ID: 343219
Sample Name: Remittance advice.exe
Cookbook: default.jbs
Time: 15:37:59
Date: 22/01/2021
Version: 31.0.0 Red Diamond

Table of Contents

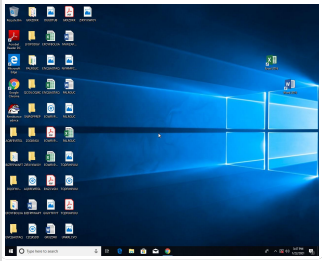
Analysis Report Remittance advice.exe

Overview

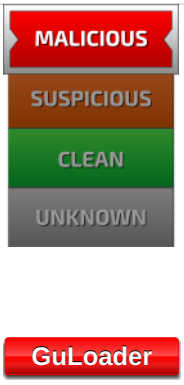
General Information

Sample Name:	Remittance advice.exe
Analysis ID:	343219
MD5:	e6f8850e7f37364..
SHA1:	9158c69b6ca0ffc...
SHA256:	275de12bf065d99.
Tags:	exe GuLoader

Most interesting Screenshot:



Detection

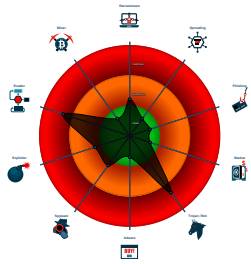


Score:	72
Range:	0 - 100
Whitelisted:	false
Confidence:	100%

Signatures

- Multi AV Scanner detection for subm…
- Yara detected GuLoader
- Found potential dummy code loops (…
- Tries to detect sandboxes and other…
- Tries to detect virtualization through…
- Yara detected VB6 Downloader Gen…
- Abnormal high CPU Usage
- Contains functionality for execution …
- Contains functionality to read the PEB
- Creates a DirectInput object (often fo…
- Detected potential crypto function
- Found inlined nop instructions (likely…
- Program does not show much activi…

Classification



Startup

- **System is w10x64**
- Remittance advice.exe (PID: 6336 cmdline: 'C:\Users\user\Desktop\Remittance advice.exe' MD5: E6F8850E7F37364F9A9FAC18601B9244)
- **cleanup**

Malware Configuration

No configs have been found

Yara Overview

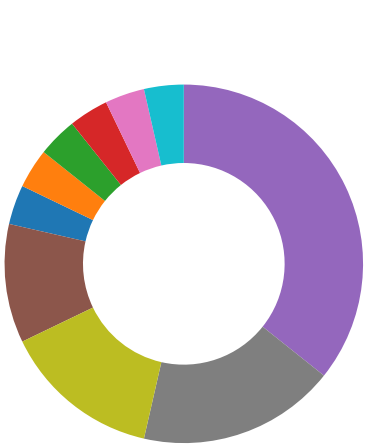
Memory Dumps

Source	Rule	Description	Author	Strings
Process Memory Space: Remittance advice.exe PID: 6336	JoeSecurity_VB6DownloaderGeneric	Yara detected VB6 Downloader Generic	Joe Security	
Process Memory Space: Remittance advice.exe PID: 6336	JoeSecurity_GuLoader	Yara detected GuLoader	Joe Security	

Sigma Overview

No Sigma rule has matched

Signature Overview



Click to jump to signature section

AV Detection:

Multi AV Scanner detection for submitted file

Compliance:

Uses 32bit PE files

Data Obfuscation:

Yara detected GuLoader

Yara detected VB6 Downloader Generic

Malware Analysis System Evasion:

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

Tries to detect virtualization through RDTSC time measurements

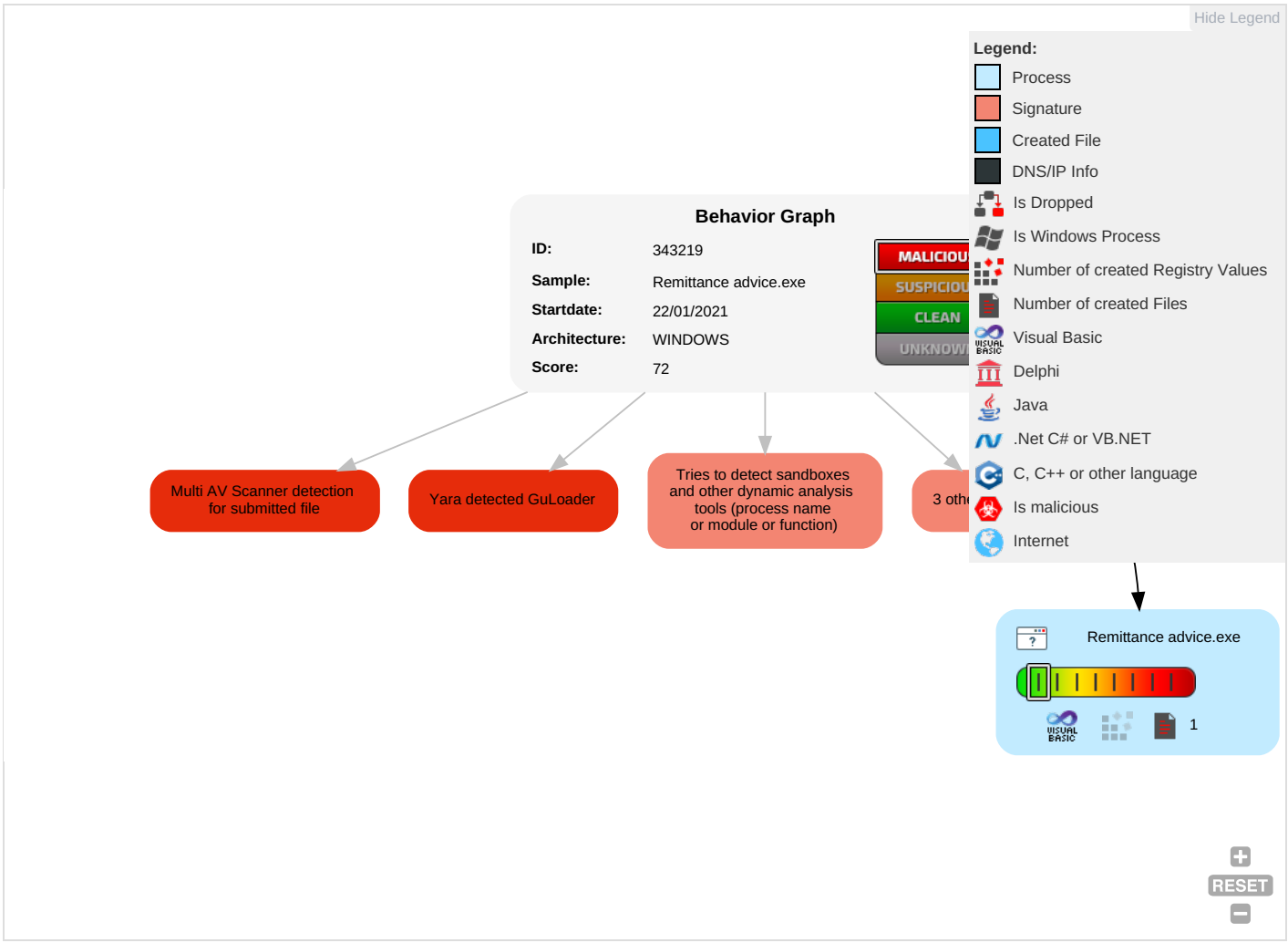
Anti Debugging:

Found potential dummy code loops (likely to delay analysis)

Mitre Att&ck Matrix

Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Exfiltration	Command and Control	Network Effects	Re Se Ef
Valid Accounts	Windows Management Instrumentation	Path Interception	Process Injection 1	Virtualization/Sandbox Evasion 1 1	Input Capture 1	Security Software Discovery 3 1 1	Remote Services	Input Capture 1	Exfiltration Over Other Network Medium	Encrypted Channel 1	Eavesdrop on Insecure Network Communication	Re Tr W Au
Default Accounts	Scheduled Task/Job	Boot or Logon Initialization Scripts	Boot or Logon Initialization Scripts	Process Injection 1	LSASS Memory	Virtualization/Sandbox Evasion 1 1	Remote Desktop Protocol	Archive Collected Data 1	Exfiltration Over Bluetooth	Junk Data	Exploit SS7 to Redirect Phone Calls/SMS	Re W W Au
Domain Accounts	At (Linux)	Logon Script (Windows)	Logon Script (Windows)	Obfuscated Files or Information 2	Security Account Manager	Process Discovery 1	SMB/Windows Admin Shares	Data from Network Shared Drive	Automated Exfiltration	Steganography	Exploit SS7 to Track Device Location	Ol De Cl Ba
Local Accounts	At (Windows)	Logon Script (Mac)	Logon Script (Mac)	Binary Padding	NTDS	System Information Discovery 1 1	Distributed Component Object Model	Input Capture	Scheduled Transfer	Protocol Impersonation	SIM Card Swap	

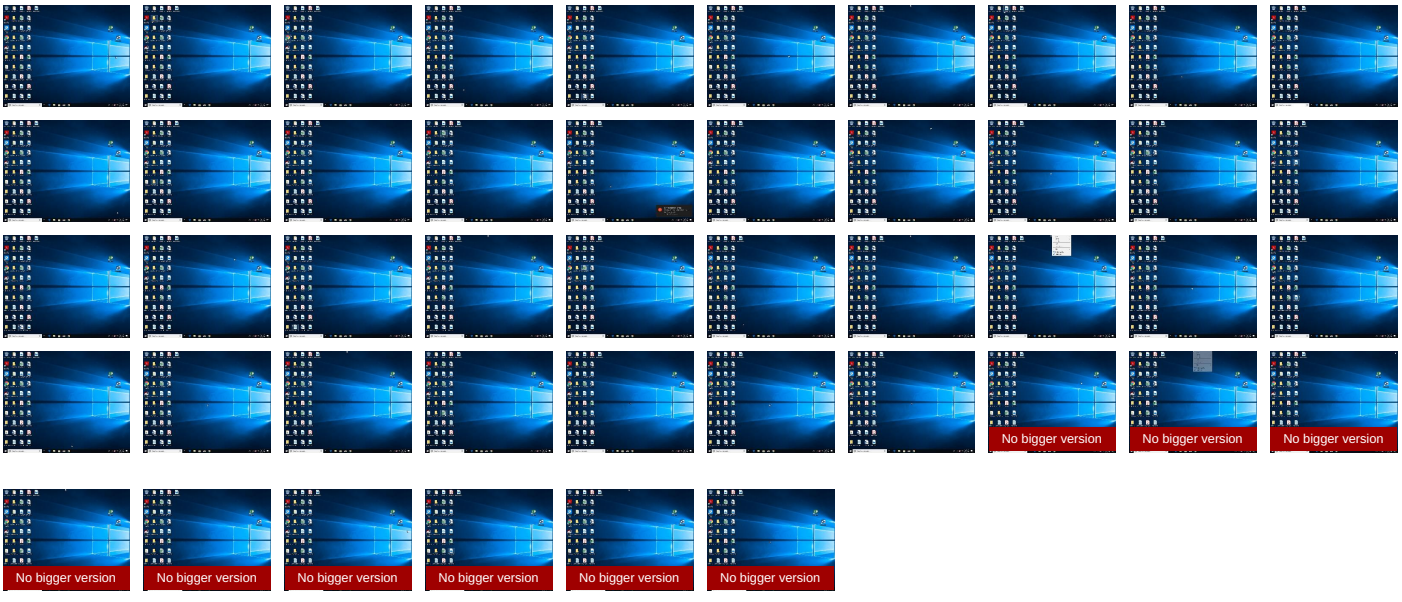
Behavior Graph



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
Remittance advice.exe	45%	Virustotal		Browse
Remittance advice.exe	37%	ReversingLabs	Win32.Trojan.Generic	

Dropped Files

No Antivirus matches

Unpacked PE Files

No Antivirus matches

Domains

No Antivirus matches

URLs

No Antivirus matches

Domains and IPs

Contacted Domains

No contacted domains info

Contacted IPs

No contacted IP infos

General Information

Joe Sandbox Version:	31.0.0 Red Diamond
Analysis ID:	343219
Start date:	22.01.2021
Start time:	15:37:59
Joe Sandbox Product:	CloudBasic
Overall analysis duration:	0h 11m 42s
Hypervisor based Inspection enabled:	false
Report type:	light
Sample file name:	Remittance advice.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:	38
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.winEXE@1/0@0/0
EGA Information:	Failed
HDC Information:	• Successful, ratio: 8.7% (good quality ratio 1.6%) • Quality average: 10.4% • Quality standard deviation: 22.1%
HCA Information:	Failed
Cookbook Comments:	• Adjust boot time • Enable AMSI • Found application associated with file extension: .exe • Override analysis time to 240s for sample files taking high CPU consumption
Warnings:	Show All • Exclude process from analysis (whitelisted): MpCmdRun.exe, audiodg.exe, BackgroundTransferHost.exe, RuntimeBroker.exe, WMIADAP.exe, MusNotifyIcon.exe, backgroundTaskHost.exe, SgrmBroker.exe, conhost.exe, svchost.exe, wuapihost.exe

Simulations

Behavior and APIs

No simulations

Joe Sandbox View / Context

IPs

No context

Domains

No context

ASN

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 (GUI) Intel 80386, for MS Windows
Entropy (8bit):	6.148990254252083
TrID:	• Win32 Executable (generic) a (10002005/4) 99.15% • Win32 Executable Microsoft Visual Basic 6 (82127/2) 0.81% • Generic Win/DOS Executable (2004/3) 0.02% • DOS Executable Generic (2002/1) 0.02% • Autodesk FLIC Image File (extensions: flc, fli, cel) (7/3) 0.00%
File name:	Remittance advice.exe
File size:	94208
MD5:	e6f8850e7f37364f9a9fac18601b9244
SHA1:	9158c69b6ca0ffca566d9689fb140b4973203fa0
SHA256:	275de12bf065d99796babc9844c4e3198645a82259c4999d13d8a14c18482358
SHA512:	c10139d4dc069466bfd0a769447025aaf177c8c8457ae82bdd0c73306b0d8345719f248302ce38def12a2fc54ca44694e5be12d0a1b6ce3fdf4cf1f61a814eaf
SSDEEP:	768:HwRs24AMpfDW9f9Q6XZu8MkrRwKgSovzRC4gUxP1+coOdMYrflBneMzxk0NHHtyG:L2qoDXZu0qKtzKgcoOCYr9B4tclP4nU
File Content Preview:	MZ.....@.....!..L.!This program cannot be run in DOS mode....$.....`.....Rich.....PE..L.....V.....@...0.....P.....P....@.....

File Icon

Icon Hash:	00649090b8b0cdf0

Static PE Info

General

Entrypoint:	0x401450
Entrypoint Section:	.text
Digitally signed:	false
Imagebase:	0x400000
Subsystem:	windows gui
Image File Characteristics:	LOCAL_SYMS_STRIPPED, 32BIT_MACHINE, EXECUTABLE_IMAGE, LINE_NUMS_STRIPPED, RELOCS_STRIPPED
DLL Characteristics:	
Time Stamp:	0x56B005AF [Tue Feb 2 01:26:07 2016 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:	9274ae9f8b107fede7241921f858c268

Entrypoint Preview

Instruction
push 00402470h
call 00007F5D84D93F55h
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
xor byte ptr [eax], al
add byte ptr [eax], al
inc eax
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add al, dl
cdq
lea ebp, dword ptr [ebp-64h]
fidivr word ptr [edi]
inc esi
mov cl, ch
lds eax, ecx
dec esp
test dword ptr [esi], 0000003Bh
add byte ptr [eax], al
add byte ptr [ecx], al
add byte ptr [eax], al
add byte ptr [ecx+00h], al
pop es
inc ecx
add byte ptr [eax+52h], dl
dec edi
push edx
inc ecx
push esp
dec ecx
dec edi
dec esi
push ebx
add byte ptr [eax], al

Instruction
loopne 00007F5D84D93F15h
push cs
add eax, dword ptr [eax]
add byte ptr [eax], al
add bh, bh
int3
xor dword ptr [eax], eax
push es
jne 00007F5D84D93FB9h
pushad
dec edx
lahf
mov byte ptr [BEB7419Eh], al

Data Directories

Name	Virtual Address	Virtual Size	Is in Section
IMAGE_DIRECTORY_ENTRY_EXPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_IMPORT	0x14504	0x28	.text
IMAGE_DIRECTORY_ENTRY_RESOURCE	0x17000	0xf22	.rsrc
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	0x230	0x20	
IMAGE_DIRECTORY_ENTRY_IAT	0x1000	0x124	.text
IMAGE_DIRECTORY_ENTRY_DELAY_IMPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_COM_DESCRIPTOR	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_RESERVED	0x0	0x0	

Sections

Name	Virtual Address	Virtual Size	Raw Size	Xored PE	ZLIB Complexity	File Type	Entropy	Characteristics
.text	0x1000	0x139ec	0x14000	False	0.370349121094	data	6.59143685253	IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_CNT_CODE, IMAGE_SCN_MEM_READ
.data	0x15000	0x14c0	0x1000	False	0.00634765625	data	0.0	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_WRITE, IMAGE_SCN_MEM_READ
.rsrc	0x17000	0xf22	0x1000	False	0.357421875	data	3.44984565593	IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ

Resources

Name	RVA	Size	Type	Language	Country
RT_ICON	0x17c3a	0x2e8	data		
RT_ICON	0x17392	0x8a8	data		
RT_GROUP_ICON	0x17370	0x22	data		
RT_VERSION	0x17120	0x250	data		

Imports

DLL	Import
MSVBVM60.DLL	_CIcos, _adj_fptan, __vbaVarMove, __vbaFreeVar, __vbaAryMove, __vbaLenBstr, __vbaStrVarMove, __vbaFreeVarList, _adj_fdiv_m64, __vbaFreeObjList, _adj_fprem1, __vbaHresultCheckObj, _adj_fdiv_m32, __vbaAryDestruct, __vbaObjSet, _adj_fdiv_m16i, _adj_fdivr_m16i, __vbaFpR8, __vbaVarTstLt, _CIsin, __vbaChkstk, EVENT_SINK_AddRef, __vbaGenerateBoundsError, __vbaStrCmp, __vbaAryConstruct2, _adj_fpatan, __vbaLateIdCallLd, EVENT_SINK_Release, _CIsqrt, EVENT_SINK_QueryInterface, __vbaExceptHandler, _adj_fprem, _adj_fdivr_m64, __vbaFPException, _CIlog, __vbaFileOpen, __vbaNew2, __vbaVar2Vec, _adj_fdiv_m32i, _adj_fdivr_m32i, __vbaStrCopy, __vbaFreeStrList, _adj_fdivr_m32, _adj_fdiv_r, __vbaVarTstNe, __vbaI4Var, __vbaVarAdd, __vbaVarDup, _CIatan, __vbaStrMove, _allmul, __vbaLateIdSt, _CItan, _CIexp, __vbaFreeStr, __vbaFreeObj

Version Infos

Description	Data
Translation	0x0400 0x04b0
InternalName	Enantiopathia6
FileVersion	1.00
CompanyName	Var map
Comments	Var map
ProductName	Var map
ProductVersion	1.00
OriginalFilename	Enantiopathia6.exe

Network Behavior

No network behavior found

Code Manipulations

Statistics

System Behavior

Analysis Process: Remittance advice.exe PID: 6336 Parent PID: 5684

General

Start time:	15:38:53
Start date:	22/01/2021
Path:	C:\Users\user\Desktop\Remittance advice.exe
Wow64 process (32bit):	true
Commandline:	'C:\Users\user\Desktop\Remittance advice.exe'
Imagebase:	0x400000
File size:	94208 bytes
MD5 hash:	E6F8850E7F37364F9A9FAC18601B9244
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	Visual Basic
Reputation:	low

File Activities

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol

File Path	Offset	Length	Completion	Count	Source Address	Symbol

Disassembly

Code Analysis