

Info-stealer: Most bang for the buck malware

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Threat Analysis Team (BLKSMTH)
@TALON

Who Am I?



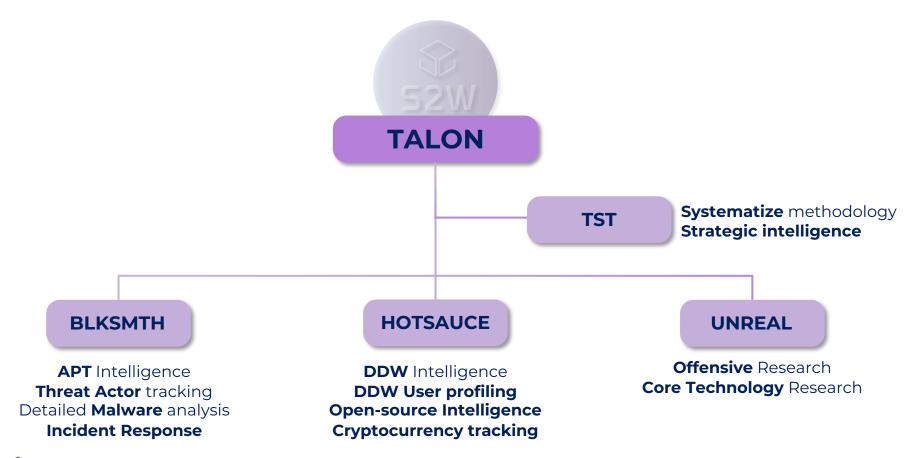
- Jiho Kim
 - Junior Threat Intelligence Researcher
 - BLKSMTH, S2W Talon
 - Working hard always

FIRSTCON 2023: First presentation of my life ever!

- gimchesh
- in Kim Jiho

Who are we & What we do?

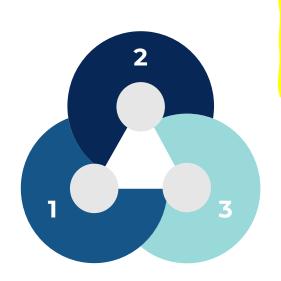
We are S2W TALON!



Abstract in 5W1H

WHO

A type of malware that steals all sensitive information, including credentials, after infiltrating a victimized system.



01. MaaS (Malware-as-a-Service)

A type that operates on the deep & dark web and sells builder or license that create stealer malware executables and panels for managing infection logs

02. Open-source

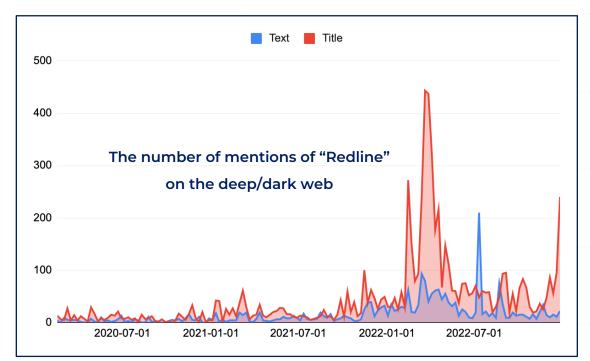
A type releasing the source code of the stealer created for free

03. Own

A type that builds and use own stealer without selling or disclosing it

WHEN

* Statistics by S2W's deep & dark web search engine, Xarvis

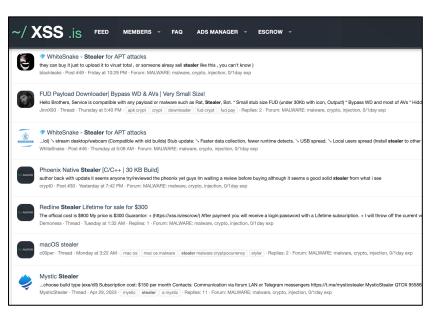


The number of mentions of "stealer" on the deep & dark web

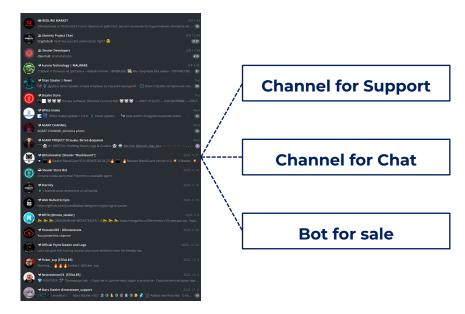
WHERE

They are most active on dark web forums and use their own Telegram channels for communication and customer care.

Dark web forums



Telegram channels





WHAT

They steal the most valuable information, and that information changes over time.

Browser	Telegram	FTP
Crypto Wallet	Steam	Email Client
VDN	Discord	IM Client
VPN	Discord	IM Client
RDP	SystemInfo	Password Manager

WHY

Not all they have huge TTPs, but they are often used by attackers because the value of the items stolen is hundreds of times greater than the relatively small cost.



Spectacular Tactics

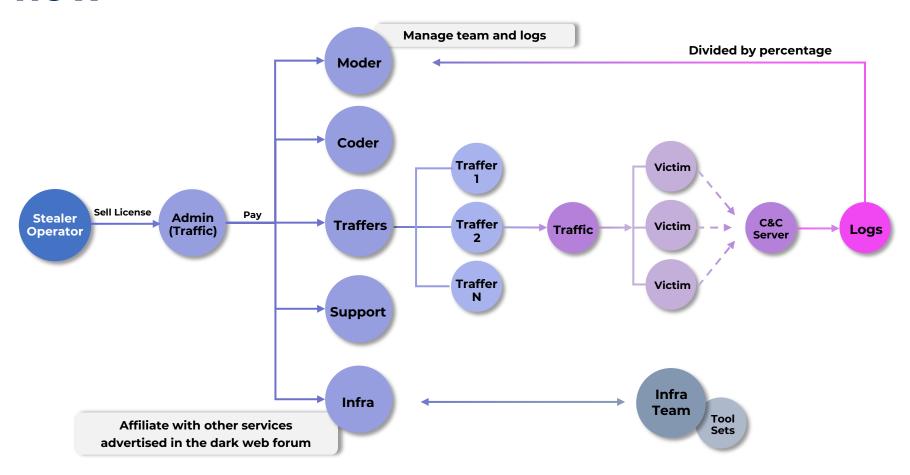


0-day / 1-day Vulnerability



Amazing set of tools

HOW

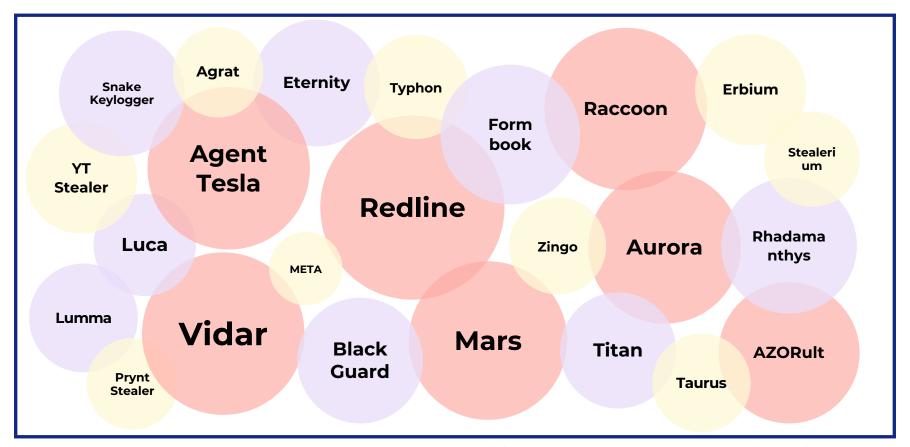




Changes

There are **more than 100 operators** in dark web forums and telegram channels, with over 40 of them being newly discovered on the dark web.

In addition to old favorites like Redline, Vidar, and Raccoon, newer stealers like Aurora, Meta, and Titan are making their mark.



* Statistics by S2W's deep & dark web search engine, Xarvis (2020 ~ 2022)

Darkweb Forums: Sales for stealer

Stealer operators began to advertise on various dark web forums to sell stealers, and fierce competition ensued on forums like Breached, XSS, and Exploits.



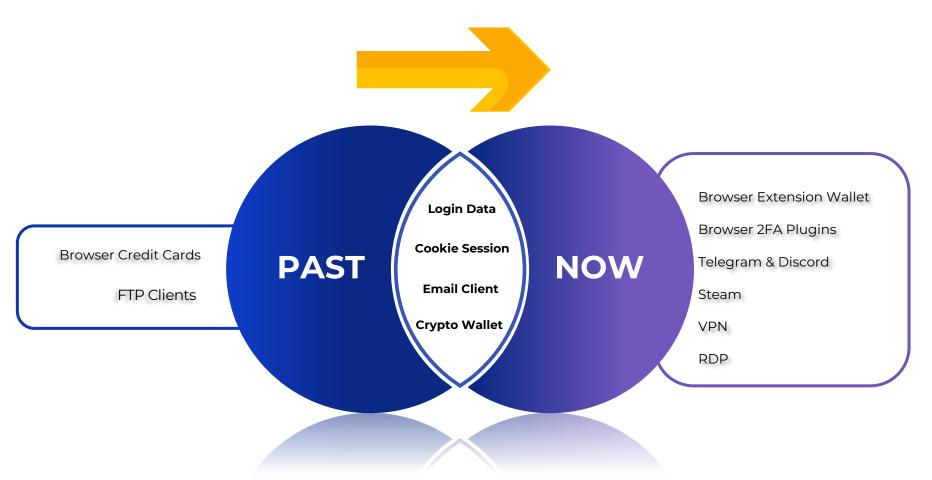






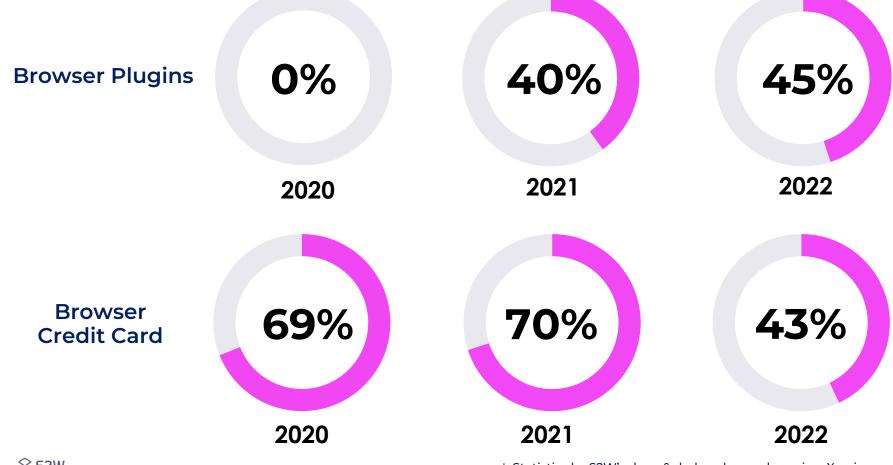




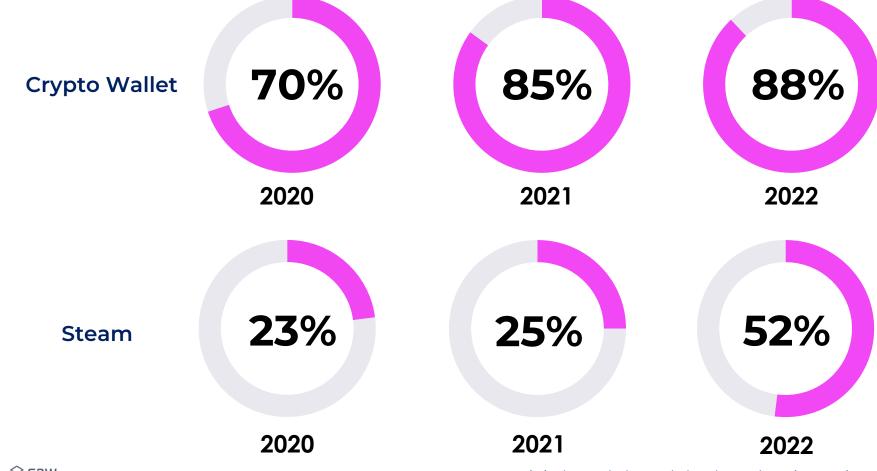




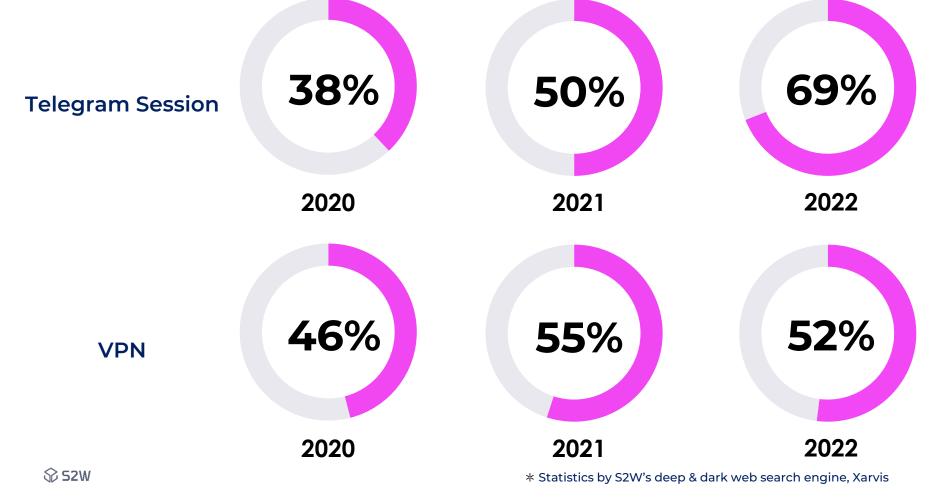
Exfiltrated Data



Exfiltrated Data



Exfiltrated Data



Darkweb Forums: Sales for stealer log

```
Autofills
--- CryptoTab Browser_[User Data]_Default.txt
 ---- Google_[Chrome]_Default.txt
--- Microsoft_[Edge]_Default.txt
— Opera GX_Unknown.txt
Cookies
--- Google_[Chrome]_Default Extension.txt
 — Google_[Chrome]_Default Network.txt
--- Microsoft_[Edge]_Default Network.txt
— Opera GX_Unknown Network.txt
Discord
L— Tokens.txt
 - DomainDetects.txt
— FTP
L— Credentials.txt

    ImportantAutofills.txt

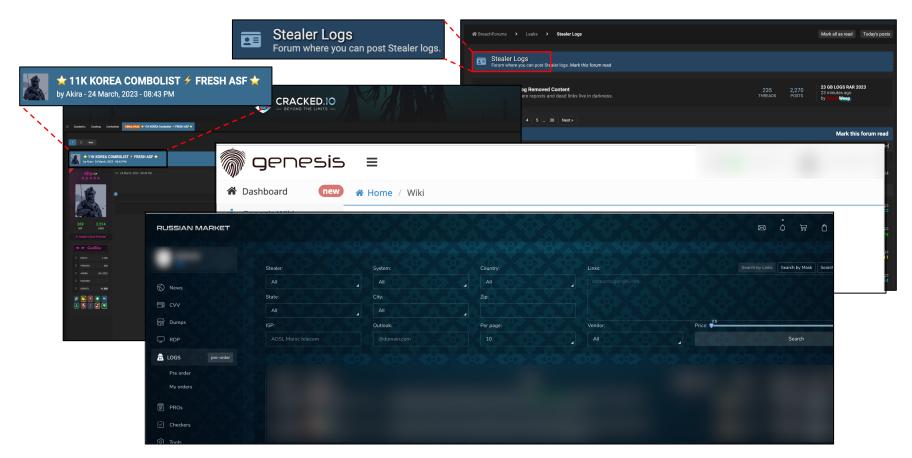
 InstalledBrowsers.txt
 InstalledSoftware.txt
 - Passwords.txt
 ProcessList.txt

    UserInformation.txt
```



Darkweb Forums: Sales for stealer log

In addition, since 2022, forum categories and markets have emerged that sell only logs





Logs are being sold for as little as \$1 and as much as \$10 on the Russian Market where logs are commonly sold.



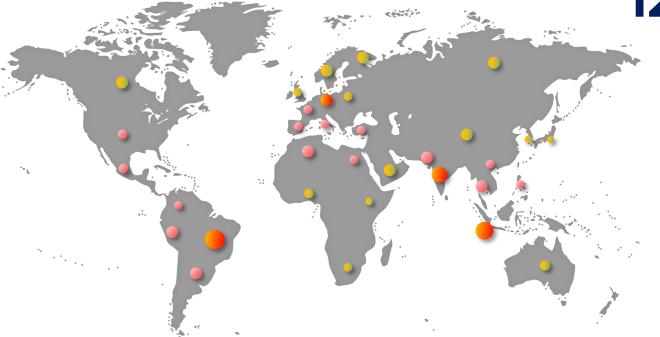


About 222 countries detected by S2W, and the number of logs for sale is more than

12,426,205.

Total Amount of Logs





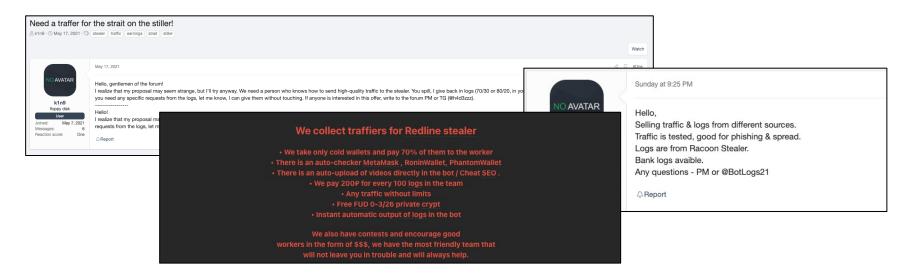
Brazil	1,684,015
India	933,266
Indonesia	764,632
Germany	528,072
:	:
Thailand	311,246
France	290,625
Colombia	262,708
:	:
South Korea	104,087

Ecosystem of Stealer

The stealer ecosystem is becoming tighter and more organized.

People who specialize in each area of the offense are starting to team up and sell their services to the customer in the dark web forums and Telegram.

They make money through fees paid for using their services.





Stealer operating Team

A group that makes stealer, licenses and builds it

Ecosystem

Traffic Teams

A group that spreads stealer and other malware and monetizes logs

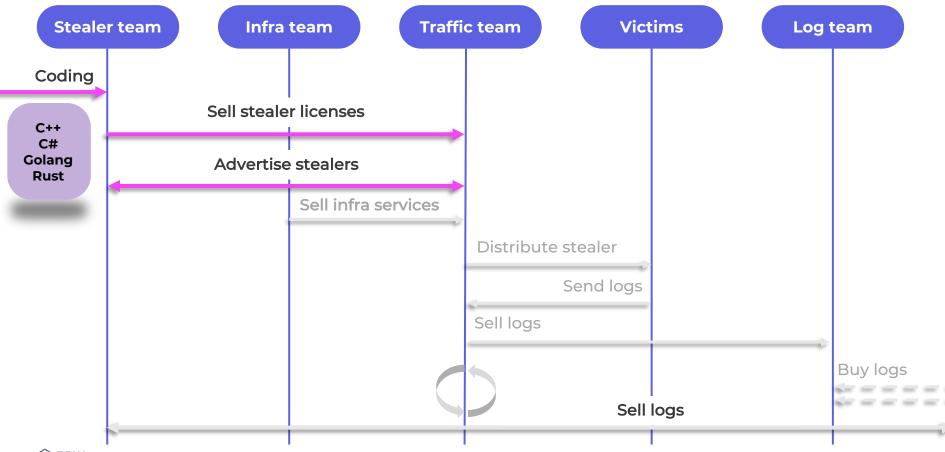
Infrastructure Team

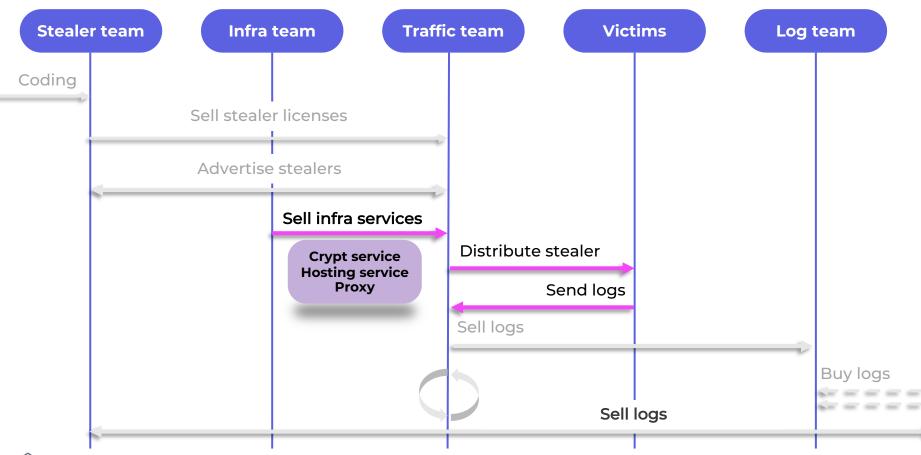
A group that provides the panels, the hosting servers needed to run and distribute it, the tools to attack

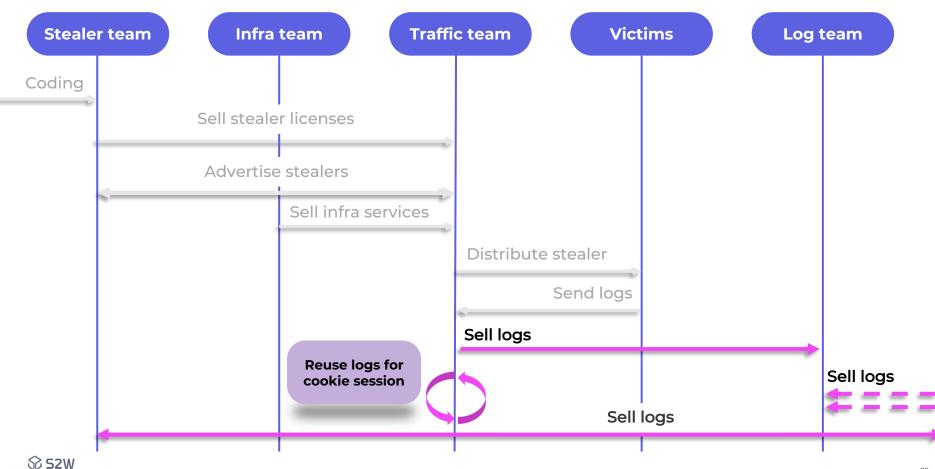
Log Team

A group that sells only logs, which can be sold per tem, per country, or per stealer.





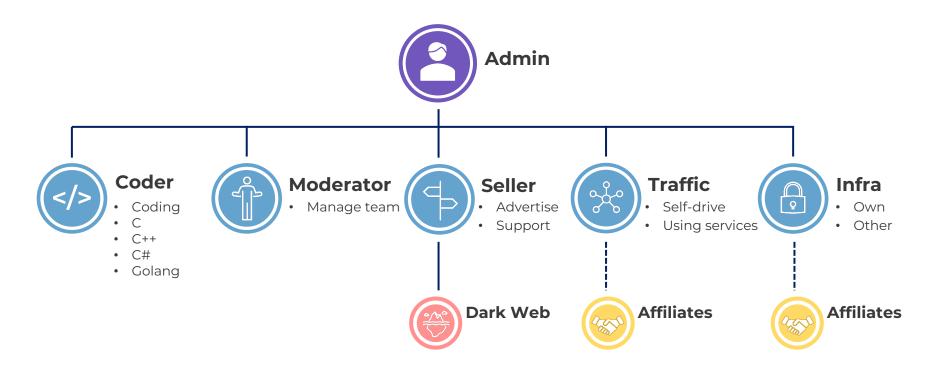




29

Stealer Operator

The operator group develops stealer, monetizes it as a service, and sells it on dark web forums.



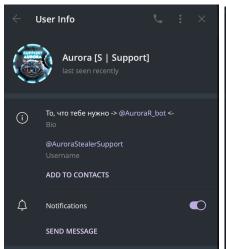
Stealer Operator

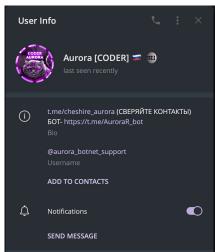
LummaC Stealer

Post Started: 2022-01-31

Contact Method: Telegram

Role: Admin, Coder, Seller, Support, Advertisement









Aurora Stealer

Post Started: 2022-08-21

Contact Method: Telegram

Role: Admin, Coder, Seller, Support

Other Services: Install, Crypt, Traffic

Stealer Operator

Eternity Group

Started: 2022-02-02

Contact Method: Telegram

Role: Admin, Coder, Seller, Support, Moderator

Other Services: Install, Brute Force, Crypt, Traffic

Work: 09:00 ~ 00:00

AGRAT Group (same as Eternity)

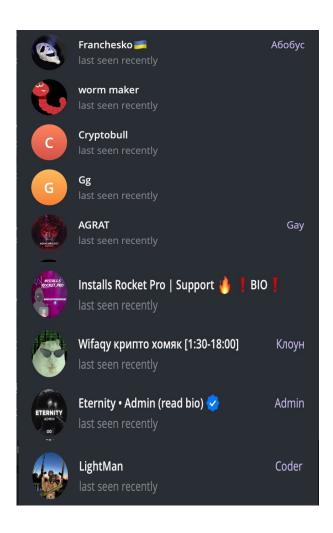
Started: 2022-02-09

Contact Method: Telegram

Role: Admin, Coder, Seller, Support, Moderator

Other Services: Install, Brute Force, Crypt, Traffic

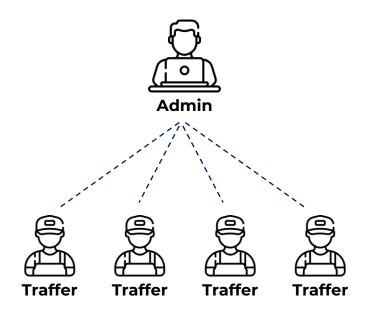
Work: 09:00 ~ 00:00



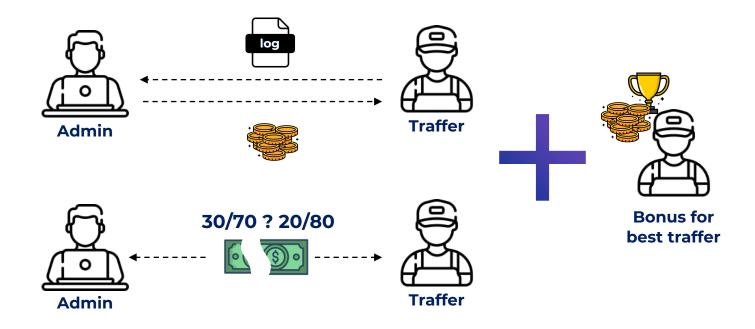


Traffic Team

A traffic team is a group whose primary purpose is to "distribute stealer" and "get Logs". They purchase stealer licenses sold within the forums or affiliate with stealer operators and provide builds to members of the team, called *Traffers*.

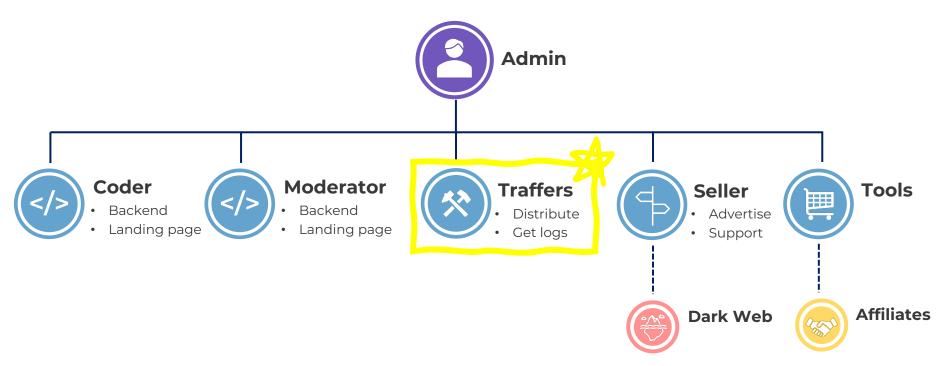


Traffic Team



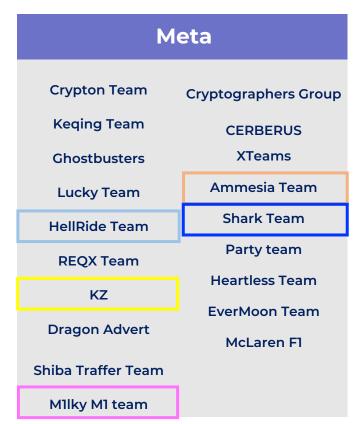
Traffic Team

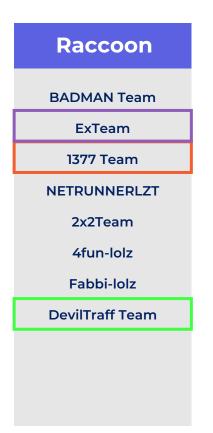
The operator group develops stealer, monetizes it as a service, and sells it on dark web forums.



Relation: Stealer Team - Traffic Team

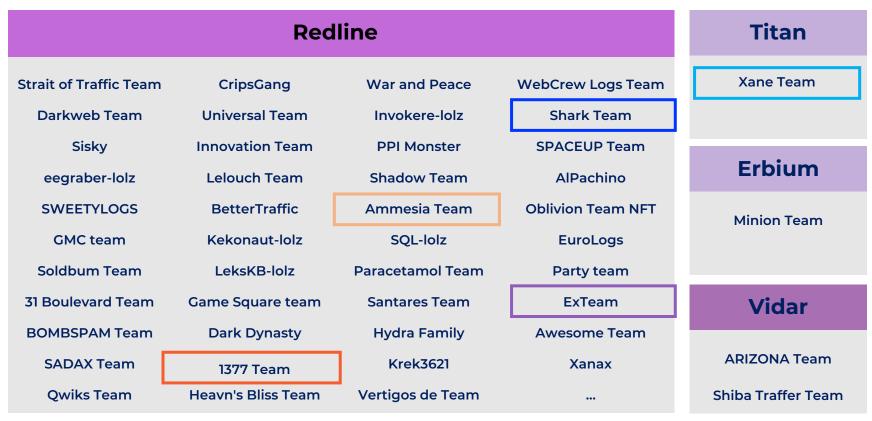
Aurora		
Amnesia Team		
Space Team		
HellRide Team		
Sakura Team		
KZ		
YungRussia		
Shark Team		
Xane Team		
DevilTraff Team		
ARIZONA Team		
M1lky M1 team		





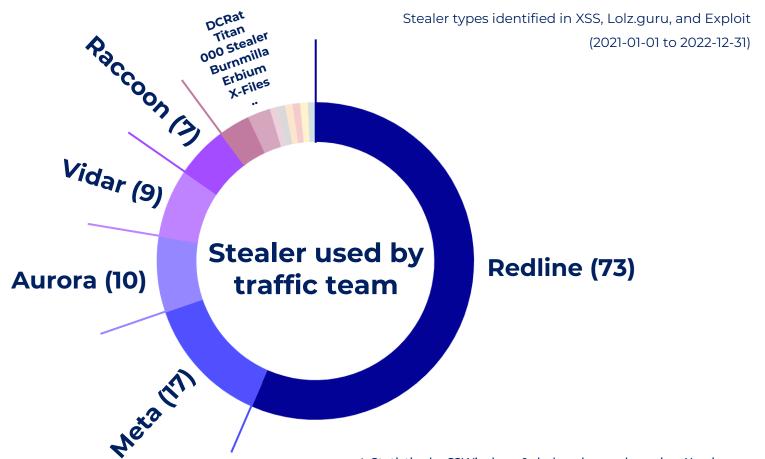
Traffic teams identified in XSS, Lolz.guru, and Exploit (2021-01-01 to 2022-12-31)

Relation: Stealer Team - Traffic Team

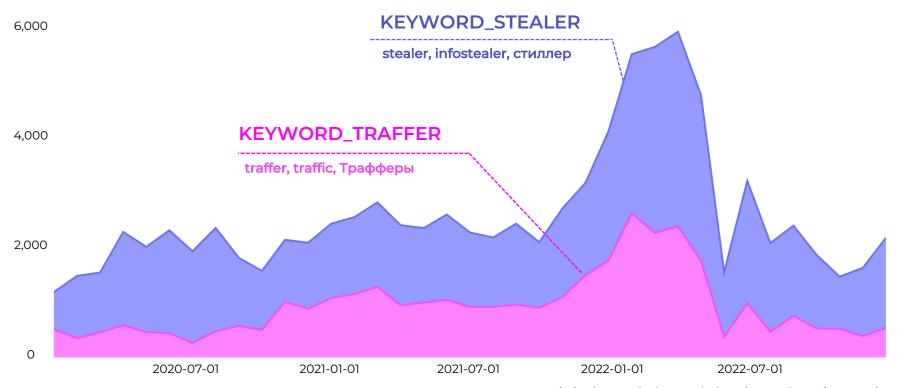


Traffers identified in XSS, Lolz.guru, and Exploit (2021-01-01 to 2022-12-31)

Relation: Stealer Team - Traffic Team



Number of Stealers Number of Traffers?







How do they distribute stealers?

Manual

The traffic team targets phishing pages and YouTube that are accessible to a large number of users to mass distribute the stealer.

Work manual from slide

Hello everyone, I'm glad that you came to see my manual, in which I put all my knowledge about traffic with all my heart. After reading it, I guarantee that everything will work out for you and you will have money

INTRODUCTION

What is the essence of the work?

We must spread the virus, which the victim will then launch. The virus can be disguised as a cheat for any game. Or you can disguise it as a program. Basically, everyone works on YouTube, uploading videos with a virus to them.

Examples: Crack Adobe Photoshop, fortnite hack, bandicam crack

I think you get the point. But everyone pours such garbage, so turn on your imagination.

AMNESIA | Library

Hello! I will tell you how to completely secure yourself on the network, and physically protect your data, both from a PC and from a phone. Safety in life and network.

You can fully set up your PC, but at the same time sit in your telegram from a regular phone, withdraw money to your card, distribute any personal information about yourself.

For each thread you can catch on and stretch the whole ball, every little thing is important. I won't teach you how to live, tell you what to do, what not to do, tell how safe the scheme is at the output, you yourself will understand everything in the end, and collect your config. Entry



Tools used by Traffic Team

- Proxy
 - Proxy list required for communication between C&C server and infected PCs.
 - Ex) Space Proxy, Luxury Proxy, Proxy Store, etc..
- YouTube Upload Tools
 - Automated uploading of videos to a specific YouTube account to perform maliciou s actions via browser cookie values and proxy values in captured logs.
 - Ex) YouTube365, Proxy 911, @YT_TurboT
- SEO
 - an indicator depending on what we take as an example. In terms of YouTube, this
 is a collection of tags, titles, descriptions, and more.
 - Ex) @CheckSEOBot, VidiQ



Tools used by Traffic Team

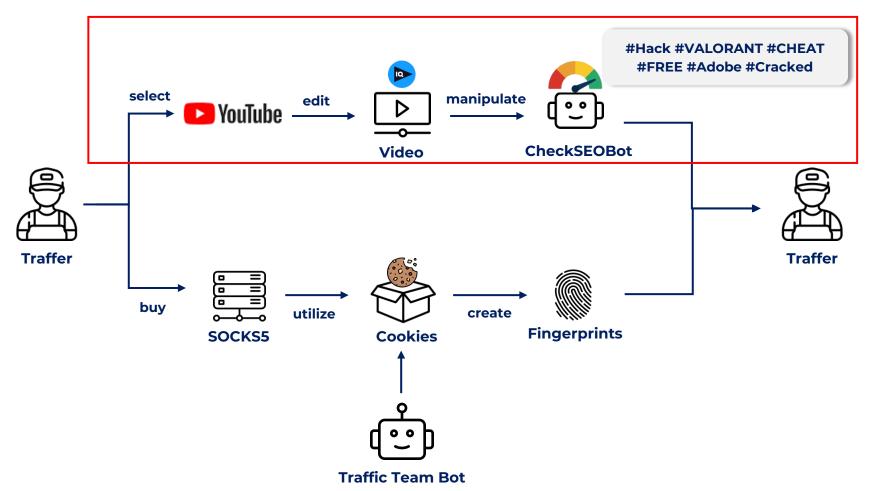
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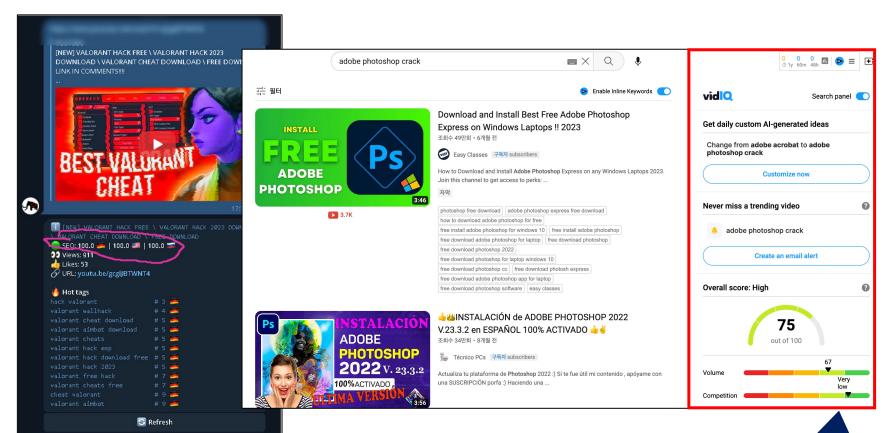


Tools used by Traffic Team

- Proxy
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- YouTube Upload Tools
 - Automated uploading of videos to a specific YouTube account to perform malicious actions via browser cookie values and proxy values in captured logs.
 - Ex) YouTube365, Proxy 911, @YT_TurboT
- SEO (Search Engine Optimization)
 - In terms of YouTube, this is a collection of tags, titles, descriptions, and more that make video to be the top of the search result.
 - Ex) @CheckSEOBot, VidiQ

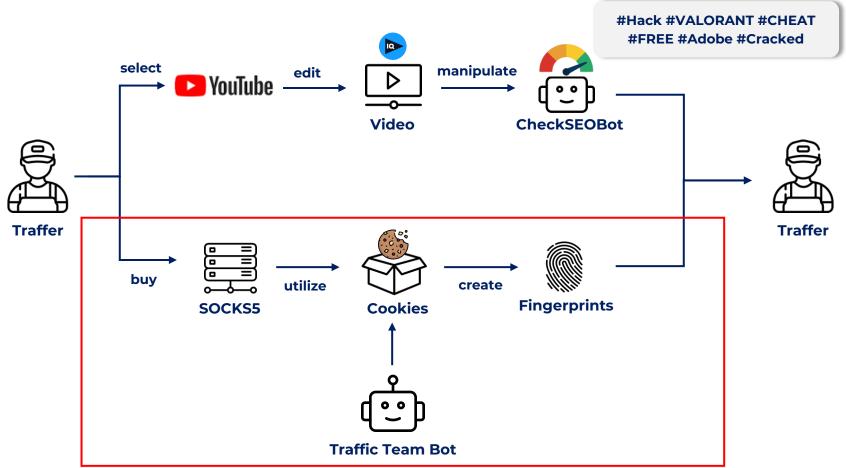


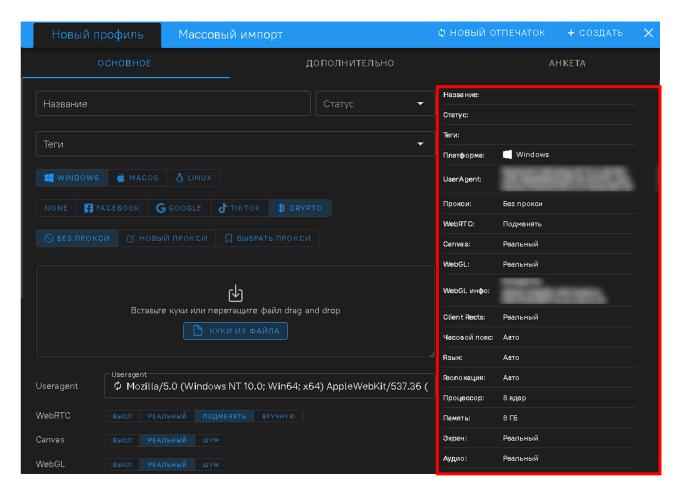




Show how high a trending index the video has-

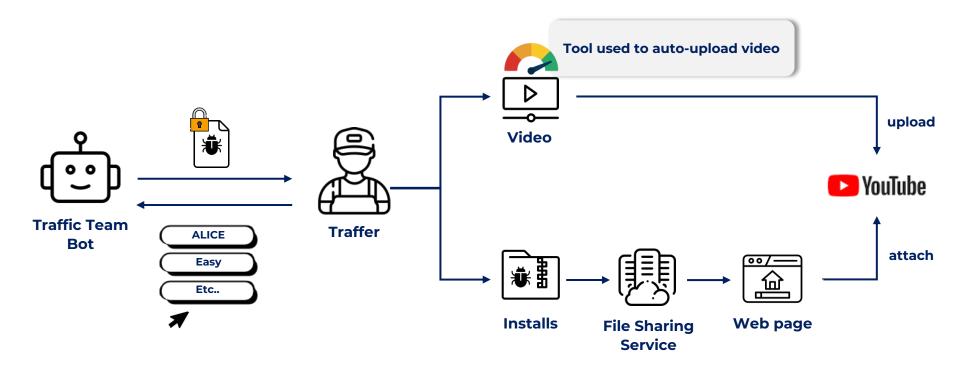
Copy tags

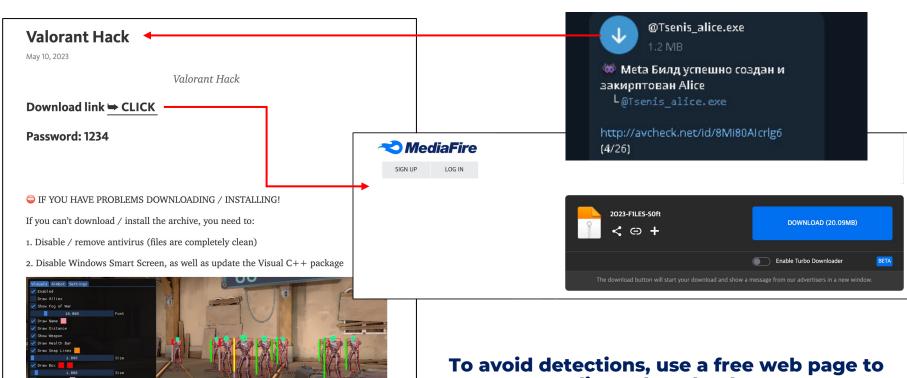




Set the browser fingerprints & proxy & session data







redirect download URL



Traffic Team: Threat cases

Among Us Cheat Free Download # Among Us Mod ... - YouTube Download - https://telegra.ph/Software-2023-02-21-6Password - 2023INSTRUCTIONS:1) Turn off Windows Defender2) Download the file from-YouTube · Dedex NA ·

AccountEdge Pro Installation 2023 - YouTube



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Hello everyone! This is my own app and website, so please enjoy! DOWNLOAD LINK: https://telegra.ph/Software-2023-02-21-6 Password: ...

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DOWNLOAD LINK: https://telegra.ph/Software-2023-02-21-6

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CSGO SKINCHANGER 2023 UNDETECTED - YouTube



CSGO SKINCHANGER UNDETECTED 2023 DOWNLOAD:

https://telegra.ph/Software-2023-02-21-6 PASSWORD: 2023- Off Defender-

YouTube · Tomás ·



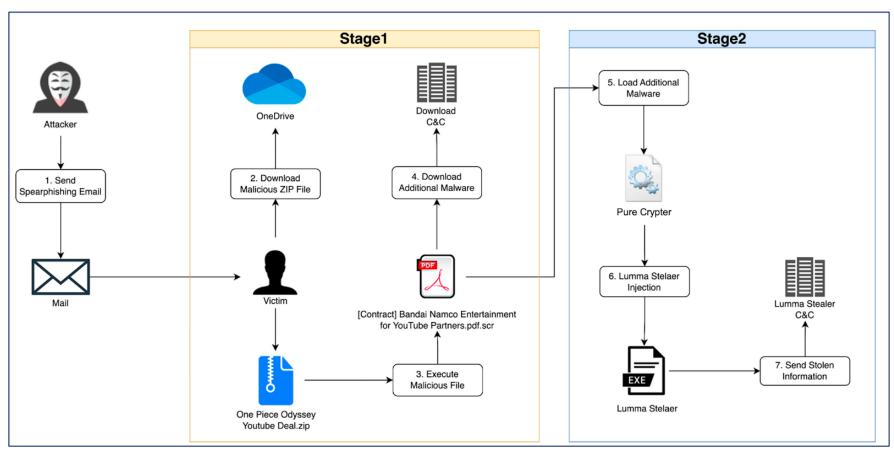


Threat cases: Lumma Stealer targeted Korean YouTuber



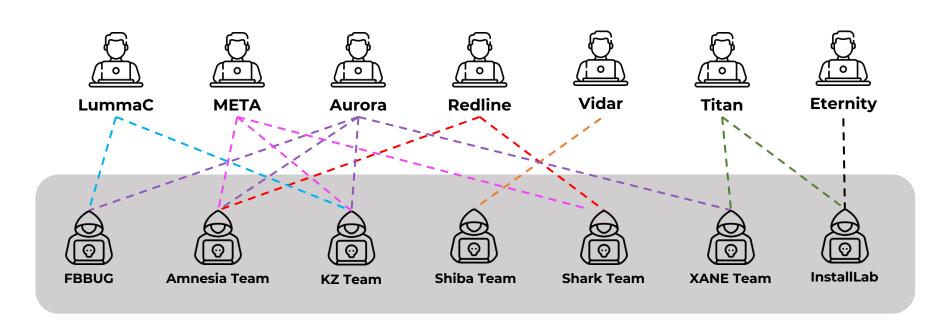


Threat cases: Lumma Stealer targeted Korean YouTuber





Relationship with Stealer Operating Group









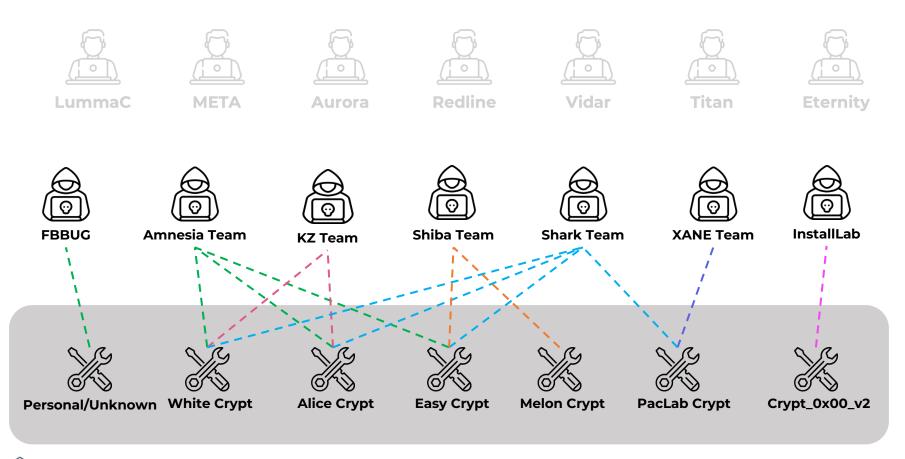




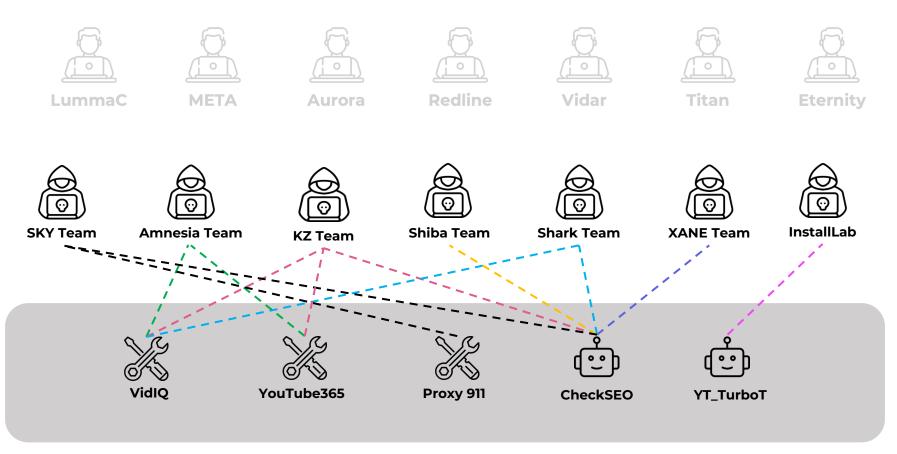




Relationship with Crypt



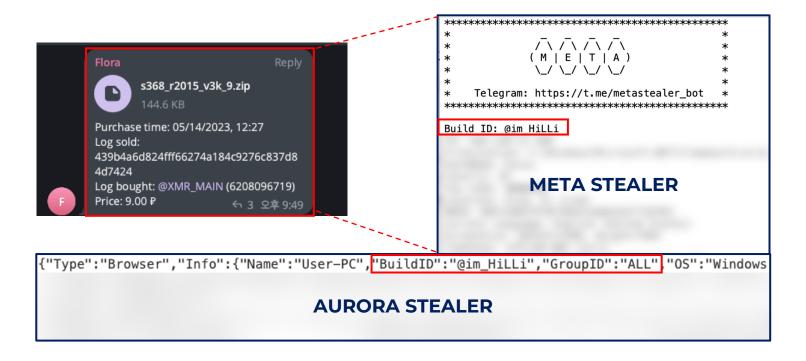
Relationship with Tools



\$ 52W

Case related Stealer Ecosystem

The string "@im_HiLLi" was present in the Build ID, which can be arbitrarily specified by the attacker when creating the stealer, and the same string was found in another Meta stealer and Aurora stealer.



Case related Stealer Ecosystem

The string "ALL" and the same ICON hash were found in a common set of samples identified them as the KZ traffic team by the Telegram ID used in the BuildID field.

BuildID	GroupID	Icon Hash
@punjet	ALL	
5713190558		
@Noxyzzz		80c0dadadadac000
@relisek		
@im_HiLLi		

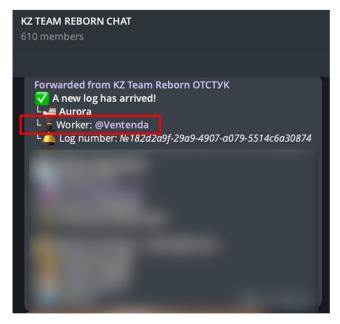
Identify value used in Aurora stealer



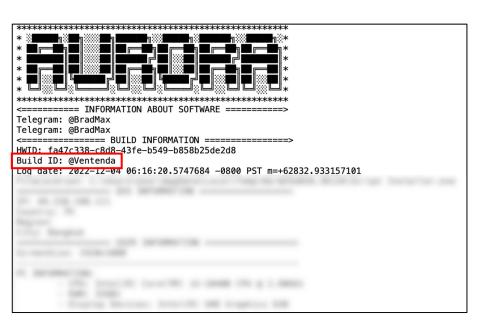
Best Traffer in KZ Team

Case related Stealer Ecosystem

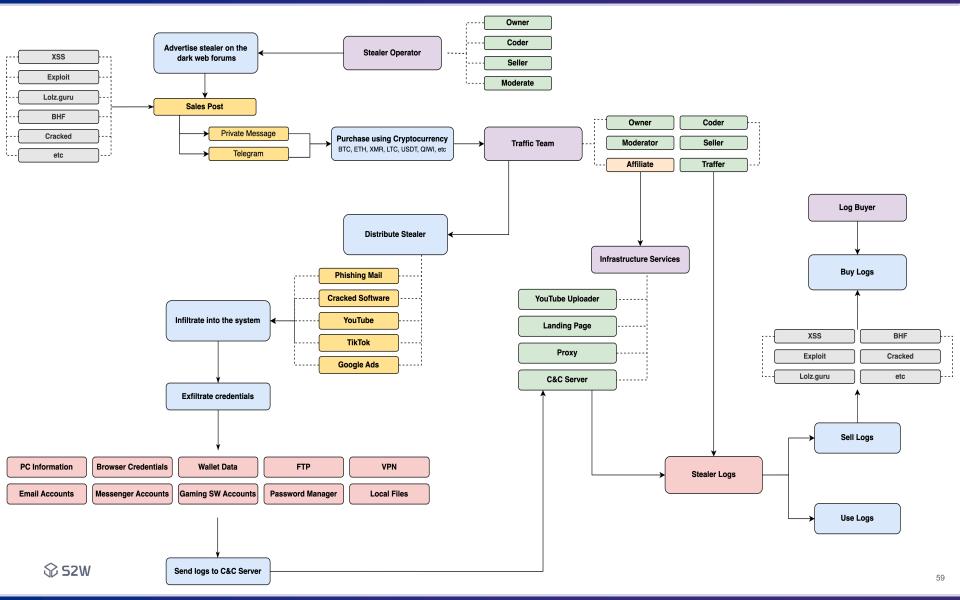
One of KZ Team's traffickers, user "Ventenda," uploaded log files to a Telegram channel that specializes in sharing only stealer logs.



KZ Team's Traaffer: @Ventenda

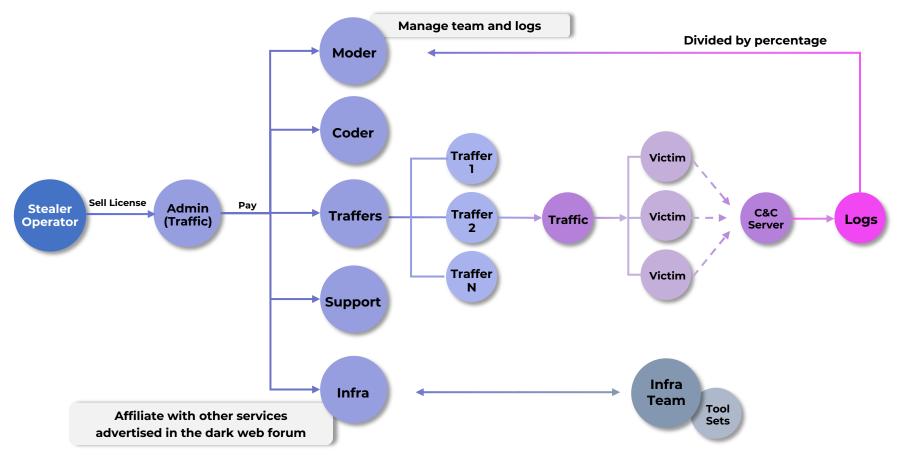


Some files in a shared stealer log

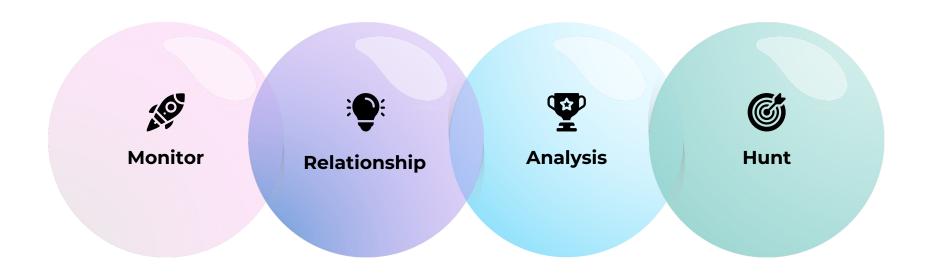


Takeaways

Lessons Learned: What to focus on to track down stealer groups



Lessons Learned: What to focus on to track down stealer groups



Thanks, Any Questions?