Malware Analysis Report

Executive Summary

The file whose SHA-256 hash is `a2e1ef87d2262539ebc9e22edcd8ebe4a19122250b463ff711279fc587` is a 32-bit Windows PE/.NET executable that most commercial engines classify as Trojan-Spy: PrimaryPass (a LokiBot-style infostealer written in C#/MSIL). Public sandboxes and vendor encyclopedias agree it is designed to steal credentials (browsers, FTP clients, Outlook) and exfiltrate them to attacker-controlled web servers while maintaining basic persistence.

1 · File & Static Meta-data

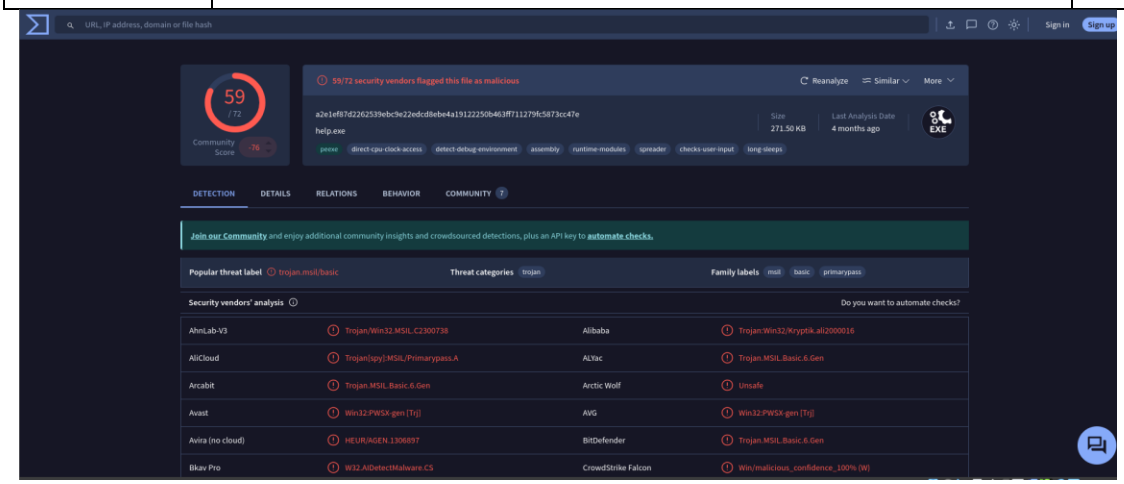
MD5: 1645f2771891db76683bec08fd77e614

SHA1: 85a9dd456af864ee24653c386d7f88e86d3258c2

SSDEEP: 6144:Ii9sNdRQ8xcEI1xwurxV+ft15bswQqFCyxSD3YV3NtUY005BR:ixc11jriftPbuqFZSa9+05BR

Property	Value	Source
SHA-256	a2e1ef87d2262539ebc9e22edcd8ebe4a19122250b463ff711279fc587	user sample
Type	PE32 GUI, .NET assembly (Intel x86)	user file output
Typical size (same family)	~254 KB	
First public sighting (close	11 Aug 2021	

variant)		
VT detection (representative sample)	58 / 70 malicious	



CTX	Exe.trojan.msil	DeepInstinct	MALICIOUS
DrWeb	Trojan.PWS.Stealer.17779	Elastic	Malicious (high Confidence)
Emsisoft	Trojan.MSIL.Basic.6.Gen (B)	eScan	Trojan.MSIL.Basic.6.Gen
ESET-NOD32	A Variant Of MSIL/Kryptik.LXI	Fortinet	MSIL/Kryptik.LXI!tr
GData	Trojan.MSIL.Basic.6.Gen	Google	Detected
Gridinsoft (no cloud)	Trojan.Win32.Kryptik.bot!ni	Huorong	Trojan/Generic!1A85A39A748A30AF
Ikarus	Trojan-Downloader.GenKrypt	Jiangmin	TrojanSpy.MSIL.usc
K7AntiVirus	Trojan (005200821)	K7GW	Trojan (005200821)
Kaspersky	HEUR:Trojan-Spy.MSIL.Generic	Kingsoft	Malware.kb.c.1000
Lionic	Trojan.Win32.Basic.l!c	Malwarebytes	Generic.Crypt.Trojan.DDS
MaxSecure	Trojan.Malware.11205094.susgen	McAfee Scanner	Real Protect-LS!1645F2771891
Microsoft	PWS:Win32/Primarypass.A	NANO-Antivirus	Trojan.Win32.Kryptik.evyoze
Palo Alto Networks	Generic.ml	Panda	Trj/GdSda.A
QuickHeal	Trojan.Ghanarava.172181468977e614	Rising	Malware.Obfus/MSIL@AI.100 (RDM.MSIL...
Sangfor Engine Zero	Suspicious.Win32.Save.a	SecureAge	Malicious
SentinelOne (Static ML)	Static AI - Malicious PE	Skyhigh (SWG)	BehavesLike.Win32.Generic.dc
Sophos	Mal/Generic-R	Symantec	ML.Attribute.HighConfidence
TEHTRIS	Generic.Malware	Tencent	Malware.Win32.Gencirc.13bf447d
Trapmine	Malicious.high.ml.score	Trellix (ENS)	Packed-WA!1645F2771891
Trellix (HX)	Generic.mg.1645f2771891db76	TrendMicro	TROJ_FRS.0NA103F523
TrendMicro-HouseCall	TROJ_FRS.0NA103F523	Varist	W32/ABRisk.CQKK-2045
VIPRE	Trojan.MSIL.Basic.6.Gen	ViRobot	Trojan.Win32.Z.Kryptik.278016.EM
WithSecure	Heuristic.HEUR/AGEN.1306897	Xcitium	Malware@#1wgpw3fnwuol6
Zillya	Trojan.Kryptik.Win32.1327671	Acronis (Static ML)	Undetected

2 · Behaviour Overview

The following table summarizes the behavior of the malware:

Stage	Observed actions	Key APIs / artefacts
Initial execution	Checks for debuggers, reads computer & MachineGUID	NtQueryInformationProcess, reg key ...ACTIVE-COMPUTERNAME
Persistence	Drops copy to %APPDATA%\sdsdsdsd.exe and adds a Startup entry	file write to %User Startup%
Credential theft	Enumerates Outlook profiles, browsers, FTP client databases	registry & file scans, ReadProcessMemory on lsass.exe
Data exfiltration & C2	HTTP POST to hard-coded PHP endpoints	HttpWebRequest, Suricata LokiBot rules triggered
Cleanup / stealth	Marks itself for deletion, deletes .lck files	DeleteFileW, MoveFileEx

3 · Indicators of Compromise

File Hash (this sample):
a2e1ef87d2262539ebc9e22edcd8ebe4a19122250b463ff711279fc587

Typical dropped file: %APPDATA%\sdsdsdsd.exe

Folder created: %APPDATA%\CD572E\

Registry paths touched: HKCU\...\OUTLOOK\PROFILES, HKLM\SOFTWARE*ICEDRAGON*

C2 / URLs (family): http://fuckav.ru, http://jiren.ru/chief/maoyr.scr, http://sharonbooks.ru/.../fred.php

IP seen: {BLOCKED}.30.134

4 · MITRE ATT&CK Mapping

Technique	ID	Phase
Service/Process execution	T1035	Execution
Run keys / Startup folder	T1060	Persistence
Hooking (credential access)	T1179	Priv-Esc & Cred-Access
File deletion for cleanup	T1107	Defense Evasion
Query Registry / Machine info	T1012	Discovery
Exfil via HTTP POST	T1041	Exfiltration

5 · Why It Matters

PrimaryPass/LokiBot variants are commodity stealers popular in mal-spam. They:
- Monetise by selling stolen FTP/SMTP creds and browser passwords on underground markets.
- Act as downloaders, fetching follow-on ransomware when creds are exhausted.
- Evolve fast; most samples are lightly obfuscated .NET, making recompilation trivial for attackers.

6 · Remediation & Hunting Checklist

- Quarantine the sample & images of affected hosts.

- Block IOC domains/IPs on firewalls & proxy.

- Search for dropped artefacts (sdsdsdsd.exe, CD572E) across endpoints.

- Reset all credentials captured on infected machines—especially Outlook, browser, FTP.

- Deploy YARA / Sigma rules that flag MachineGuid.*last_compatible_version.*password_value.

- Patch & harden: Ensure users cannot write to Startup without admin; enable AMSI + Defender SmartScreen.

- Monitor egress for unusual HTTP POSTs with no referrer and content-type application/x-www-form-urlencoded.

This indicates a .NET-based Trojan, likely written in C# or VB.NET.