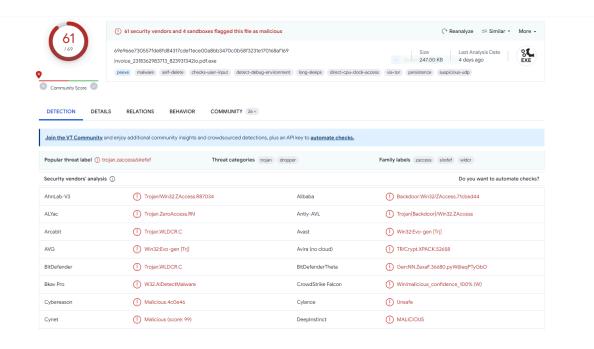
## Zeus Banking Trojan Report



VirusTotal Report

#### **Hashes**

Md5: ea039a854d20d7734c5add48f1a51c34

sha1: 9615dca4c0e46b8a39de5428af7db060399230b2

sha256: 69e966e730557fde8fd84317cdef1ece00a8bb3470c0b58f3231e170168af169

Filename: invoice\_2318362983713\_823931342io.pdf.exe

# Capa Output

md5   sha1   sha256   os   format   arch   path	9615 69e9 wind pe i386	dows 5			
ATT&CK Tactic	ATT8	&CK Technique			
DEFENSE EVASION	Virt	ualization/Sandbox Evasio	on::System Checks T1497.001		
MBC Objective		MBC Behavior			
ANTI-BEHAVIORAL ANALYSIS		Virtual Machine Detection [B0009]			
Capability			Namespace		
reference anti-VM strings targeting VMWare resolve function by parsing PE exports			anti-analysis/anti-vm/vm-detection load-code/pe		

# **Basic Static Analysis**

names		
file	c:\users\daniel\desktop\invoice_2318362983713_823931342io.pdf.exe	
debug	n/a	
<u>export</u>	corect.com	
version	n/a	
manifest	n/a	
.NET > module	n/a	
certificate > program-name	n/a	

#### Research showed this to be a Romanian News Source

value
section[0]
.text
8309B5D320B3D392E25AFD5
6.707
18.42 %
0x00000400
0x0000BA00
0x0000B600 (46592 bytes)
0x00001000
0x0000B571 (46449 bytes)

Doesn't appear to be compressed, raw address and virtual are similar sizes

#### **API CALLS:**

```
ascii,14,section:.itext,-,import,windowing,-,CallWindowProc
ascii,12,section:.itext,-,import,windowing,-,UpdateWindow
ascii,24,section:.itext,x,import,windowing,-,AllowSetForegroundWindow
ascii,10,section:.itext,-,import,windowing,-,GetCapture
ascii,15,section:.itext,-,import,windowing,-,lsWindowEnabled
ascii,19,section:.itext,-,import,windowing,T1010 | Window
Discovery, GetWindowTextLength
ascii,21,section:.itext,-,import,synchronization,-,DeleteCriticalSection
ascii,14,section:.itext,-,import,resource,-,SizeofResource
ascii,22,section:.itext,x,import,reconnaissance,-,GetEnvironmentVariable
ascii,16,section:.itext,-,import,reconnaissance,-,GetLogicalDrives
ascii,12,section:.itext,-,import,reconnaissance,T1124 | System Time
Discovery, GetTickCount
ascii,12,section:.itext,-,import,reconnaissance,-,GetDriveType
ascii,22,section:.itext,x,import,reconnaissance,-,GetEnvironmentVariable
ascii,11,section:.itext,-,import,memory,-,LocalUnlock
ascii,8,section:.itext,-,import,memory,-,HeapFree
ascii,14,section:.itext,-,import,memory,T1055 | Process Injection,VirtualQueryEx
ascii,10,section:.itext,-,import,memory,-,LocalAlloc
ascii,9,section:.itext,-,import,memory,-,LocalFree
```

```
ascii,9,section:.itext,x,import,input-output,-,VkKeyScan
ascii,16,section:.itext,x,import,input-output,T1056 | Input Capture,GetAsyncKeyState
ascii,20,section:.itext,-,import,input-output,-,CopvAcceleratorTable
ascii,15,section:.itext,-,import,input-output,-,SwapMouseButton
ascii,19,section:.itext,x,import,file,-,PathRenameExtension
ascii,15,section:.itext,-,import,file,-,PathQuoteSpaces
ascii,11,section:.itext,-,import,file,-,PathCombine
ascii,9,section:.itext,x,import,file,-,WriteFile
ascii,21,section:.itext,-,import,file,-,GetCompressedFileSize
ascii,17,section:.itext,-,import,file,-,CreateFileMapping
ascii,12,section:.itext,x,import,file,T1083 | File and Directory Discovery,FindNextFile
ascii,16,section:.itext,x,import,execution,-,GetCurrentThread
ascii,20,section:.itext,-,import,execution,-,GetPrivateProfileInt
ascii,7,section:.itext,x,-,execution,T1106 | Execution through API,WinExec
ascii,11,section:.itext,-,import,dynamic-library,-,FreeLibrary
ascii,15,section:.itext,-,import,dynamic-library,-,GetModuleHandle
```

### **Suspected Function Calls**

```
ascii,57,section:.pdata,-,-,-,AsksmaceaglyBubuPulsKaifTeasMistPeelGhisPrimChaoLyreroeno
ascii,15,section:.pdata,-,-,-,KERNEL32.MulDiv
ascii,35,section:.pdata,-,-,-,BagsSpicDollBikeAzonPoopHamsPyasmap
ascii,28,section:.pdata,-,-,-,KERNEL32.SetCurrentDirectory
ascii,11,section:.pdata,-,-,-,BardHolyawe
ascii,20,section:.pdata,-,-,-,SHLWAPI.SHFreeShared
ascii,47,section:.pdata,-,-,-,BathEftsDawnvilepughThroCymakohloverMitefuzerat
ascii,28,section:.pdata,-,-,-,SHLWAPI.PathMakeSystemFolder
ascii,41,section:.pdata,-,-,-,BemaCadsPodsWavyCedeRadsbrioOustPerefenom
ascii,21,section:.pdata,-,-,-,USER32.SetDlgItemText
ascii,33,section:.pdata,-,-,-,BullbonyaweeWaitsnugTierDriblibye
ascii,21,section:.pdata,-,-,-,KERNEL32.VirtualQuery
ascii,14,section:.pdata,-,-,-,CameValeWauler
ascii,15,section:.pdata,-,-,-,USER32.IsIconic
ascii,35,section:.pdata,-,-,-,-,CedeSalsshulLimyThroliraValeDonabox
ascii,18,section:.pdata,-,-,-,USER32.CreateCaret
ascii,24,section:.pdata,-,-,-,CellrotoCrudUntohighCols
ascii,19,section:.pdata,-,-,-,KERNEL32.CreateFile
ascii,25,section:.pdata,-,-,-,DenyLubeDunssawsOresvarut
ascii,26,section:.pdata,-,-,-,SHLWAPI.PathRemoveFileSpec
ascii,40,section:.pdata,-,-,-,-,DragRoutflusCrowPeatmownNewsyaksSerfmare
ascii,18,section:.pdata,-,-,-,USER32.DestroyIcon
ascii,11,section:.pdata,-,-,-,Dumpcotsavo
```

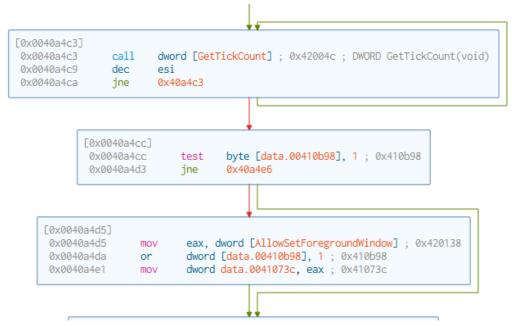
```
ascii,20,section:.pdata,-,-,-,USER32.SetDlgItemInt
ascii,62,section:.pdata,-,-,-,-,DungBadebankBangGelthoboCocaBozotsksWheyVaryShoghoseNi
psCadisi
ascii,15,section:.pdata,-,-,-,USER32.EndPaint
ascii,58,section:.pdata,-,-,-,ExitRollWoodGumsgamaSloerevsWussletssinkYearZitiryesHypout
ascii,19,section:.pdata,-,-,-,USER32.GetClassInfo
ascii,15,section:.pdata,-,-,-,FociTalcileador
ascii,29,section:.pdata,-,-,-,KERNEL32.ConvertDefaultLocale
ascii,10,section:.pdata,-,-,-,GeneAilshe
ascii,22,section:.pdata,-,-,-,KERNEL32.FindFirstFile
ascii,27,section:.pdata,-,-,-,GhisGoodHowlCoonCigscateged
ascii,28,section:.pdata,-,-,-,KERNEL32.GetWindowsDirectory
ascii,47,section:.pdata,-,-,-,-,GimpWadsdashHoraYardSeatDeanScanscowRantKeasfib
ascii,20,section:.pdata,-,-,-,KERNEL32.LCMapString
ascii,9,section:.pdata,-,-,-,Haesourfe
ascii,21,section:.pdata,-,-,-,USER32.GetKeyNameText
ascii,35,section:.pdata,-,-,-,-,HoggSoonLasstwaeNapeCeilBawlscopdub
ascii,29,section:.pdata,-,-,-,KERNEL32.SystemTimeToFileTime
ascii,13,section:.pdata,-,-,-,lcontellnoway
ascii,24,section:.pdata,-,-,-,SHLWAPI.PathRemoveBlanks
ascii,32,section:.pdata,-,-,-,ImidslatJokyCombdrubChefBilkSale
ascii,21,section:.pdata,-,-,-,USER32.GetShellWindow
ascii,56,section:.pdata,-,-,-,-,lzararfsFlamWostAirsconsMouefemelallPoretweeSacsOxidMinx
ascii,24,section:.pdata,-,-,-,SHLWAPI.PathAddExtension
ascii,39,section:.pdata,-,-,-,JabsNaveFateLariManyLeeksecshiesBawlwoo
ascii,31,section:.pdata,-,-,-,KERNEL32.CreateloCompletionPort
ascii,24,section:.pdata,-,-,-,KatsDoreOmerBetsKoraKeef
ascii,25,section:.pdata,-,-,-,KERNEL32.GetShortPathName
ascii,12,section:.pdata,-,-,-,KineChamLows
ascii,28,section:.pdata,-,-,-,KERNEL32.SetCurrentDirectory
ascii,8,section:.pdata,-,-,-,LeerMiff
ascii,29,section:.pdata,-,-,-,KERNEL32.LeaveCriticalSection
ascii,43,section:.pdata,-,-,-,MaarSectFiscNextMattbamsErasnimstoeaBadshon
ascii,19,section:.pdata,-,-,-,USER32.GetClassInfo
ascii,31,section:.pdata,-,-,-,MarkMokeOsesShwaSkegpornlimemim
ascii,23,section:.pdata,-,-,-,KERNEL32.GetStartupInfo
ascii,50,section:.pdata,-,-,-,-,MeanOrrabirogirtWorkGawpSassPirnVinoLotaPledEidefe
ascii,20,section:.pdata,-,-,-,SHLWAPI.SHLockShared
ascii,22,section:.pdata,-,-,-,NextLoveOralwanySurfhm
ascii,28,section:.pdata,-,-,-,KERNEL32.VerSetConditionMask
ascii,47,section:.pdata,-,-,-,NisiBoyolineJiaoveryObiaowedblamHaetMaulweensky
ascii,24,section:.pdata,-,-,-,SHLWAPI.PathCanonicalize
ascii,32,section:.pdata,-,-,-,OastcabskamiKartDumbInksSomsMass
ascii,28,section:.pdata,-,-,-,KERNEL32.SetCurrentDirectory
```

```
ascii,19,section:.pdata,-,-,-,PeckQuinFillrillsaw
ascii,26,section:.pdata,-,-,-,KERNEL32.GetThreadPriority
ascii,20,section:.pdata,-,-,-,RamilimaputtHastJobs
ascii,21,section:.pdata,-,-,-,KERNEL32.FindNextFile
ascii,48,section:.pdata,-,-,-,RemsSlaySoreAnoaaxalbuffusesemeuMapsyogaHangLoud
ascii,22,section:.pdata,-,-,-,SHLWAPI.PathMakePretty
ascii,23,section:.pdata,-,-,-,RidsFineZingMickMomsdue
ascii,21,section:.pdata,-,-,-,USER32.GetMonitorInfo
ascii,25,section:.pdata,-,-,-,SeminerdsoloseenYaginobox
ascii,25,section:.pdata,-,-,-,SHLWAPI.PathIsLFNFileSpec
ascii,34,section:.pdata,-,-,-,SiretomsbritGrewlckyNapaLumsBoaren
ascii,24,section:.pdata,-,-,-,KERNEL32.OpenFileMapping
ascii,60,section:.pdata,-,-,-,-,SlabKitsSlayseptPfftjiffSabsdeskOafsNowtMemsKirnKepiMiffDunt
ascii,22,section:.pdata,-,-,-,KERNEL32.OpenSemaphore
ascii,28,section:.pdata,-,-,-,SoldKartAqueiliaRushWauldhal
ascii,17,section:.pdata,-,-,-,SHLWAPI.PathIsUNC
ascii,50,section:.pdata,-,-,-,SuitplieGunsMaidBaitFeusJiaotodycolyAlbsLuneToyspe
ascii,14,section:.pdata,-,-,-,USER32.GetProp
ascii,32,section:.pdata,-,-,-,SungActaKopsMaarposyparefuzedeck
ascii,23,section:.pdata,-,-,-,SHLWAPI.PathIsDirectory
ascii,43,section:.pdata,-,-,-,ToeaTailecusGeesSoliCadeSpueEndsPlaykaphall
ascii,22,section:.pdata,-,-,-,SHLWAPI.PathRemoveArgs
ascii,22,section:.pdata,-,-,-,-,Vavsrubepodsjadebrooli
ascii,19,section:.pdata,-,-,-,USER32.GetUpdateRgn
ascii,15,section:.pdata,-,-,-,VeerCrawFlateel
ascii,29,section:.pdata,-,-,-,SHLWAPI.PathParselconLocation
ascii,27,section:.pdata,-,-,-,-,WainMeekPinyWonkpooflaudsir
ascii,28,section:.pdata,-,-,-,KERNEL32.GetWindowsDirectory
ascii,32,section:.pdata,-,-,-,WhopTestrangrapsdebsTzarNipaYins
ascii,19,section:.pdata,-,-,-,KERNEL32.DeleteFile
ascii,8,section:.pdata,-,-,-,YeukMags
ascii,21,section:.pdata,-,-,-,KERNEL32.GlobalHandle
ascii,57,section:.pdata,-,-,-,ZetaBeduPirnhipsjailTingSrisTeleAposhuskNameHoerflagemuwo
ascii,15,section:.pdata,-,-,-,USER32.LoadIcon
```

#### Libraries

- SHLAWPI.dll
- KERNEL32.dll
- USER32.dll

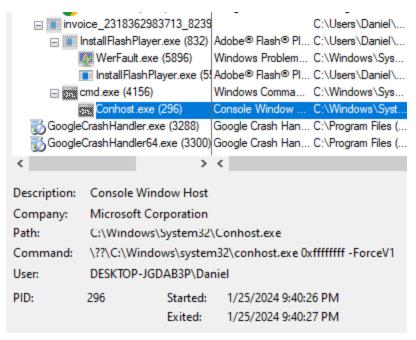
### **Advanced Static Code Analysis:**



### **Dynamic Code Analysis**



The .exe that the malware used to run



Hidden terminal session behind screen executing