The Spring Dragon APT

APT reports

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minute read

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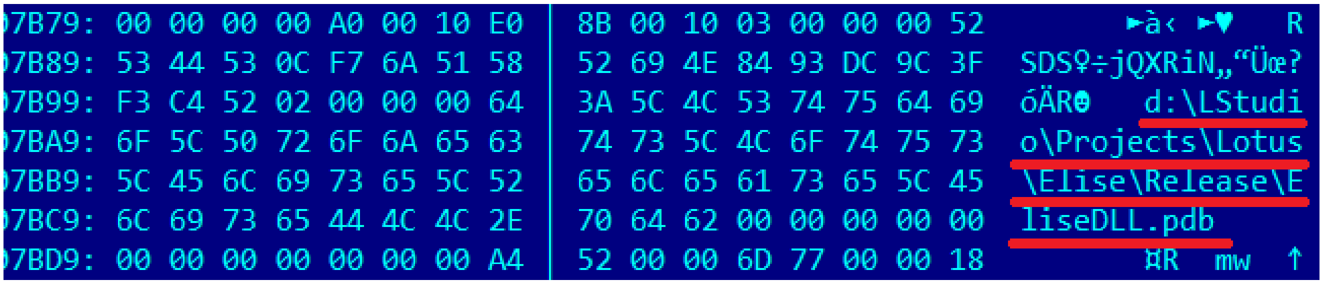
More Intrusion Techniques Rolled In

Let’s examine a couple of interesting delivery techniques from an APT active for the past several years, the Spring Dragon APT. A paper released today by our colleagues at Palo Alto Networks presented a portion of data on this crew under the label “the Lotus Blossom Operation“, likely named for the debug string present in much of the “Elise” codebase since at least 2012: “d:\lstudio\projects\lotus\…”.



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7B79: 00 00 00 00 A0 00 10 E0 │ 8B 00 10 03 00 00 00 52        ►à‹ ►♥   R
7B89: 53 44 53 0C F7 6A 51 58 │ 52 69 4E 84 93 DC 9C 3F  SDS♀÷jQXRiN„“Üœ?
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7BA9: 6F 5C 50 72 6F 6A 65 63 │ 74 73 5C 4C 6F 74 75 73  o\Projects\Lotus
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7BC9: 6C 69 73 65 44 4C 4C 2E │ 70 64 62 00 00 00 00 00  liseDLL.pdb
7BD9: 00 00 00 00 00 00 00 A4 │ 52 00 00 6D 77 00 00 18         ¤R  mw  ↑
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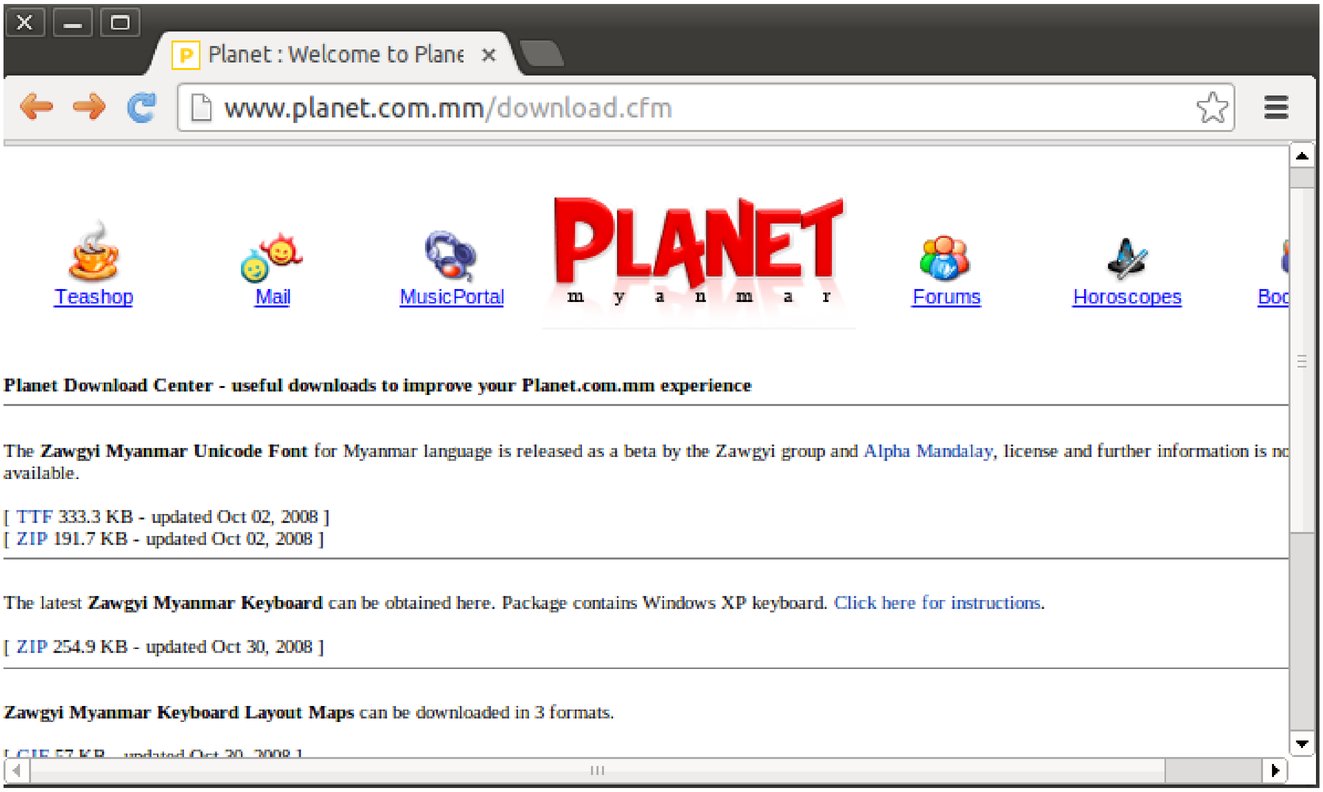
The group’s capabilities are more than the much discussed CVE-2012-0158 exploits over the past few years. Instead, the group is known to have employed half day spearphish exploits, strategic web compromises, and watering holes employing fake Flash player update re-directions. The group’s spearphish toolset includes PDF exploits, Adobe Flash Player exploits, and the common CVE-2012-0158 Word exploits including those generated from the infamous “Tran Duy Linh” kit. While ongoing attacks by the Spring Dragon APT take us back to a focus on Vietnam, they appear to have rolled out a steady mix of exploits against defense subcontractors around the world and government related organizations in VN, TW, PH, and other locations over the past few years. Let's take a quick look at a couple more examples of their intrusion capabilities that haven't been mentioned elsewhere.



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The **Zawgyi Myanmar Unicode Font** for Myanmar language is released as a beta by the Zawgyi group and Alpha Mandalay, license and further information is nc available.

[TTF 333.3 KB - updated Oct 02, 2008]
[ZIP 191.7 KB - updated Oct 02, 2008]

The latest **Zawgyi Myanmar Keyboard** can be obtained here. Package contains Windows XP keyboard. Click here for instructions.

[ZIP 254.9 KB - updated Oct 30, 2008]

Zawgyi Myanmar Keyboard Layout Maps can be downloaded in 3 formats.

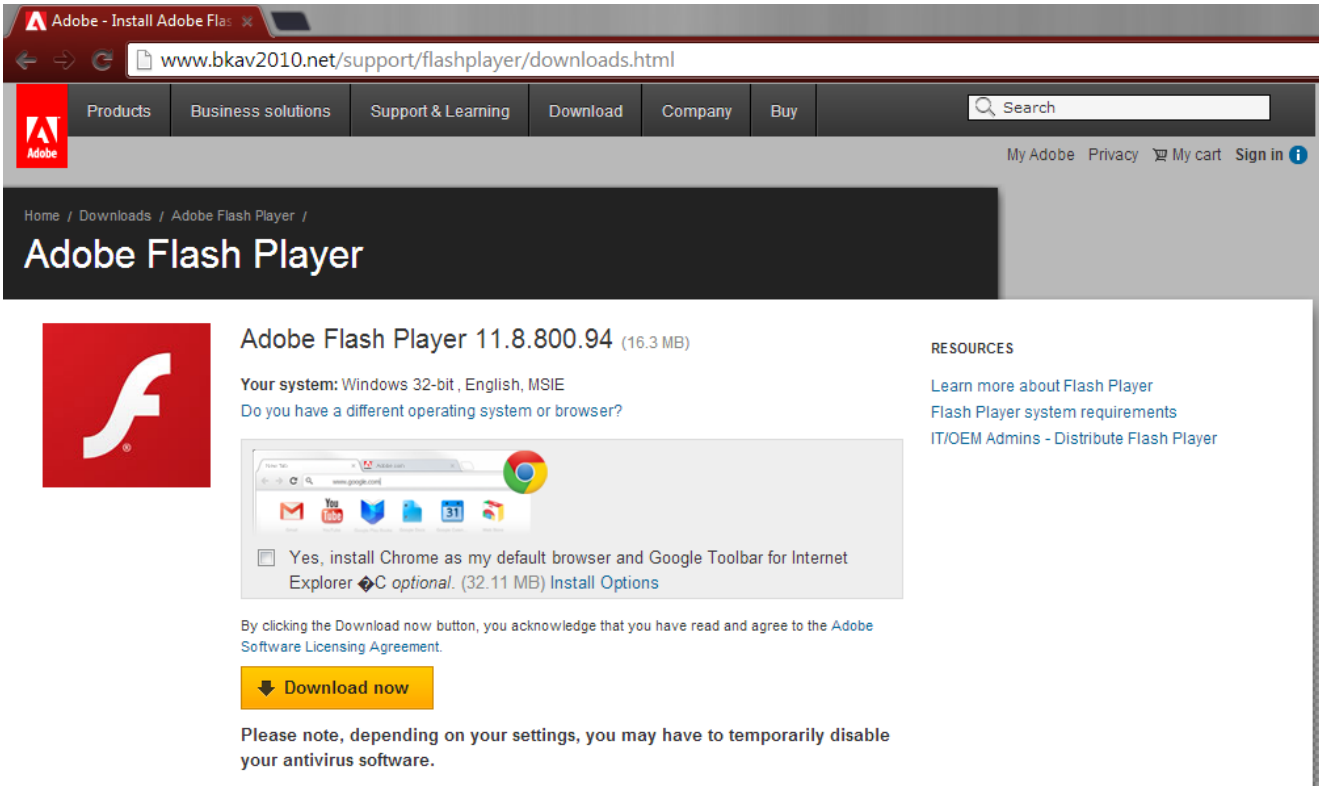
[GIF 57 KB - updated Oct 30, 2008]

Organizations located in Myanmar and targeted by Spring Dragon have gone unmentioned. But Spring Dragon's infiltration techniques there were not simply 0158 spearphish, they also compromised sites. In one case, they replaced specialized font installers needed to render Myanma font. You can see an image here of the "Planet Myanmar" website in late 2012 distributing such a package. All of the zip links were redirected to a poisoned installer zip file. The download name was "Zawgyi_Keyboard_L.zip", and it dropped a "setup.exe" that contained several backdoor components, including an Elise "wincex.dll" (a42c966e26f3577534d03248551232f3, detected as Backdoor.Win32.Agent.delp). It beacons out with the typical Elise GET request "GET /%x/page_%02d%02d%02d%02d.html", as documented in the Lotus Blossom paper.

Another APT later abused this exact site to deliver malicious VBS (CVE-2014-6332) exploits in November of 2014 with a Lurid variant payload. And that same group also served a malicious PDF exploit (CVE-2010-2883) from this site in June 2012 as "Zawgyi Unicode Keyboard.pdf". Even earlier than that, they spearphished with that same PDF exploit object later hosted on the website under different file names. In November 2011, they used filenames appropriate for their spearphishing targets with this exploit like "台灣安保協會「亞太區域安全與台海和平」國際研討會邀 請 函_20110907.pdf" ("Taiwan Security Association

International Seminar Invitation – the Asia-Pacific regional security and peace in the Taiwan Strait"), "china-central_asia.pdf", "hydroelectric sector.pdf", and various governmental related proposals. In this case, there was unexpected overlap from two APT.

Another interesting technique that we observed in use against government targets was a campaign that lured recipients to a site redirecting users to a spoofed Flash installer site.



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Adobe Flash Player

Adobe Flash Player 11.8.800.94 (16.3 MB)

Your system: Windows 32-bit , English, MSIE

Do you have a different operating system or browser?

□ Yes, install Chrome as my default browser and Google Toolbar for Internet Explorer �C *optional*. (32.11 MB) Install Options

By clicking the Download now button, you acknowledge that you have read and agree to the Adobe Software Licensing Agreement.

Download now

Please note, depending on your settings, you may have to temporarily disable your antivirus software.

RESOURCES

Learn more about Flash Player

Flash Player system requirements

IT/OEM Admins - Distribute Flash Player

This site in turn redirected users to a Flash installer bundled with the common Elise backdoor, eventually communicating with 210.175.53.24 and its usual "GET /14111121/page_321111234.html HTTP/1.0".

hxxp://www.bkav2010.net/support/flashplayer/downloads.html → redirected to hxxp://96.47.234.246/support/flashplayer/install_flashplayer.exe (Trojan-Dropper.Win32.Agent.ilbq)

While this particular actor effectively used their almost worn out CVE-2012-0158 exploits in the past, Spring Dragon employs more involved and creative intrusive activity as well.

- APT
- Cyber espionage
- Social engineering
- Targeted attacks

Authors

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The Spring Dragon APT

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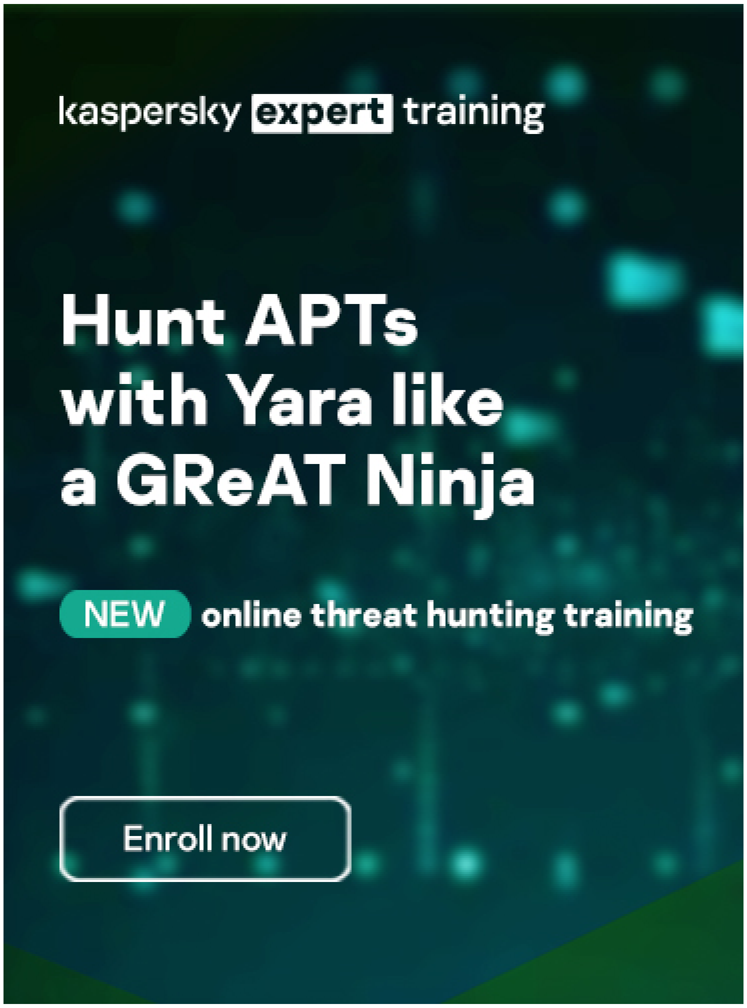


Reports

APT trends report Q1 2022

This is our latest summary of advanced persistent threat (APT) activity, focusing on events that we observed during Q1 2022.

Lazarus Trojanized DeFi app for delivering malware

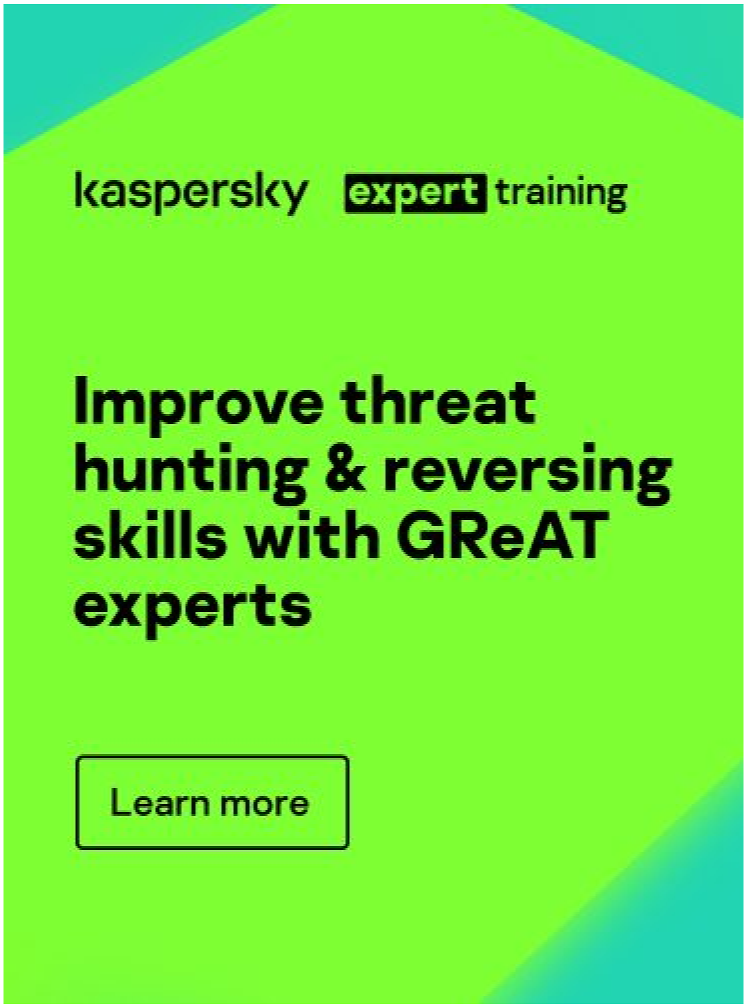
We recently discovered a Trojanized DeFi application that was compiled in November 2021. This application contains a legitimate program called DeFi Wallet that saves and manages a cryptocurrency wallet, but also implants a full-featured backdoor.

MoonBounce: the dark side of UEFI firmware

At the end of 2021, we inspected UEFI firmware that was tampered with to embed a malicious code we dub MoonBounce. In this report we describe how the MoonBounce implant works and how it is connected to APT41.

The BlueNoroff cryptocurrency hunt is still on

It appears that BlueNoroff shifted focus from hitting banks and SWIFT-connected servers to solely cryptocurrency businesses as the main source of the group’s illegal income.



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