ID: 620140
Sample Name:
62724e14c3203.dll
Cookbook: default.jbs
Time: 11:59:27
Date: 04/05/2022
Version: 34.0.0 Boulder Opal

Table of Contents

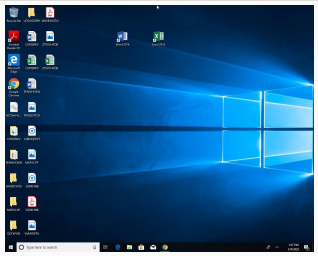
Windows Analysis Report

62724e14c3203.dll

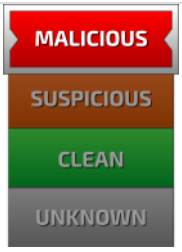
Overview

General Information

Sample Name:	62724e14c3203.dll
Analysis ID:	620140
MD5:	d8b1d46801506b.
SHA1:	af58e06fafcf944…
SHA256:	ac633cc57571ff5..
Tags:	dll enel enelenergia gozi isfb ita ursnif
Infos:	



Detection



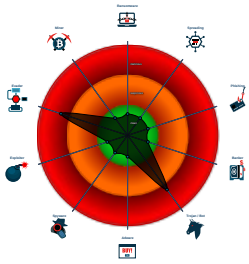
Ursnif

Score:	72
Range:	0 - 100
Whitelisted:	false
Confidence:	100%

Signatures

- Multi AV Scanner detection for subm…
- Yara detected Ursnif
- Tries to detect sandboxes and other…
- Query firmware table information (lik…
- Tries to detect sandboxes / dynamic…
- Machine Learning detection for sam…
- Uses 32bit PE files
- PE file contains an invalid checksum
- Tries to load missing DLLs
- May sleep (evasive loops) to hinder…
- PE file contains sections with non-s…
- Contains capabilities to detect virtua…

Classification



Process Tree

- **System is w10x64**
- loaddll32.exe (PID: 2472 cmdline: loaddll32.exe "C:\Users\user\Desktop\62724e14c3203.dll" MD5: 7DEB5DB86C0AC789123DEC286286B938)
  - cmd.exe (PID: 4760 cmdline: cmd.exe /C rundll32.exe "C:\Users\user\Desktop\62724e14c3203.dll",#1 MD5: F3BDBE3BB6F734E357235F4D5898582D)
    - rundll32.exe (PID: 4612 cmdline: rundll32.exe "C:\Users\user\Desktop\62724e14c3203.dll",#1 MD5: D7CA562B0DB4F4DD0F03A89A1FDAD63D)
  - regsvr32.exe (PID: 3556 cmdline: regsvr32.exe /s C:\Users\user\Desktop\62724e14c3203.dll MD5: 426E7499F6A7346F0410DEAD0805586B)
  - rundll32.exe (PID: 1340 cmdline: rundll32.exe C:\Users\user\Desktop\62724e14c3203.dll,DllRegisterServer MD5: D7CA562B0DB4F4DD0F03A89A1FDAD63D)
- **cleanup**

Malware Configuration

No configs have been found

Yara Signatures

Initial Sample

Source	Rule	Description	Author	Strings
62724e14c3203.dll	JoeSecurity_Ursnif_1	Yara detected Ursnif	Joe Security	

Sigma Signatures

No Sigma rule has matched

Snort Signatures

No Snort rule has matched

Joe Sandbox Signatures

AV Detection

Multi AV Scanner detection for submitted file

Machine Learning detection for sample

Key, Mouse, Clipboard, Microphone and Screen Capturing

Yara detected Ursnif

E-Banking Fraud

Yara detected Ursnif

Hooking and other Techniques for Hiding and Protection

Yara detected Ursnif

Malware Analysis System Evasion

Query firmware table information (likely to detect VMs)

Tries to detect sandboxes / dynamic malware analysis system (registry check)

Anti Debugging

Tries to detect sandboxes and other dynamic analysis tools (window names)

Stealing of Sensitive Information

Yara detected Ursnif

Remote Access Functionality

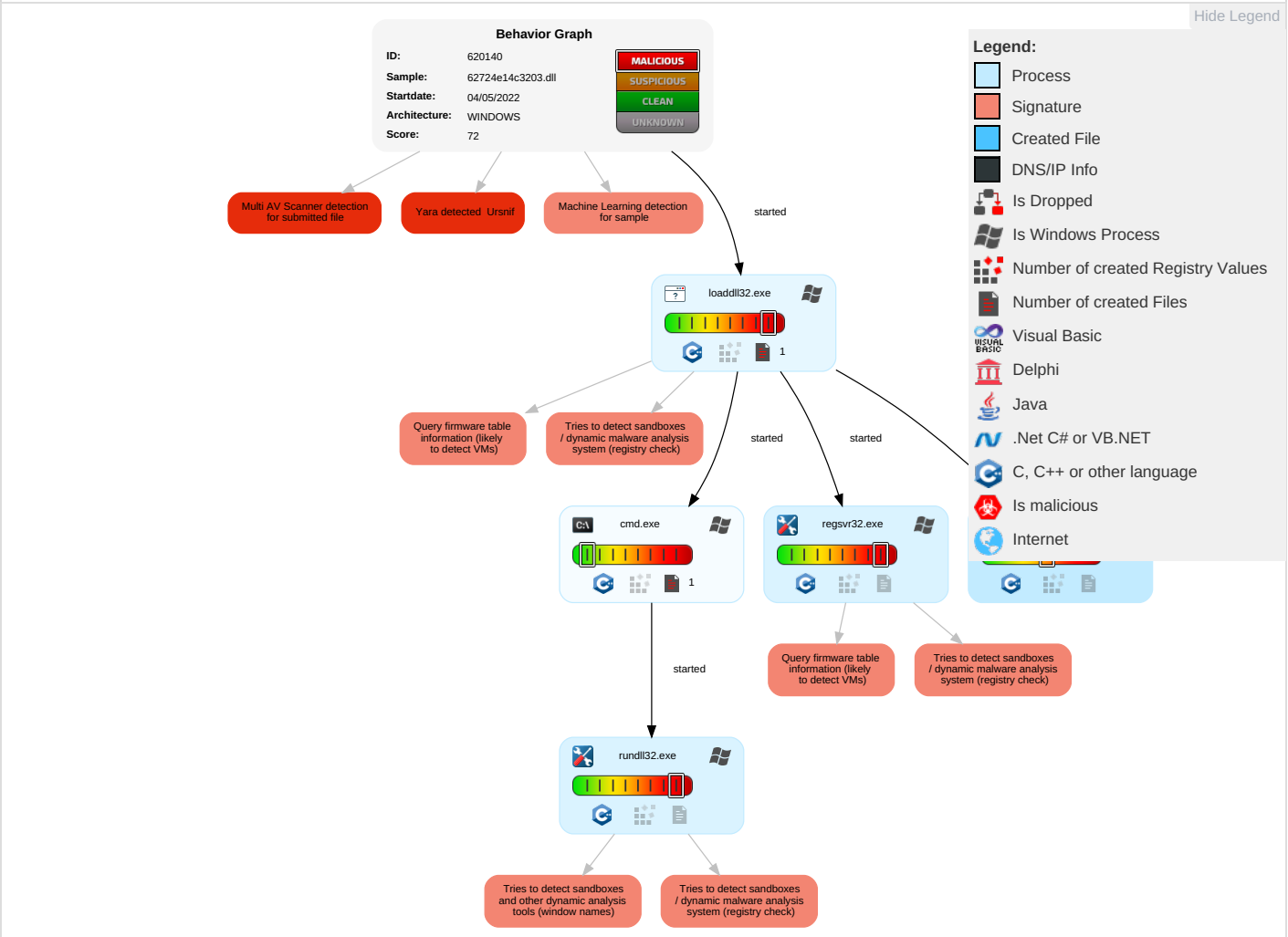
Yara detected Ursnif

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	Windows Management Instrumentation	1 DLL Side-Loading	1 1 Process Injection	1 Regsvr32	OS Credential Dumping	3 1 Security Software Discovery	Remote Services	Data from Local System	Exfiltration Over Other Network Medium	Data Obfuscation	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 DLL Side-Loading	1 Rundll32	LSASS Memory	2 2 1 Virtualization/Sandbox Evasion	Remote Desktop Protocol	Data from Removable Media	Exfiltration Over Bluetooth	Junk Data	Exploit SS7 to Redirect Phone Calls/SMS	Remotely Wipe Data Without Authorization	Device Lockout
Domain Accounts	At (Linux)	Logon Script (Windows)	Logon Script (Windows)	2 2 1 Virtualization/Sandbox Evasion	Security Account Manager	2 System Information Discovery	SMB/Windows Admin Shares	Data from Network Shared Drive	Automated Exfiltration	Steganography	Exploit SS7 to Track Device Location	Obtain Device Cloud Backups	Delete Device Data
Local Accounts	At (Windows)	Logon Script (Mac)	Logon Script (Mac)	1 Software Packing	NTDS	System Network Configuration Discovery	Distributed Component Object Model	Input Capture	Scheduled Transfer	Protocol Impersonation	SIM Card Swap		Carrier Billing Fraud
Cloud Accounts	Cron	Network Logon Script	Network Logon Script	1 1 Process Injection	LSA Secrets	Remote System Discovery	SSH	Keylogging	Data Transfer Size Limits	Fallback Channels	Manipulate Device Communication		Manipulate App Store Rankings or Ratings
Replication Through Removable Media	Launchd	Rc.common	Rc.common	1 DLL Side-Loading	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

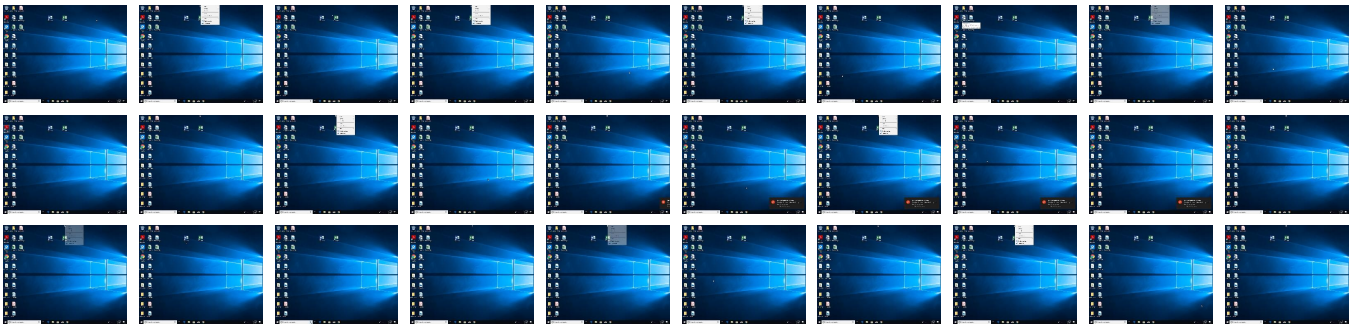
Behavior Graph



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
62724e14c3203.dll	29%	Virustotal		Browse
62724e14c3203.dll	29%	ReversingLabs	Win32.Trojan.Ursnif	
62724e14c3203.dll	100%	Joe Sandbox ML		

Dropped Files

No Antivirus matches

Unpacked PE Files

No Antivirus matches

Domains

No Antivirus matches

URLs

Source	Detection	Scanner	Label	Link
http://pki-ocsp.symauth.com0	0%	URL Reputation	safe	

Domains and IPs

Contacted Domains

No contacted domains info

URLs from Memory and Binaries

Name	Source	Malicious	Antivirus Detection	Reputation
http://pki-crl.symauth.com/offlineca/TheInstituteofElectricalandElectronicsEngineersIncIEEERootCA.cr	62724e14c3203.dll	false		high
http://pki-ocsp.symauth.com0	62724e14c3203.dll	false	• URL Reputation: safe	unknown
http://pki-crl.symauth.com/ca_d409a5cb737dc0768fd08ed5256f3633/LatestCRL.crl07	62724e14c3203.dll	false		high

World Map of Contacted IPs

No contacted IP infos

General Information

Joe Sandbox Version:	34.0.0 Boulder Opal
Analysis ID:	620140
Start date and time: 04/05/202211:59:27	2022-05-04 11:59:27 +02:00
Joe Sandbox Product:	CloudBasic
Overall analysis duration:	0h 6m 33s
Hypervisor based Inspection enabled:	false
Report type:	light
Sample file name:	62724e14c3203.dll
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:	19
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:	mal72.troj.evad.winDLL@9/0@0/0
EGA Information:	Failed
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: .dll • Adjust boot time • Enable AMSI • Override analysis time to 240s for rundll32

Warnings

- Exclude process from analysis (whitelisted): MpCmdRun.exe, audiodg.exe, WMIADAP.exe, backgroundTaskHost.exe, SgrmBroker.exe, conhost.exe, svchost.exe
- Excluded IPs from analysis (whitelisted): 20.40.129.122, 23.211.6.115
- Excluded domains from analysis (whitelisted): e12564.dspb.akamaiedge.net, fs.microsoft.com, store-images.s-microsoft.com, arc.trafficmanager.net, store-images.s-microsoft.com-c.edgekey.net, time.windows.com, iris-de-prod-azsc-frc.francecentral.cloudapp.azure.com, arc.msn.com
- Not all processes where analyzed, report is missing behavior information

Simulations

Behavior and APIs

Time	Type	Description
12:00:32	API Interceptor	1x Sleep call for process: regsvr32.exe modified
12:00:32	API Interceptor	1x Sleep call for process: rundll32.exe modified
12:00:36	API Interceptor	2x Sleep call for process: loaddll32.exe modified

Joe Sandbox View / Context

IPs

No context

Domains

No context

ASNs

No context

JA3 Fingerprints

No context

Dropped Files

No context

Created / dropped Files

No created / dropped files found

Static File Info

General

File type:	PE32 executable (DLL) (GUI) Intel 80386, for MS Windows
Entropy (8bit):	6.015061702913002
TrID:	• Win32 Dynamic Link Library (generic) (1002004/3) 99.60% • Generic Win/DOS Executable (2004/3) 0.20% • DOS Executable Generic (2002/1) 0.20% • Autodesk FLIC Image File (extensions: flc, fli, cel) (7/3) 0.00%
File name:	62724e14c3203.dll
File size:	3735060
MD5:	d8b1d46801506b84938f864365bc7c81
SHA1:	af58e06fafcf944e800ac5029b5a40ce5326db3e
SHA256:	ac633cc57571ff54a72dd8cac9236cddef488af8074e08a3b17b53983d3f0733
SHA512:	672ae9a31d0d5a6c6c724d5ca22a408938a15729e8abc93036575062b6ea078e64f7ecd7d4ca2aece79b69520ade7727c0351bb7d6e904212d38f56dc20c30af
SSDEEP:	49152:3TeGCEZ8YnAM+OxCYxsk2GVybVpr7Vt+S/z/:3TBCEZXAM+O4msk2GV4Vprxt+SL/
TLSH:	36065AE1760AA5CFD09A5AF89813CF026B3C53F94A115D13EDA9787F6D63CC13289E24
File Content Preview:	MZ.....@.....!..L.!This program cannot be run in DOS mode....$.....\o.....v.....v.....w.....v.....v.....v.....Rich.....PE..L....Chb...

File Icon

Icon Hash:	74f0e4ecccdce0e4

Static PE Info

General

Entrypoint:	0x10394000
Entrypoint Section:	.taggant
Digitally signed:	false
Imagebase:	0x10000000
Subsystem:	windows gui
Image File Characteristics:	32BIT_MACHINE, EXECUTABLE_IMAGE, DLL
DLL Characteristics:	
Time Stamp:	0x626843F2 [Tue Apr 26 19:11:46 2022 UTC]
TLS Callbacks:	
CLR (.Net) Version:	
OS Version Major:	5
OS Version Minor:	0
File Version Major:	5
File Version Minor:	0
Subsystem Version Major:	5
Subsystem Version Minor:	0
Import Hash:	c846031d91edf5130318f0a56b358ac5

Entrypoint Preview

Instruction
jmp 00007FB628B3664Ah
pmaxub mm7, qword ptr [eax]
add byte ptr [eax], al
add byte ptr [eax], al
add cl, ch
add byte ptr [eax], ah
add byte ptr [eax], al
push esp
inc ecx
inc edi
inc edi

Instruction
add byte ptr [eax], ah
add byte ptr [eax], al
loop 00007FB628B3664Eh
add byte ptr [eax], al
add dword ptr [eax], eax
xor byte ptr [edx+0906DE0Ch], al
sub al, byte ptr [esi+0DF78648h]
add dword ptr [edi], eax
add ah, byte ptr [eax+30CF0C82h]
or byte ptr [ebx+ecx*8], 00000002h
add dword ptr [ecx], eax
xor dword ptr [09060B30h], ecx
pushad
xchg byte ptr [eax+01h], cl
add eax, dword ptr [edx+eax]
add dword ptr [eax], esi
and ecx, 862A0906h
dec eax
xchg bh, dh
or eax, A0010701h
adc ebx, D0D08104h
add byte ptr [ecx], al
add byte ptr [ecx], al
sal dword ptr [ecx+000003A1h], 00000000h
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [ecx], al
add byte ptr [ecx+60h], bh
xchg dword ptr [edx+edi*2], ebp
xor byte ptr [edi-0Ch], ch
insd
jnbe 00007FB628B36691h
pushfd
push eax
les esi, esp
cmp dword ptr [1EFF9DD7h], eax
stosd
mov al, byte ptr [5C67BBA0h]
cli
pop ecx
xor bh, bh
add byte ptr [ecx], al
add byte ptr [ecx], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al

Instruction
add byte ptr [eax], al
add byte ptr [esi+edi*8], dl
cmp byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
sub al, byte ptr [eax]
add al, byte ptr [eax]
add dword ptr [eax], eax
imul ebp, dword ptr [edx], F0h

Rich Headers

Programming Language:	• [ASM] VS2008 SP1 build 30729 • [LNK] VS2008 SP1 build 30729 • [IMP] VS2008 SP1 build 30729 • [EXP] VS2008 SP1 build 30729

Data Directories

Name	Virtual Address	Virtual Size	Is in Section
IMAGE_DIRECTORY_ENTRY_EXPORT	0xe000	0x4c	.exports
IMAGE_DIRECTORY_ENTRY_IMPORT	0xf07b	0x6c	.imports
IMAGE_DIRECTORY_ENTRY_RESOURCE	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_EXCEPTION	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_SECURITY	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_BASERELOC	0x0	0x0	
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	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_DELAY_IMPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_COM_DESCRIPTOR	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_RESERVED	0x0	0x0	

Sections

Name	Virtual Address	Virtual Size	Raw Size	Xored PE	ZLIB Complexity	File Type	Entropy	Characteristics
.text	0x1000	0x16b7	0x1800	False	0.700846354167	data	6.45396003483	IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_CNT_CODE, IMAGE_SCN_MEM_READ
.rdata	0x3000	0x59c	0x600	False	0.185546875	data	1.83732227468	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ
.data	0x4000	0x25c	0x200	False	0.08984375	data	0.369416603835	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_WRITE, IMAGE_SCN_MEM_READ
.bss	0x5000	0x2dc	0x400	False	0.7626953125	data	6.25781926122	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_WRITE, IMAGE_SCN_MEM_READ
.reloc	0x6000	0x8000	0x7200	False	0.970086348684	data	7.85482039795	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ
.exports	0xe000	0x1000	0x200	False	0.140625	data	0.781993247616	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ
.imports	0xf000	0x1000	0x200	False	0.26171875	data	2.01907876474	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_WRITE, IMAGE_SCN_MEM_READ

Name	Virtual Address	Virtual Size	Raw Size	Xored PE	ZLIB Complexity	File Type	Entropy	Characteristics
.themida	0x10000	0x384000	0x384000	unknown	unknown	unknown	unknown	IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_WRITE, IMAGE_SCN_CNT_CODE, IMAGE_SCN_MEM_READ
.taggant	0x394000	0x2200	0x2014	False	0.32976132489	DOS executable (COM)	3.88631067097	IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_CNT_CODE, IMAGE_SCN_MEM_READ

Imports

DLL	Import
kernel32.dll	GetModuleHandleA
ntdll.dll	_snwprintf
ADVAPI32.dll	ConvertStringSecurityDescriptorToSecurityDescriptorA

Exports

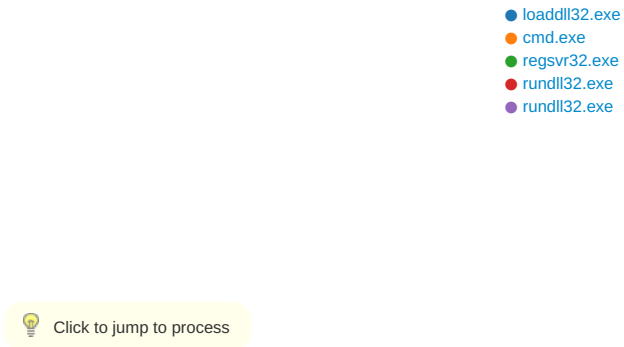
Name	Ordinal	Address
DllRegisterServer	1	0x100011c2

Network Behavior

No network behavior found

Statistics

Behavior



System Behavior

Analysis Process: loaddll32.exe PID: 2472, Parent PID: 3852

General

Target ID:	0
Start time:	12:00:29

Start date:	04/05/2022
Path:	C:\Windows\System32\loaddll32.exe
Wow64 process (32bit):	true
Commandline:	loaddll32.exe "C:\Users\user\Desktop\62724e14c3203.dll"
Imagebase:	0x140000
File size:	116736 bytes
MD5 hash:	7DEB5DB86C0AC789123DEC286286B938
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	high

File Activities

There is hidden Windows Behavior. Click on **Show Windows Behavior** to show it.

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol

Analysis Process: cmd.exe PID: 4760, Parent PID: 2472

General

Target ID:	1
Start time:	12:00:29
Start date:	04/05/2022
Path:	C:\Windows\SysWOW64\cmd.exe
Wow64 process (32bit):	true
Commandline:	cmd.exe /C rundll32.exe "C:\Users\user\Desktop\62724e14c3203.dll",#1
Imagebase:	0x1190000
File size:	232960 bytes
MD5 hash:	F3BDBE3BB6F734E357235F4D5898582D
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	high

File Activities

There is hidden Windows Behavior. Click on **Show Windows Behavior** to show it.

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol

Analysis Process: regsvr32.exe PID: 3556, Parent PID: 2472

General

Target ID:	2
Start time:	12:00:30
Start date:	04/05/2022
Path:	C:\Windows\SysWOW64\regsvr32.exe
Wow64 process (32bit):	true
Commandline:	regsvr32.exe /s C:\Users\user\Desktop\62724e14c3203.dll
Imagebase:	0xb70000
File size:	20992 bytes
MD5 hash:	426E7499F6A7346F0410DEAD0805586B
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	high

Analysis Process: rundll32.exe PID: **4612**, Parent PID: **4760**

General	
Target ID:	3
Start time:	12:00:30
Start date:	04/05/2022
Path:	C:\Windows\SysWOW64\rundll32.exe
Wow64 process (32bit):	true
Commandline:	rundll32.exe "C:\Users\user\Desktop\62724e14c3203.dll",#1
Imagebase:	0x970000
File size:	61952 bytes
MD5 hash:	D7CA562B0DB4F4DD0F03A89A1FDAD63D
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	high

Analysis Process: rundll32.exe PID: **1340**, Parent PID: **2472**

General	
Target ID:	4
Start time:	12:00:30
Start date:	04/05/2022
Path:	C:\Windows\SysWOW64\rundll32.exe
Wow64 process (32bit):	true
Commandline:	rundll32.exe C:\Users\user\Desktop\62724e14c3203.dll,DllRegisterServer
Imagebase:	0x970000
File size:	61952 bytes
MD5 hash:	D7CA562B0DB4F4DD0F03A89A1FDAD63D
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	high

Disassembly

No disassembly