

Hiveforce Labs

THREAT ADVISORY

X ATTACK REPORT

PupkinStealer: The Silent Thief Hiding in Plain Sight

Date of Publication

Admiralty Code

TA Number

May 13, 2025

A1

TA2025146

Summary

First Seen: April 2025 **Malware:** PupkinStealer

Affected Products: Chromium-based browsers

Affected Platform: Windows Targeted Countries: Worldwide

Attack: PupkinStealer is a lightweight but dangerous malware that quietly steals browser passwords, Telegram and Discord session data, desktop files, and screenshots. Once executed, it zips up the stolen info and exfiltrates it via a Telegram bot, making it a

stealthy threat aimed at quick data theft and account hijacking.

X Attack Regions



Powered by Bing ian Bureau of Statistics, GeoNames, Microsoft, Navinfo, Open Places, OpenStreetMap, Overture Maps Fundation, TomTom, Zenrin

Attack Details

- PupkinStealer, first discovered in April 2025, is written in C# using the .NET framework and is designed to quietly steal sensitive information from Windows computers. While not particularly complex, it is effective at what it does, stealing browser passwords, desktop files, data from messaging apps like Telegram and Discord, and even capturing screenshots of the victim's screen. Once the information is collected, it is compressed into a ZIP file and exfiltrated via a Telegram bot named botKanal.
- This malware is believed to be created by a developer who goes by the name Ardent. It's part of a growing trend of lightweight and customizable "info stealers" that are widely shared or sold in underground communities. These tools are attractive to low-skilled attackers because they're easy to use and don't require much technical know-how to deploy.
- Once PupkinStealer infects a system, it launches several tasks. One of its first actions is to steal saved passwords from popular browsers like Chrome, Edge, Opera, and Vivaldi. It decrypts these credentials using Windows' own built-in tools and stores the data in text files. It also searches the user's desktop for specific types of files, like documents or images and copies them into a folder for exfiltration.
- Another task involves stealing Telegram session data. This allows attackers to access the user's Telegram account without needing a password. If the Telegram process is running, the malware quietly shuts it down so it can copy session files without any issues. Similarly, it targets Discord by scanning for login tokens saved on the system. With these tokens, attackers can hijack Discord accounts and impersonate the victim.
- To gather even more information, PupkinStealer takes a screenshot of the user's desktop and saves it. After collecting everything, passwords, desktop files, Telegram sessions, Discord tokens, and the screenshot, it bundles it all into a compressed ZIP file. The ZIP also contains identifying details like the victim's username, IP address, and Windows Security Identifier (SID), helping the attacker track their victims. Finally, the malware sends this data to its operator through the Telegram Bot API.
- PupkinStealer might seem simple on the surface, but it poses a serious threat. Its quiet behavior, combined with the ability to steal valuable personal data, makes it effective and dangerous. To protect against such threats, users should be careful when downloading unknown files or clicking suspicious links.

Recommendations

- Strengthen Email Security: To strengthen email security, use advanced filtering to block spear-phishing, sandbox attachments for safe analysis, and enable DMARC, DKIM, and SPF to prevent spoofed emails. These measures help protect against malicious threats.
- Enhance Endpoint Protection: Deploy next-generation antivirus (NGAV) and endpoint detection & response (EDR) solutions to identify and block malware. Leverage behavioral analysis and machine learning-based detection to spot suspicious activity.
- Protect Your Devices with Security Software and Updates: Make sure you're using a trusted antivirus or endpoint protection tool, and keep it updated. These tools help catch threats like PupkinStealer before they can do harm. Also, don't ignore software updates. Keeping your operating system, web browsers, and everyday apps up to date ensures known security holes are patched, making it much harder for attackers to get in.
- Tighten App Permissions and Secure Messaging Accounts: Review what access your apps really need, especially lesser-used or third-party ones. Limiting their access to your files and network helps reduce the chances of malware slipping through. Also, protect your Telegram and Discord accounts by enabling two-factor authentication (2FA), keeping an eye out for unusual login activity, and never reusing the same password across different services.

Potential MITRE ATT&CK TTPs

TA0002	TA0003	TA0005	TA0006
Execution	Persistence	Defense Evasion	Credential Access
TA0007	TA0009	TA0010	T1059 Command and Scripting Interpreter
Discovery	Collection	Exfiltration	
T1204	T1204.002	T1027 Obfuscated Files or Information	T1027.015
User Execution	Malicious File		Compression
T1547 Boot or Logon Autostart Execution	T1547.001 Registry Run Keys / Startup Folder	T1555 Credentials from Password Stores	T1555.003 Credentials from Web Browsers

T1528 Steal Application Access Token	T1082 System Information Discovery	T1005 Data from Local System	T1113 Screen Capture
T1074 Data Staged	T1074.001 Local Data Staging	T1041 Exfiltration Over C2 Channel	T1567 Exfiltration Over Web Service
T1567.002 Exfiltration to Cloud Storage	T1560 Archive Collected Data	101010000	10101010101

X Indicators of Compromise (IOCs)

ТҮРЕ	VALUE	
MD5	fc99a7ef8d7a2028ce73bf42d3a95bce	
SHA256	9309003c245f94ba4ee52098dadbaa0d0a4d83b423d76c1bfc082a1c29e0 b95f	
URL	hxxps[:]//api[.]telegram[.]org/bot[BotToken]/sendDocument?chat_id=76 13862165&caption	
File Path	%APPDATA%\Temp\[Username]\Grabbers\Browser\passwords.txt, %APPDATA%\Temp\[Username]\Grabbers\TelegramSession*, %APPDATA%\Temp\[Username]\Grabbers\Discord\Tokens.txt, %APPDATA%\Temp\[Username]\Grabbers\Screenshot\Screen.jpg, %APPDATA%\Temp\[Username]\DesktopFiles*, %APPDATA%\Temp\[Username]\[Username]@ardent.zip	

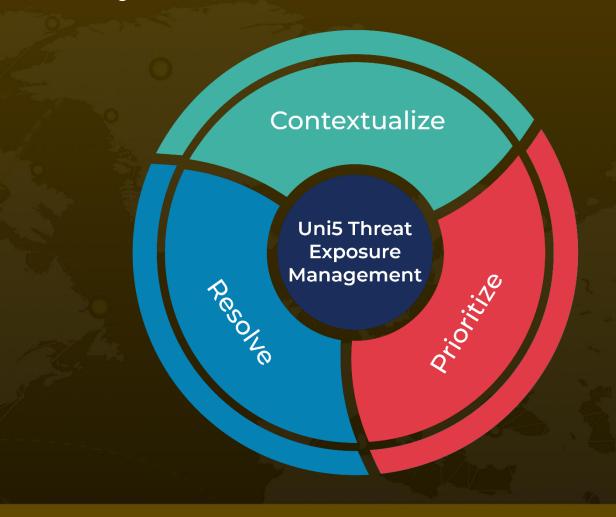
References

https://www.cyfirma.com/research/pupkinstealer-a-net-based-info-stealer/

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