

Health Sector Cybersecurity Coordination Center (HC3)

Sector Note

June 16, 2020

TLP: WHITE

Report: 202006161030

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LokiBot Malware Threat to Healthcare

Executive Summary

Researchers have discovered threat actors are capitalizing on attention towards the COVID-19 pandemic and the

Menu

World Health Organization (WHO) with a new spearphishing email designed to spread the LokiBot trojan that uses the WHO trademark as a lure.

Lokibot is an information stealer; the main functionality of its binary is to collect system and application credentials and user information to send back to the attacker.

Report

In late March, FortiGuard Labs discovered a new COVID-19/Coronavirus-themed spearphishing email that uses the World Health Organization (WHO) trademark in an attempt to convince recipients of its authenticity. The email contains the subject line "Coronavirus disease (COVID-19) Important Communication." It also includes an attachment

entitled "COVID_19- WORLD HEALTH ORGANIZATION CDC_DOC.zip.arj" that appears to contain additional information, but is in fact a decoy. Since it was first detected, the spearphishing campaign has gone global, with Turkey, Portugal, Germany, Austria and the United States showing the highest incidents.

Lokibot is a malware designed to collect credentials and security tokens from an infected machine running on a Windows Operating System (OS). Lokibot was first observed in 2015, when it targeted cryptocoin wallets, though there is evidence that the widely-spread version was a hijacked version (also referred to as patched or cracked version) of the earlier one. One of the key differences is that the patched version allows the attacker to change the command and control (C2) URL.

Once executed, Lokibot unpacks the main binary into memory using hollow process injection2 to insert itself into a legitimate Microsoft Windows application to hide its activities. Lokibot also uses an infected system machine global unique identifier (GUID) value to generate a mutex (an MD5 hash) that acts as a flag

to prevent itself from infecting the same machine again. Lokibot collects information and credentials from multiple applications, including but not limited to Mozilla Firefox, Google Chrome, Thunderbird, FTP and SFTP applications.

To prevent infection, HC3 recommends that all Antivirus and Intrusion Prevention System definitions are kept up to date on a continual basis. Healthcare Organizations are also urged to maintain a proactive patching routine whenever vendor updates are made available. If it is deemed that patching a device is not feasible, it is recommended that a risk assessment is conducted to determine additional mitigation safeguards.

From WHO Center for disease control to undisclosed recipients

From WHO Center for disease control to undisclosed recipients

COVID 19 - WORLD HEALTH ORGANIZATION CDC_DOC eip.eij (371 kB)

Due to the high volume of misinformation being spread about the Coronavirus disease (COVID-19) pandemic, we put together a comprehensive document that contains guidelines & WHO recommendations. This document contains:

"Guide to local production of WHO-recommended Handrub Formulations.

"Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected.

"Infection Prevention and Control for the safe management of a dead body in the context of COVID-19.

"PC guidance for long-term care facilities in the context of COVID-19.

"Consideration for quarrantine of individuals in the context of containment for coronavirus disease (COVID-19).

"Health workers exposure risk assessment and management in the context of COVID-19 virus.

"Rational use of personal protective equipment for coronavirus disease (COVID-19).

"Advice on the Use of Masks.

"Home care for patients with suspected novel coronavirus (nCoV) infection presenting with mild symptoms and management of contacts.

"Q&A on infection prevention and centrol for health care workers caring for patients with suspected or confirmed 2019-nCoV.

For any questions related to COVID-19 and infection prevention and control (IPC), please contact: WHOiro@who.int

Centre for disease control (CDC)
World Health Organization

Coronavirus disease (COVID-19) Important Communication.

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Healthcare Organizations are encouraged to conduct ongoing training sessions to educate and inform personnel about the latest phishing/spearphishing attacks. Employees should also be reminded to never open attachments from someone they don't know, and to always treat emails from unrecognized/untrusted senders with caution.

References

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