LEADERSHIP FOR IT SECURITY & PRIVACY ACROSS HHS

HHS CYBERSECURITY PROGRAM

OFFICE OF INFORMATION SECURITY

HC3: Sector Alert

October 8, 2021 TLP: White Report: 202110081200

Medusa TangleBot Malware Leveraging COVID-19 Theme to Attack U.S. Targets

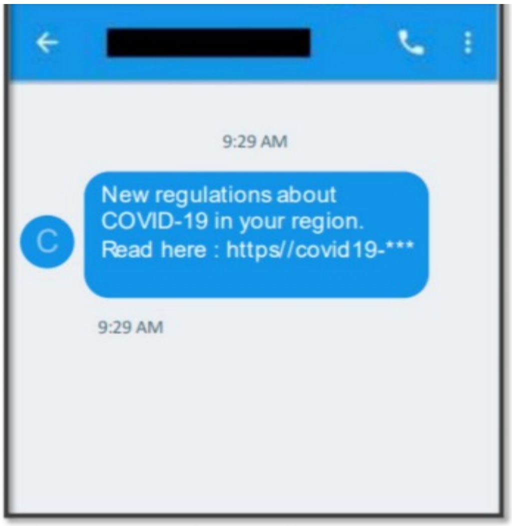
Executive Summary

Medusa (AKA TangleBot) is a malware that is spreading via SMS and is currently targeting the Android mobile operating system. There are reports of this malware going back to 2019 and it appears to have reemerged in popularity. Medusa is similar to Europe's Flu Bot malware which tricks the target into installing the malicious software received by a fake Covid-19 alert. Medusa 's wide-ranging access to mobile device functions is what sets it apart. Attackers have been leveraging COVID-19 themes to entice victims in the United States to unknowingly install Medusa onto their devices. Medusa is capable of collecting data and installing additional malware.

Report/Analysis

The Medusa malware is targeting Android users and taking advantage of the pandemic by sending COVID-19 related text messages that informs receipts of, "New regulations about COVID-19 in your region," and another sends an alert stating, "You have received the appointment for the 3rd dose." Each text message is sent with a malicious link as shown in *Figure 1.*

The attack is initiated when the victim clicks on a malicious link in a SMS text, they are directed to a website that gives a notification that the user's Adobe Flash Player is out of date and must be updated. Clicking on the resulting dialog box results only in downloading malware onto the device. It is important to mention that while Adobe Flash Player was natively supported on Android devices, it no longer is, however as you can see in Figures 2 -4. *(Courtesy of Cloudmark) this is how the attack is carried out.)*


[redacted]

9:29 AM

C

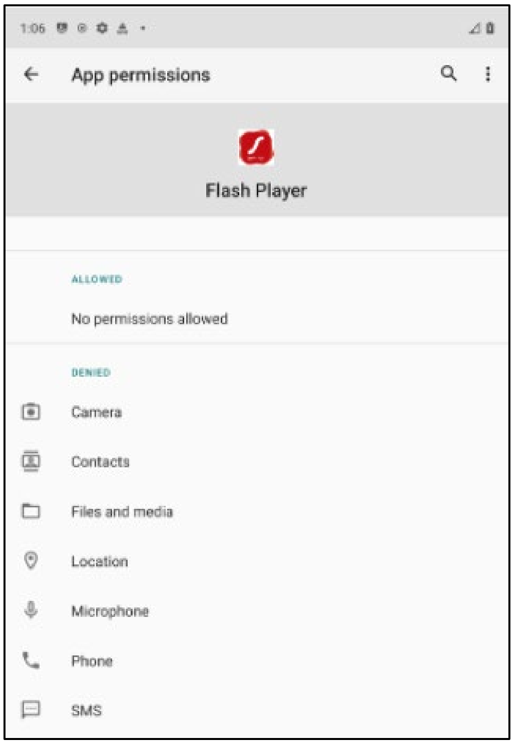
New regulations about COVID-19 in your region. Read here : https//covid19-***

9:29 AM

Possible TangleBot message that hackers would send to try to get users to click on malware link

CLOUDMARK

Figure 1


1:06

App permissions

Flash Player

ALLOWED

No permissions allowed

DENIED

Camera

Contacts

Files and media

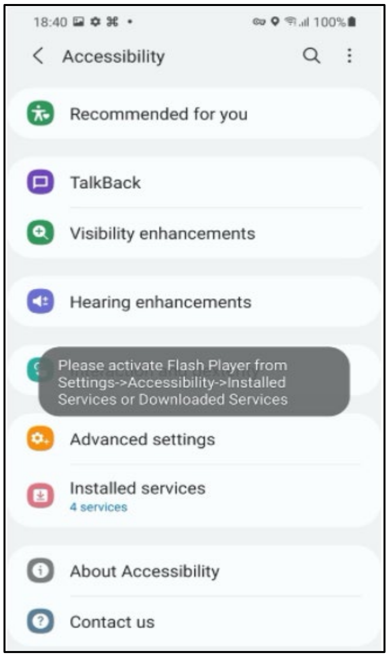
Location

Microphone

Phone

SMS

Figure 2


18:40 100%

Accessibility

Recommended for you

TalkBack

Visibility enhancements

Hearing enhancements

Please activate Flash Player from Settings->Accessibility->Installed Services or Downloaded Services

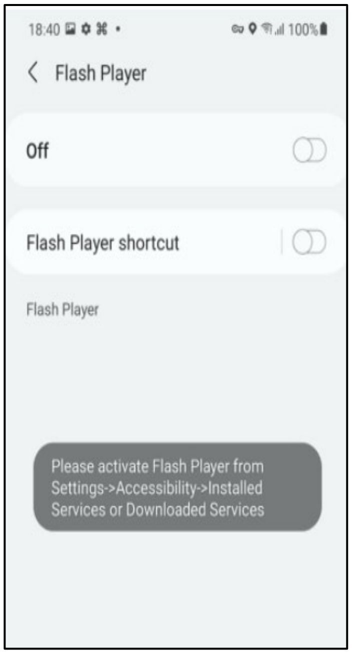
Advanced settings

Installed services
4 services

About Accessibility

Contact us

Figure 3


18:40 100%

Flash Player

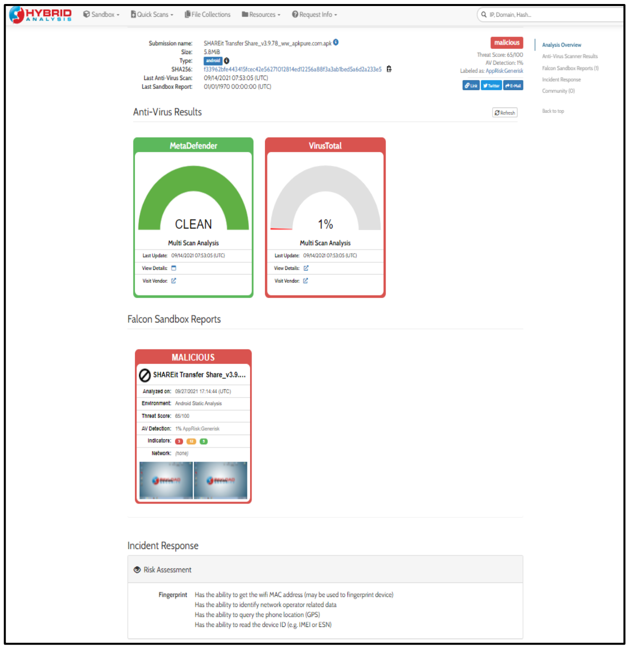
Off

Flash Player shortcut

Flash Player

Please activate Flash Player from Settings->Accessibility->Installed Services or Downloaded Services

Figure 4



Submission name: SHAREit Transfer Share_v3.9.78_ww_apkpure.com.apk
Size: 5.8MiB
Type: android
SHA256: f33962bfe443415fcec42e56271012814ed12256a88f3a3ab1bed5a6d2a233e5
Last Anti-Virus Scan: 09/14/2021 07:53:05 (UTC)
Last Sandbox Report: 01/01/1970 00:00:00 (UTC)

malicious
Threat Score: 65/100
AV Detection: 1%
Labeled as: AppRisk:Generisk

Anti-Virus Results

MetaDefender
CLEAN
Multi Scan Analysis
Last Update: 09/14/2021 07:53:05 (UTC)
View Details:
Visit Vendor:

VirusTotal
1%
Multi Scan Analysis
Last Update: 09/14/2021 07:53:05 (UTC)
View Details:
Visit Vendor:

Falcon Sandbox Reports

MALICIOUS
SHAREit Transfer Share_v3.9....
Analyzed on: 09/27/2021 17:14:44 (UTC)
Environment: Android Static Analysis
Threat Score: 65/100
AV Detection: 1% AppRisk:Generisk
Indicators: 3 12 5
Network: (none)

Incident Response

Risk Assessment

Fingerprint
Has the ability to get the wifi MAC address (may be used to fingerprint device)
Has the ability to identify network operator related data
Has the ability to query the phone location (GPS)
Has the ability to read the device ID (e.g. IMEI or ESN)

Figure 5

Once the Medusa malware infects a device, it has a number of data gathering capabilities it can leverage, including accessing the victim's internet, call logs and GPS. This is particularly concerning because it can allow the threat actor to know the victim's location at any time. Additionally, the attacker can record the camera, screen, or microphone audio or stream them directly to the attacker. The attacker can also place overlay screens on the device covering legitimate apps and screens. In addition to this, Medusa can use the victim's device to message other mobile devices spreading throughout the mobile network.

Patches, Mitigations, and Workarounds

It is recommended for mobiles user to utilize safe messaging practices and avoid clicking on any links in texts, even if they appear from a reputable source. When downloading apps, read the install prompts carefully and be aware of rights and privileges the app may request. Additionally, users should only install apps from trusted sources.

According to experts, once the malware is installed to a device it can be difficult to detect and remove. In Figure 5 below, courtesy of Hybrid Analysis, you will see that AppRisk:Generisk , which is linked to TangleBot, is hard to detect with Antivirus.

References

Broadcom: Protection Bulletins
https://www.broadcom.com/support/security-center/protection-bulletin#blt5dc4cb156b238046_en-us

Phone scammers use COVID-19 vaccine appointments to try tricking victims into downloading malware
https://www.cyberscoop.com/phone-scammers-use-covid-19-vaccine-appointments-to-try-tricking-victims-into-downloading-malware/

New TangleBot malware is targeting Android devices in the US and Canada
https://www.digitalinformationworld.com/2021/09/new-tanglebot-malware-is-targeting.html

TangleBot: New Advanced SMS Malware Targets Mobile Users Across U.S. and Canada with COVID-19 Lures
https://www.cloudmark.com/en/blog/mobile/tanglebot-new-advanced-sms-malware-targets-mobile-users-across-us-and-canada-covid-19

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