLoader" from ruleset "Malware" has matched on a memory dump for (process #3) explorer.exe. • Rule "SmokeLoaderStrings" from ruleset "Malware" has matched on the function strings for (process #3) explorer.exe.			
4/5	Defense Evasion	Obscures a file's origin	1	-
	• (Process #3) explorer.exe tries to delete zone identifier of file "C:\Users\RDhJ0CNFevzX\AppData\Roaming\bcatcih".			
4/5	Injection	Writes into the memory of another process	1	Injector
	• (Process #2) 8362e0f91ae3379c73422bbca7bac493.virus.exe modifies memory of (process #3) explorer.exe.			
4/5	Injection	Modifies control flow of another process	1	Injector
	• (Process #2) 8362e0f91ae3379c73422bbca7bac493.virus.exe creates thread in (process #3) explorer.exe.			
4/5	Reputation	Known malicious file	1	-
	• Reputation analysis labels the sample itself as "Mal/Generic-S".			
4/5	Reputation	Contacts known malicious URL	1	-
	• Reputation analysis labels the URL "host-data-coin-11.com/" which was contacted by (process #3) explorer.exe as "Mal/HTMLGen-A".			
2/5	Anti Analysis	Tries to detect debugger	1	-
	• (Process #2) 8362e0f91ae3379c73422bbca7bac493.virus.exe tries to detect a debugger via API "NtQueryInformationProcess".			
2/5	Hide Tracks	Deletes file after execution	2	-
	• (Process #3) explorer.exe deletes executed executable "c:\users\rdhj0cnfevzx\appdata\roaming\bcatcih". • (Process #3) explorer.exe deletes executed executable "c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe".			
2/5	Anti Analysis	Delays execution	1	-
	• (Process #3) explorer.exe has a thread which sleeps more than 5 minutes.			
2/5	Injection	Writes into the memory of a process started from a created or modified executable	1	-
	• (Process #1) 8362e0f91ae3379c73422bbca7bac493.virus.exe modifies memory of (process #2) 8362e0f91ae3379c73422bbca7bac493.virus.exe.			
2/5	Injection	Modifies control flow of a process started from a created or modified executable	1	-
	• (Process #1) 8362e0f91ae3379c73422bbca7bac493.virus.exe alters context of (process #2) 8362e0f91ae3379c73422bbca7bac493.virus.exe.			
2/5	Task Scheduling	Schedules task	2	-
	• Schedules task for command "C:\Users\RDhJ0CNFevzX\AppData\Roaming\bcatcih", to be triggered by Logon. • Schedules task for command "C:\Users\RDhJ0CNFevzX\AppData\Roaming\bcatcih", to be triggered by Time. Task has been rescheduled by the analyzer.			
1/5	Obfuscation	Reads from memory of another process	1	-
	• (Process #1) 8362e0f91ae3379c73422bbca7bac493.virus.exe reads from (process #2) 8362e0f91ae3379c73422bbca7bac493.virus.exe.			

Score	Category	Operation	Count	Classification
1/5	Obfuscation	Creates a page with write and execute permissions	1	-
	• (Process #1) 8362e0f91ae3379c73422bbca7bac493.virus.exe allocates a page in a foreign process with "PAGE_EXECUTE_READWRITE" permissions, often used to dynamically unpack code.			
1/5	Discovery	Enumerates running processes	1	-
	• (Process #3) explorer.exe enumerates running processes.			
1/5	Mutex	Creates mutex	1	-
	• (Process #3) explorer.exe creates mutex with name "FE7F15060B875FB9FB2A49F08D5D03120C287F38".			
1/5	Execution	Executes itself	2	-
	• (Process #1) 8362e0f91ae3379c73422bbca7bac493.virus.exe executes a copy of the sample at C:\Users\RDhJ0CNFevzX\Desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe. • (Process #5) svchost.exe executes a copy of the sample at C:\Users\RDhJ0CNFevzX\Desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe.			
1/5	Obfuscation	Resolves API functions dynamically	1	-
	• (Process #1) 8362e0f91ae3379c73422bbca7bac493.virus.exe resolves 41 API functions by name.			

Mitre ATT&CK Matrix

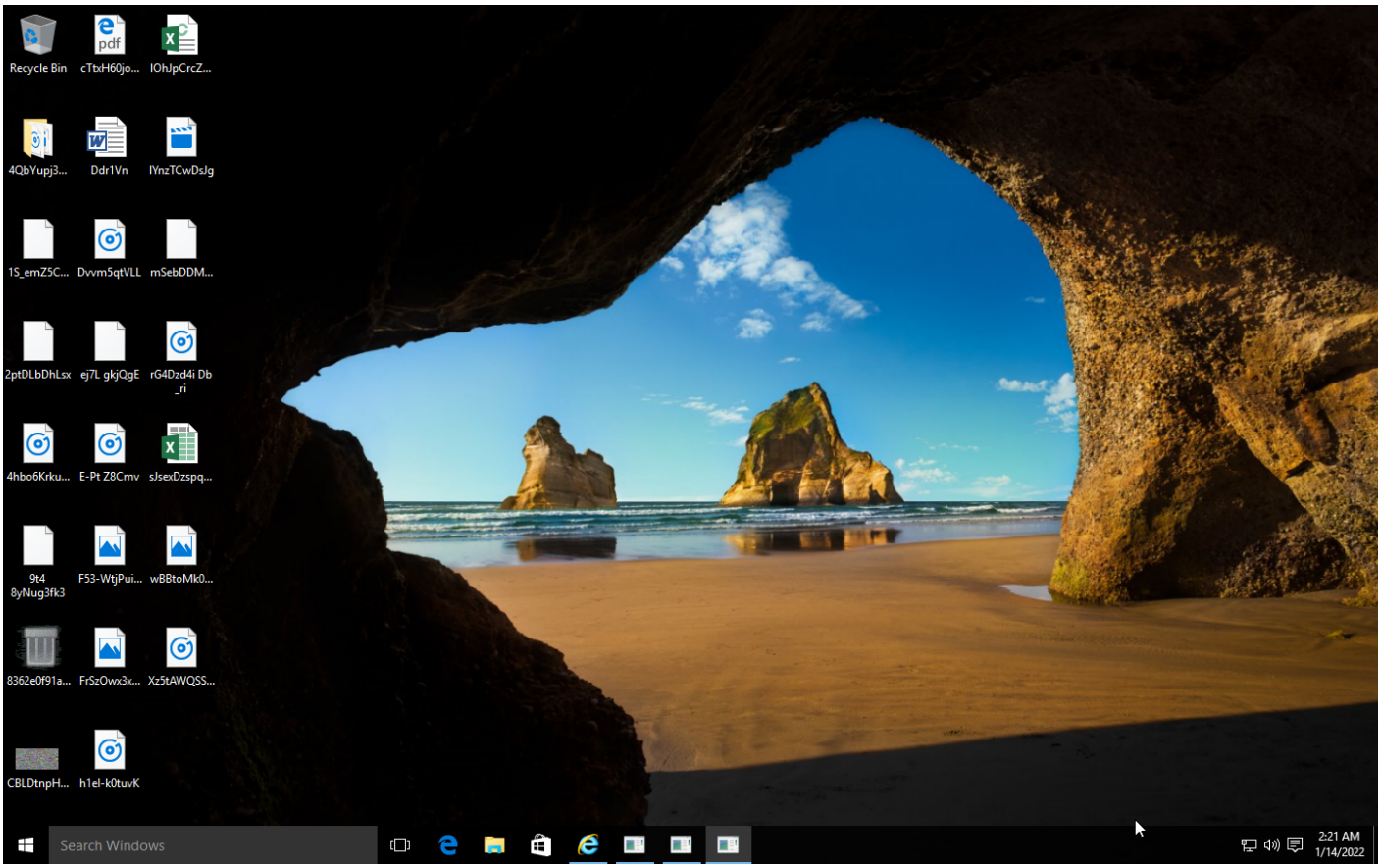
Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Command and Control	Exfiltration	Impact
	#T1053 Scheduled Task	#T1053 Scheduled Task	#T1053 Scheduled Task	#T1045 Software Packing		#T1057 Process Discovery					
				#T1096 NTFS File Attributes							

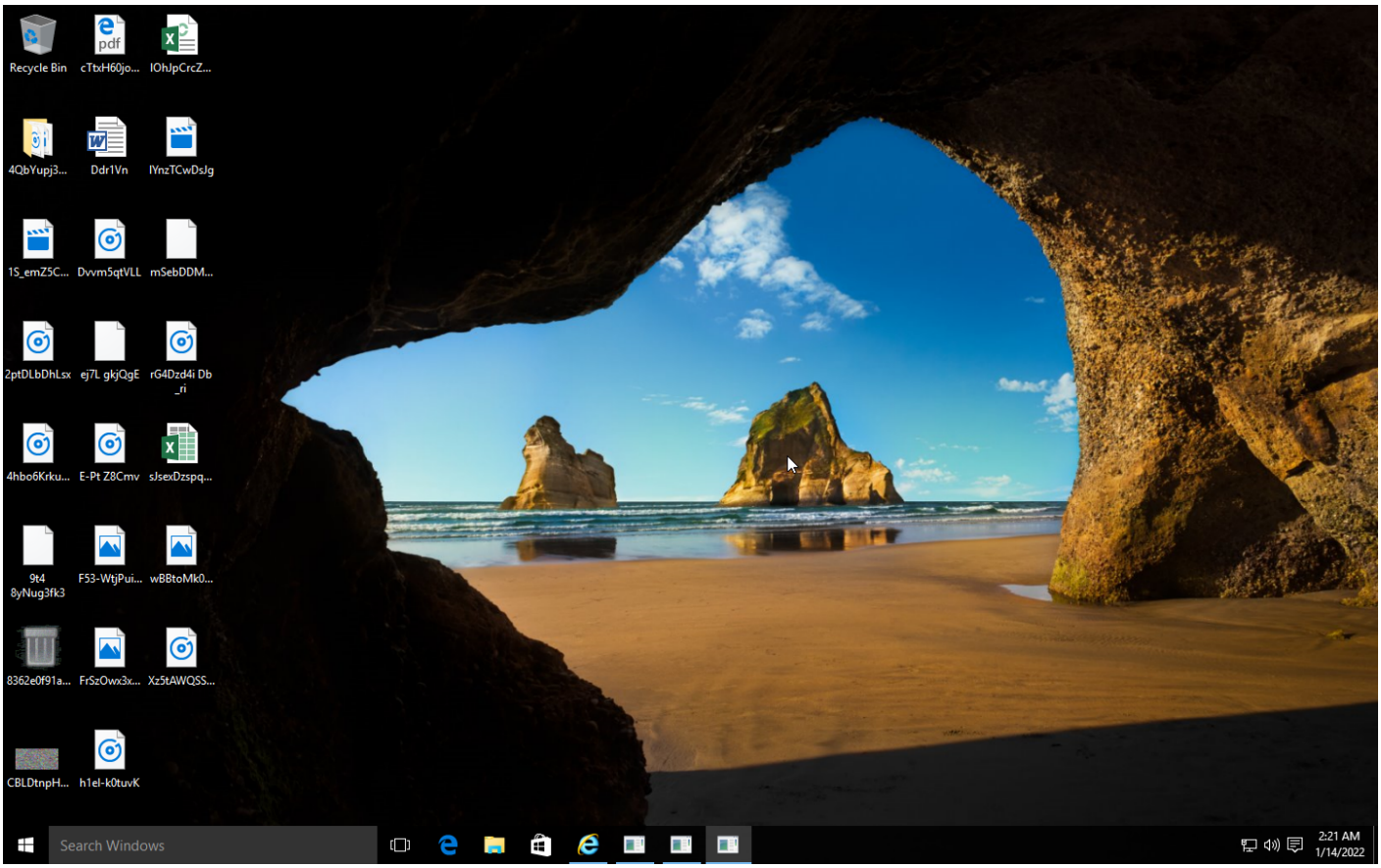
Sample Information

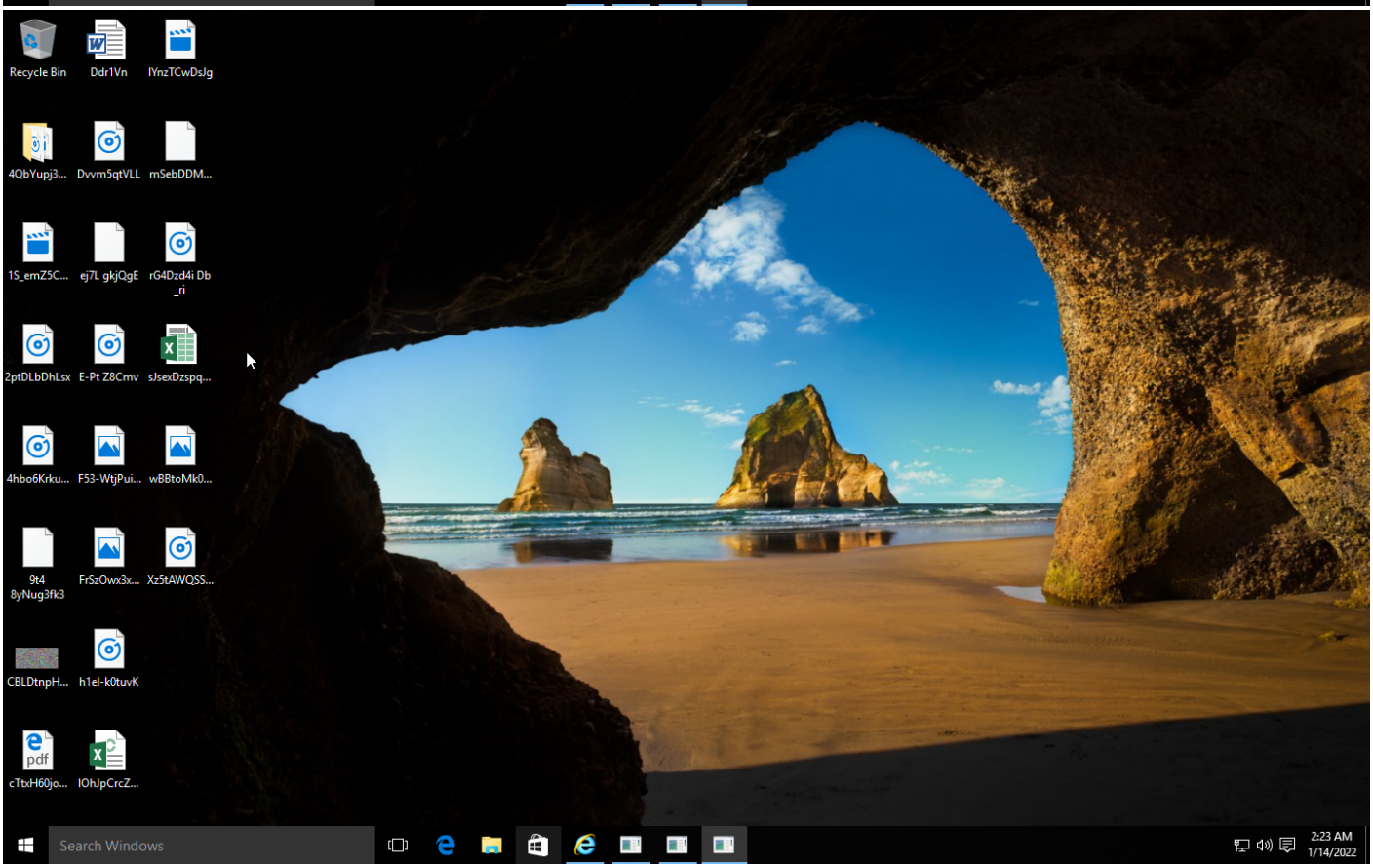
ID	#3276928
MD5	8362e0f91ae3379c73422bbca7bac493
SHA1	ec761f77bbe9900aed7ffa0a9303dc6801a9effb
SHA256	adfea20237be615461c44fea423d6043fc74bf1c5303ee33fcecd8acd201291e
SSDeep	3072:Uv7CHCUfMX34IHHW1UJNZoVkzUI1V9gALVggjcGkNIVqI:UvByIIW1UJNZo/VV7ITsq
ImpHash	996fe7decbf39b8813e0892e829e72ad
File Name	8362e0f91ae3379c73422bbca7bac493.virus.exe
File Size	287.50 KB
Sample Type	Windows Exe (x86-32)
Has Macros	✓

Analysis Information

Creation Time	2022-01-14 03:20 (UTC+1)
Analysis Duration	00:04:00
Termination Reason	Timeout
Number of Monitored Processes	5
Execution Successful	False
Reputation Enabled	✓
WHOIS Enabled	✓
Built-in AV Enabled	✗
Built-in AV Applied On	Sample Files, PCAP File, Downloaded Files, Dropped Files, Modified Files, Memory Dumps, Embedded Files
Number of AV Matches	0
YARA Enabled	✓
YARA Applied On	Sample Files, PCAP File, Downloaded Files, Dropped Files, Modified Files, Memory Dumps, Embedded Files
Number of YARA Matches	3


Recycle Bin
cTtxH60jo...
lOhJpCrcZ...
4QbYupj3...
Ddr1Vn
lYnzTCwDsJg
1S_emZ5C...
Dvvm5qtVLL
mSebDDM...
2ptDLbDhLsx
ej7L gkjQgE
rG4Dzd4i Db _ri
4hbo6Krku...
E-Pt Z8Cmv
sJsexDzspq...
9t4 8yNug3fk3
F53-WtjPui...
wBBtoMk0...
8362e0f91a...
FrSzOwx3x...
Xz5tAWQSS...
CBLDtnpH...
h1el-k0tuvK
Search Windows
2:21 AM
1/14/2022





Screenshots truncated

NETWORK

General

3.47 KB total sent

1.77 KB total received

1 ports 80

1 contacted IP addresses

0 URLs extracted

0 files downloaded

0 malicious hosts detected

DNS

0 DNS requests for 0 domains

0 nameservers contacted

0 total requests returned errors

HTTP/S

1 URLs contacted, 1 servers

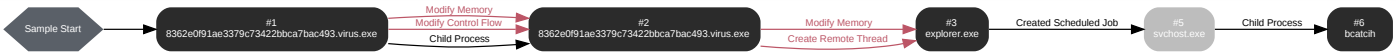
5 sessions, 3.47 KB sent, 1.77 KB received

HTTP Requests

Method	URL	Dest. IP	Dest. Port	Status Code	Response Size	Verdict
POST	host-data-coin-11.com/	-	-		0 bytes	NA

BEHAVIOR

Process Graph



Process #1: 8362e0f91ae3379c73422bbca7bac493.virus.exe

ID	1
File Name	c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe
Command Line	"C:\Users\RDhJ0CNFevzX\Desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe"
Initial Working Directory	C:\Users\RDhJ0CNFevzX\Desktop\
Monitor Start Time	Start Time: 79913, Reason: Analysis Target
Unmonitor End Time	End Time: 107637, Reason: Terminated
Monitor duration	27.72s
Return Code	0
PID	3652
Parent PID	1560
Bitness	32 Bit

Host Behavior

Type	Count
Module	72
File	6
Environment	1
Window	1
Process	1
-	3
-	5

Process #2: 8362e0f91ae3379c73422bbca7bac493.virus.exe

ID	2
File Name	c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe
Command Line	"C:\Users\RDhJ0CNFevzX\Desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe"
Initial Working Directory	C:\Users\RDhJ0CNFevzX\Desktop\
Monitor Start Time	Start Time: 101339, Reason: Child Process
Unmonitor End Time	End Time: 124422, Reason: Terminated
Monitor duration	23.08s
Return Code	0
PID	4100
Parent PID	3652
Bitness	32 Bit

Injection Information (4)

Injection Type	Source Process	Source / Target TID	Address / Name	Size	Success	Count
Modify Memory	#1: c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe	0xe4c	0x400000(4194304)	0x200	✓	1
Modify Memory	#1: c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe	0xe4c	0x401000(4198400)	0x7200	✓	1
Modify Memory	#1: c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe	0xe4c	0x39a008(3776520)	0x4	✓	1
Modify Control Flow	#1: c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe	0xe4c / 0x1008	0x77c08fe0(2009108448)	-	✓	1

Host Behavior

Type	Count
Module	17
Keyboard	2
Process	1
File	1
System	6
-	1
Registry	12
-	1

Process #3: explorer.exe

ID	3
File Name	c:\windows\explorer.exe
Command Line	C:\Windows\Explorer.EXE
Initial Working Directory	C:\Windows\system32\
Monitor Start Time	Start Time: 118619, Reason: Injection
Unmonitor End Time	End Time: 320585, Reason: Terminated by Timeout
Monitor duration	201.97s
Return Code	Unknown
PID	1560
Parent PID	18446744073709551615
Bitness	64 Bit

Injection Information (3)

Injection Type	Source Process	Source / Target TID	Address / Name	Size	Success	Count
Modify Memory	#2: c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe	0x1008	0x410000(4259840)	0x5000	✓	1
Modify Memory	#2: c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe	0x1008	0x420000(4325376)	0x16000	✓	1
Create Remote Thread	#2: c:\users\rdhj0cnfevzx\desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe	0x1008	0x421930(4331824)	-	✓	1

Dropped Files (1)

File Name	File Size	SHA256	YARA Match
C:\Users\RDhJ0CNFevzX\AppData\Roaming\bcatcih	287.50 KB	adfea20237be615461c44fea423d6043fc74bf1c5303ee33fcecd8acd201291e	✗

Host Behavior

Type	Count
Module	29
System	12450
Process	7250
Mutex	1
Registry	2
File	19
User	1
COM	1

Network Behavior

Type	Count
HTTP	5
TCP	5

Process #5: svchost.exe

ID	5
File Name	c:\windows\system32\svchost.exe
Command Line	C:\Windows\system32\svchost.exe -k netsvcs
Initial Working Directory	C:\Windows\system32\
Monitor Start Time	Start Time: 178829, Reason: Created Scheduled Job
Unmonitor End Time	End Time: 320585, Reason: Terminated by Timeout
Monitor duration	141.76s
Return Code	Unknown
PID	860
Parent PID	532
Bitness	64 Bit

Process #6: bcatcih

ID	6
File Name	c:\users\rdhj0cnfevzx\appdata\roaming\bcatcih
Command Line	C:\Users\RDhJ0CNFevzX\AppData\Roaming\bcatcih
Initial Working Directory	C:\Windows\system32\
Monitor Start Time	Start Time: 192582, Reason: Child Process
Unmonitor End Time	End Time: 320585, Reason: Terminated by Timeout
Monitor duration	128.00s
Return Code	Unknown
PID	3616
Parent PID	860
Bitness	32 Bit

Host Behavior

Type	Count
Module	29
File	3
Environment	1

ARTIFACTS

File

SHA256	File Names	Category	File Size	MIME Type	Operations	Verdict
adfea20237be615461c44fea423d6043fc74bf1c5303ee33fcecd8acd201291e	C:\Users\RDhJ0CNFevzX\Desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe, C:\Users\RDhJ0CNFevzX\AppData\Roaming\bcatcih	Sample File	287.50 KB	application/vnd.microsoft.portable-executable	Access, Delete, Create, Write	MALICIOUS

Filename

File Name	Category	Operations	Verdict
C:\Users\RDhJ0CNFevzX\Desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe	Sample File	Access, Delete	CLEAN
apfHQ	Accessed File	Access	CLEAN
C:\Windows\system32\ntdll.dll	Accessed File	Access	CLEAN
C:\Users\RDhJ0CNFevzX\AppData\Roaming\bcatcih	Sample File	Access, Delete, Create, Write	CLEAN
C:\Users\RDhJ0CNFevzX\AppData\Roaming\bcatcih:Zone.Identifier	Accessed File	Access, Delete	CLEAN
C:\Windows\system32\advapi32.dll	Accessed File	Access	CLEAN
C:\Users\RDhJ0CNFevzX\AppData\Roaming\wvhwbfa	Accessed File	Access	CLEAN

URL

URL	Category	IP Address	Country	HTTP Methods	Verdict
http://host-data-coin-11.com	-	93.189.42.167	-	POST	MALICIOUS

Domain

Domain	IP Address	Country	Protocols	Verdict
host-data-coin-11.com	93.189.42.167	-	HTTP	CLEAN

IP

IP Address	Domains	Country	Protocols	Verdict
93.189.42.167	host-data-coin-11.com	Russia	DNS, HTTP, TCP	CLEAN

Mutex

Name	Operations	Parent Process Name	Verdict
FE7F15060B875FB9FB2A49F08D5D03120C287F38	access	explorer.exe	CLEAN

Registry

Registry Key	Operations	Parent Process Name	Verdict
\REGISTRY\MACHINE\System\CurrentControlSet\Enum\IDE	access	8362e0f91ae3379c73422bbca7bac493.virus.exe	CLEAN
\REGISTRY\MACHINE\System\CurrentControlSet\Enum\SCSI	access	8362e0f91ae3379c73422bbca7bac493.virus.exe	CLEAN
HKEY_LOCAL_MACHINE\Software\Microsoft\Internet Explorer	access	explorer.exe	CLEAN
HKEY_LOCAL_MACHINE\Software\Microsoft\Internet Explorer\svcVersion	access, read	explorer.exe	CLEAN

Process

Process Name	Commandline	Verdict
8362e0f91ae3379c73422bbca7bac493.virus.exe	"C:\Users\RDhJ0CNFevzX\Desktop\8362e0f91ae3379c73422bbca7bac493.virus.exe"	MALICIOUS
bcatcih	C:\Users\RDhJ0CNFevzX\AppData\Roaming\bcatcih	MALICIOUS
explorer.exe	C:\Windows\Explorer.EXE	SUSPICIOUS
svchost.exe	C:\Windows\system32\svchost.exe -k netsvcs	CLEAN

YARA / AV

YARA (3)

Ruleset Name	Rule Name	Rule Description	File Type	File Name	Classification	Verdict
Malware	SmokeLoader	SmokeLoader memory dump	Memory Dump	-	Downloader	5/5
Malware	SmokeLoader	SmokeLoader memory dump	Memory Dump	-	Downloader	5/5
Malware	SmokeLoaderStrings	SmokeLoader strings	Function Strings	function_strings_process_3.txt	Downloader	5/5

ENVIRONMENT

Virtual Machine Information

Name	win10_64_th2_en_mso2016
Description	win10_64_th2_en_mso2016
Architecture	x86 64-bit
Operating System	Windows 10 Threshold 2
Kernel Version	10.0.10586.0 (0de6dc23-8e19-4bb7-8608-d54b1e6fa379)
Network Scheme Name	Local Gateway
Network Config Name	Local Gateway

Platform Information

Platform Version	4.4.0
Dynamic Engine Version	4.4.0 / 12/08/2021 19:04
Static Engine Version	4.4.0.0 / 2021-12-08 18:00:20
AV Exceptions Version	4.4.1.6 / 2021-12-14 15:06:27
Link Detonation Heuristics Version	4.4.1.7 / 2021-12-15 19:11:26
Smart Memory Dumping Rules Version	4.4.0.0 / 2021-12-08 18:00:20
Signature Trust Store Version	4.4.1.6 / 2021-12-14 15:06:27
VMRay Threat Identifiers Version	4.4.1.7 / 2021-12-15 19:11:26
YARA Built-in Ruleset Version	4.4.1.7

Software Information

Adobe Acrobat Reader Version	Not installed
Microsoft Office	2016
Microsoft Office Version	16.0.4266.1003
Hangul Office	Not installed
Hangul Office Version	Not installed
Internet Explorer Version	11.0.10586.0
Chrome Version	Not installed
Firefox Version	Not installed
Flash Version	Not installed
Java Version	Not installed

System Information

Sample Directory	C:\Users\RDhJ0CNFevzX\Desktop
Computer Name	XC64ZB
User Domain	XC64ZB
User Name	RDhJ0CNFevzX
User Profile	C:\Users\RDhJ0CNFevzX
Temp Directory	C:\Users\RDHJ0C~1\AppData\Local\Temp
System Root	C:\Windows