LockBit ransomware

github.com/albertzsigovits/malware-notes/blob/master/Ransomware/Lockbit.md albertzsigovits

albertzsigovits/**malware**-**notes**



Notes and IoCs of fresh malware

유 1 Contributor 0 Issues

☆ 27
Stars

₹ 5 Forks



Ransom gates

- lockbitkodidilol.onion
- lockbitks2tvnmwk.onion

Ransom note

Restore-My-Files.txt

Ransom extension

.lockbit

E-mail

ondrugs@firemail.cc

Persistence

Mutex

Global{BEF590BE-11A6-442A-A85B-656C1081E04C}

Executed commands

- bcdedit /set {default} recoveryenabled No
- bcdedit /set {default} bootstatuspolicy ignoreallfailures
- vssadmin delete shadows /all /quiet
- wbadmin DELETE SYSTEMSTATEBACKUP -deleteOldest
- wbadmin DELETE SYSTEMSTATEBACKUP
- wbadmin delete catalog -quiet
- wevtutil cl system
- wevtutil cl security
- · wevtutil cl application
- wmic SHADOWCOPY /nointeractive
- · wmic shadowcopy delete
- ping 1.1.1.1 -n 22 > Nul & "%s"
- ping 127.0.0.7 -n 3 > Nul & fsutil file setZeroData offset=0 length=524288"%s" & Del /f /q "%s"

Registry keys

- SOFTWARE\LockBit
- SOFTWARE\LockBit\full
- SOFTWARE\LockBit\Public

Folders skip-list

\$windows.~bt intel msocache \$recycle.bin \$windows.~ws tor browser boot system volume information perflogs google application data windows windows.old appdata Windows nt Msbuild Microsoft All users Mozilla

Files skip-list

ntldr
ntuser.dat.log
bootsect.bak
autorun.inf

Service stop-list

wrapper

DefWatch

ccEvtMgr

ccSetMgr

SavRoam

Sqlservr

sqlagent

sqladhlp

Culserver

RTVscan

sqlbrowser

SQLADHLP

QBIDPService

Intuit.QuickBooks.FCS

QBCFMonitorService

sqlwriter

msmdsrv

tomcat6

zhudongfangyu

vmware-usbarbitator64

vmware-converter

dbsrv12

dbeng8

MSSQL\$MICROSOFT##WID

MSSQL\$VEEAMSQL2012

SQLAgent\$VEEAMSQL2012

SQLBrowser

SQLWriter

FishbowlMySQL

MSSQL\$MICROSOFT##WID

MySQL57

MSSQL\$KAV_CS_ADMIN_KIT

MSSQLServerADHelper100

SQLAgent\$KAV_CS_ADMIN_KIT

msftesql-Exchange

MSSQL\$MICROSOFT##SSEE

MSSQL\$SBSMONITORING

MSSQL\$SHAREPOINT

MSSQLFDLauncher\$SBSMONITORING

MSSQLFDLauncher\$SHAREPOINT

SQLAgent\$SBSMONITORING

SQLAgent\$SHAREPOINT

QBFCService

QBVSS

YooBackup

YooIT

svc\$

MSSQL

MSSQL\$

memtas

mepocs

sophos

veeam

backup

bedbg

PDVFSService

BackupExecVSSProvider

BackupExecAgentAccelerator

BackupExecAgentBrowser

BackupExecDiveciMediaService

BackupExecJobEngine

BackupExecManagementService

BackupExecRPCService

MVArmor

MVarmor64

stc_raw_agent

VSNAPVSS

VeeamTransportSvc

VeeamDeploymentService

VeeamNFSSvc

AcronisAgent

ARSM

AcrSch2Svc

CASAD2DWebSvc

CAARCUpdateSvc

WSBExchange

MSExchange

MSExchange\$

LanmanWorkstation

WebClient

Process kill-list

wxServer

wxServerView

sqlmangr

RAgui

supervise

Culture

Defwatch

winword

QBW32

QBDBMgr

qbupdate

axlbridge

httpd

fdlauncher

MsDtSrvr

java

360se

360doctor

wdswfsafe

fdhost

GDscan

ZhuDongFangYu

QBDBMgrN

mysqld

AutodeskDesktopApp

acwebbrowser

Creative Cloud

Adobe Desktop Service

CoreSync

Adobe CEF Helper

node

AdobeIPCBroker

sync-taskbar

sync-worker

InputPersonalization

AdobeCollabSync

BrCtrlCntr

BrCcUxSys

SimplyConnectionManager

Simply.SystemTrayIcon

fbguard

fbserver

ONENOTEM

wsa_service

koaly-exp-engine-service

TeamViewer_Service

TeamViewer

tv_w32

tv_x64

TitanV

Ssms

notepad

RdrCEF

oracle

ocssd

dbsnmp

synctime

agntsvc

isqlplussvc

xfssvccon

mydesktopservice

ocautoupds

encsvc

firefox

tbirdconfig

mydesktopqos

ocomm

dbeng50

sqbcoreservice

excel

infopath

msaccess

mspub

onenote

outlook

powerpnt

steam

thebat

thunderbird

visio

wordpad

bedbh

vxmon

benetns

bengien

pvlsvr

beserver

raw_agent_svc

vsnapvss

CagService

DellSystemDetect

EnterpriseClient

VeeamDeploymentSvc

Extension list

- .msstyles
- .sqlitedb
- .sqlite3
- .diagcab
- .diagcfg
- .diagpkg
- .sqlite
- .db-shm
- .db-wal
- .dacpac
- .theme
- .icns
- .lock
- .tmd
- .ckp
- .dbc
- .sql
- .mwb
- .rar
- .dbv
- .frm
- .mdf
- .dbt
- .qry
- .ndf
- .sdb
- .myd
- .mrg
- .db3
- .dbs .dbf
- .sdf
- .zip
- .rdp
- .bin
- .hlp
- .shs
- .drv
- .wpx
- .bat
- .rom
- .msc .spl
- .ps1
- .msu
- .ics
- .key
- .exe
- .dll
- .lnk .ico
- .hlp
- .sys
- .drv
- .cur

```
.idx
.ini
.reg
.mp3
.386
.cmd
.ani
.adv
.msi
.msp
.com
.nls
.ocx
.mpa
.cpl
.mod
.hta
.prf
.rtp
```

Ransom note:

```
All your important files are encrypted!
Any attempts to restore your files with the thrid-party software will be
fatal for your files!
RESTORE YOU DATA POSIBLE ONLY BUYING private key from us.
There is only one way to get your files back:
| 1. Download Tor browser - https://www.torproject.org/ and install it.
| 2. Open link in TOR browser - http://lockbitks2tvnmwk.onion/?
This link only works in Tor Browser!
| 3. Follow the instructions on this page
 ### Attention! ###
 # Do not rename encrypted files.
 # Do not try to decrypt using third party software, it may cause
permanent data loss.
 # Decryption of your files with the help of third parties may cause
increased price(they add their fee to our)
 # Tor Browser may be blocked in your country or corporate network. Use
https://bridges.torproject.org
# Tor Browser user manual https://tb-manual.torproject.org/about
!!! We also download huge amount of your private data, including finance
information, clients personal info, network diagrams, passwords and so
on. Don't forget about GDPR.
```

SHA256

- 0a937d4fe8aa6cb947b95841c490d73e452a3cafcd92645afc353006786aba76
- 0e66029132a885143b87b1e49e32663a52737bbff4ab96186e9e5e829aa2915f
- 0f178bc093b6b9d25924a85d9a7dde64592215599733e83e3bbc6df219564335

- 0f5d71496ab540c3395cfc024778a7ac5c6b5418f165cc753ea2b2befbd42d51
- 13849c0c923bfed5ab37224d59e2d12e3e72f97dc7f539136ae09484cbe8e5e0
- 15a7d528587ffc860f038bb5be5e90b79060fbba5948766d9f8aa46381ccde8a
- 1b109db549dd0bf64cadafec575b5895690760c7180a4edbf0c5296766162f18
- 1e3bf358c76f4030ffc4437d5fcd80c54bd91b361abb43a4fa6340e62d986770
- 256e2bf5f3c819e0add95147b606dc314bbcbac32a801a59584f43a4575e25dc
- 26b6a9fecfc9d4b4b2c2ff02885b257721687e6b820f72cf2e66c1cae2675739
- 2b8117925b4b5b39192aaaea130426bda39ebb5f363102641003f2c2cb33b785
- 3f29a368c48b0a851db473a70498e168d59c75b7106002ac533711ca5cfabf89
- 410c884d883ebe2172507b5eadd10bc8a2ae2564ba0d33b1e84e5f3c22bd3677
- 4acc0b5ed29adf00916dea7652bcab8012d83d924438a410bee32afbcdb995cc
- 5b9bae348788cd2a1ce0ba798f9ae9264c662097011adbd44ecfab63a8c4ae28
- 6292c2294ad1e84cd0925c31ee6deb7afd300f935004a9e8a7a43bf80034abae
- 69d9dd7fdd88f33e2343fb391ba063a65fe5ffbe649da1c5083ec4a67c525997
- 83ab7a2bcac146db472f3b930c01af5b6d3d978ead7b14a9d0ac16e1a76e9f9d
- 9bc98d15f243257c1b5bca59464abe68c680cd5482ba9f5082201dde41a016cf
- a03326ac8efa930e10091a374d40ddab9f7c2f12246d6ef7983bad93256f1f3a
- a0085da4a920e92d8f59fefa6f25551655ca911382b5e34df76a9333ac8b7214
- a08fbf01d02097094b725101309b2bf7fefc2e27724654b840b87e091aa5c9b9
- a1360645cf3113715cc023d2e4cf9f6f3a6278abcf4499f0ba7cd76c82839eb0
- c8205792fbc0a5efc6b8f0f2257514990bfaa987768c4839d413dd10721e8871
- ce8559871b410e23057393eb2d9fb76ec902da2ff1f8006ad312c81852a41f6f
- e3f236e4aeb73f8f8f0caebe46f53abbb2f71fa4b266a34ab50e01933709e877
- ec88f821d22e5553afb94b4834f91ecdedeb27d9ebfd882a7d8f33b5f12ac38d
- ffbb6c4d8d704a530bdd557890f367ad904c09c03f53fda5615a7208a0ea3e4d

Decryptors

- 09e956d140d6879cf7eacbb65dcbfbe1dea1961a31c5d0f834343ef2c886ccc1
- 9bc98d15f243257c1b5bca59464abe68c680cd5482ba9f5082201dde41a016cf

VT perks:

- vhash:"015036656d5223z12z3e05031f1z37z406001a5zb7z"
- imphash:"be232aa2621354bf5dd7b405cc99198c"

YARA rules

```
rule lockbit_clsids
        strings:
                $id1 = "{3E5FC7F9-9A51-4367-9063-A120244FBEC7}" ascii
wide
                id2 = {D2E7041B-2927-42fb-8E9F-7CE93B6DC937} ascii
wide
                $id3 = "{02B49784-1CA2-436C-BC08-72FA3956507D}" ascii
wide
                $id4 = "{BEF590BE-11A6-442A-A85B-656C1081E04C}" ascii
wide
        condition:
                3 of them
}
rule lockbit_mutex
        strings:
                $mutex = "X01XADp001" ascii wide
        condition:
                all of them
}
rule lockbit_uac
        strings:
                $uac0 = "Elevation:Administrator!new:" ascii wide
                $uac1 = "DisplayCalibrator" ascii wide
                $uac2 = "Software\Microsoft\Windows
NT\CurrentVersion\ICM\Calibration" ascii wide
        condition:
                all of them
}
```

```
rule lockbit_cmd
        strings:
                $cmd0 = "vssadmin Delete Shadows /All /Quiet" ascii wide
                $cmd1 = "bcdedit /set {default} recoveryenabled No" ascii
wide
                $cmd2 = "bcdedit /set {default} bootstatuspolicy
ignoreallfailures" ascii wide
                $cmd3 = "wbadmin DELETE SYSTEMSTATEBACKUP" ascii wide
                $cmd4 = "wbadmin DELETE SYSTEMSTATEBACKUP -deleteOldest"
ascii wide
                $cmd5 = "wmic SHADOWCOPY /nointeractive" ascii wide
                $cmd6 = "wevtutil cl security" ascii wide
                $cmd7 = "wevtutil cl system" ascii wide
                $cmd8 = "wevtutil cl application" ascii wide
        condition:
                6 of them
}
rule lockbit_priv_masq
{
        strings:
                $masq = { ff 15 [1-4] 85 ?? 0f [1-5] 68 04 01 00 00 8d
[1-5] 50 ff 15 [1-4] 8b [1-5] 8d [1-5] 0f ?? ?? 8d ?? ?? 66 ?? ?? 8d ??
?? 66 ?? ?? 75 ?? 0f ?? ?? [1-4] be 3f [1-3] 66 ?? ?? c7 45 ?? [1-4] 66
?? ?? ?? }
                $priv = { ff 15 [1-4] 85 ?? 74 ?? 8d ?? ?? 50 8d ?? ?? 50
6a 00 ff 15 [1-4] 85 ?? 74 ?? 39 ?? ?? 75 ?? 8d ?? ?? 50 6a 04 8d ?? ??
50 6a 13 ff 75 ?? ff 15 [1-4] 85 ?? 7? ?? ?? ?? [1-4] 3d [1-4] 74 ?? 3d
[1-4] 74 ?? 85 ?? 7f ?? 8b ?? eb ?? 0f ?? ?? 81 [1-5] eb ?? 8d ?? ?? 50
8d ?? ?? 50 ff 75 ?? ff 15 }
        condition:
                $masq or $priv
}
```