



Cyber Threat Intelligence Alert

Hackers Continue to Exploit the COVID-19
Pandemic in Malicious Campaigns



TLP: WHITE

March 2020

1.1 19-03-2020-001: Hackers Continue to Exploit the COVID-19 Pandemic in Malicious Campaigns



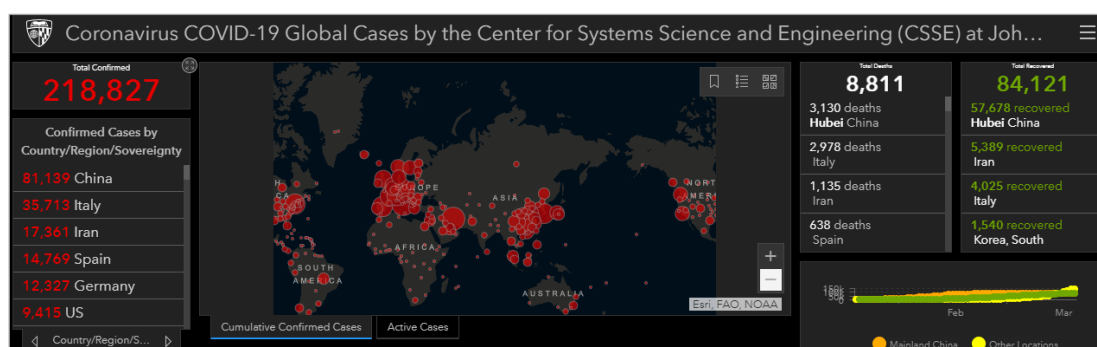
Threat Level:	High
Threat Vector:	Malware
Threat Actor:	Nation-State Actors; Cybercriminals
Targeted Assets:	End Users
Information Source:	OSINT
Credibility Score:	B2 - Credible

Recommendations: + Implement the technical IOCs attached to this report in your security systems.

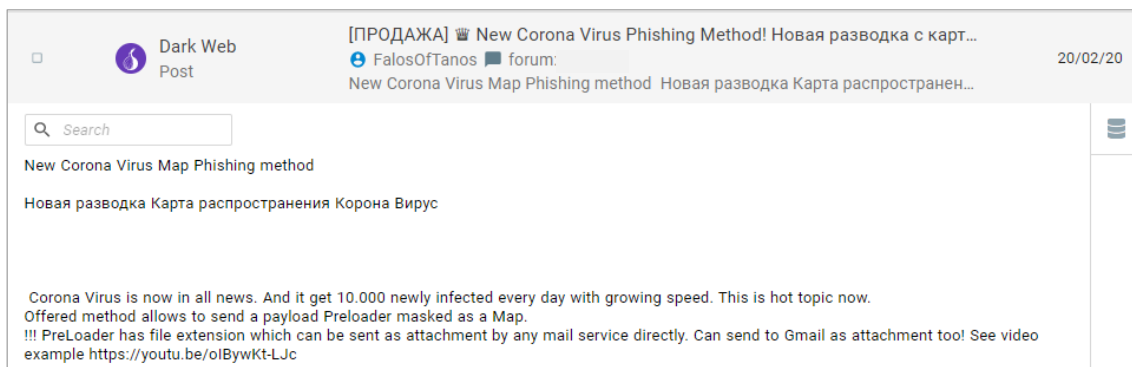
As the Coronavirus (COVID-19) epidemic continues to spread throughout the world in recent weeks, additional malicious campaigns were identified exploiting the recent panic and the constant search for information and updates on the virus in order to spread various types of malware.

1.1.1 Cybercrime Threat Actors

Firstly, security researchers have identified Russian cybercriminals selling malicious versions of the highly popular interactive map of COVID-19 cases around the world, created by Johns Hopkins Coronavirus Resource Center. In fact, these versions include info-stealer malware, intended on stealing information from its victims' computers.¹

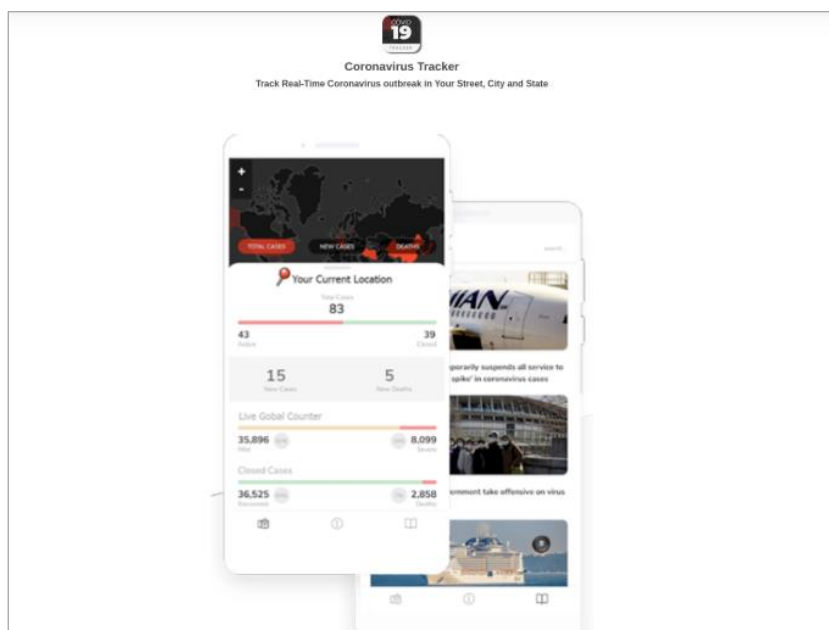


¹ <https://krebsonsecurity.com/2020/03/live-coronavirus-map-used-to-spread-malware/>



The Johns Hopkins Coronavirus Resource Center' map (above) and the sells offer of the malicious map on a Russian Dark Web forum (below, source: Verint Luminar)

In addition, a new malicious domain was discovered, `coronavirusapp[.]site`, which is offering to download an Android app that tracks the spread of the virus and also includes statistical data. However, the application is actually poisoned with *CovidLock*, a ransomware that changes the password used to unlock the device, thus denying the victims access to their phones. The victims are required to pay a ransom fee of US\$ 100 in Bitcoin, or else, according to the ransom note, their contacts, pictures, videos and device's memory will all be erased.²

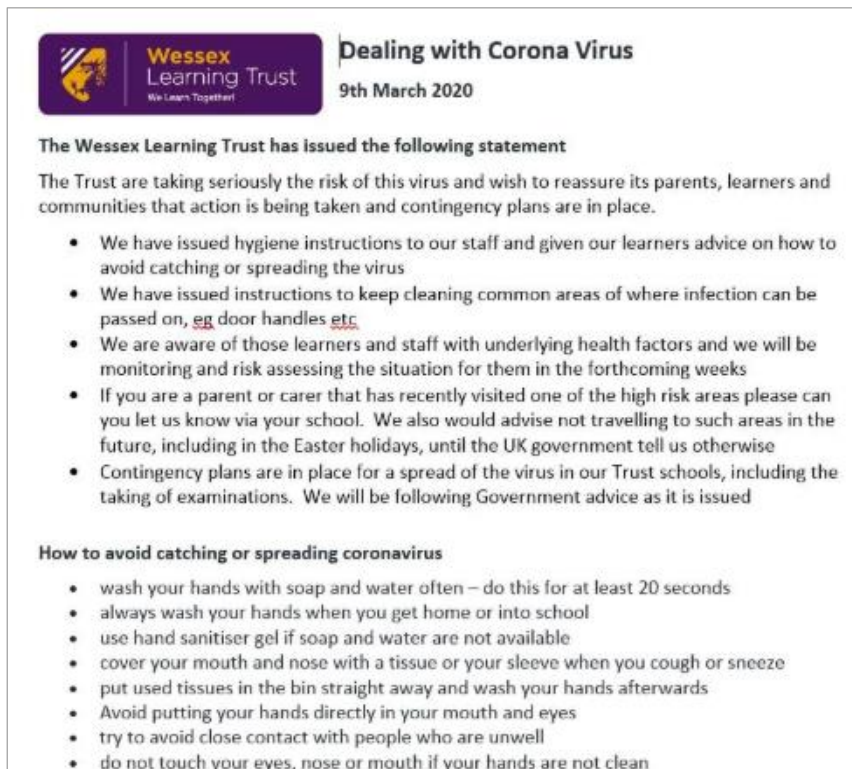


Screenshot of the `coronavirusapp[.]site` domain. Source: DomainTools

Security researchers have also discovered a new backdoor distributed in RAR format. The file includes an executable masquerading as a Microsoft Word file with information on COVID-19, intended to install the rest of the malware on the victim's computer. The researchers estimate that file is being distributed via phishing emails.³

² <https://www.domaintools.com/resources/blog/covidlock-mobile-coronavirus-tracking-app-coughs-up-ransomware>

³ <https://www.bleepingcomputer.com/news/security/blackwater-malware-abuses-cloudflare-workers-for-c2-communication/>



The Word file presented to the victim as a distraction while the malware is executed

Moreover, a new ransomware called *CoronaVirus* was recently identified being distributed through a fake website of WiseCleaner, a service offering system utilities for Windows OS. Download files on this malicious site act as downloaders for both the *CoronaVirus* ransomware and a stealer called *Kpot*. The ransomware is called *CoronaVirus* because when it encrypts the files, it changes their names to include the attackers' email address, coronaVi2022@protonmail.ch, and the ransom note is saved in a text file called CoronaVirus.txt.⁴

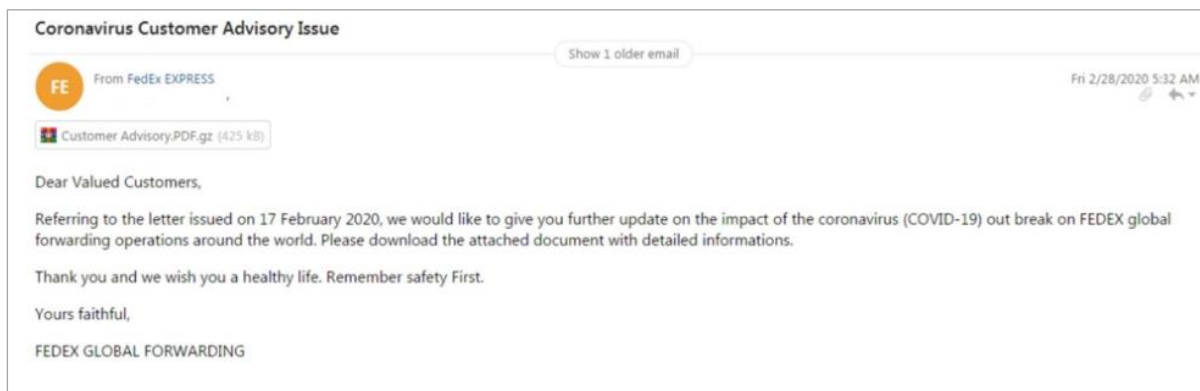
Additional campaigns utilize phishing emails with malicious attachments that supposedly include information and updates on Coronavirus, but in fact download different malware to the victims' computers, including a banking Trojan called *TrickBot*,⁵ a Stealer called *LokiBot*⁶ and a Stealer called *FormBook*.⁷

⁴ <https://www.bleepingcomputer.com/news/security/new-coronavirus-ransomware-acts-as-cover-for-kpot-infostealer/>

⁵ <https://news.sophos.com/en-us/2020/03/04/trickbot-campaign-targets-coronavirus-fears-in-italy/>

⁶ <https://www.fortinet.com/blog/threat-research/attackers-taking-advantage-of-the-coronavirus-covid-19-media-frenzy.html>

⁷ <https://www.bleepingcomputer.com/news/security/data-stealing-formbook-malware-preys-on-coronavirus-fears/>



Coronavirus-themed phishing email impersonating FedEx to infect the recipient with LokiBot. Source: Fortinet.

1.1.2 State-Sponsored Actors

Security researchers have also identified state-sponsored threat actors exploiting the COVID-19 panic to promote their interests and carry out attack campaigns. In early March 2020, researchers discovered a campaign launched by a Chinese APT group against targets in Vietnam, using emails with a malicious RAR file that ostensibly included a message from Vietnam's prime minister on Coronavirus.⁸ In reality, the file downloaded a backdoor malware to the victims' computers. Another Chinese APT group attacked targets in Mongolia's government using malicious documents that supposedly contain new information on the virus.⁹

Additionally, another APT group originating from North Korea has sent phishing messages to South Korean officials that ostensibly included a document detailing the reaction of the country to the pandemic. In fact, the document contained a malware called *BabyShark*, associated with a North Korean APT group.¹⁰

Lastly, security researchers identified another campaign by a Russian APT Group that sent malicious files, seemingly including updates on Coronavirus, in order to distribute a backdoor malware to targets in Ukraine. The Russian hackers pretended to be from the Center for Public Health of the Ministry of Health of Ukraine so that they could deliver emails containing these malicious files.¹¹

In conclusion, cybercriminals and state-sponsored threat actors are using the panic resulting from the Coronavirus epidemic for phishing purposes and malware distribution. As the virus continues to spread across the world, preoccupying the global agenda, it can be estimated we will witness more campaigns exploiting the crisis.

⁸ <https://www.zdnet.com/article/state-sponsored-hackers-are-now-using-coronavirus-lures-to-infect-their-targets/>
<https://blog.vincss.net/2020/03/re012-phan-tich-ma-doc-loi-dung-dich-COVID-19-de-phat-tan-gia-mao-chi-thi-cua-thu-tuong-Nguyen-Xuan-Phuc.html>

⁹ <https://research.checkpoint.com/2020/vicious-panda-the-covid-campaign/>

¹⁰ <https://twitter.com/issuemakerslab/status/1233010155018604545>

¹¹ <https://twitter.com/RedDrip7/status/1230683740508000256>
<https://mp.weixin.qq.com/s/o6KC0k43AuOY5F8FKGbmMg>

1.1.3 Best Practices for Secure Remote Working

On account of the global situation related to COVID-19, organizations worldwide have directed their employees to work remotely from home, which may leverage the security risks to the employee and the organization. Among these risks are:

- + Unsecure Wi-Fi connection
- + Unsecure remote connection to organization network
- + Outdated security tools
- + Attacks by threat actors seeking to exploit the COVID-19 pandemic and take advantage of the sense of anxiety in society

Based on the above, we recommend the following practices for ensuring employees work remotely in a secure way:

- + Allow remote access to the organization's network with two-factor authentication only.
- + Ensure remote sessions are automatically timed out after a certain period of inactivity, and require re-authentication.

Guide employees to:

- + strengthen the security of their Wi-Fi connection by setting a password for their router at home
- + use a VPN so their connection is secured and encrypted
- + ensure their security tools (anti-virus, firewall) are fully updated
- + back up important files on a regular basis.
- + be extra vigilant regarding any COVID-19-related communication from supposedly internal, or external sources, especially those that encourage the user to take action, such as clicking on a link, opening an attachment, downloading a document or an app, or visiting a website.

Implement the technical IOCs attached to this report in your security systems.

Legend

Threat Level

Cyber threat levels are rated in accordance with the Multi-State Information Analysis Center (MS-ISAC) threat-level system:

- + **Severe.** Specific risk of hacking, virus, or other malicious activity.
- + **High.** High risk of malicious activity that targets or compromises core infrastructure.
- + **Elevated.** Significant risk due to increased malicious activity that compromises systems or diminishes service.
- + **Guarded.** General risk of increased hacking, virus or other malicious activity.
- + **Low.** No unusual activity exists beyond normal concern for malicious activity.

Admiralty Code – Source Reliability and Information Credibility

		Source Reliability					
		A	B	C	D	E	F
Information Credibility	1	A1	B1	C1	D1	E1	F1
	2	A2	B2	C2	D2	E2	F2
	3	A3	B3	C3	D3	E3	F3
	4	A4	B4	C4	D4	E4	F4
	5	A5	B5	C5	D5	E5	F5
	6	A6	B6	C6	D6	E6	F6

Credible
Uncertain
Non-Credible

Traffic Light Protocol

The Traffic Light Protocol (TLP) was created in order to facilitate greater sharing of information. TLP is a set of designations used to ensure that sensitive information is shared with the appropriate audience. It employs the following colors to indicate expected sharing boundaries to be applied by the recipient(s).

- + **Red.** Not for disclosure, restricted to participants only.
- + **Amber.** Limited disclosure, restricted to participants' organizations.
- + **Green.** Limited disclosure, restricted to the community.
- + **White.** Disclosure is forbidden.

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